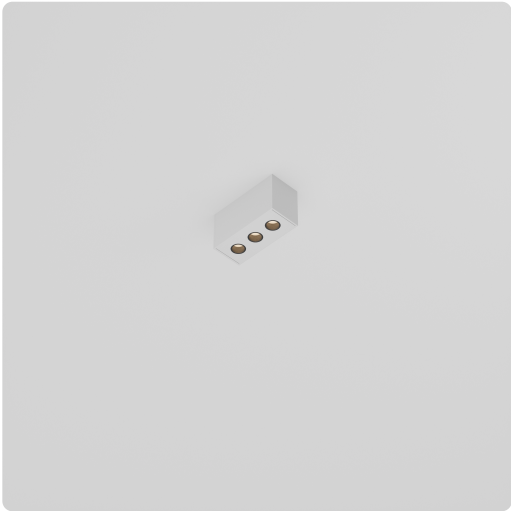




concentra c

linha de luminárias embutidas ou aplicadas, em perfil de alumínio extrudado. permite instalação em forro de gesso, alvenaria, laje, marcenaria ou trilho, com opções de fechos fixos e orientáveis. sua principal característica é o excelente controle antiofuscamento, eficiência luminosa e tamanhos reduzidos.

informações técnicas

fonte de luz
LED integrado

IRC
alto índice de reprodução de cor (irc>90 | r9>60)

vida útil
50.000h

facho

concentrado (10 a 20°)
médio (21 a 45°)
aberto (> 46°)
difuso

potência	facho	temperatura de...	fluxo luminoso...	fluxo luminoso útil	dimensões
3	concentrado	2700			91x39x51
3	médio	2700			91x39x51
3	aberto	2700			91x39x51
3	concentrado	3000	395	287	91x39x51
3	médio	3000	395	302	91x39x51
3	aberto	3000	395	244	91x39x51
3	concentrado	4000			91x39x51
3	médio	4000			91x39x51
3	aberto	4000			91x39x51
6	concentrado	2700			91x39x51
6	médio	2700			91x39x51
6	aberto	2700			91x39x51
6	concentrado	3000	700	499	91x39x51
6	médio	3000	700	507	91x39x51
6	aberto	3000	700	435	91x39x51
6	concentrado	4000			91x39x51
6	médio	4000			91x39x51
6	aberto	4000			91x39x51
6	concentrado	2700			171x39x51
6	médio	2700			171x39x51
6	aberto	2700			171x39x51
6	concentrado	3000	715	482	171x39x51
6	médio	3000	715	554	171x39x51
6	aberto	3000	715	477	171x39x51
6	concentrado	4000			171x39x51
6	médio	4000			171x39x51
6	aberto	4000			171x39x51
12	concentrado	2700			171x39x51

12	médio	2700			171x39x51
12	aberto	2700			171x39x51
12	concentrado	3000	1290	824	171x39x51
12	médio	3000	1290	951	171x39x51
12	aberto	3000	1290	808	171x39x51
12	concentrado	4000			171x39x51
12	médio	4000			171x39x51
12	aberto	4000			171x39x51
12	concentrado	2700			337x39x51
12	médio	2700			337x39x51
12	aberto	2700			337x39x51
12	concentrado	3000	1430	1089	337x39x51
12	médio	3000	1430	1113	337x39x51
12	aberto	3000	1430	874	337x39x51
12	concentrado	4000			337x39x51
12	médio	4000			337x39x51
12	aberto	4000			337x39x51
24	concentrado	2700			337x39x51
24	médio	2700			337x39x51
24	aberto	2700			337x39x51
24	concentrado	3000	2715	1905	337x39x51
24	médio	3000	2715	1953	337x39x51
24	aberto	3000	2715	1582	337x39x51
24	concentrado	4000			337x39x51
24	médio	4000			337x39x51
24	aberto	4000			337x39x51
18	concentrado	2700			503x39x51
18	médio	2700			503x39x51
18	aberto	2700			503x39x51
18	concentrado	3000	2145	1555	503x39x51
18	médio	3000	2145	1644	503x39x51
18	aberto	3000	2145	1350	503x39x51
18	concentrado	4000			503x39x51
18	médio	4000			503x39x51
18	aberto	4000			503x39x51
36	concentrado	2700			503x39x51
36	médio	2700			503x39x51
36	aberto	2700			503x39x51
36	concentrado	3000	4072	2842	503x39x51
36	médio	3000	4072	2941	503x39x51
36	aberto	3000	4072	2270	503x39x51
36	concentrado	4000			503x39x51
36	médio	4000			503x39x51
36	aberto	4000			503x39x51

equipamentos

LED driver 350mA (ponto remoto)
LED driver 700mA (ponto remoto)

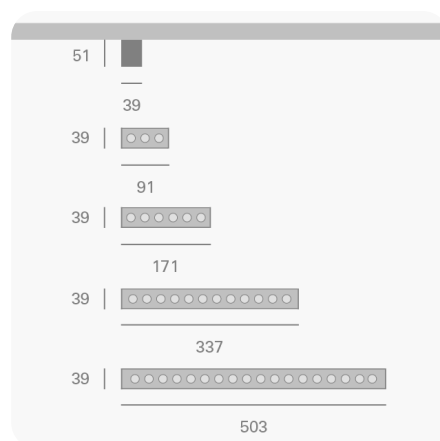
controle

on/off
dim fphase
dim dali
dim 1-10V

instalação

forro de gesso
laje
marcenaria

IP
20

dimensões

acabamentos e cores
cores




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LumCAT:

Luminaire: concentra 8 c serie 3 fc

LampCAT: modulo led 3W 30K irc 90

Ballast type: LED driver 350mA

Report No:

Voltage(V): 127.9200

Test No:

Current(A): 0.0630

Number of Lamps: 1

Power (W): 3.7970

Lamp flux(lm): 395.0

PF: 0.4700

Length(mm): 80

Width(mm): 25

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 287.03, Efficiency(%): 72.67% , Luminous Efficacy(lm/W): 75.59

Central intensity(cd): 1581.604, Maximum intensity(cd): 1594.268

Angle of maximum intensity: C=0.0 γ =1.0

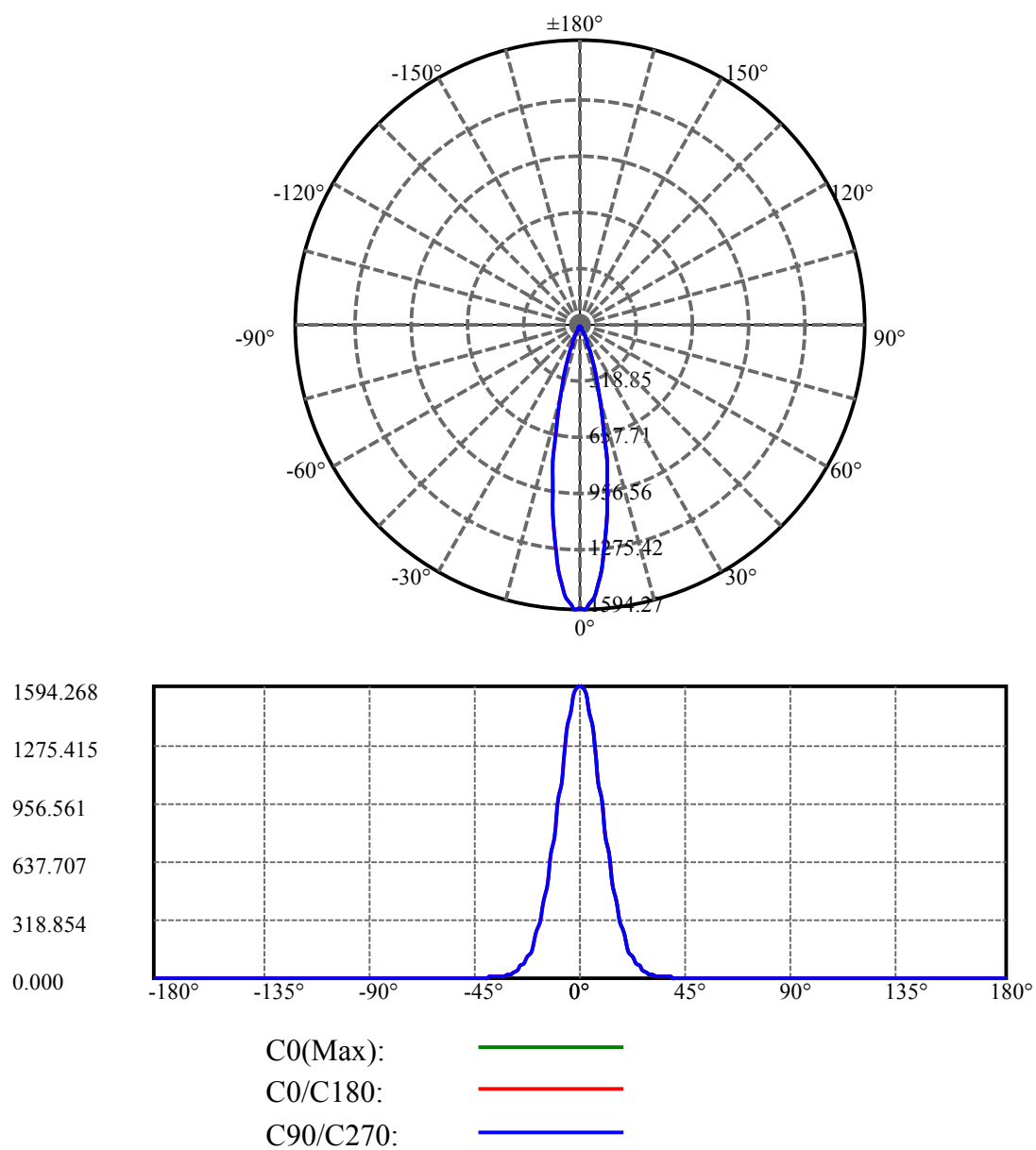
Beam angle of C0 plane : 21.62

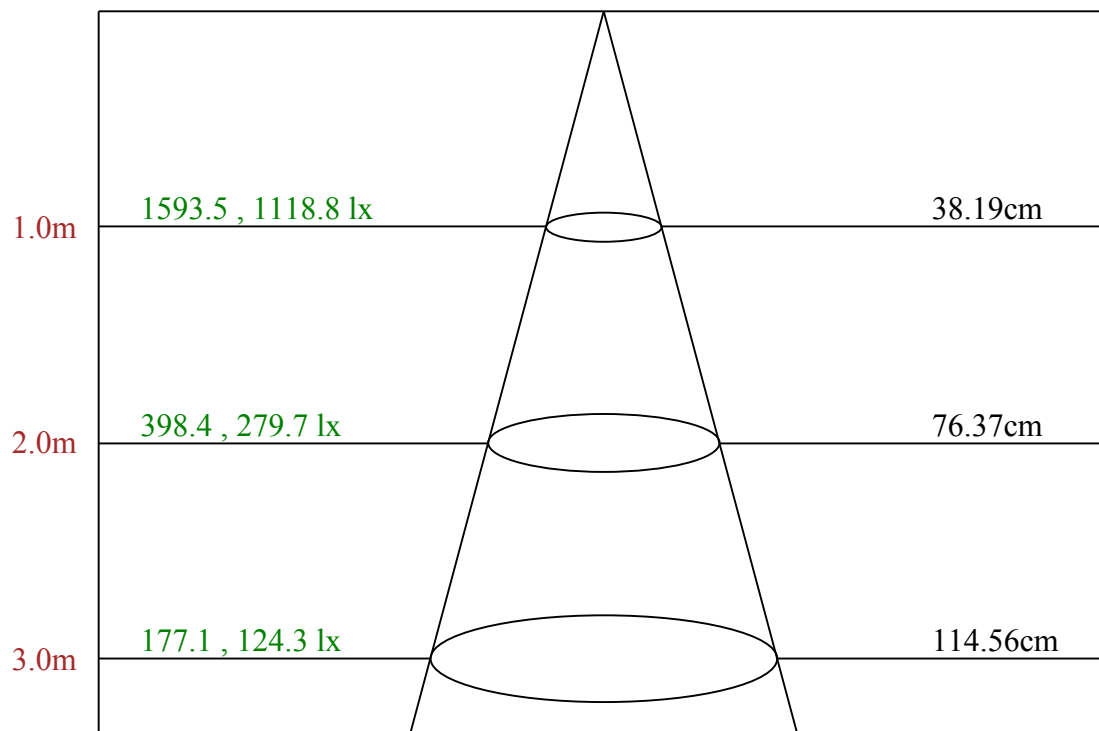
Average BeamAngle(IEC 61341): 21.62

Equipment: equipamento lumini
Temperature(°C): 25.5

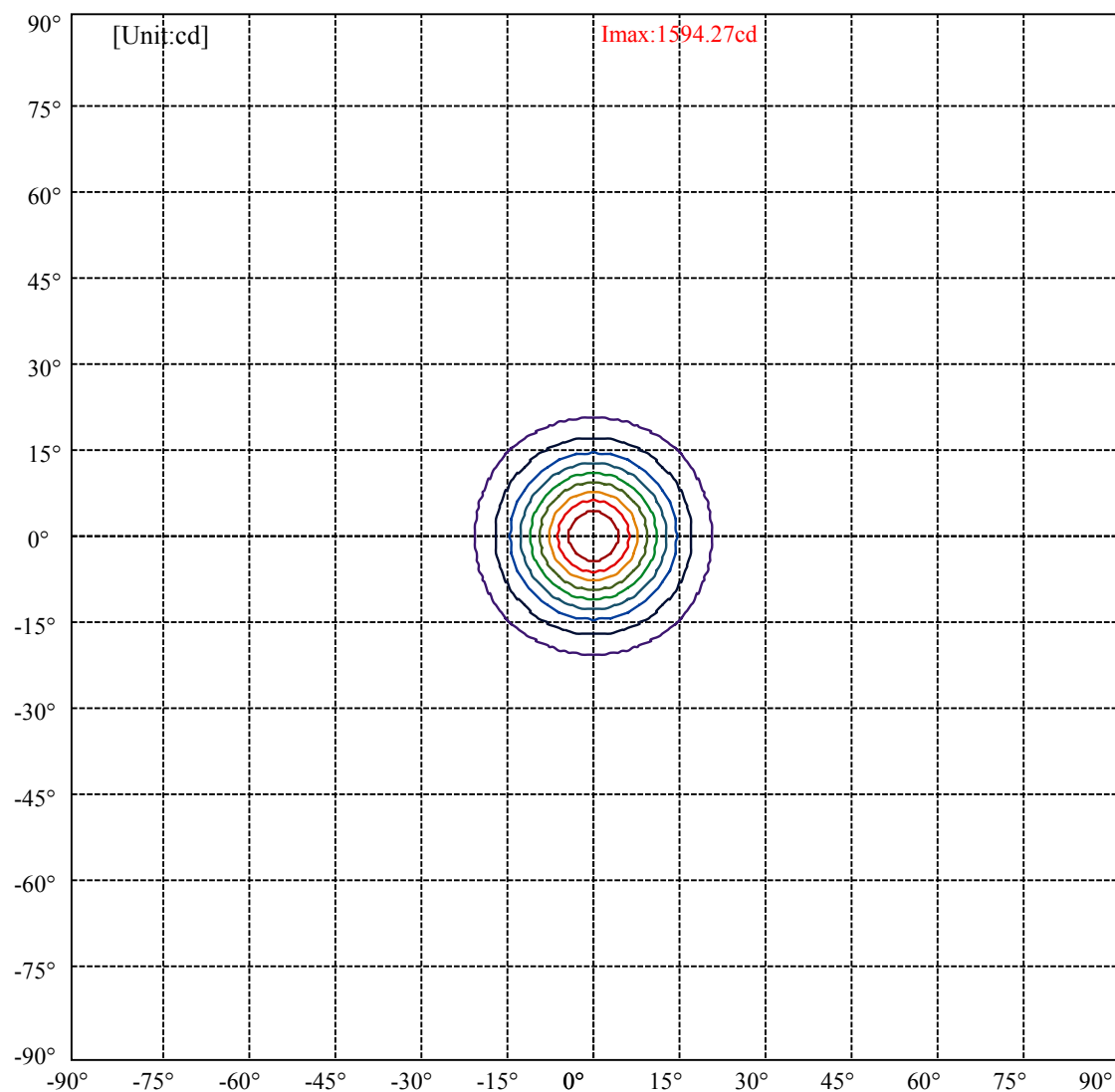
Date: 14/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 21.62



(10%Imax)	159.427	—————
(20%Imax)	318.854	—————
(30%Imax)	478.281	—————
(40%Imax)	637.707	—————
(50%Imax)	797.134	—————
(60%Imax)	956.561	—————
(70%Imax)	1115.99	—————
(80%Imax)	1275.41	—————
(90%Imax)	1434.84	—————

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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	2113	1569	1224	1178	1239	1436	1794	2605	5190
C45	2113	1569	1224	1178	1239	1436	1794	2605	5190
C90	2113	1569	1224	1178	1239	1436	1794	2605	5190

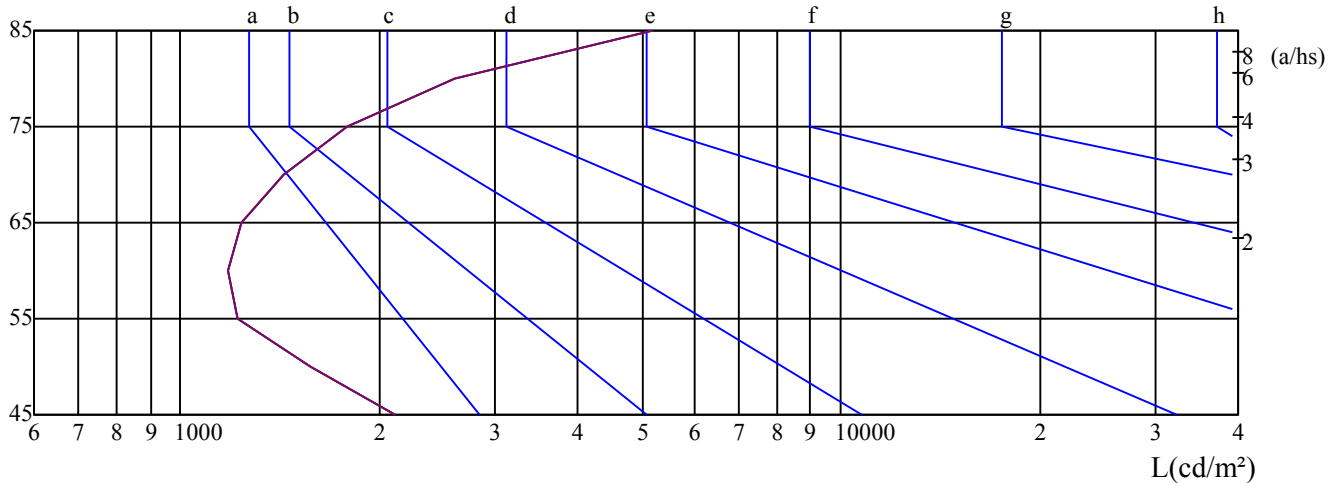
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1239	1239	1239	1794	1794	1794	5190	5190	5190

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

Equipment: equipamento lumini
Temperature($^{\circ}$ C): 25.5

Date: 14/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	4.53	5.42	4.94	5.78	6.15	5.37	6.27	5.78	6.63	7.00
	3H	5.60	6.40	6.03	6.78	7.18	6.24	7.03	6.67	7.42	7.81
	4H	6.51	7.24	6.95	7.64	8.06	6.97	7.71	7.41	8.11	8.53
	6H	7.71	8.38	8.17	8.80	9.25	8.02	8.70	8.48	9.12	9.57
	8H	8.53	9.17	8.99	9.60	10.06	8.69	9.33	9.15	9.76	10.22
	12H	9.48	10.09	9.95	10.53	11.00	9.60	10.20	10.06	10.64	11.11
4H	2H	4.72	5.46	5.17	5.86	6.28	5.46	6.19	5.90	6.59	7.01
	3H	6.12	6.74	6.59	7.18	7.65	6.62	7.24	7.09	7.68	8.15
	4H	7.34	7.88	7.82	8.34	8.84	7.66	8.20	8.14	8.66	9.16
	6H	8.79	9.26	9.30	9.75	10.25	8.98	9.46	9.50	9.95	10.45
	8H	9.80	10.23	10.32	10.73	11.25	9.84	10.28	10.37	10.78	11.30
	12H	10.94	11.34	11.47	11.84	12.40	10.97	11.37	11.50	11.86	12.43
8H	4H	7.78	8.21	8.30	8.71	9.24	8.05	8.48	8.57	8.98	9.50
	6H	9.53	9.89	10.07	10.40	10.96	9.68	10.03	10.22	10.55	11.11
	8H	10.80	11.09	11.37	11.65	12.20	10.80	11.10	11.37	11.66	12.20
	12H	12.20	12.42	12.78	12.98	13.55	12.20	12.42	12.77	12.97	13.55
12H	4H	7.91	8.31	8.44	8.80	9.37	8.16	8.57	8.69	9.06	9.63
	6H	9.83	10.12	10.40	10.68	11.23	9.96	10.26	10.53	10.82	11.36
	8H	11.17	11.40	11.75	11.95	12.52	11.17	11.40	11.75	11.95	12.52
Variation with the observer position at spacings:											
S = 1.0H		1.3/-1.1					1.3/-1.1				
S = 1.5H		1.5/-1.2					1.5/-1.2				
S = 2.0H		1.7/-1.2					1.7/-1.2				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-6.4					-6.4				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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lumini

LumCAT:

Luminaire: concentra 8 c serie 3 fm

LampCAT: modulo led 3W 30K irc 90

Ballast type: LED driver 350mA

Report No:

Voltage(V): 127.9300

Test No:

Current(A): 0.0630

Number of Lamps: 1

Power (W): 3.7970

Lamp flux(lm): 395.0

PF: 0.4700

Length(mm): 80

Width(mm): 25

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 301.75, Efficiency(%): 76.39% , Luminous Efficacy(lm/W): 79.47

Central intensity(cd): 1218.209, Maximum intensity(cd): 1218.209

Angle of maximum intensity: $C=0.0$ $\gamma=0.0$

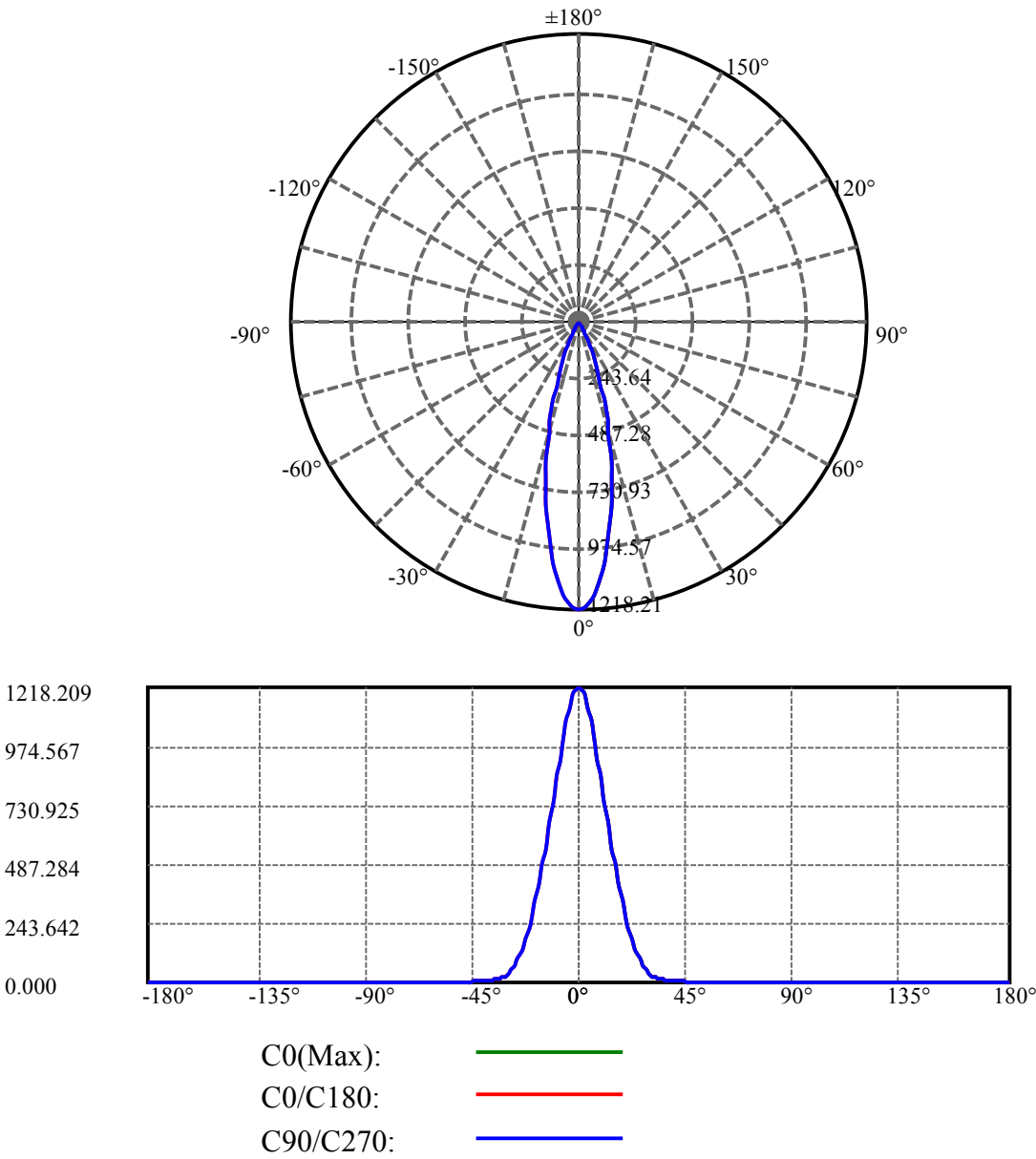
Beam angle of C0 plane : 25.87

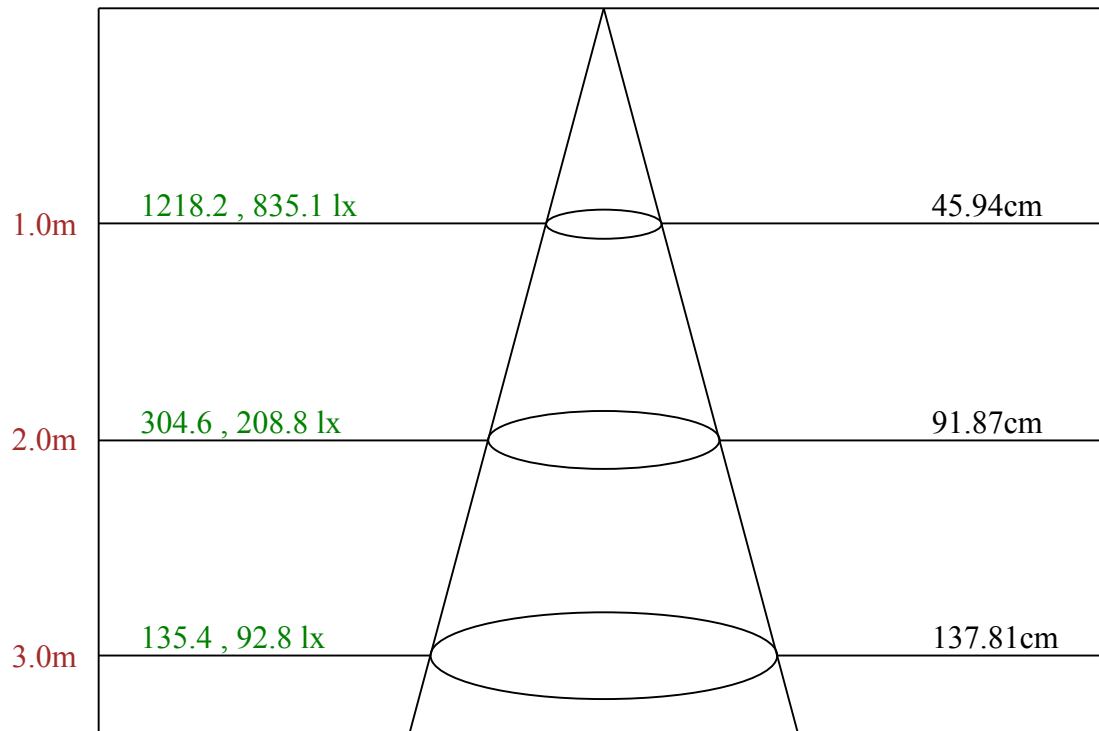
Average BeamAngle(IEC 61341): 25.87

Equipment: equipamento lumini
Temperature(°C): 25.5

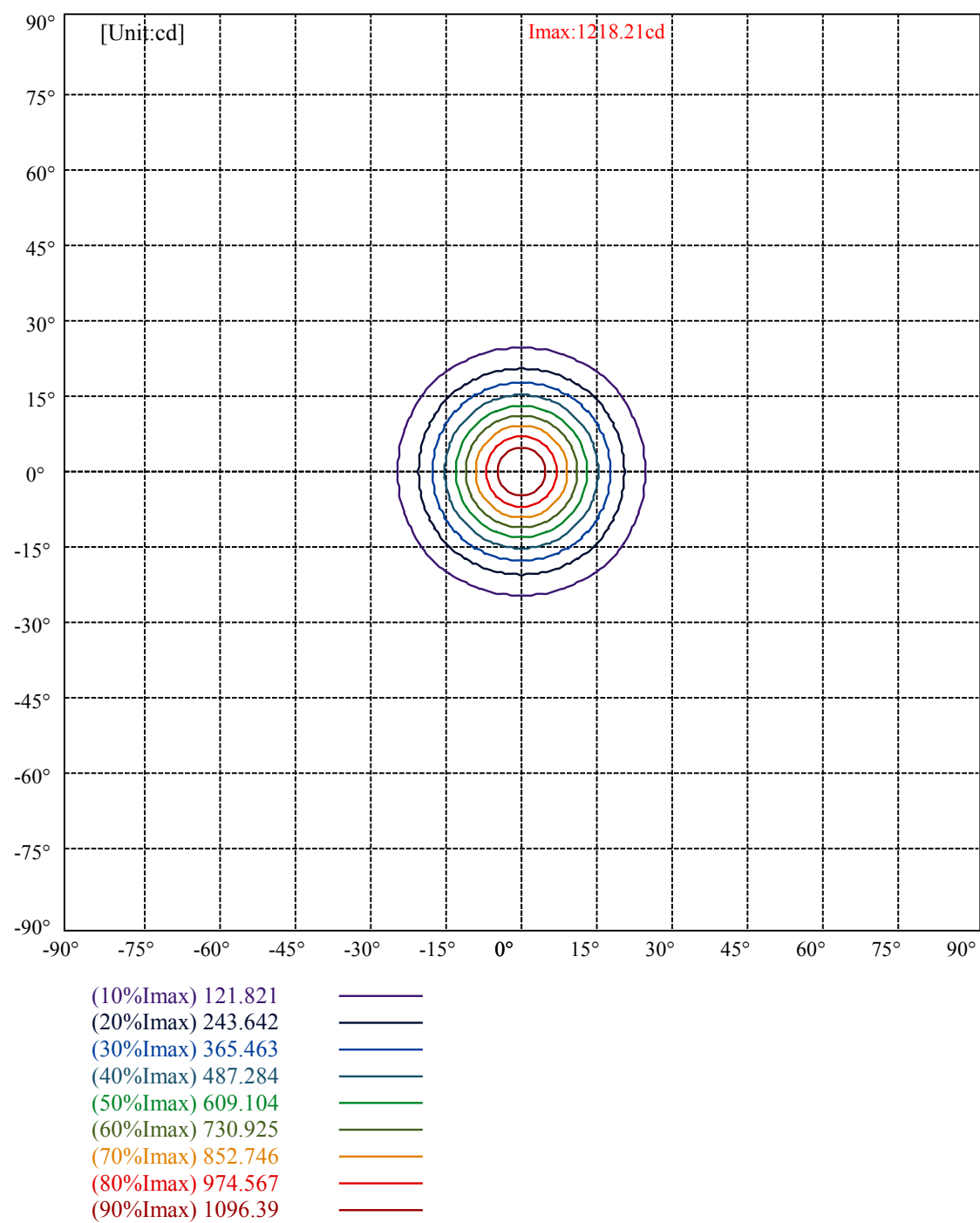
Date: 14/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 25.87



Luminance Table

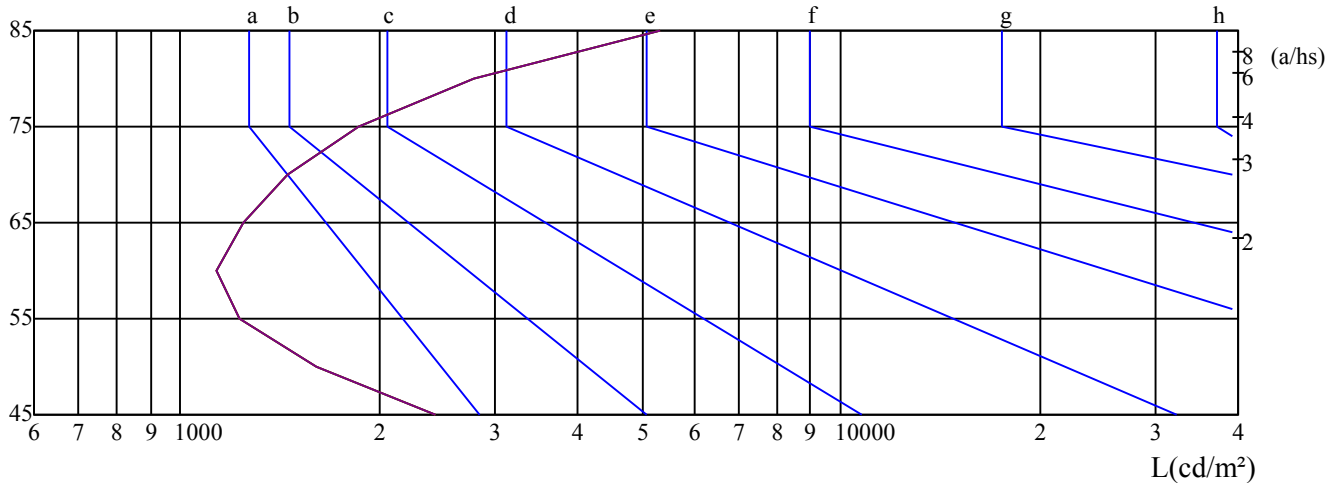
γ	45	50	55	60	65	70	75	80	85
C0	2428	1611	1230	1131	1246	1453	1863	2776	5326
C45	2428	1611	1230	1131	1246	1453	1863	2776	5326
C90	2428	1611	1230	1131	1246	1453	1863	2776	5326

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1246	1246	1246	1863	1863	1863	5326	5326	5326

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

 $\gamma(^{\circ})$ 

C0 ———

C45 ———

C90 ———

Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	6.94	7.83	7.34	8.19	8.56	8.10	9.00	8.51	9.36	9.73
	3H	7.38	8.18	7.81	8.56	8.96	8.38	9.18	8.81	9.56	9.96
	4H	7.89	8.63	8.33	9.03	9.45	8.73	9.47	9.17	9.87	10.29
	6H	8.76	9.43	9.22	9.85	10.30	9.45	10.12	9.91	10.54	10.99
	8H	9.35	9.99	9.81	10.42	10.88	9.95	10.59	10.41	11.02	11.48
	12H	10.10	10.71	10.57	11.15	11.62	10.56	11.17	11.03	11.60	12.07
4H	2H	6.86	7.60	7.30	8.00	8.42	7.96	8.69	8.40	9.09	9.51
	3H	7.56	8.17	8.02	8.61	9.08	8.42	9.04	8.89	9.48	9.95
	4H	8.36	8.90	8.84	9.36	9.86	9.04	9.57	9.51	10.04	10.54
	6H	9.52	10.00	10.04	10.49	10.99	10.04	10.51	10.55	11.01	11.51
	8H	10.33	10.77	10.85	11.26	11.79	10.77	11.20	11.29	11.70	12.22
	12H	11.32	11.72	11.85	12.21	12.78	11.62	12.02	12.14	12.51	13.08
8H	4H	8.65	9.08	9.17	9.58	10.11	9.24	9.68	9.76	10.18	10.70
	6H	10.13	10.48	10.67	11.00	11.56	10.55	10.91	11.10	11.43	11.99
	8H	11.21	11.51	11.78	12.07	12.61	11.54	11.84	12.11	12.40	12.94
	12H	12.46	12.68	13.04	13.24	13.81	12.66	12.88	13.24	13.44	14.01
12H	4H	8.75	9.15	9.28	9.64	10.21	9.32	9.72	9.84	10.21	10.78
	6H	10.39	10.68	10.96	11.24	11.79	10.78	11.08	11.35	11.63	12.18
	8H	11.55	11.78	12.13	12.33	12.90	11.85	12.07	12.43	12.63	13.20
Variation with the observer position at spacings:											
S = 1.0H		2.6/-1.7					2.6/-1.7				
S = 1.5H		3.1/-1.5					3.1/-1.5				
S = 2.0H		3.5/-1.4					3.5/-1.4				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-5.5					-5.5				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 8 c serie 3 fa

LampCAT: modulo led 3W 30K irc 90

Ballast type: LED driver 350mA

Report No:

Voltage(V): 127.9300

Test No:

Current(A): 0.0630

Number of Lamps: 1

Power (W): 3.7990

Lamp flux(lm): 395.0

PF: 0.4700

Length(mm): 80

Width(mm): 25

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 244.37, Efficiency(%): 61.87% , Luminous Efficacy(lm/W): 64.32

Central intensity(cd): 344.934, Maximum intensity(cd): 344.934

Angle of maximum intensity: C=0.0 γ =0.0

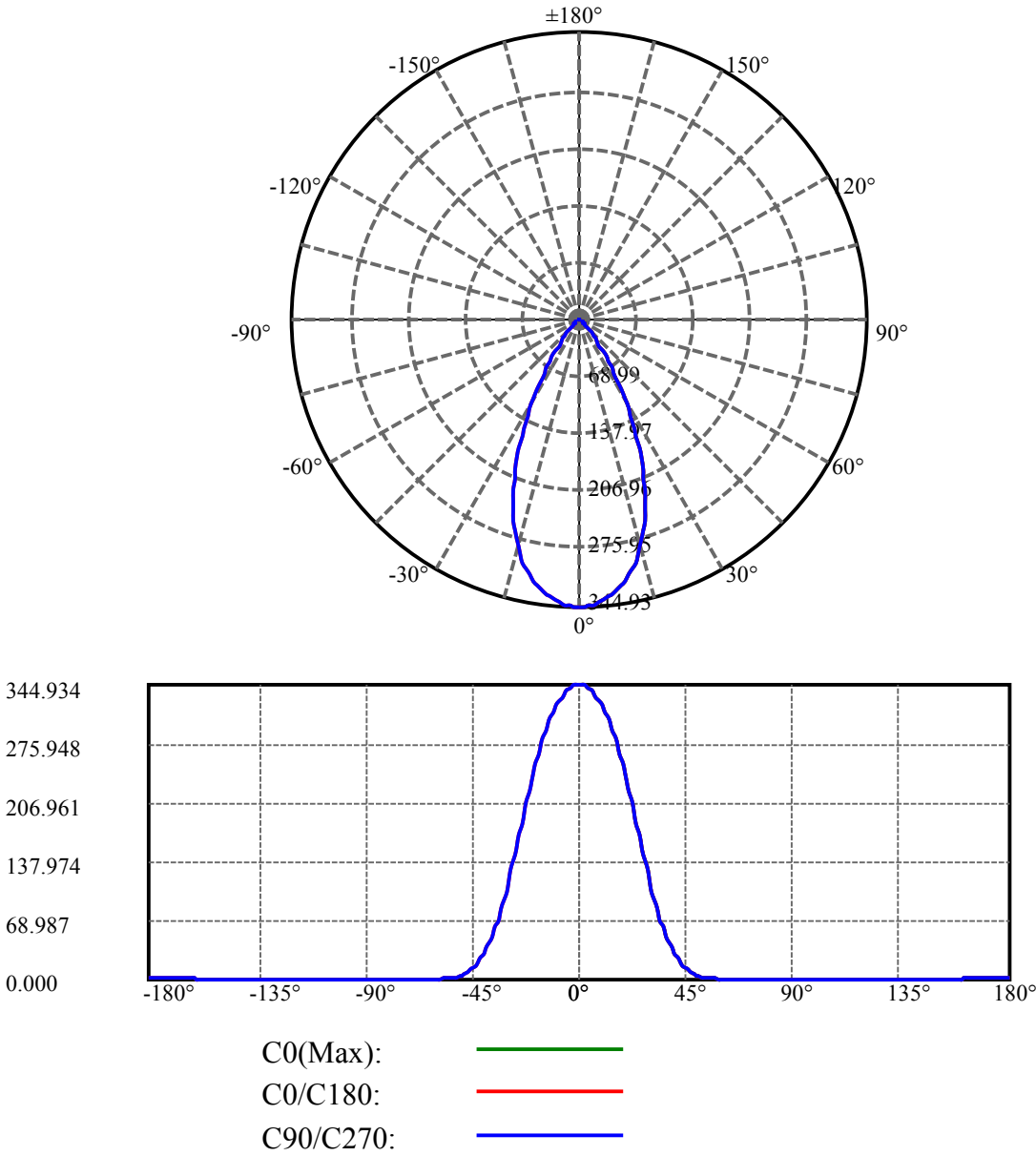
Beam angle of C0 plane : 49.47

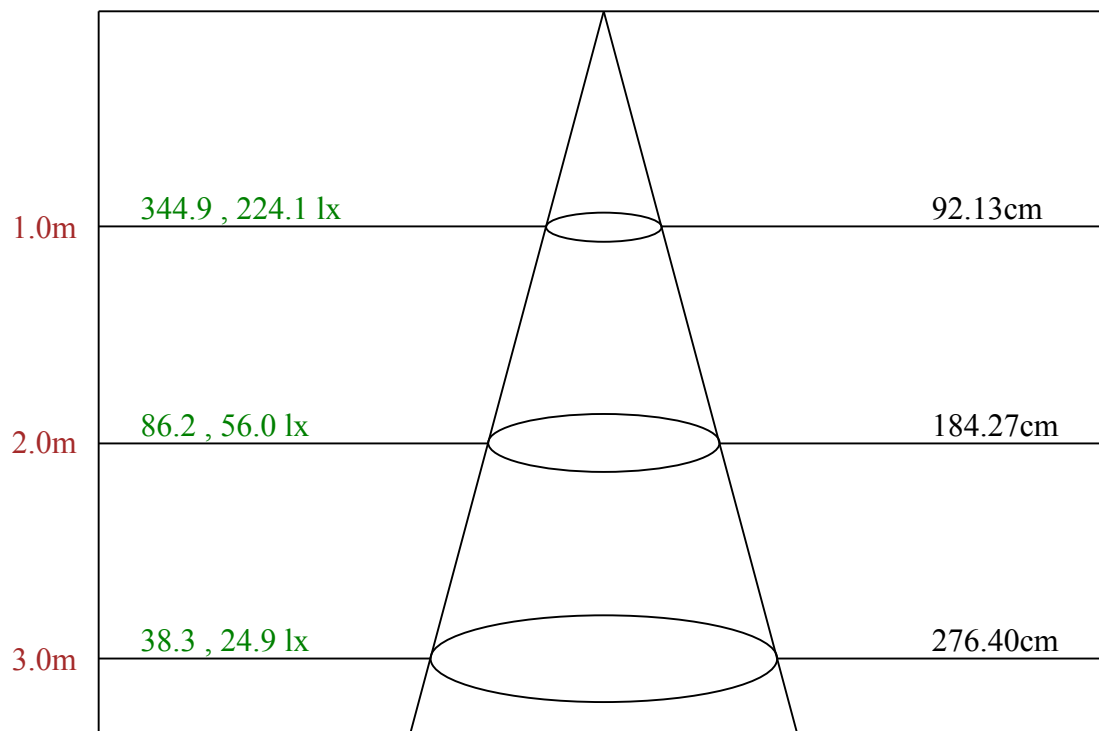
Aveage BeamAngle(IEC 61341):49.47

Equipment: equipamento lumini
Temperature(°C): 25.5

Date: 14/05/2025
Humidity(%): 60.0%

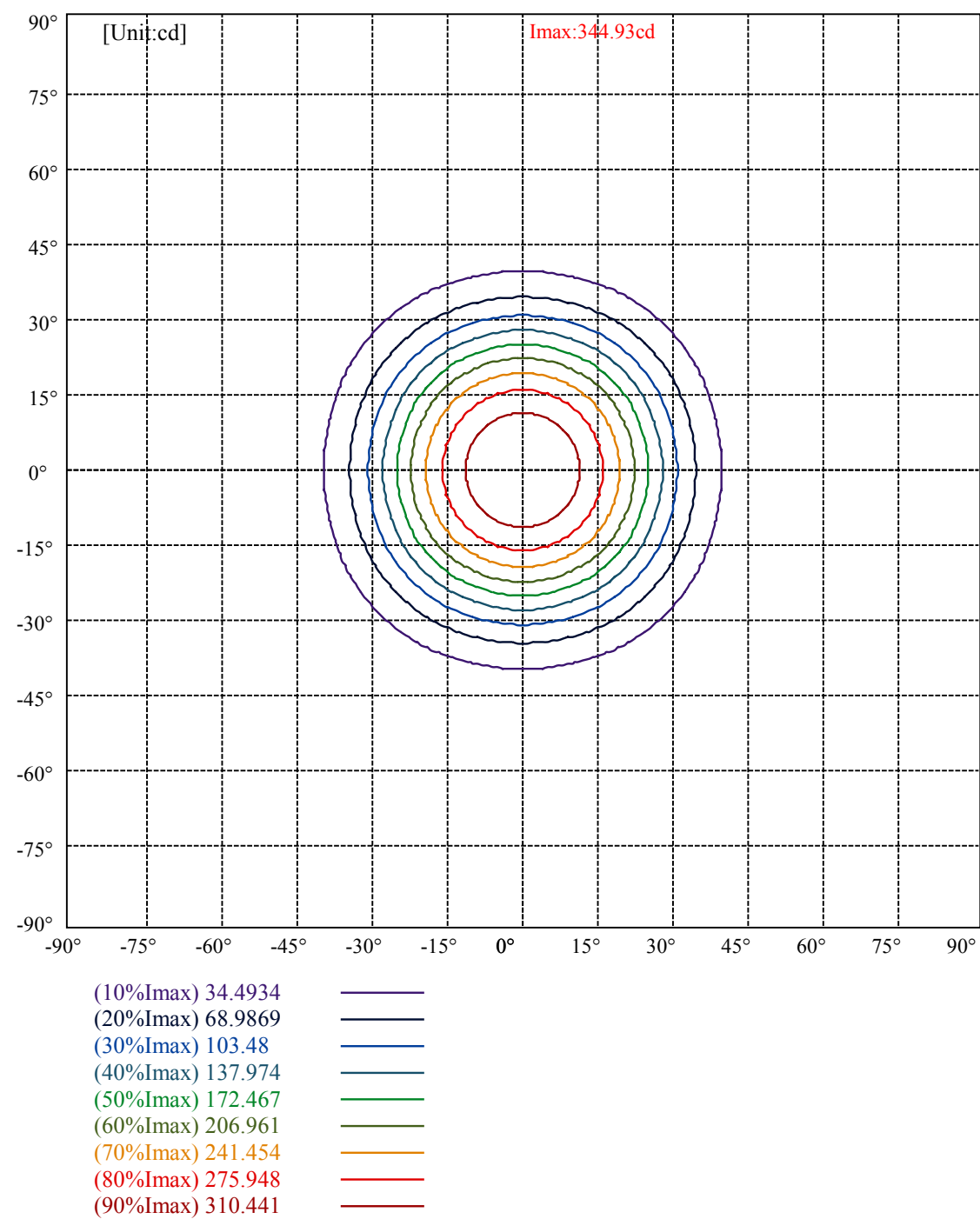
Operator: 01
Distance(m): 6.90





Max , Ave

Beam angle of C0 plane 49.47



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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	8408	2819	1110	958	993	1070	1311	1885	3790
C45	8408	2819	1110	958	993	1070	1311	1885	3790
C90	8408	2819	1110	958	993	1070	1311	1885	3790

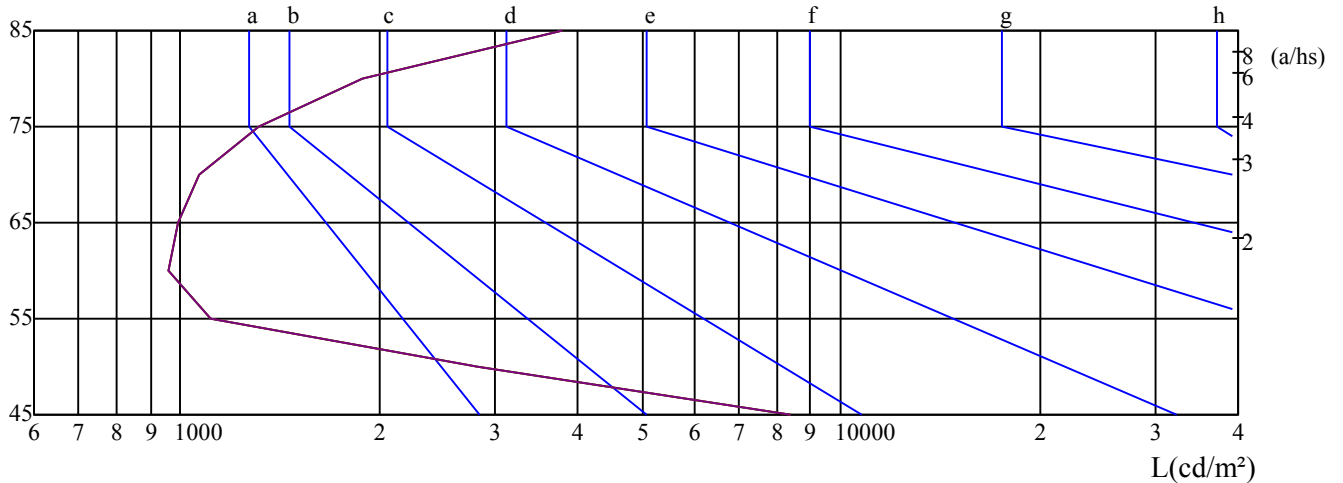
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
993	993	993	1311	1311	1311	3790	3790	3790

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 —

C45 —

C90 —

Equipment: equipamento lumini
Temperature($^{\circ}$ C): 25.5

Date: 14/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	18.22	19.16	18.62	19.51	19.88	18.80	19.74	19.20	20.09	20.46
	3H	18.02	18.86	18.45	19.24	19.63	18.60	19.44	19.03	19.82	20.21
	4H	17.93	18.70	18.37	19.10	19.52	18.51	19.28	18.95	19.68	20.10
	6H	17.87	18.58	18.33	18.99	19.44	18.45	19.16	18.91	19.57	20.02
	8H	17.83	18.50	18.28	18.92	19.38	18.40	19.08	18.86	19.50	19.95
	12H	17.80	18.44	18.27	18.87	19.34	18.37	19.01	18.83	19.44	19.91
4H	2H	17.91	18.68	18.34	19.07	19.49	18.48	19.26	18.92	19.65	20.07
	3H	17.68	18.33	18.14	18.76	19.22	18.26	18.91	18.72	19.34	19.80
	4H	17.63	18.19	18.10	18.65	19.14	18.21	18.76	18.68	19.23	19.72
	6H	17.54	18.03	18.05	18.52	19.02	18.11	18.61	18.62	19.10	19.59
	8H	17.54	17.99	18.06	18.49	19.01	18.11	18.56	18.63	19.06	19.57
	12H	17.58	18.00	18.10	18.48	19.05	18.13	18.55	18.65	19.04	19.60
8H	4H	17.44	17.90	17.96	18.39	18.91	18.02	18.47	18.54	18.97	19.49
	6H	17.37	17.75	17.91	18.26	18.82	17.94	18.31	18.48	18.82	19.38
	8H	17.44	17.76	18.01	18.31	18.85	18.00	18.31	18.57	18.87	19.41
	12H	17.54	17.78	18.12	18.33	18.90	18.08	18.32	18.65	18.87	19.43
12H	4H	17.40	17.82	17.92	18.30	18.87	17.97	18.39	18.49	18.88	19.44
	6H	17.37	17.69	17.94	18.24	18.78	17.94	18.25	18.50	18.81	19.35
	8H	17.42	17.66	18.00	18.21	18.78	17.98	18.22	18.55	18.77	19.33
Variation with the observer position at spacings:											
S = 1.0H		4.8/-10.2					4.8/-10.2				
S = 1.5H		7.4/-8.4					7.4/-8.4				
S = 2.0H		9.2/-7.1					9.2/-7.1				
Standard tables:		BK1					BK1				
Uncorrected UGR		-2.9					-2.9				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 8 c serie 3 fc

LampCAT: modulo led 6W 30K irc 90

Ballast type: LED driver 700mA

Report No:

Voltage(V): 127.8500

Test No:

Current(A): 0.0620

Number of Lamps: 1

Power (W): 7.5550

Lamp flux(lm): 700.0

PF: 0.9520

Length(mm): 80

Width(mm): 25

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 498.60, Efficiency(%): 71.23% , Luminous Efficacy(lm/W): 66.00

Central intensity(cd): 2993.145, Maximum intensity(cd): 2993.145

Angle of maximum intensity: C=0.0 γ =0.0

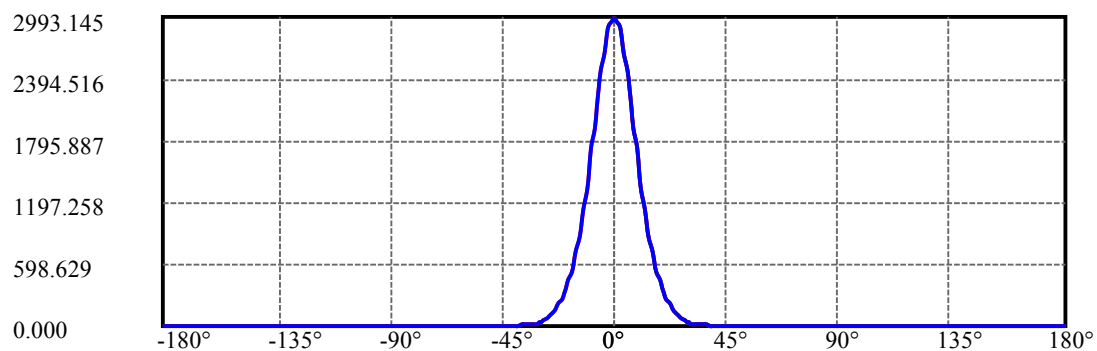
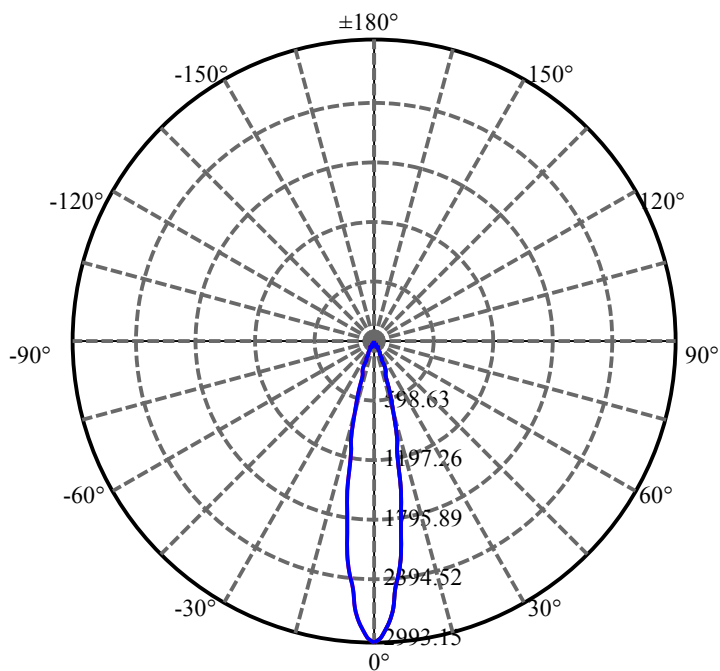
Beam angle of C0 plane : 20.19

Average BeamAngle(IEC 61341): 20.19

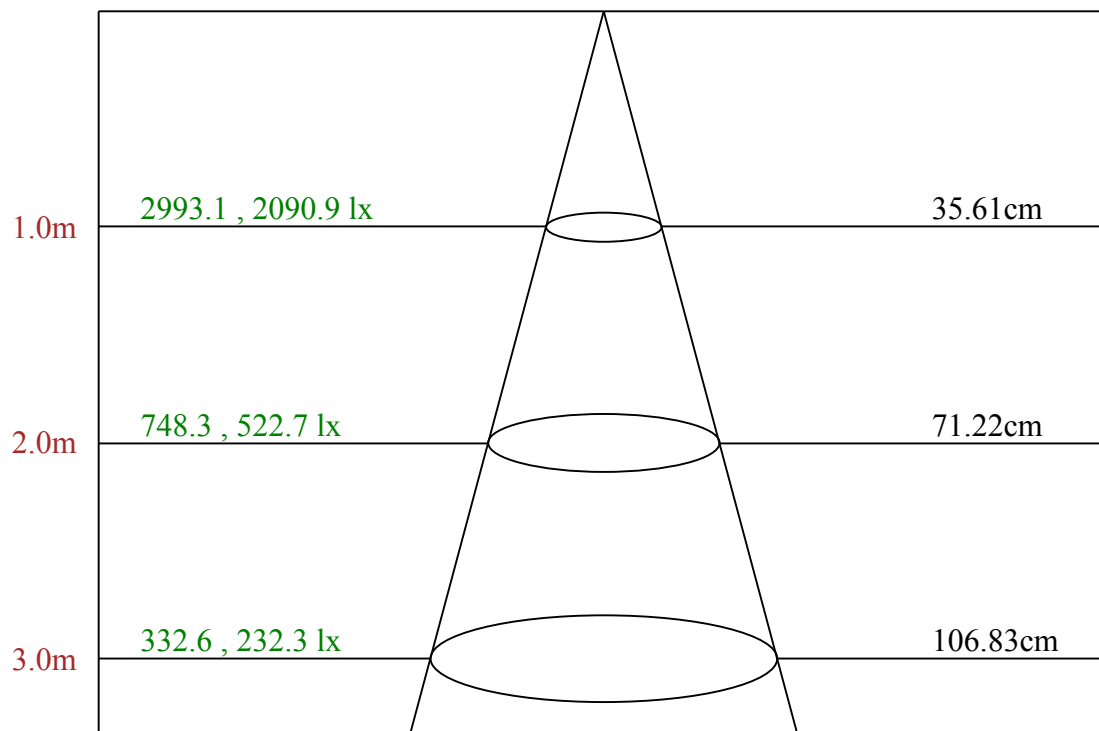
Equipment: equipamento lumini
Temperature(°C): 25.5

Date: 14/05/2025
Humidity(%): 60.0%

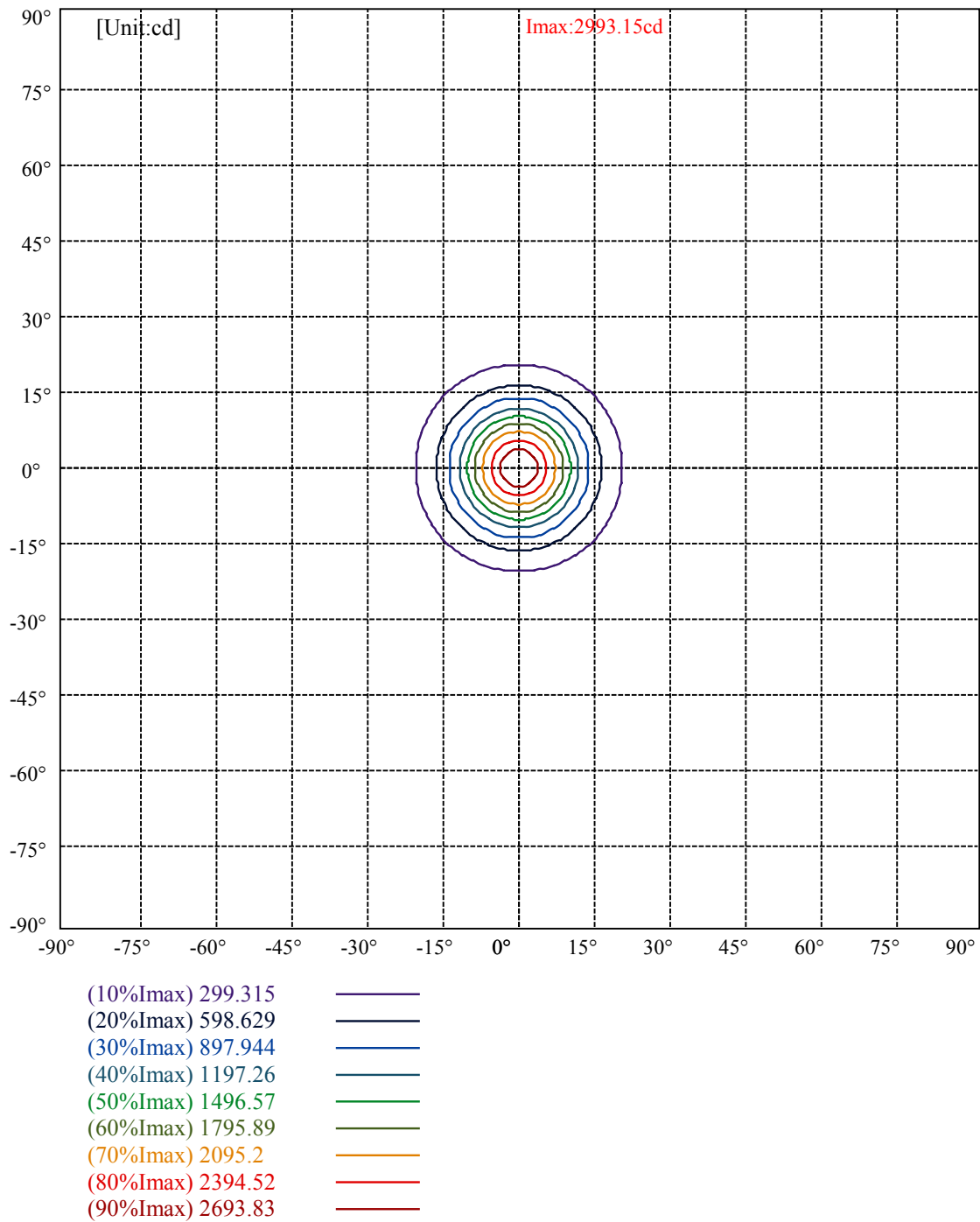
Operator: 01
Distance(m): 6.90



C0(Max):
C0/C180:
C90/C270:



Max , Ave Beam angle of C0 plane 20.19



Luminance Table

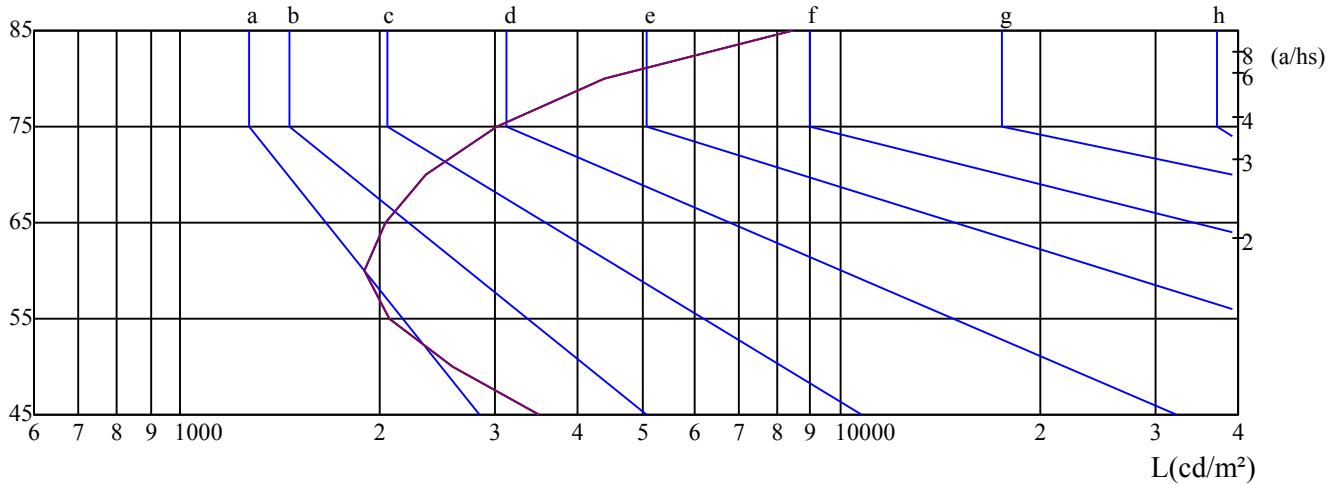
γ	45	50	55	60	65	70	75	80	85
C0	3501	2588	2075	1904	2049	2349	3012	4387	8467
C45	3501	2588	2075	1904	2049	2349	3012	4387	8467
C90	3501	2588	2075	1904	2049	2349	3012	4387	8467

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2049	2049	2049	3012	3012	3012	8467	8467	8467

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

 $\gamma(^{\circ})$ 

C0 ———

C45 ———

C90 ———

Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	7.38	8.28	7.79	8.63	9.00	6.76	7.65	7.16	8.01	8.38
	3H	8.11	8.90	8.53	9.28	9.68	7.67	8.46	8.09	8.84	9.24
	4H	8.78	9.52	9.22	9.91	10.33	8.38	9.12	8.82	9.51	9.93
	6H	9.85	10.52	10.30	10.94	11.39	9.49	10.16	9.95	10.58	11.03
	8H	10.52	11.16	10.98	11.58	12.04	10.23	10.87	10.69	11.30	11.76
	12H	11.43	12.04	11.90	12.48	12.94	11.14	11.75	11.61	12.18	12.65
4H	2H	7.43	8.17	7.87	8.56	8.98	6.88	7.62	7.32	8.02	8.43
	3H	8.45	9.07	8.91	9.50	9.97	8.10	8.72	8.56	9.15	9.62
	4H	9.44	9.97	9.91	10.43	10.93	9.12	9.65	9.60	10.12	10.61
	6H	10.78	11.25	11.29	11.75	12.25	10.51	10.98	11.02	11.47	11.97
	8H	11.65	12.09	12.18	12.59	13.11	11.44	11.88	11.97	12.38	12.90
	12H	12.79	13.19	13.32	13.68	14.25	12.55	12.96	13.08	13.45	14.01
8H	4H	9.81	10.24	10.33	10.74	11.26	9.54	9.97	10.06	10.47	10.99
	6H	11.47	11.82	12.01	12.34	12.90	11.25	11.60	11.79	12.12	12.68
	8H	12.60	12.90	13.17	13.46	14.00	12.45	12.74	13.01	13.30	13.84
	12H	14.00	14.22	14.58	14.77	15.34	13.80	14.02	14.38	14.57	15.14
12H	4H	9.92	10.32	10.45	10.81	11.38	9.67	10.07	10.20	10.56	11.13
	6H	11.75	12.04	12.31	12.60	13.14	11.55	11.84	12.12	12.40	12.94
	8H	12.97	13.19	13.55	13.74	14.31	12.83	13.05	13.41	13.60	14.17
Variation with the observer position at spacings:											
S = 1.0H		1.3/-1.1					1.3/-1.1				
S = 1.5H		1.5/-1.2					1.5/-1.2				
S = 2.0H		1.7/-1.2					1.7/-1.2				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-4.8					-4.8				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 8 c serie 3 fm

LampCAT: modulo led 6W 30K irc 90

Ballast type: LED driver 700mA

Report No:

Voltage(V): 127.8400

Test No:

Current(A): 0.0620

Number of Lamps: 1

Power (W): 7.5480

Lamp flux(lm): 700.0

PF: 0.9510

Length(mm): 80

Width(mm): 25

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 507.17, Efficiency(%): 72.45% , Luminous Efficacy(lm/W): 67.19

Central intensity(cd): 2056.014, Maximum intensity(cd): 2056.014

Angle of maximum intensity: C=0.0 γ =0.0

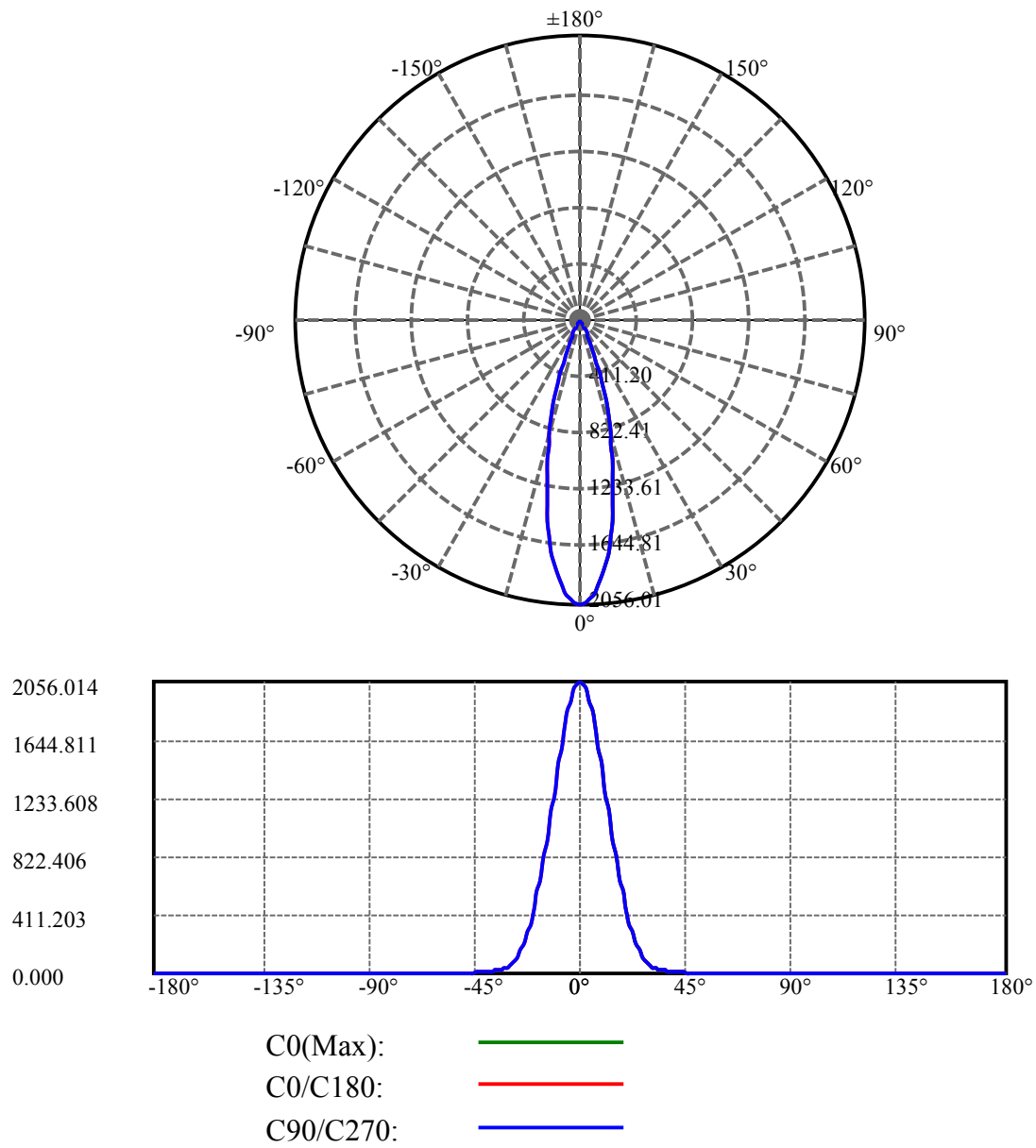
Beam angle of C0 plane : 26.24

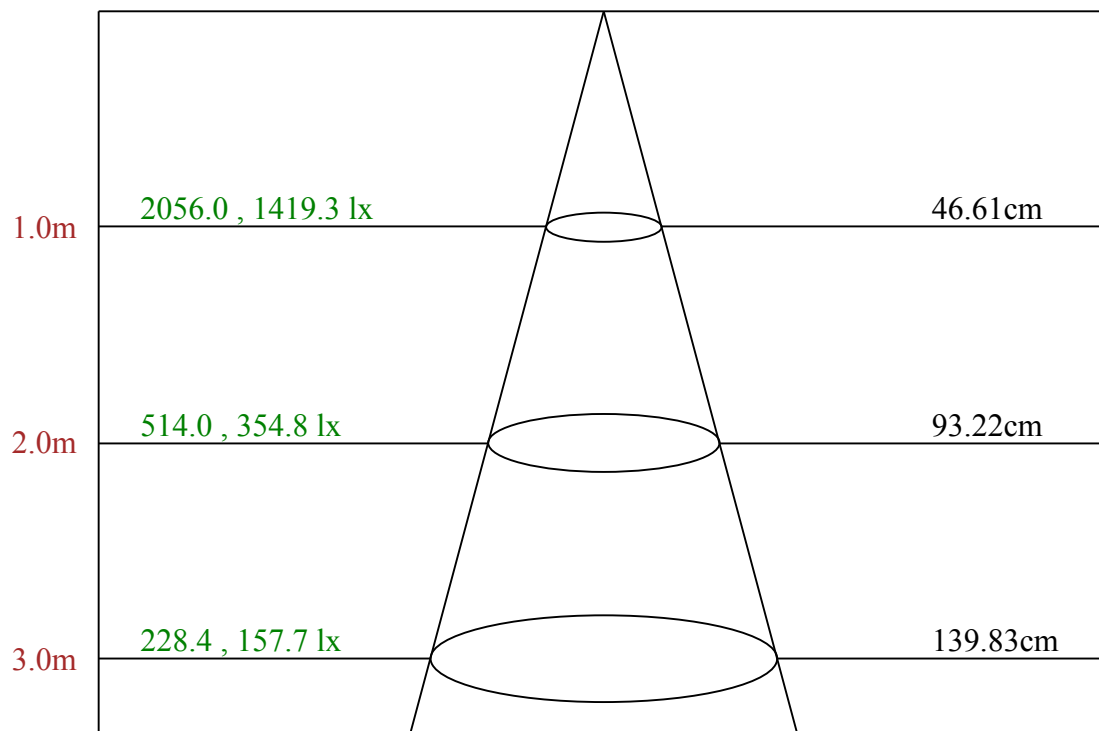
Aveage BeamAngle(IEC 61341):26.24

Equipment: equipamento lumini
Temperature(°C): 25.5

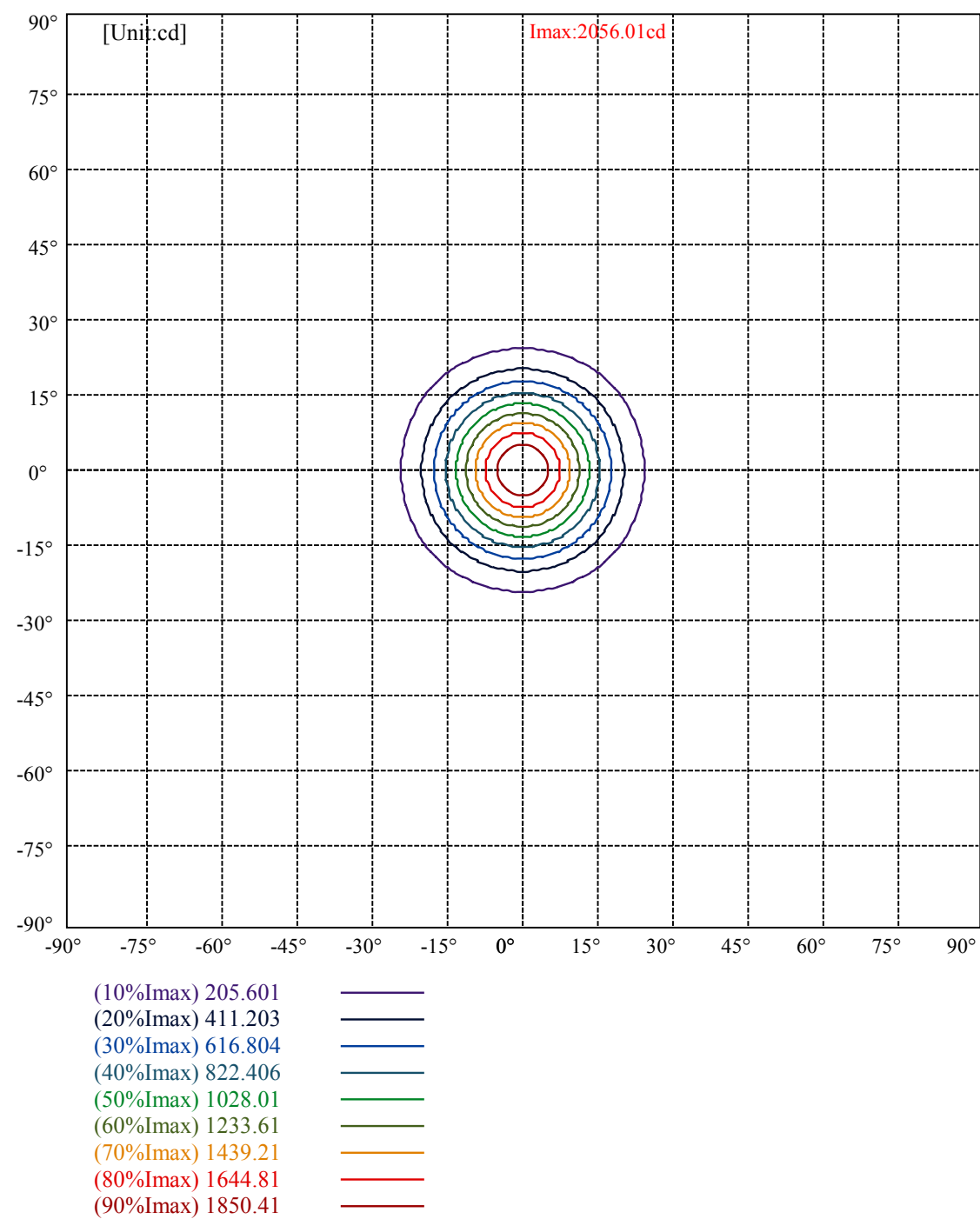
Date: 14/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 26.24



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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

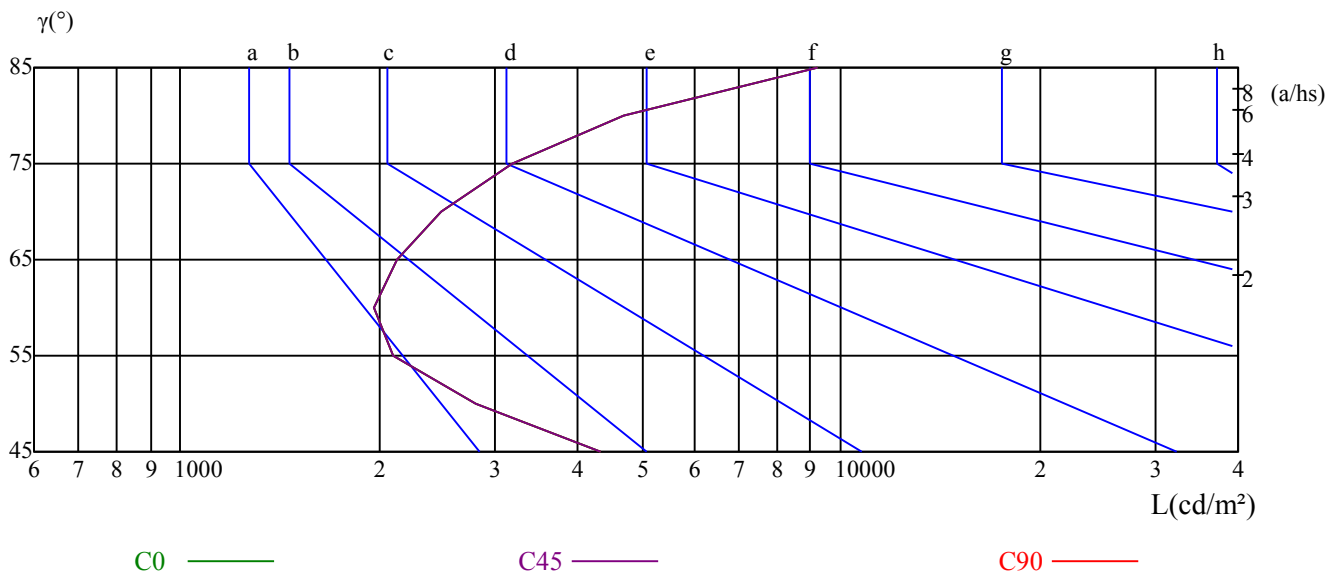
γ	45	50	55	60	65	70	75	80	85
C0	4322	2801	2106	1970	2133	2488	3173	4695	9252
C45	4322	2801	2106	1970	2133	2488	3173	4695	9252
C90	4322	2801	2106	1970	2133	2488	3173	4695	9252

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2133	2133	2133	3173	3173	3173	9252	9252	9252

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve



Equipment: equipamento lumini
Temperature($^{\circ}$ C): 25.5

Date: 14/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	9.18	10.07	9.58	10.43	10.80	9.97	10.87	10.38	11.22	11.59
	3H	9.59	10.39	10.02	10.77	11.17	10.28	11.07	10.71	11.46	11.86
	4H	10.05	10.79	10.49	11.19	11.61	10.62	11.36	11.07	11.76	12.18
	6H	10.86	11.53	11.32	11.95	12.40	11.29	11.96	11.75	12.38	12.83
	8H	11.46	12.10	11.92	12.53	12.99	11.77	12.41	12.23	12.84	13.30
	12H	12.25	12.85	12.71	13.29	13.76	12.45	13.06	12.92	13.50	13.97
4H	2H	9.09	9.82	9.53	10.22	10.64	9.83	10.57	10.27	10.97	11.39
	3H	9.72	10.34	10.19	10.78	11.25	10.32	10.94	10.79	11.38	11.85
	4H	10.46	11.00	10.94	11.46	11.96	10.92	11.46	11.40	11.92	12.42
	6H	11.56	12.04	12.08	12.53	13.03	11.87	12.34	12.38	12.83	13.33
	8H	12.40	12.83	12.92	13.33	13.86	12.58	13.01	13.10	13.51	14.04
	12H	13.44	13.84	13.97	14.33	14.90	13.52	13.93	14.05	14.42	14.99
8H	4H	10.72	11.15	11.24	11.65	12.18	11.12	11.56	11.65	12.06	12.58
	6H	12.14	12.50	12.68	13.01	13.58	12.38	12.73	12.92	13.25	13.81
	8H	13.25	13.55	13.82	14.11	14.65	13.36	13.66	13.93	14.22	14.77
	12H	14.57	14.79	15.15	15.35	15.92	14.59	14.82	15.17	15.37	15.94
12H	4H	10.81	11.21	11.34	11.70	12.27	11.20	11.60	11.73	12.09	12.66
	6H	12.40	12.69	12.97	13.25	13.80	12.62	12.91	13.19	13.47	14.02
	8H	13.58	13.81	14.16	14.37	14.94	13.68	13.91	14.26	14.46	15.03
Variation with the observer position at spacings:											
S = 1.0H		2.6/-1.8					2.6/-1.8				
S = 1.5H		3.1/-1.6					3.1/-1.6				
S = 2.0H		3.5/-1.5					3.5/-1.5				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-3.5					-3.5				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 8 c serie 3 fa

LampCAT: modulo led 6W 30K irc 90

Ballast type: LED driver 700mA

Report No:

Voltage(V): 127.8900

Test No:

Current(A): 0.0620

Number of Lamps: 1

Power (W): 7.5340

Lamp flux(lm): 700.0

PF: 0.9520

Length(mm): 80

Width(mm): 25

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 434.91, Efficiency(%): 62.13% , Luminous Efficacy(lm/W): 57.73

Central intensity(cd): 571.784, Maximum intensity(cd): 571.784

Angle of maximum intensity: C=0.0 γ =0.0

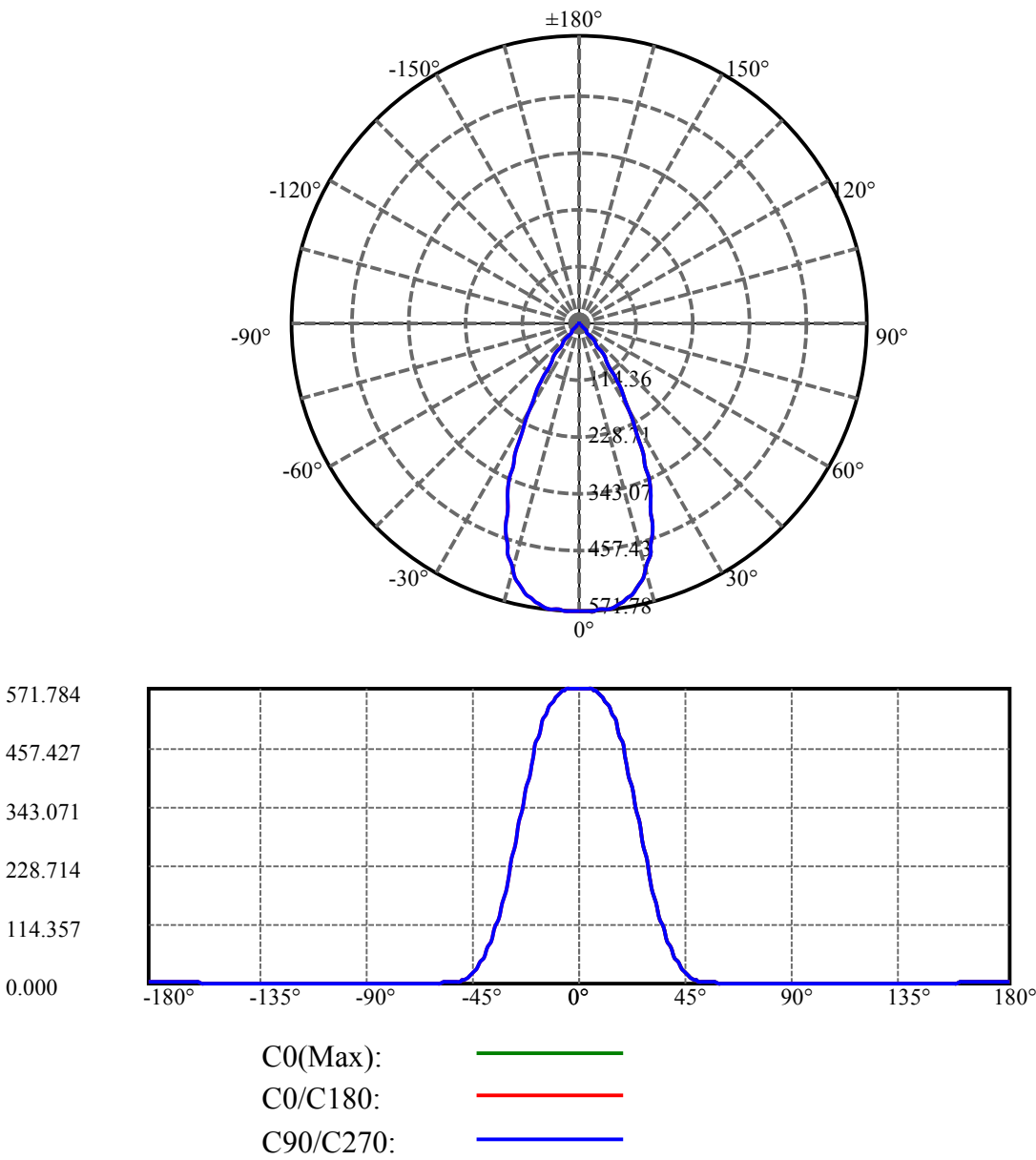
Beam angle of C0 plane : 52.21

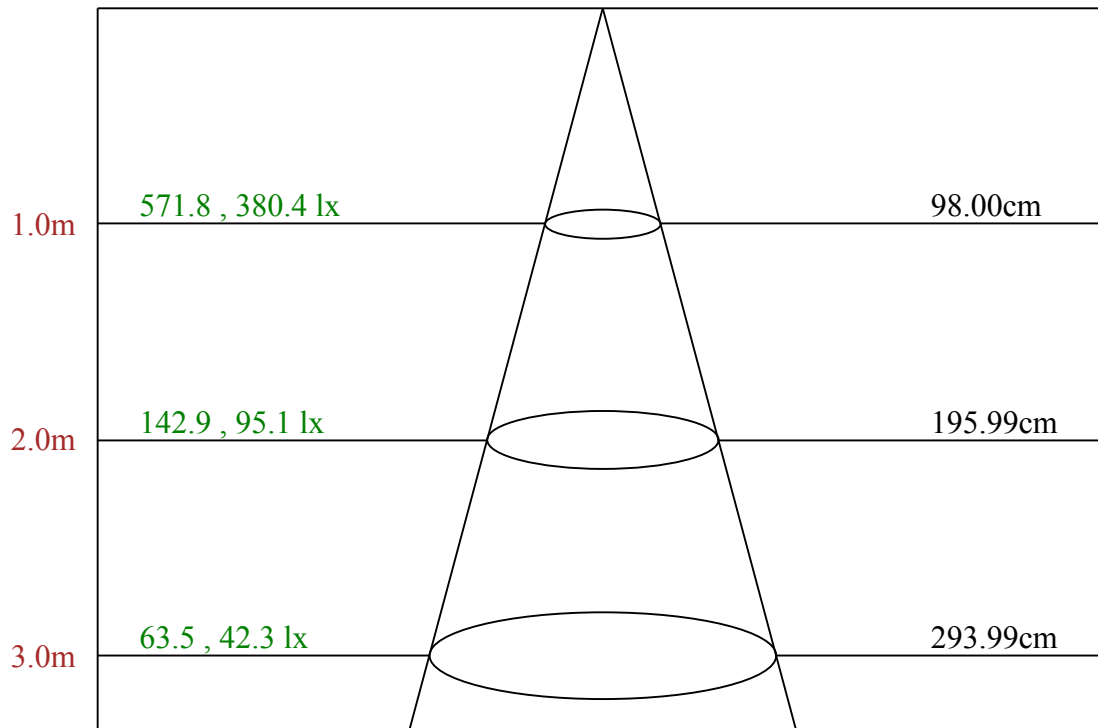
Average BeamAngle(IEC 61341): 52.21

Equipment: equipamento lumini
Temperature(°C): 25.5

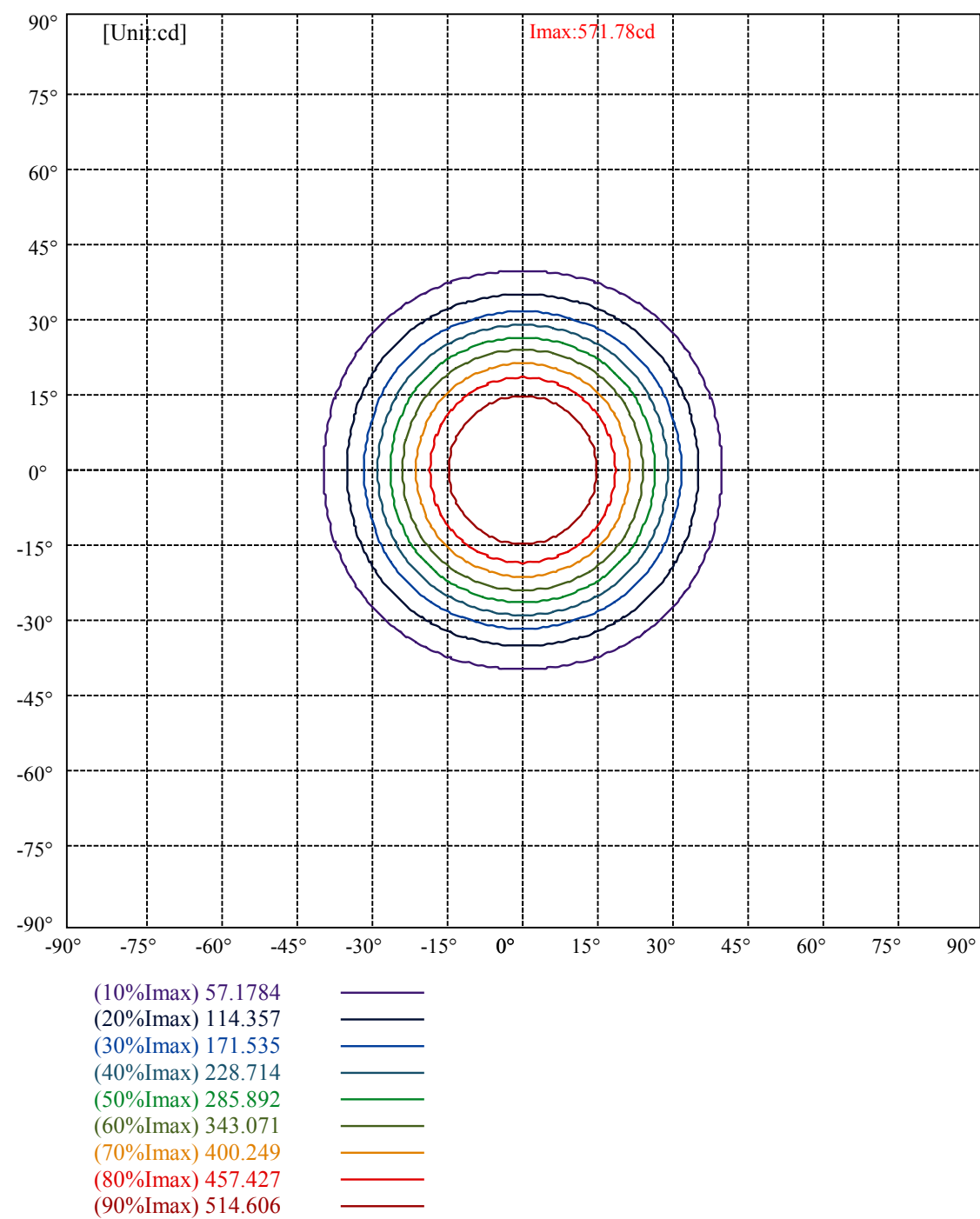
Date: 13/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 52.21



Luminance Table

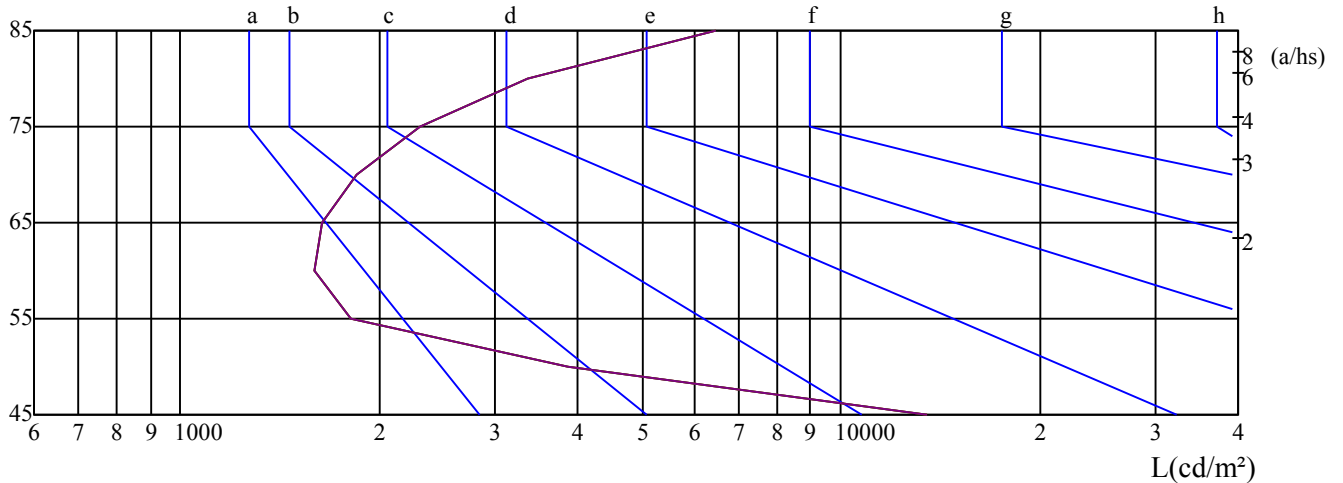
γ	45	50	55	60	65	70	75	80	85
C0	13483	3856	1811	1595	1633	1844	2299	3359	6487
C45	13483	3856	1811	1595	1633	1844	2299	3359	6487
C90	13483	3856	1811	1595	1633	1844	2299	3359	6487

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1633	1633	1633	2299	2299	2299	6487	6487	6487

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

 $\gamma(^{\circ})$ 

C0 ———

C45 ———

C90 ———

Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	20.58	21.51	20.98	21.87	22.23	20.14	21.07	20.54	21.42	21.79
	3H	20.38	21.21	20.81	21.59	21.98	19.94	20.77	20.37	21.15	21.54
	4H	20.29	21.06	20.73	21.45	21.87	19.85	20.62	20.29	21.01	21.43
	6H	20.23	20.93	20.69	21.35	21.79	19.80	20.50	20.25	20.91	21.36
	8H	20.18	20.85	20.64	21.27	21.73	19.75	20.42	20.21	20.84	21.29
	12H	20.15	20.78	20.61	21.22	21.68	19.73	20.36	20.19	20.79	21.25
4H	2H	20.27	21.03	20.70	21.43	21.84	19.82	20.59	20.26	20.98	21.40
	3H	20.04	20.68	20.50	21.11	21.57	19.60	20.24	20.06	20.67	21.13
	4H	19.98	20.54	20.46	21.00	21.49	19.55	20.10	20.02	20.56	21.06
	6H	19.90	20.38	20.40	20.87	21.37	19.47	19.95	19.97	20.44	20.94
	8H	19.88	20.33	20.40	20.83	21.35	19.46	19.91	19.98	20.41	20.92
	12H	19.91	20.33	20.43	20.81	21.38	19.50	19.91	20.02	20.40	20.97
8H	4H	19.80	20.25	20.31	20.74	21.26	19.36	19.81	19.88	20.31	20.83
	6H	19.72	20.09	20.26	20.60	21.16	19.30	19.67	19.84	20.18	20.74
	8H	19.78	20.09	20.35	20.65	21.19	19.37	19.68	19.94	20.23	20.77
	12H	19.86	20.10	20.44	20.65	21.22	19.47	19.71	20.04	20.26	20.82
12H	4H	19.75	20.16	20.27	20.65	21.21	19.32	19.73	19.84	20.22	20.78
	6H	19.72	20.03	20.29	20.58	21.12	19.30	19.61	19.87	20.16	20.70
	8H	19.76	20.00	20.33	20.55	21.11	19.35	19.59	19.93	20.14	20.70
Variation with the observer position at spacings:											
S = 1.0H		5.0/-10.5					5.0/-10.5				
S = 1.5H		7.6/-8.5					7.6/-8.5				
S = 2.0H		9.4/-7.2					9.4/-7.2				
Standard tables:		BK1					BK1				
Uncorrected UGR		-1.0					-1.0				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 17 c serie 3 fc

LampCAT: modulo led 6W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 220.0000

Test No:

Current(A): 0.0360

Number of Lamps: 1

Power (W): 7.4000

Lamp flux(lm): 715.0

PF: 0.9700

Length(mm): 145

Width(mm): 20

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 481.63, Efficiency(%): 67.36% , Luminous Efficacy(lm/W): 65.08

Central intensity(cd): 3418.017, Maximum intensity(cd): 3418.017

Angle of maximum intensity: $C=0.0$ $\gamma=0.0$

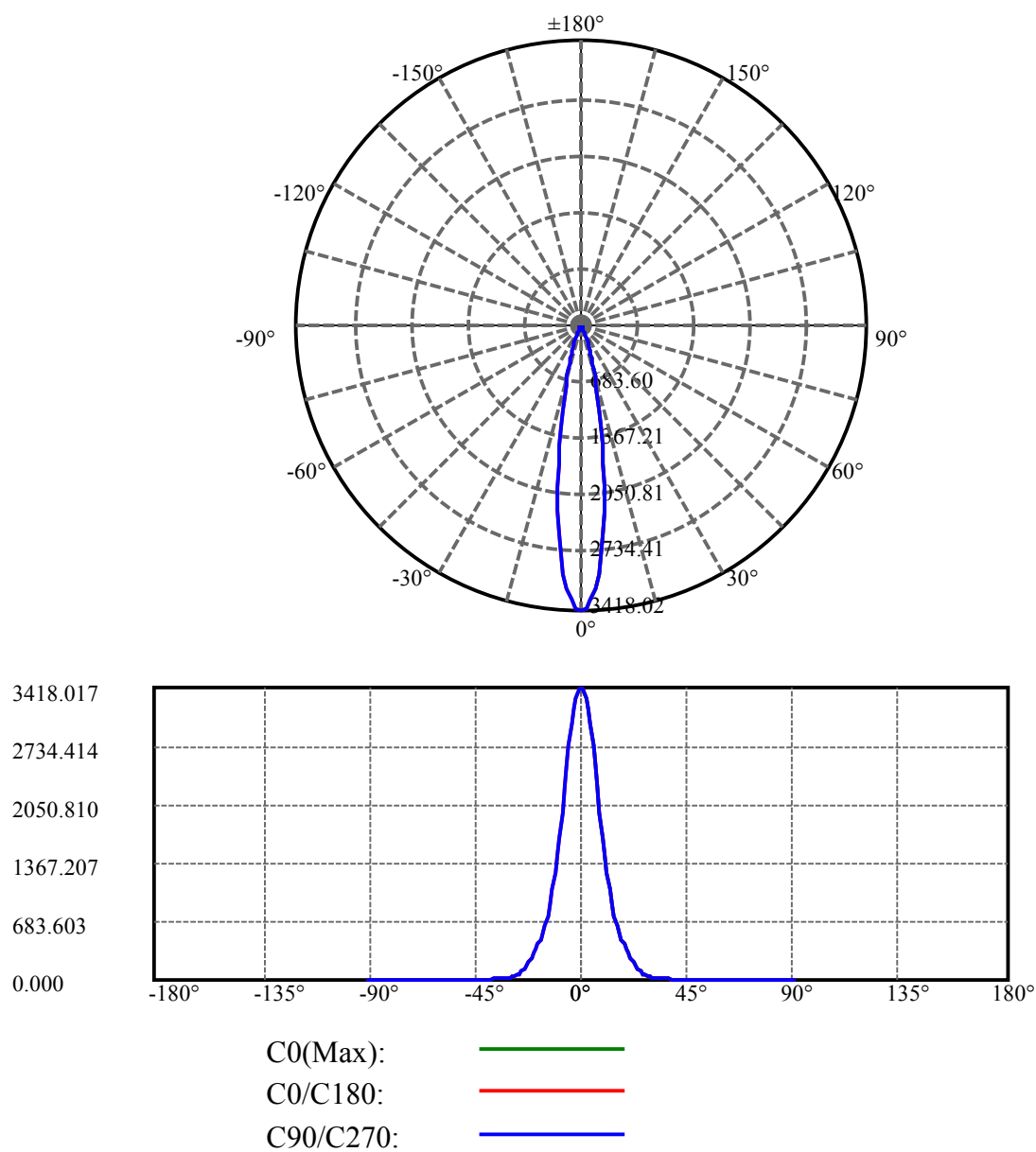
Beam angle of C0 plane : 17.70

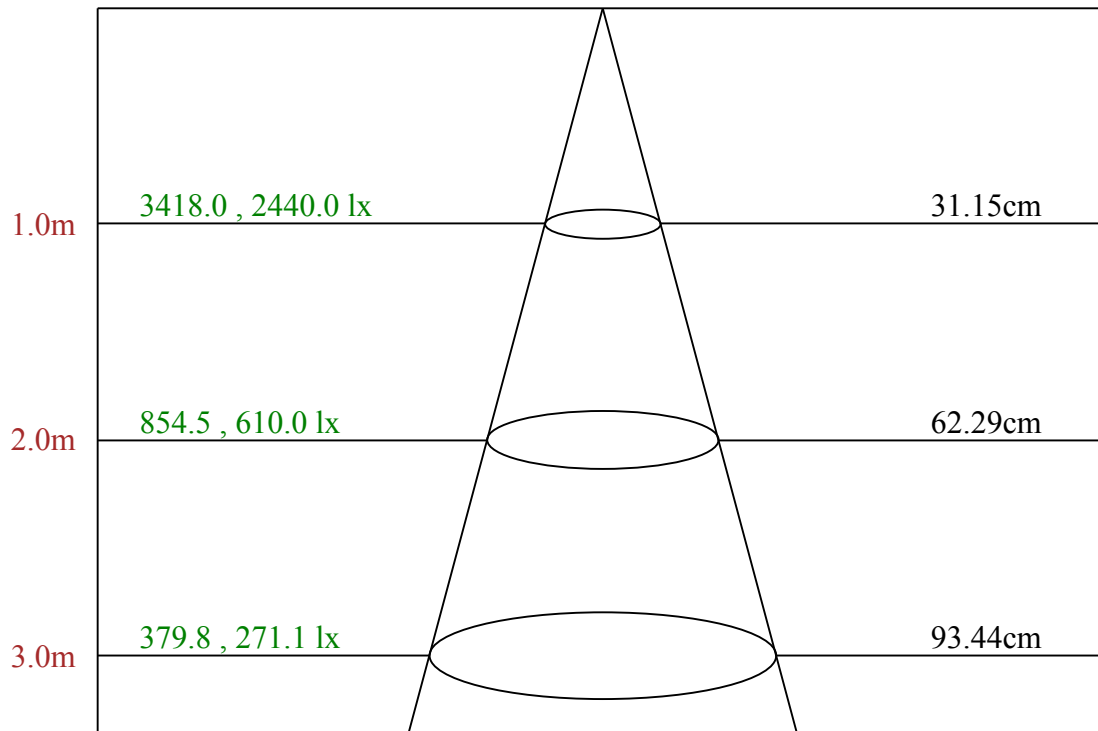
Average BeamAngle(IEC 61341): 17.70

Equipment: equipamento lumini
Temperature(°C): 25.5

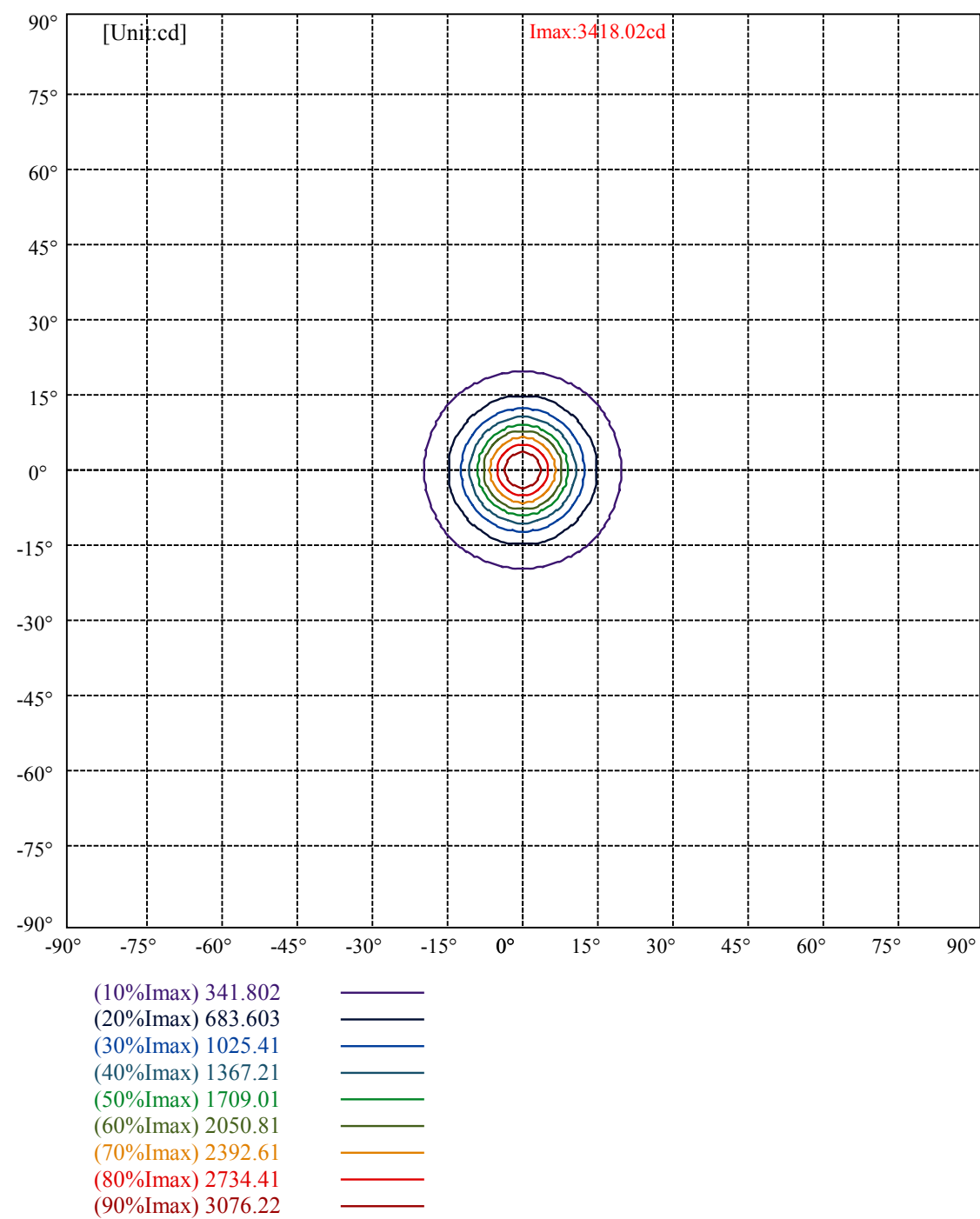
Date: 8/5/2024
Humidity(%): 55.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 17.70



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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	2600	2056	1345	1248	1350	1608	1998	2978	5934
C45	2600	2056	1345	1248	1350	1608	1998	2978	5934
C90	2600	2056	1345	1248	1350	1608	1998	2978	5934

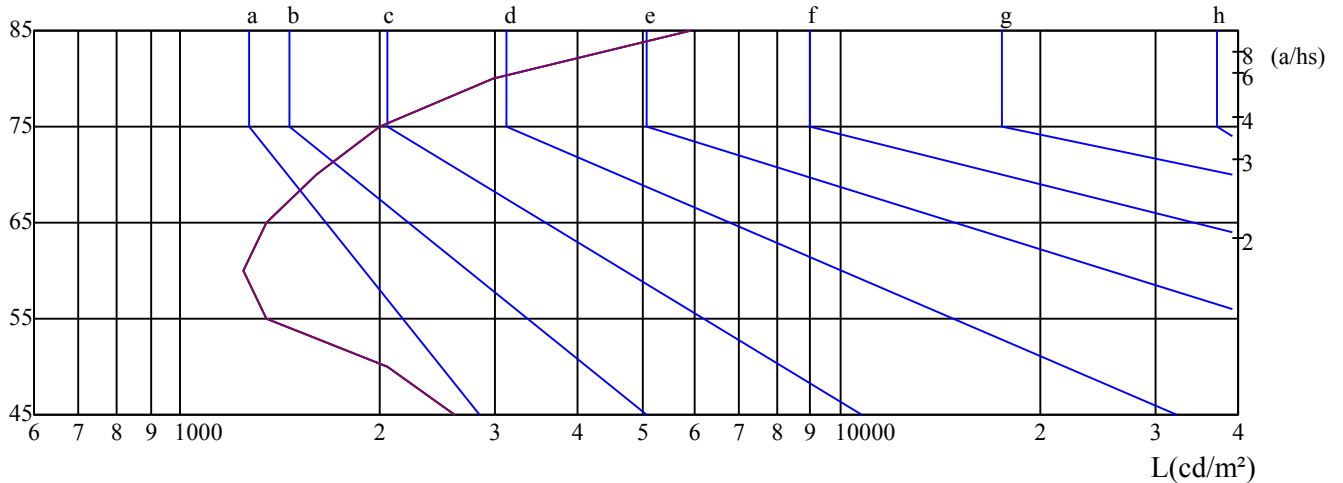
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1350	1350	1350	1998	1998	1998	5934	5934	5934

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

Equipment: equipamento lumini
Temperature($^{\circ}$ C): 25.5

Date: 8/5/2024
Humidity(%): 55.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	4.45	5.36	4.81	5.67	5.99	4.74	5.65	5.10	5.96	6.28
	3H	5.57	6.39	5.96	6.72	7.07	5.77	6.59	6.16	6.92	7.27
	4H	6.48	7.23	6.88	7.58	7.95	6.62	7.37	7.02	7.72	8.09
	6H	7.80	8.49	8.22	8.87	9.27	7.88	8.56	8.30	8.94	9.34
	8H	8.61	9.26	9.03	9.65	10.06	8.70	9.35	9.12	9.74	10.15
	12H	9.64	10.26	10.07	10.65	11.07	9.68	10.30	10.11	10.70	11.12
4H	2H	4.63	5.38	5.03	5.74	6.10	4.89	5.64	5.29	5.99	6.36
	3H	6.11	6.74	6.54	7.14	7.55	6.26	6.89	6.68	7.28	7.70
	4H	7.34	7.88	7.78	8.31	8.75	7.43	7.97	7.87	8.40	8.85
	6H	8.93	9.41	9.41	9.87	10.32	8.97	9.45	9.45	9.90	10.36
	8H	9.92	10.36	10.41	10.82	11.30	9.98	10.43	10.47	10.89	11.36
	12H	11.15	11.56	11.64	12.01	12.53	11.17	11.58	11.66	12.03	12.55
8H	4H	7.82	8.27	8.31	8.73	9.20	7.90	8.34	8.39	8.80	9.28
	6H	9.75	10.11	10.26	10.59	11.11	9.78	10.14	10.29	10.62	11.13
	8H	11.00	11.30	11.53	11.82	12.32	11.05	11.35	11.58	11.87	12.37
	12H	12.48	12.71	13.02	13.22	13.75	12.49	12.71	13.03	13.23	13.76
12H	4H	7.98	8.39	8.47	8.84	9.37	8.06	8.46	8.55	8.92	9.44
	6H	10.08	10.38	10.62	10.91	11.41	10.11	10.41	10.64	10.93	11.43
	8H	11.42	11.65	11.96	12.16	12.69	11.46	11.69	12.01	12.21	12.73
Variation with the observer position at spacings:											
S = 1.0H		1.4/-1.2					1.4/-1.2				
S = 1.5H		1.6/-1.3					1.6/-1.3				
S = 2.0H		1.8/-1.2					1.8/-1.2				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-5.9					-5.9				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 17 c serie 3 fm

LampCAT: modulo led 6W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 220.0000

Test No:

Current(A): 0.0360

Number of Lamps: 1

Power (W): 7.3900

Lamp flux(lm): 715.0

PF: 0.9700

Length(mm): 145

Width(mm): 20

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 553.75, Efficiency(%): 77.45% , Luminous Efficacy(lm/W): 74.93

Central intensity(cd): 2276.567, Maximum intensity(cd): 2276.567

Angle of maximum intensity: C=0.0 γ =0.0

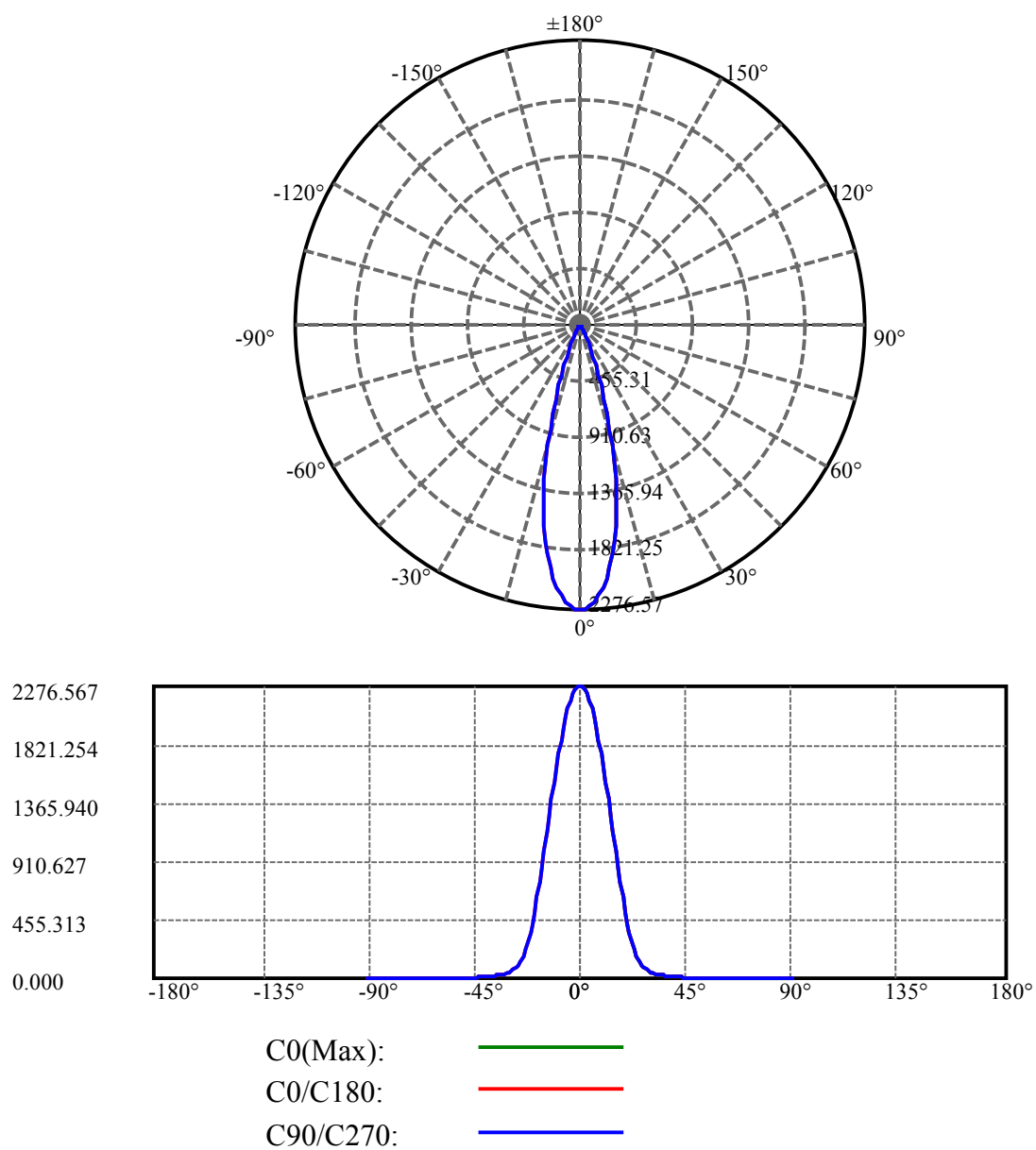
Beam angle of C0 plane : 28.00

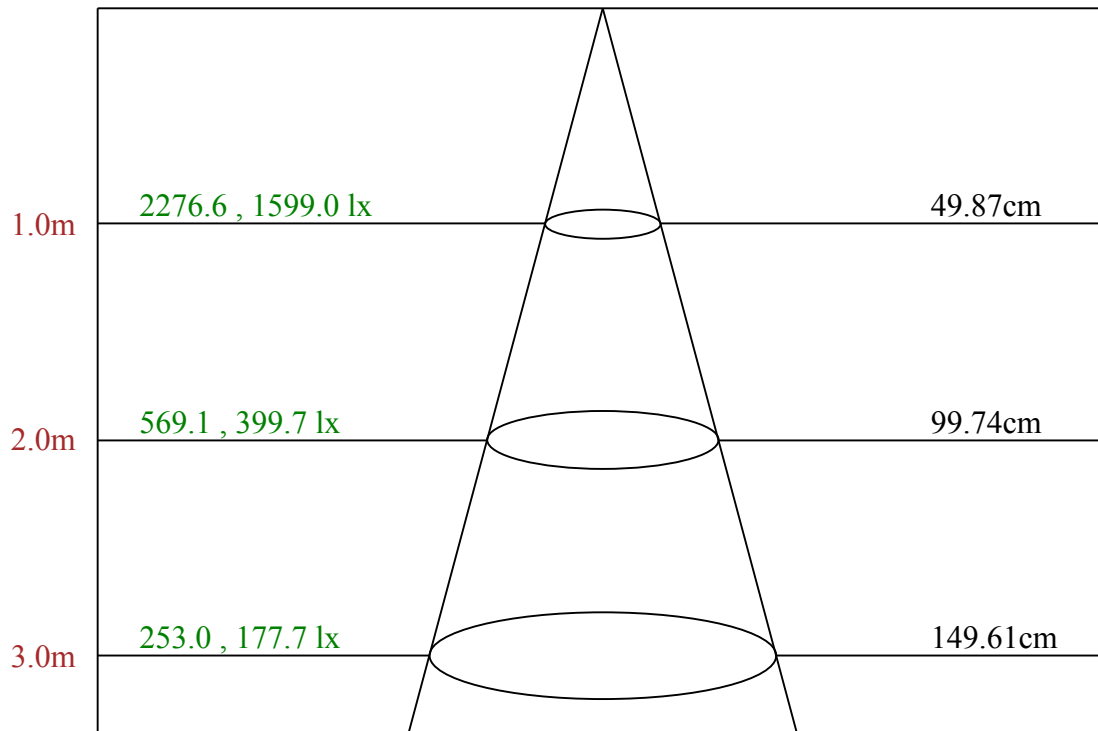
Aveage BeamAngle(IEC 61341):28.00

Equipment: equipamento lumini
Temperature(°C): 25.5

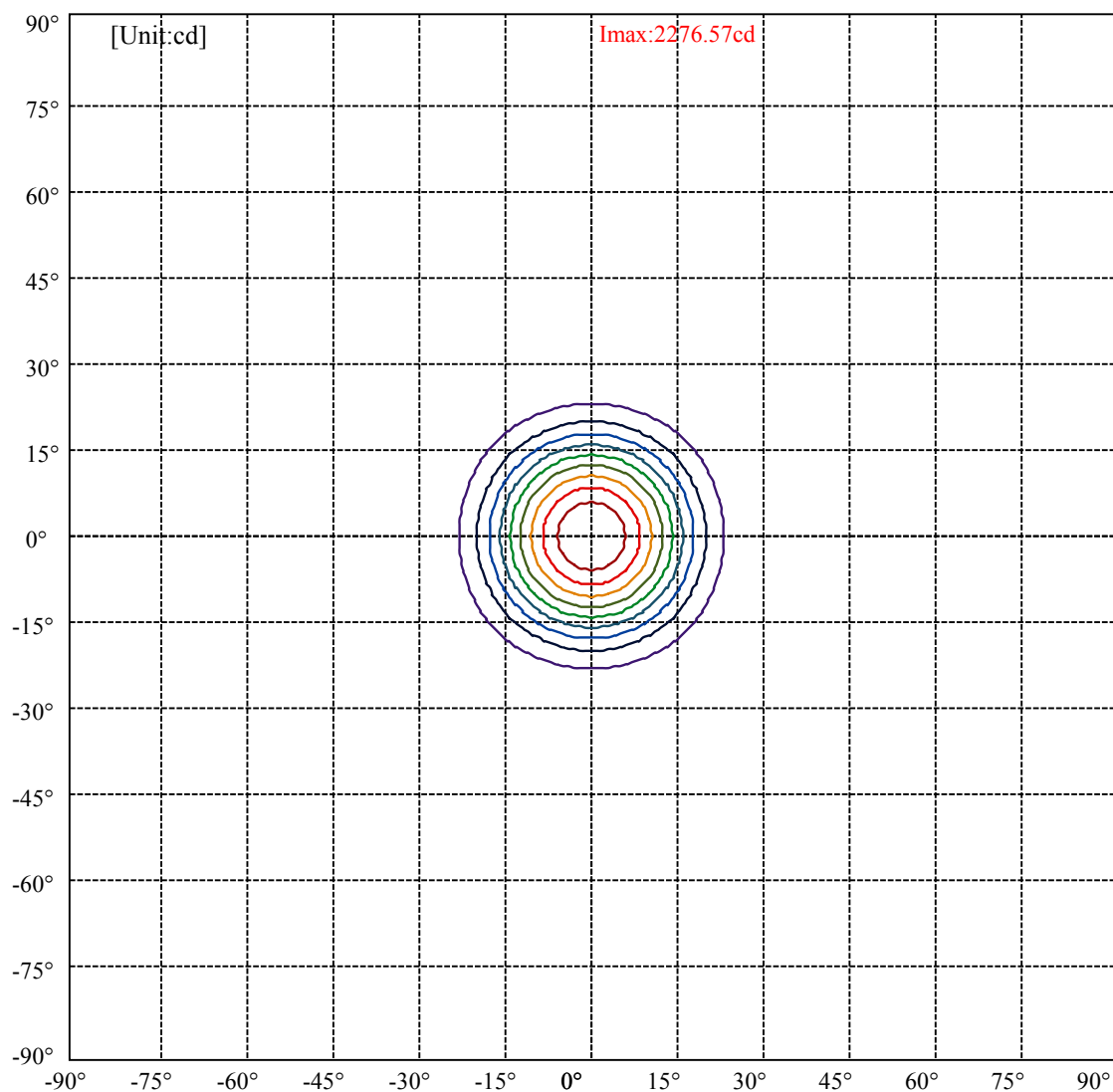
Date: 8/5/2024
Humidity(%): 55.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 28.00



(10%Imax) 227.657	—
(20%Imax) 455.313	—
(30%Imax) 682.97	—
(40%Imax) 910.627	—
(50%Imax) 1138.28	—
(60%Imax) 1365.94	—
(70%Imax) 1593.6	—
(80%Imax) 1821.25	—
(90%Imax) 2048.91	—

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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	2931	1947	1388	1330	1476	1728	2236	3333	6687
C45	2931	1947	1388	1330	1476	1728	2236	3333	6687
C90	2931	1947	1388	1330	1476	1728	2236	3333	6687

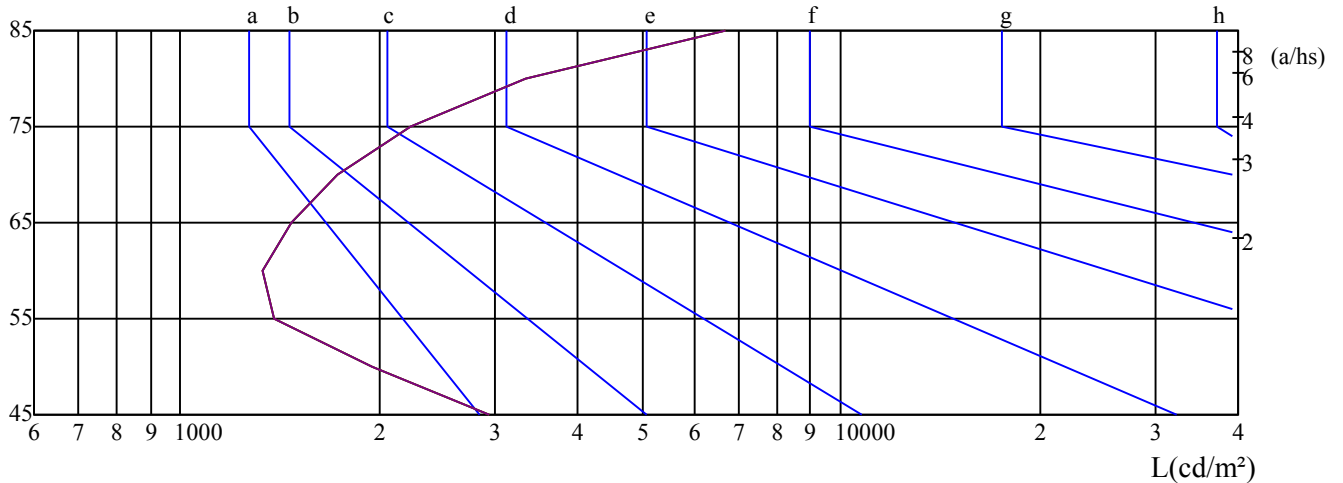
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1476	1476	1476	2236	2236	2236	6687	6687	6687

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

Equipment: equipamento lumini
Temperature($^{\circ}$ C): 25.5

Date: 8/5/2024
Humidity(%): 55.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	5.73	6.64	6.09	6.95	7.26	6.08	6.99	6.45	7.31	7.62
	3H	6.52	7.33	6.91	7.67	8.02	6.81	7.62	7.19	7.95	8.30
	4H	7.26	8.01	7.67	8.37	8.74	7.49	8.24	7.90	8.60	8.97
	6H	8.45	9.13	8.87	9.51	9.91	8.60	9.28	9.02	9.66	10.06
	8H	9.23	9.88	9.66	10.27	10.68	9.35	10.00	9.77	10.39	10.80
	12H	10.20	10.82	10.63	11.22	11.64	10.29	10.91	10.72	11.30	11.72
4H	2H	5.76	6.51	6.16	6.86	7.23	6.08	6.83	6.48	7.19	7.55
	3H	6.87	7.50	7.30	7.90	8.32	7.11	7.74	7.54	8.14	8.55
	4H	7.95	8.49	8.39	8.92	9.37	8.12	8.67	8.56	9.09	9.54
	6H	9.44	9.92	9.92	10.37	10.83	9.53	10.01	10.01	10.47	10.92
	8H	10.43	10.87	10.92	11.33	11.81	10.51	10.95	10.99	11.41	11.88
	12H	11.62	12.03	12.11	12.48	13.01	11.67	12.08	12.17	12.54	13.06
8H	4H	8.37	8.81	8.86	9.27	9.75	8.51	8.96	9.00	9.42	9.89
	6H	10.20	10.56	10.70	11.04	11.55	10.26	10.62	10.77	11.10	11.62
	8H	11.46	11.76	11.99	12.28	12.78	11.51	11.81	12.05	12.33	12.83
	12H	12.91	13.14	13.46	13.66	14.18	12.94	13.17	13.49	13.69	14.21
12H	4H	8.51	8.92	9.00	9.37	9.90	8.65	9.06	9.14	9.51	10.03
	6H	10.51	10.81	11.05	11.34	11.84	10.57	10.87	11.11	11.40	11.89
	8H	11.86	12.09	12.41	12.61	13.13	11.91	12.13	12.45	12.65	13.18
Variation with the observer position at spacings:											
S = 1.0H		2.5/-1.7					2.5/-1.7				
S = 1.5H		3.0/-1.6					3.0/-1.6				
S = 2.0H		3.4/-1.5					3.4/-1.5				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-5.1					-5.1				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 17 c serie 3 fa

LampCAT: modulo led 6W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 221.0000

Test No:

Current(A): 0.0360

Number of Lamps: 1

Power (W): 7.3700

Lamp flux(lm): 715.0

PF: 0.9700

Length(mm): 145

Width(mm): 20

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 477.19, Efficiency(%): 66.74% , Luminous Efficacy(lm/W): 64.75

Central intensity(cd): 799.705, Maximum intensity(cd): 799.705

Angle of maximum intensity: C=0.0 γ =0.0

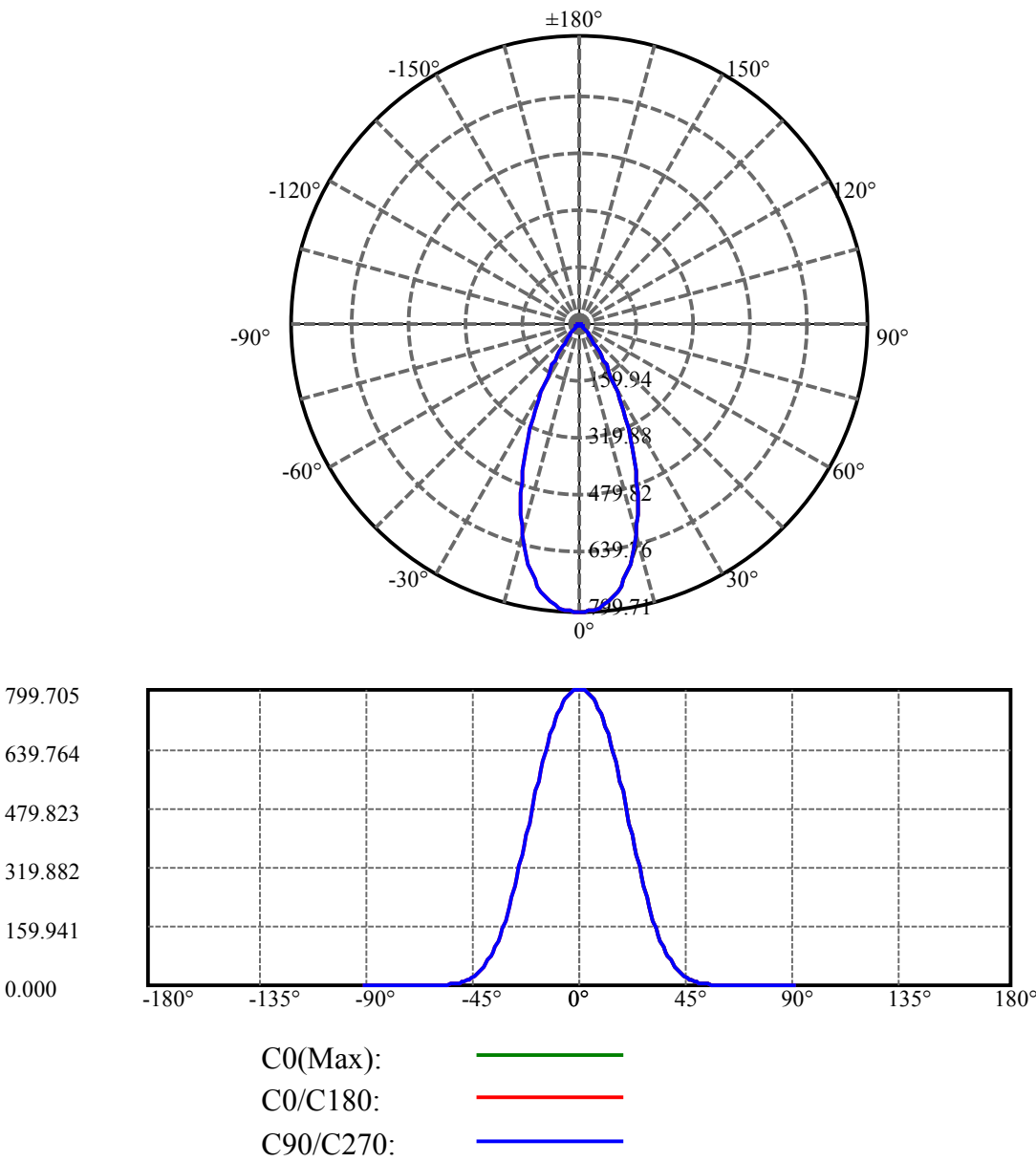
Beam angle of C0 plane : 44.56

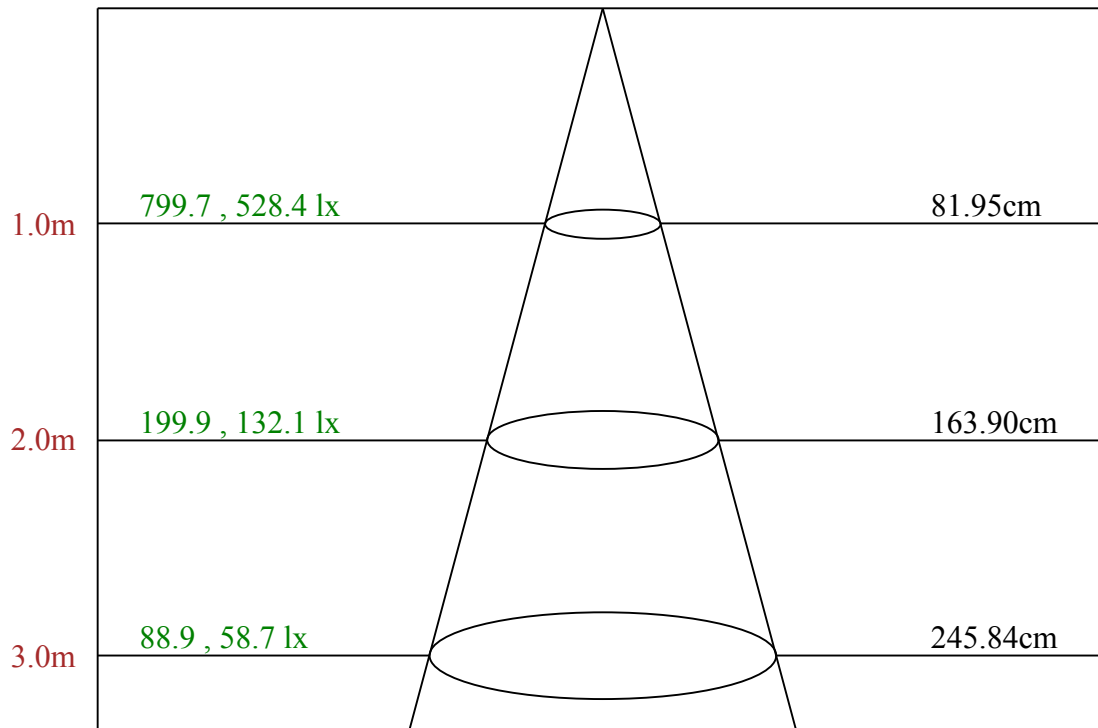
Aveage BeamAngle(IEC 61341):44.56

Equipment: equipamento lumini
Temperature(°C): 25.5

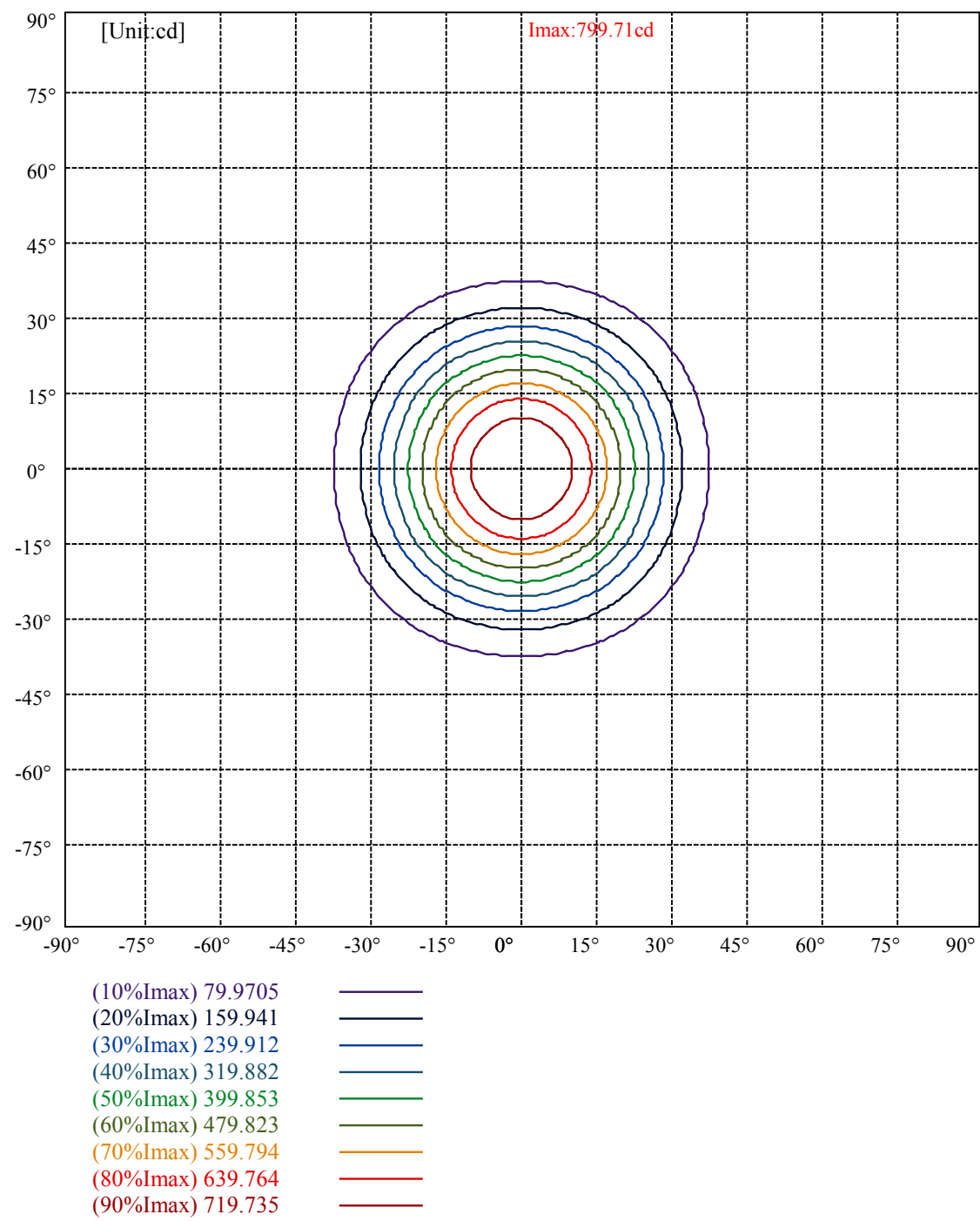
Date: 8/7/2024
Humidity(%): 55.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 44.56



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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	9908	3742	1453	1133	1156	1320	1665	2387	4803
C45	9908	3742	1453	1133	1156	1320	1665	2387	4803
C90	9908	3742	1453	1133	1156	1320	1665	2387	4803

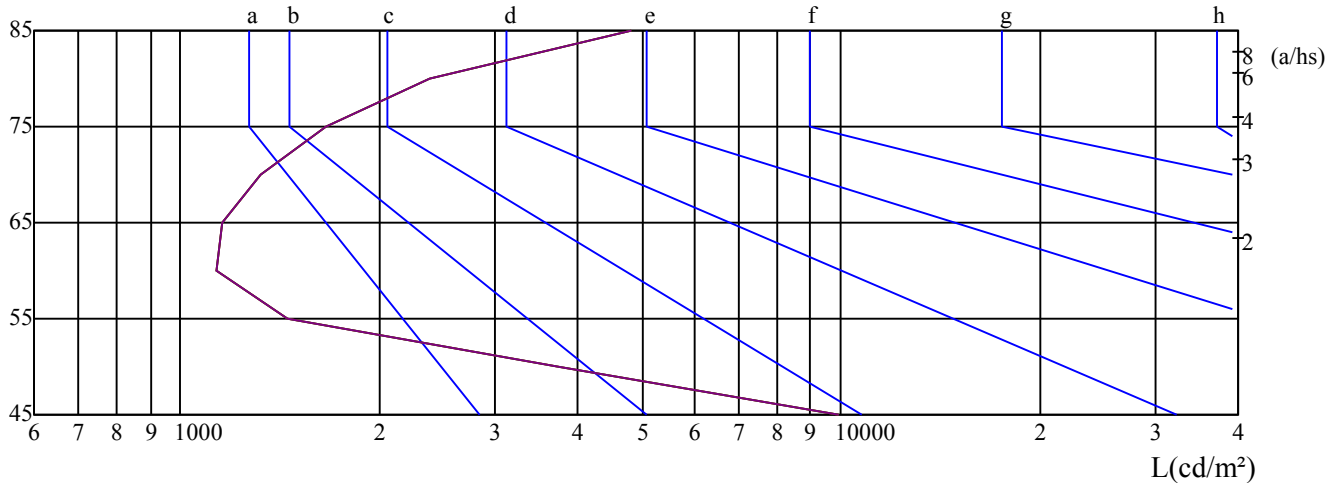
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1156	1156	1156	1665	1665	1665	4803	4803	4803

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 —

C45 —

C90 —

Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	15.48	16.43	15.84	16.74	17.06	16.09	17.04	16.45	17.35	17.67
	3H	15.31	16.15	15.70	16.49	16.83	15.92	16.76	16.31	17.10	17.45
	4H	15.24	16.02	15.64	16.37	16.74	15.86	16.63	16.26	16.99	17.36
	6H	15.23	15.94	15.64	16.31	16.71	15.85	16.56	16.26	16.93	17.33
	8H	15.22	15.90	15.64	16.28	16.69	15.84	16.52	16.26	16.90	17.31
	12H	15.26	15.90	15.68	16.29	16.71	15.88	16.52	16.31	16.92	17.34
4H	2H	15.18	15.96	15.58	16.31	16.68	15.78	16.56	16.19	16.92	17.28
	3H	14.99	15.64	15.42	16.04	16.45	15.60	16.25	16.02	16.64	17.06
	4H	14.98	15.54	15.42	15.97	16.42	15.59	16.15	16.03	16.57	17.02
	6H	14.98	15.47	15.45	15.92	16.38	15.59	16.08	16.06	16.54	16.99
	8H	15.05	15.50	15.53	15.96	16.44	15.66	16.11	16.14	16.57	17.05
	12H	15.19	15.61	15.68	16.07	16.59	15.81	16.23	16.30	16.69	17.21
8H	4H	14.83	15.29	15.32	15.75	16.22	15.43	15.89	15.91	16.34	16.82
	6H	14.89	15.26	15.40	15.74	16.26	15.49	15.86	15.99	16.34	16.85
	8H	15.09	15.40	15.62	15.93	16.42	15.68	15.99	16.21	16.51	17.01
	12H	15.37	15.61	15.91	16.13	16.65	15.97	16.21	16.51	16.73	17.25
12H	4H	14.80	15.22	15.29	15.67	16.19	15.39	15.81	15.88	16.26	16.79
	6H	14.93	15.24	15.46	15.77	16.26	15.52	15.83	16.05	16.35	16.85
	8H	15.14	15.38	15.68	15.90	16.42	15.71	15.95	16.25	16.47	16.99
Variation with the observer position at spacings:											
S = 1.0H		5.0/-9.9					5.0/-9.9				
S = 1.5H		7.5/-8.1					7.5/-8.1				
S = 2.0H		9.3/-6.8					9.3/-6.8				
Standard tables:		BK1					BK1				
Uncorrected UGR		-2.7					-2.7				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 17 c serie 3 fc

LampCAT: modulo led 12W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 220.0000

Test No:

Current(A): 0.0650

Number of Lamps: 1

Power (W): 14.0200

Lamp flux(lm): 1290.0

PF: 0.9700

Length(mm): 145

Width(mm): 20

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 824.30, Efficiency(%): 63.90% , Luminous Efficacy(lm/W): 58.79

Central intensity(cd): 5893.452, Maximum intensity(cd): 5893.452

Angle of maximum intensity: $C=0.0$ $\gamma=0.0$

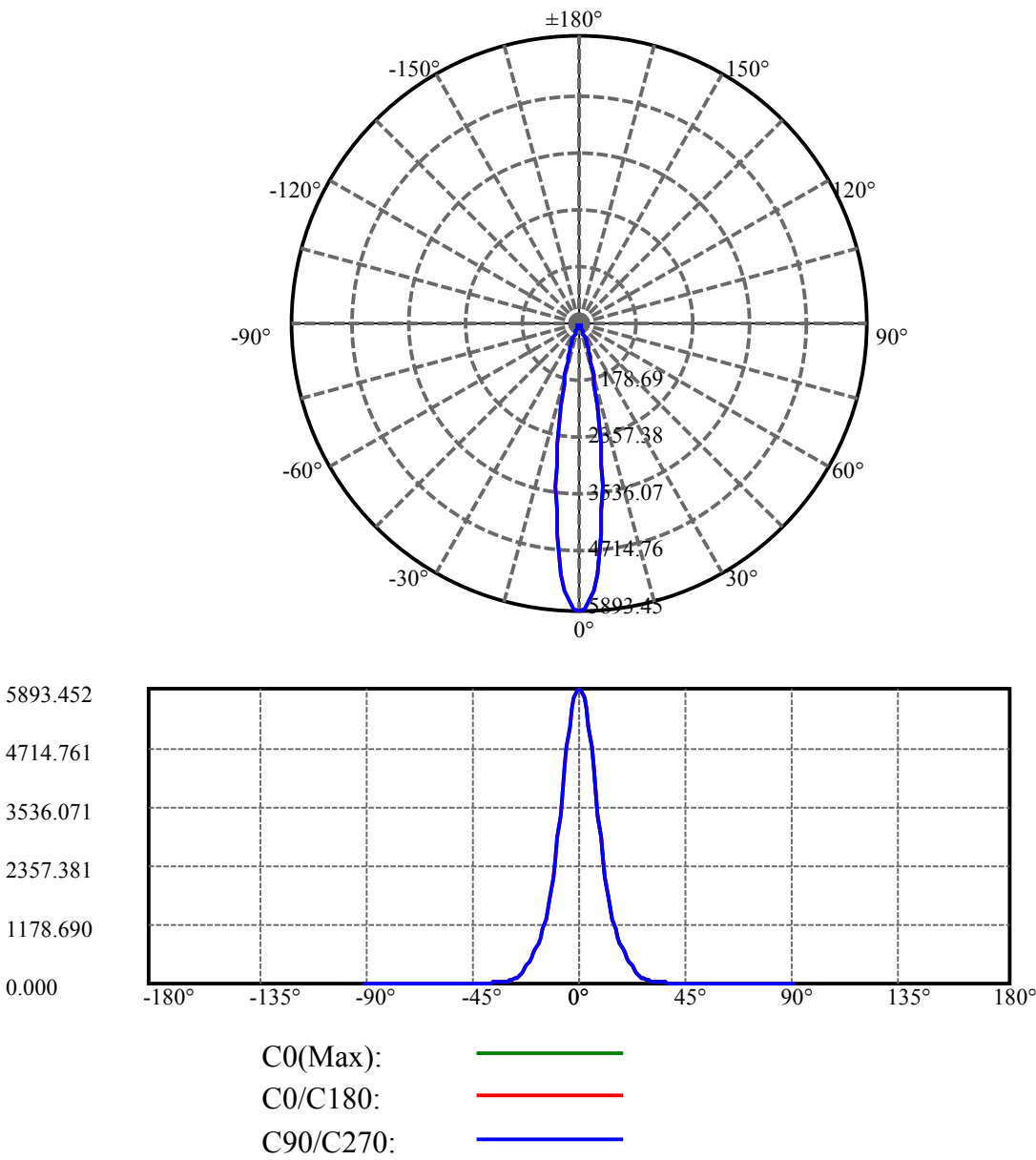
Beam angle of C0 plane : 17.88

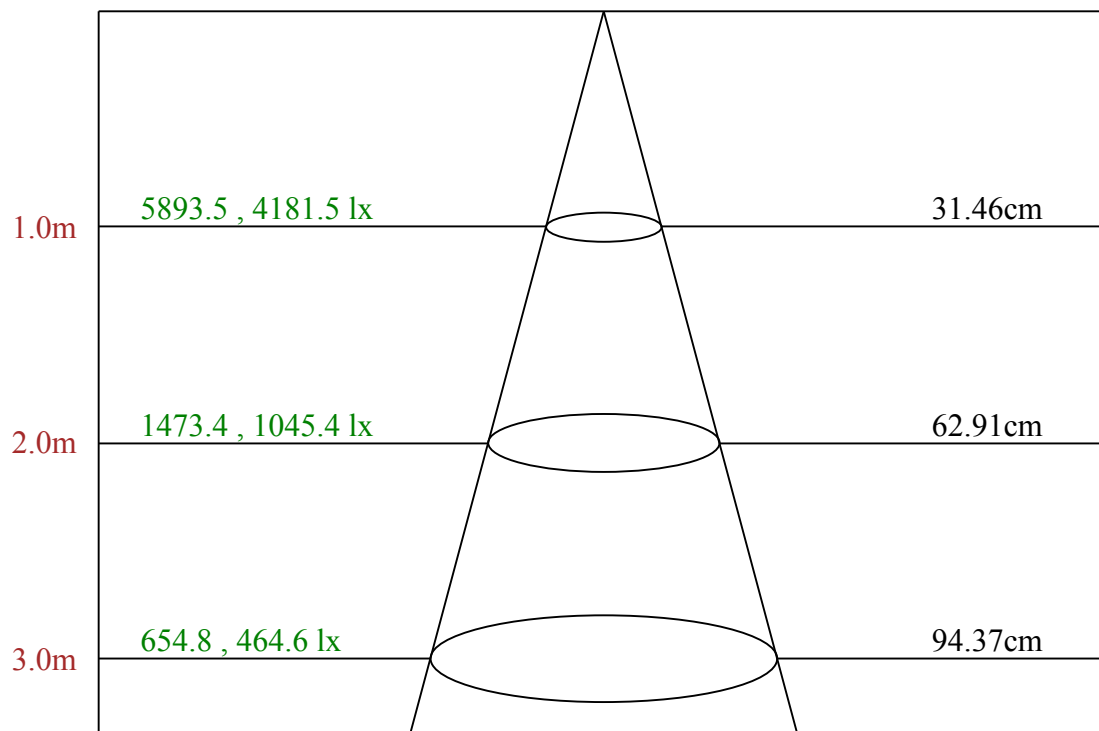
Average BeamAngle(IEC 61341): 17.88

Equipment: equipamento lumini
Temperature(°C): 25.5

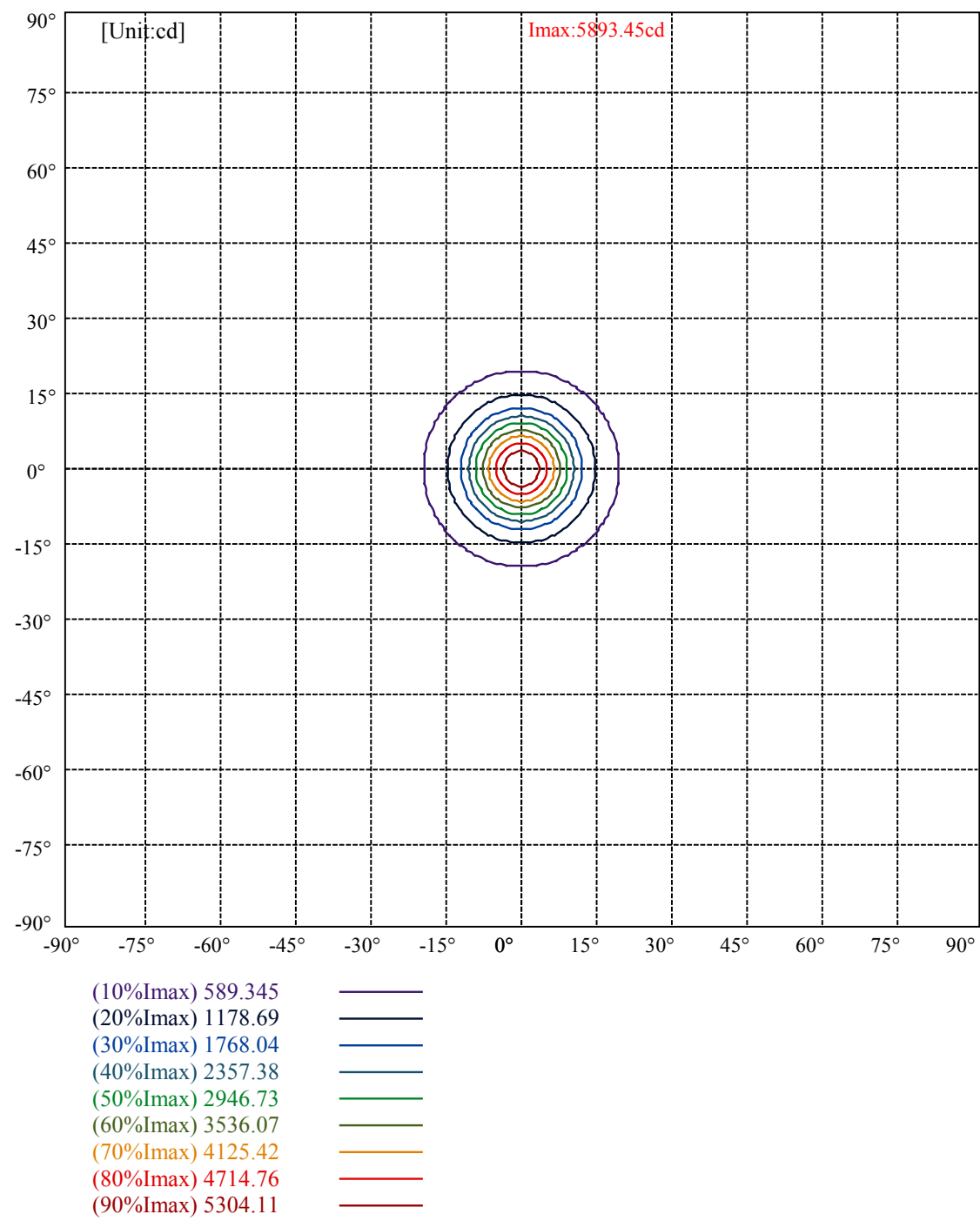
Date: 8/5/2024
Humidity(%): 55.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 17.88



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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	4376	3435	2233	2052	2234	2568	3330	4893	9654
C45	4376	3435	2233	2052	2234	2568	3330	4893	9654
C90	4376	3435	2233	2052	2234	2568	3330	4893	9654

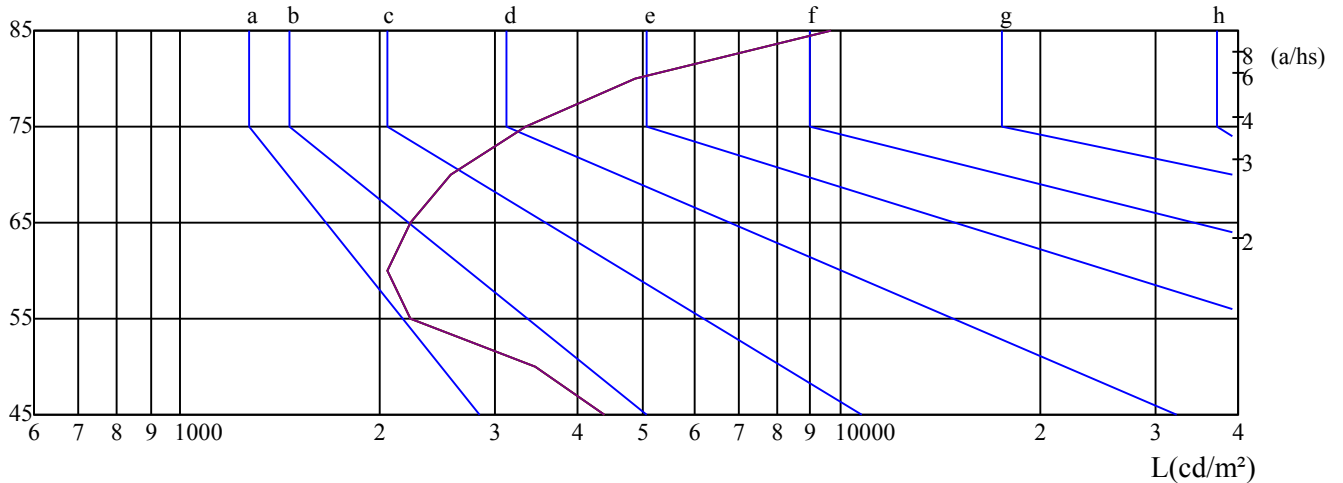
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2234	2234	2234	3330	3330	3330	9654	9654	9654

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

Equipment: equipamento lumini
Temperature($^{\circ}$ C): 25.5

Date: 8/5/2024
Humidity(%): 55.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	6.23	7.14	6.60	7.46	7.77	6.44	7.35	6.80	7.66	7.98
	3H	7.31	8.12	7.70	8.46	8.80	7.43	8.24	7.82	8.58	8.93
	4H	8.18	8.93	8.59	9.29	9.66	8.28	9.03	8.68	9.38	9.75
	6H	9.48	10.17	9.90	10.54	10.94	9.51	10.19	9.93	10.57	10.97
	8H	10.30	10.96	10.73	11.34	11.75	10.31	10.96	10.74	11.35	11.76
	12H	11.33	11.94	11.76	12.34	12.76	11.32	11.93	11.75	12.33	12.75
4H	2H	6.38	7.13	6.78	7.48	7.85	6.56	7.31	6.96	7.67	8.03
	3H	7.79	8.42	8.22	8.81	9.23	7.88	8.51	8.31	8.91	9.32
	4H	8.99	9.53	9.43	9.96	10.41	9.06	9.60	9.50	10.02	10.47
	6H	10.57	11.04	11.04	11.50	11.95	10.57	11.05	11.04	11.50	11.95
	8H	11.58	12.03	12.07	12.49	12.96	11.57	12.01	12.06	12.47	12.95
	12H	12.81	13.22	13.30	13.67	14.19	12.78	13.19	13.28	13.65	14.17
8H	4H	9.44	9.89	9.93	10.35	10.82	9.50	9.94	9.99	10.40	10.88
	6H	11.35	11.71	11.86	12.19	12.71	11.35	11.71	11.86	12.19	12.70
	8H	12.64	12.94	13.18	13.47	13.97	12.62	12.92	13.16	13.45	13.95
	12H	14.12	14.35	14.67	14.87	15.39	14.10	14.32	14.64	14.84	15.36
12H	4H	9.60	10.00	10.09	10.46	10.98	9.65	10.06	10.14	10.51	11.03
	6H	11.68	11.98	12.22	12.51	13.00	11.68	11.98	12.22	12.50	13.00
	8H	13.06	13.29	13.61	13.81	14.33	13.04	13.27	13.59	13.79	14.31
Variation with the observer position at spacings:											
S = 1.0H		1.5/-1.2					1.5/-1.2				
S = 1.5H		1.7/-1.3					1.7/-1.3				
S = 2.0H		1.9/-1.3					1.9/-1.3				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-4.3					-4.3				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 17 c serie 3 fm

LampCAT: modulo led 12W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 220.0000

Test No:

Current(A): 0.0640

Number of Lamps: 1

Power (W): 13.9900

Lamp flux(lm): 1290.0

PF: 0.9700

Length(mm): 145

Width(mm): 20

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 950.81, Efficiency(%): 73.71% , Luminous Efficacy(lm/W): 67.96

Central intensity(cd): 3946.013, Maximum intensity(cd): 3946.013

Angle of maximum intensity: C=0.0 γ =0.0

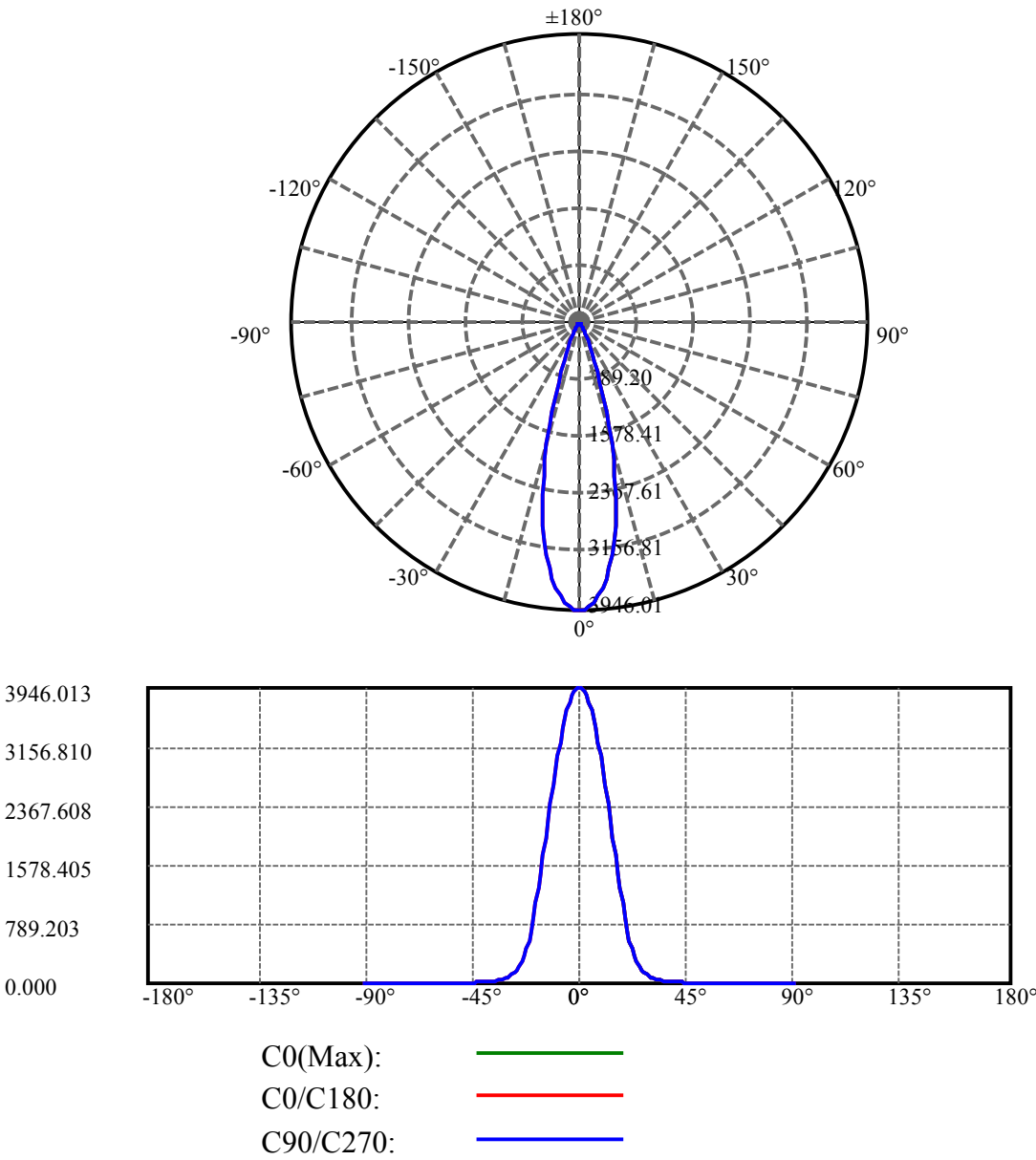
Beam angle of C0 plane : 27.69

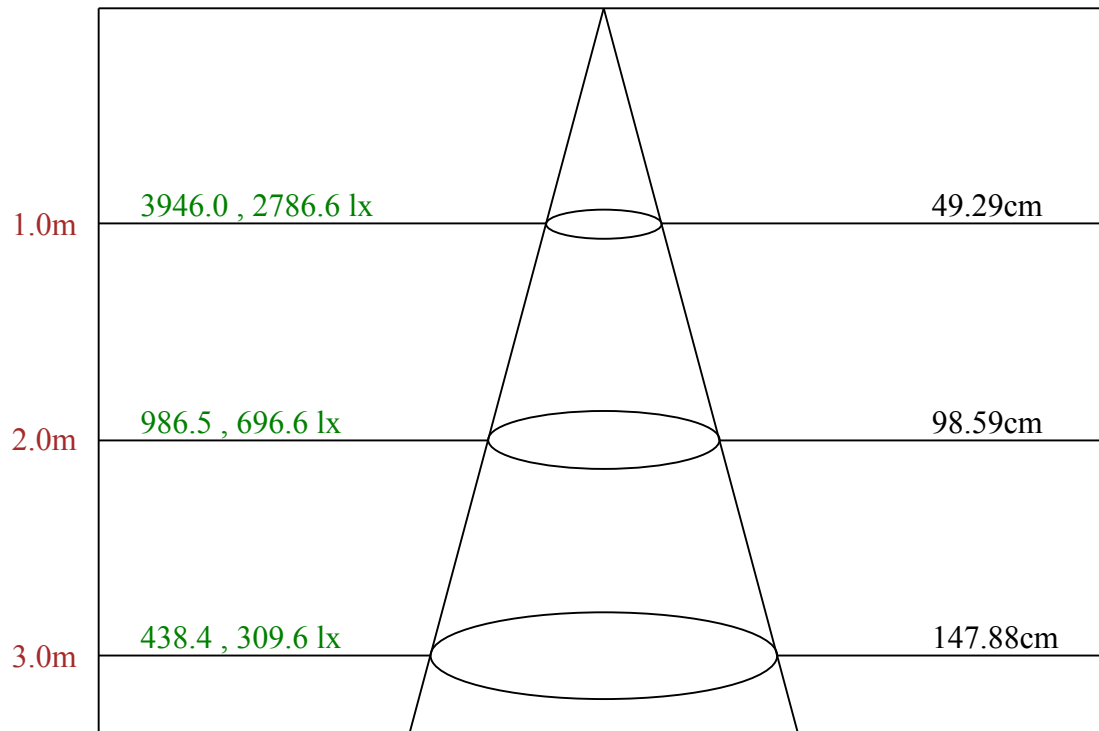
Aveage BeamAngle(IEC 61341):27.69

Equipment: equipamento lumini
Temperature(°C): 25.5

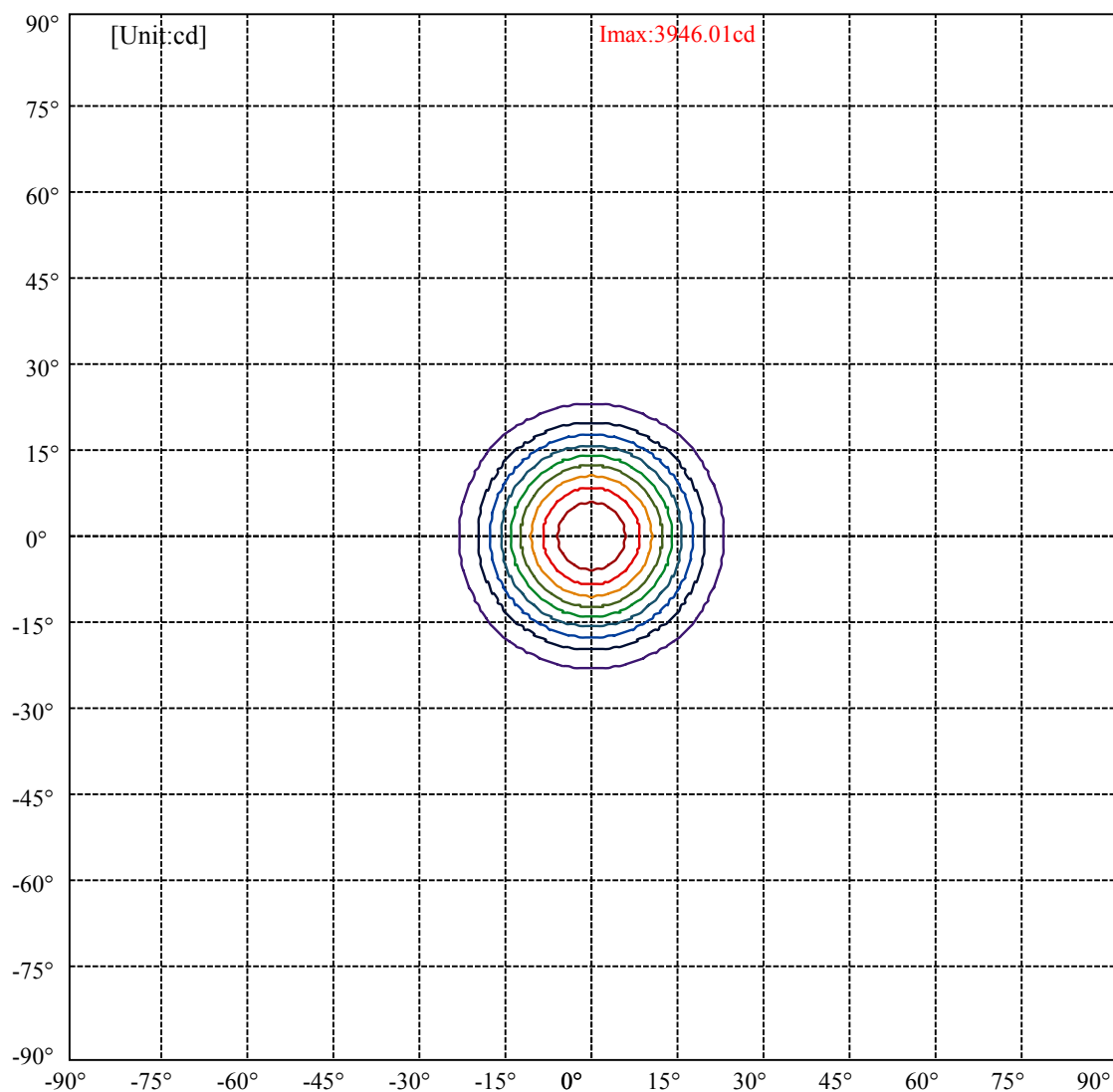
Date: 8/5/2024
Humidity(%): 55.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 27.69



(10%Imax) 394.601	—————
(20%Imax) 789.203	—————
(30%Imax) 1183.8	—————
(40%Imax) 1578.41	—————
(50%Imax) 1973.01	—————
(60%Imax) 2367.61	—————
(70%Imax) 2762.21	—————
(80%Imax) 3156.81	—————
(90%Imax) 3551.41	—————

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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	4969	3365	2369	2282	2506	2964	3838	5720	11537
C45	4969	3365	2369	2282	2506	2964	3838	5720	11537
C90	4969	3365	2369	2282	2506	2964	3838	5720	11537

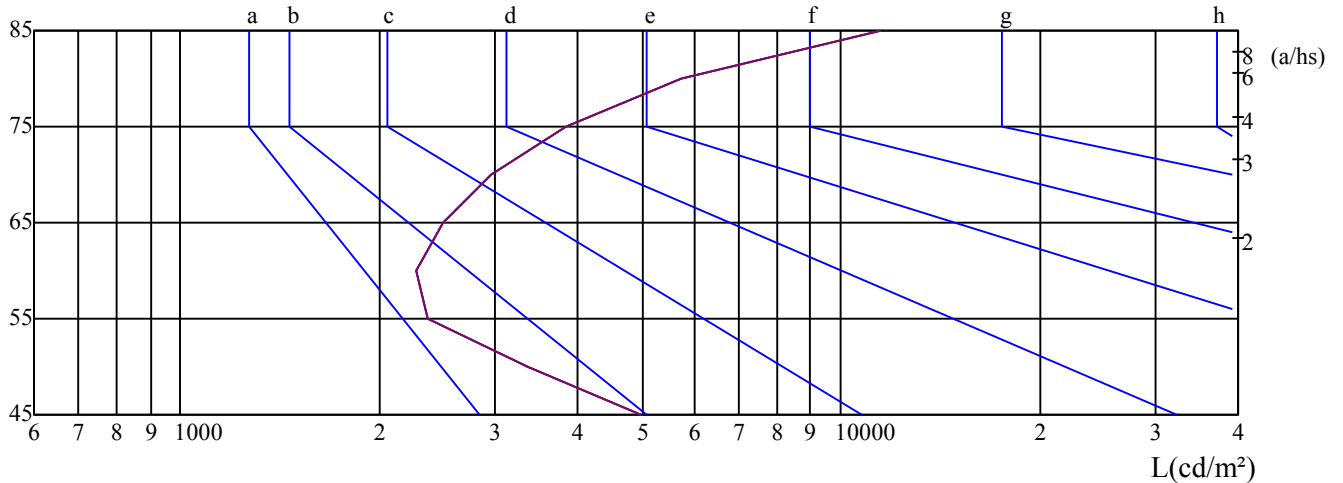
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2506	2506	2506	3838	3838	3838	11537	11537	11537

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

Equipment: equipamento lumini
Temperature($^{\circ}$ C): 25.5

Date: 8/5/2024
Humidity(%): 55.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	7.60	8.51	7.96	8.82	9.14	7.91	8.82	8.27	9.13	9.44
	3H	8.43	9.24	8.82	9.58	9.92	8.61	9.42	8.99	9.75	10.10
	4H	9.21	9.96	9.61	10.31	10.68	9.27	10.02	9.67	10.38	10.74
	6H	10.44	11.12	10.86	11.50	11.90	10.37	11.05	10.78	11.43	11.83
	8H	11.25	11.90	11.67	12.28	12.69	11.10	11.75	11.52	12.14	12.55
	12H	12.25	12.87	12.68	13.27	13.68	12.04	12.66	12.47	13.06	13.48
4H	2H	7.63	8.37	8.03	8.73	9.10	7.90	8.65	8.30	9.01	9.38
	3H	8.78	9.41	9.21	9.81	10.22	8.91	9.54	9.34	9.94	10.35
	4H	9.90	10.44	10.34	10.86	11.31	9.91	10.45	10.35	10.87	11.32
	6H	11.43	11.90	11.90	12.36	12.81	11.31	11.79	11.78	12.24	12.69
	8H	12.44	12.89	12.93	13.35	13.82	12.26	12.70	12.75	13.16	13.64
	12H	13.67	14.08	14.16	14.53	15.05	13.43	13.84	13.92	14.29	14.82
8H	4H	10.30	10.75	10.79	11.21	11.68	10.31	10.75	10.80	11.21	11.69
	6H	12.16	12.53	12.67	13.01	13.52	12.05	12.41	12.56	12.89	13.41
	8H	13.45	13.75	13.99	14.28	14.77	13.28	13.58	13.81	14.10	14.60
	12H	14.94	15.17	15.49	15.68	16.21	14.72	14.94	15.26	15.46	15.99
12H	4H	10.44	10.85	10.93	11.30	11.82	10.45	10.86	10.94	11.31	11.84
	6H	12.47	12.77	13.01	13.29	13.79	12.37	12.67	12.91	13.19	13.69
	8H	13.84	14.07	14.39	14.59	15.11	13.68	13.91	14.23	14.43	14.95
Variation with the observer position at spacings:											
S = 1.0H		2.5/-1.7					2.5/-1.7				
S = 1.5H		3.0/-1.6					3.0/-1.6				
S = 2.0H		3.3/-1.4					3.3/-1.4				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-3.2					-3.2				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 17 c serie 3 fa

LampCAT: modulo led 12W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 221.0000

Test No:

Current(A): 0.0640

Number of Lamps: 1

Power (W): 13.9500

Lamp flux(lm): 1290.0

PF: 0.9700

Length(mm): 145

Width(mm): 20

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 808.47, Efficiency(%): 62.67% , Luminous Efficacy(lm/W): 57.96

Central intensity(cd): 1359.837, Maximum intensity(cd): 1359.837

Angle of maximum intensity: C=0.0 γ =0.0

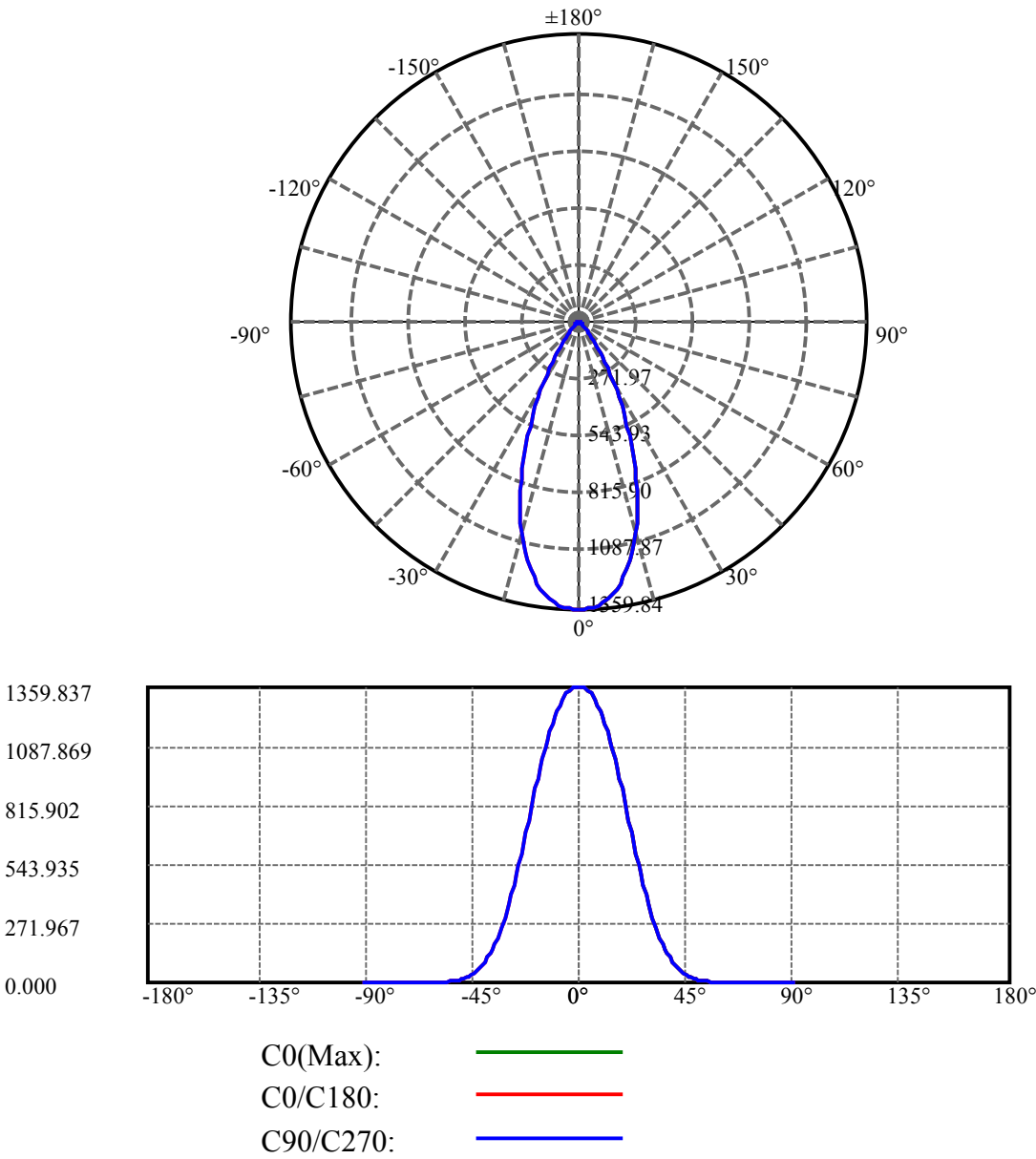
Beam angle of C0 plane : 44.56

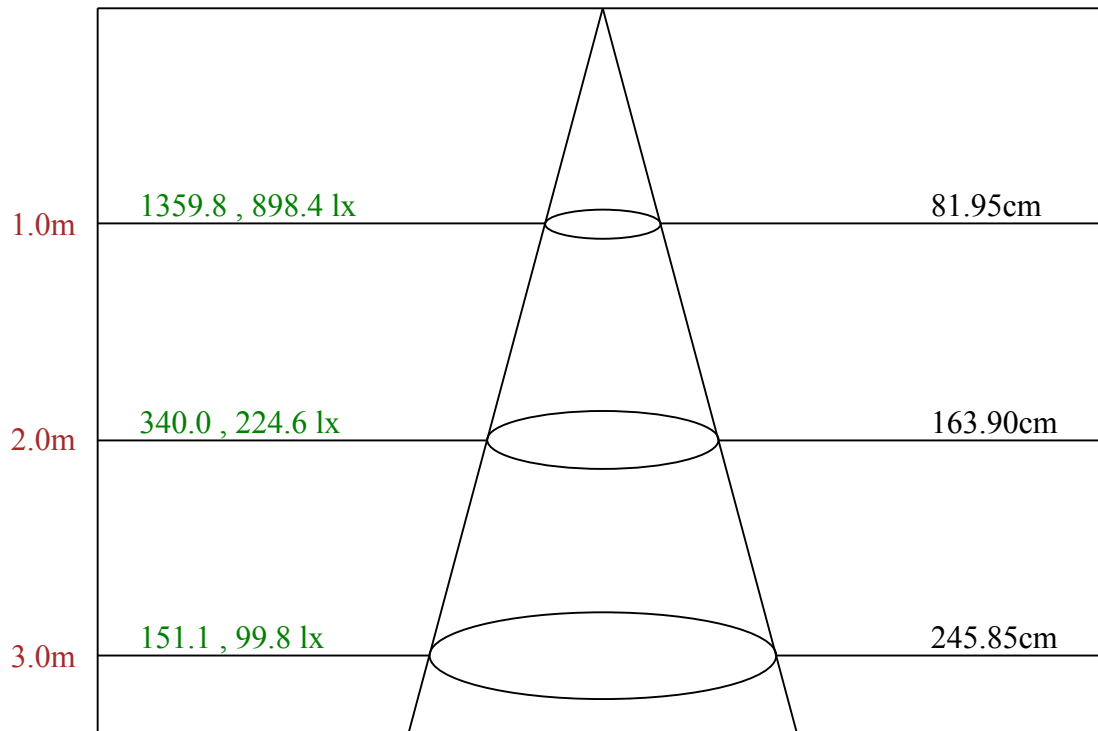
Aveage BeamAngle(IEC 61341):44.56

Equipment: equipamento lumini
Temperature(°C): 25.5

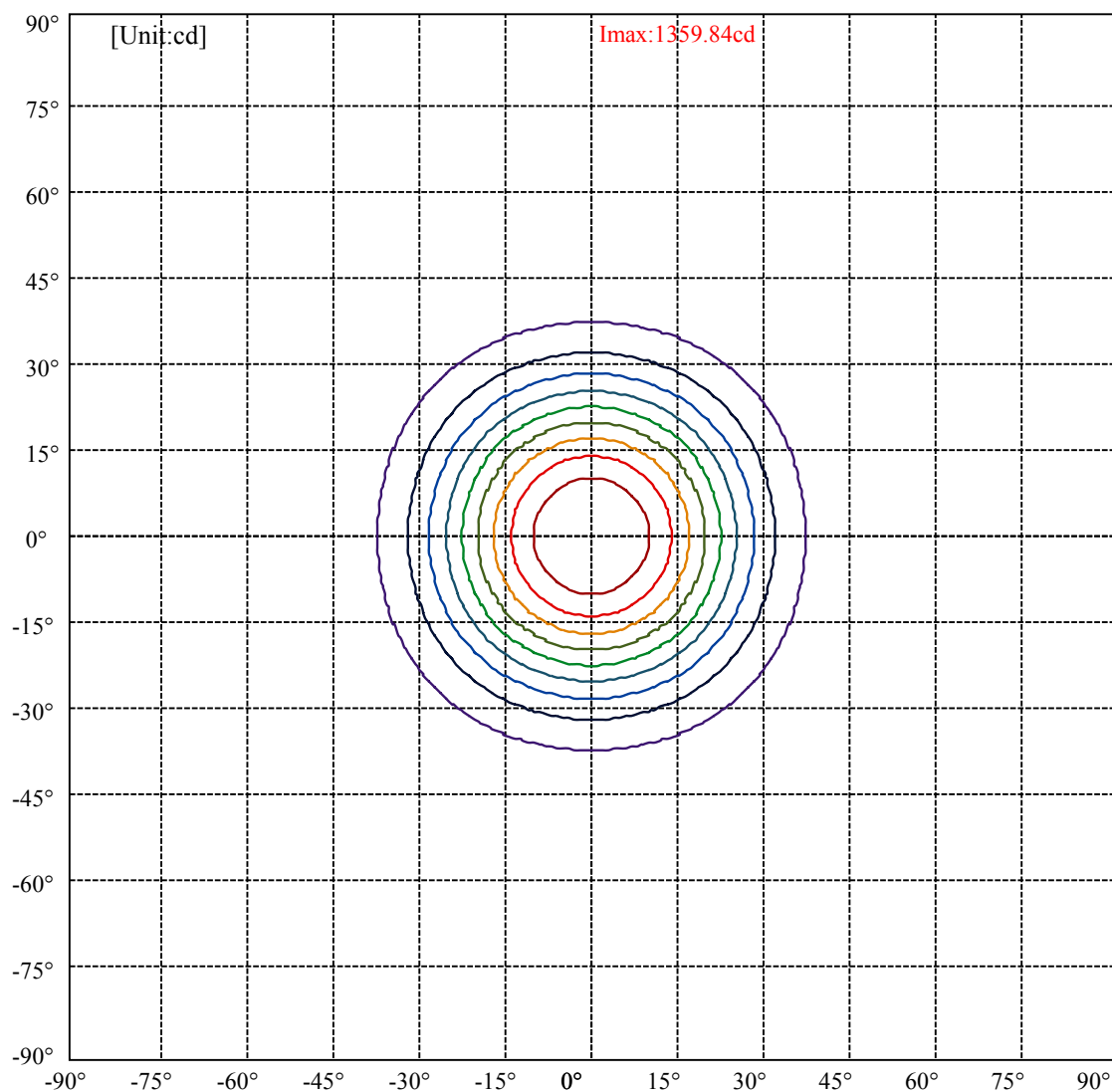
Date: 8/7/2024
Humidity(%): 55.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 44.56



(10%Imax) 135.984	—
(20%Imax) 271.967	—
(30%Imax) 407.951	—
(40%Imax) 543.935	—
(50%Imax) 679.918	—
(60%Imax) 815.902	—
(70%Imax) 951.886	—
(80%Imax) 1087.87	—
(90%Imax) 1223.85	—

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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	16270	6245	2476	1872	1923	2160	2712	4018	8006
C45	16270	6245	2476	1872	1923	2160	2712	4018	8006
C90	16270	6245	2476	1872	1923	2160	2712	4018	8006

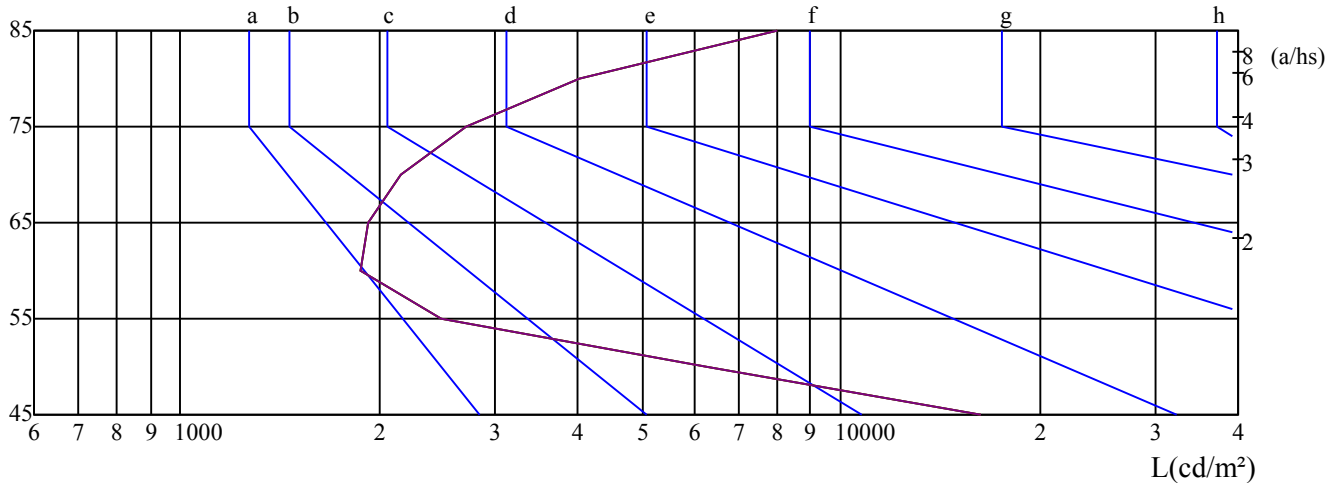
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1923	1923	1923	2712	2712	2712	8006	8006	8006

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

Equipment: equipamento lumini
Temperature($^{\circ}$ C): 25.5

Date: 8/7/2024
Humidity(%): 55.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	17.23	18.18	17.60	18.49	18.81	17.84	18.78	18.20	19.09	19.41
	3H	17.06	17.90	17.45	18.24	18.58	17.66	18.50	18.05	18.84	19.19
	4H	16.99	17.77	17.39	18.12	18.49	17.60	18.37	18.00	18.73	19.10
	6H	16.98	17.69	17.40	18.06	18.46	17.58	18.29	18.00	18.67	19.07
	8H	16.97	17.65	17.39	18.03	18.44	17.57	18.25	18.00	18.64	19.04
	12H	17.01	17.65	17.43	18.04	18.46	17.61	18.25	18.04	18.65	19.06
4H	2H	16.93	17.71	17.33	18.06	18.43	17.53	18.30	17.93	18.66	19.03
	3H	16.74	17.39	17.17	17.78	18.20	17.34	17.99	17.76	18.38	18.80
	4H	16.73	17.29	17.17	17.71	18.16	17.33	17.89	17.76	18.31	18.76
	6H	16.72	17.22	17.20	17.67	18.13	17.32	17.81	17.79	18.27	18.72
	8H	16.79	17.25	17.28	17.71	18.18	17.38	17.84	17.87	18.30	18.77
	12H	16.94	17.36	17.43	17.82	18.34	17.53	17.95	18.02	18.40	18.92
8H	4H	16.58	17.03	17.06	17.49	17.97	17.16	17.62	17.65	18.08	18.55
	6H	16.64	17.01	17.14	17.49	18.00	17.21	17.59	17.72	18.07	18.58
	8H	16.83	17.14	17.37	17.67	18.16	17.40	17.71	17.93	18.24	18.73
	12H	17.11	17.35	17.66	17.87	18.40	17.67	17.91	18.22	18.43	18.95
12H	4H	16.54	16.96	17.03	17.42	17.94	17.12	17.55	17.62	18.00	18.52
	6H	16.67	16.99	17.21	17.51	18.01	17.24	17.55	17.78	18.08	18.58
	8H	16.88	17.12	17.42	17.64	18.16	17.43	17.67	17.98	18.19	18.72
Variation with the observer position at spacings:											
S = 1.0H		5.0/-10.0					5.0/-10.0				
S = 1.5H		7.5/-8.2					7.5/-8.2				
S = 2.0H		9.3/-6.9					9.3/-6.9				
Standard tables:		BK1					BK1				
Uncorrected UGR		-0.9					-0.9				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 34 c serie 3 fc

LampCAT: modulo led 12W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 127.7500

Test No:

Current(A): 0.1120

Number of Lamps: 1

Power (W): 14.0180

Lamp flux(lm): 1430.0

PF: 0.9760

Length(mm): 340

Width(mm): 40

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1089.14, Efficiency(%): 76.16% , Luminous Efficacy(lm/W): 77.70

Central intensity(cd): 6155.164, Maximum intensity(cd): 6155.164

Angle of maximum intensity: C=0.0 γ =0.0

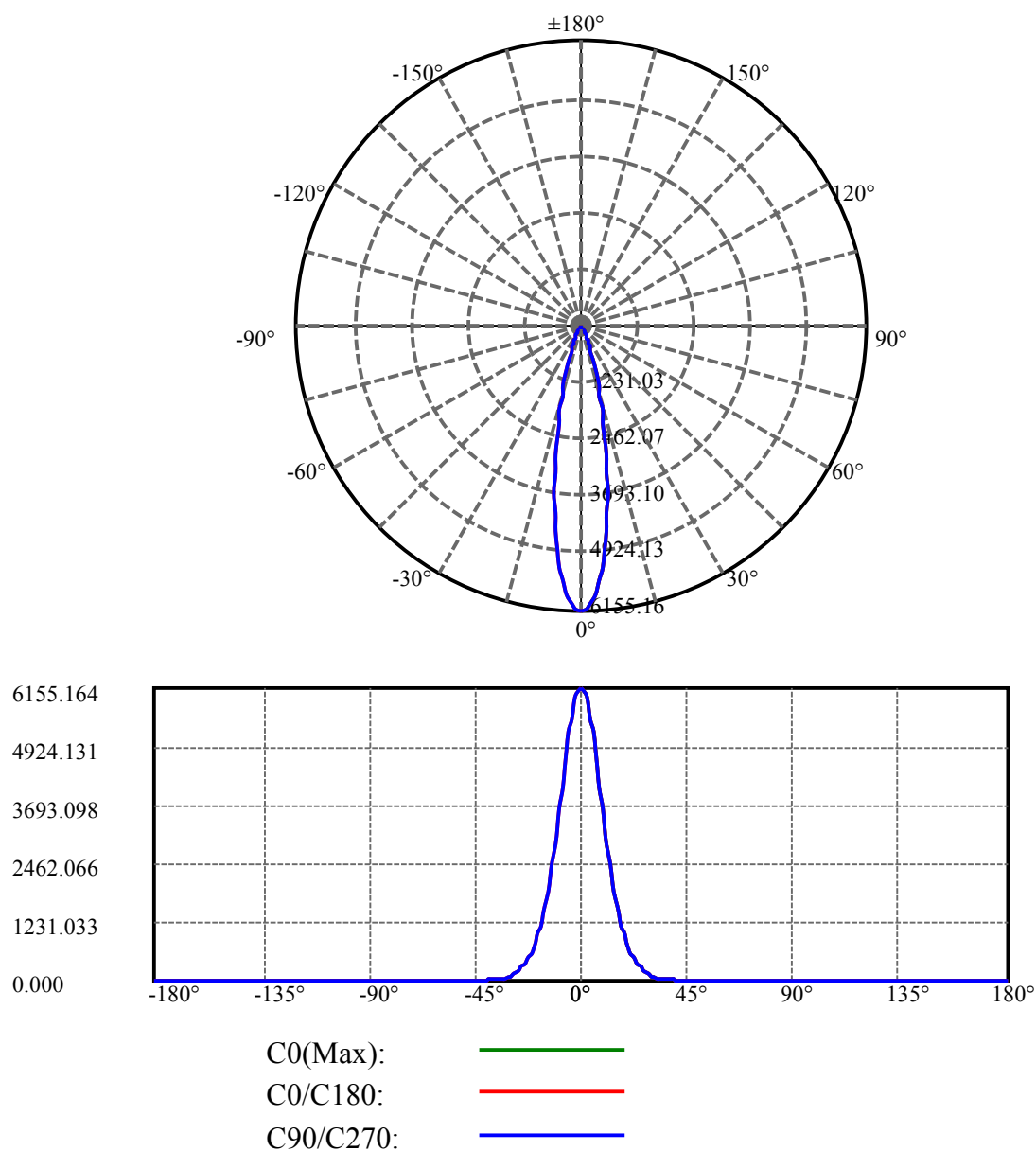
Beam angle of C0 plane : 20.74

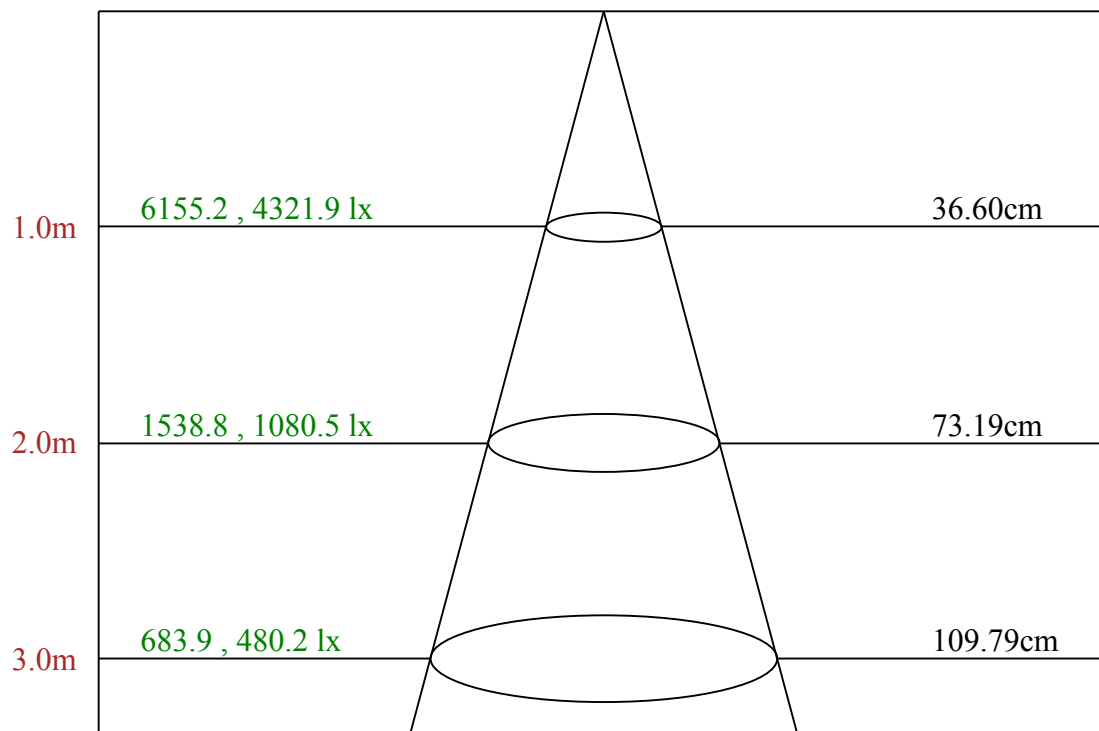
Aveage BeamAngle(IEC 61341):20.74

Equipment: equipamento lumini
Temperature(°C): 25.5

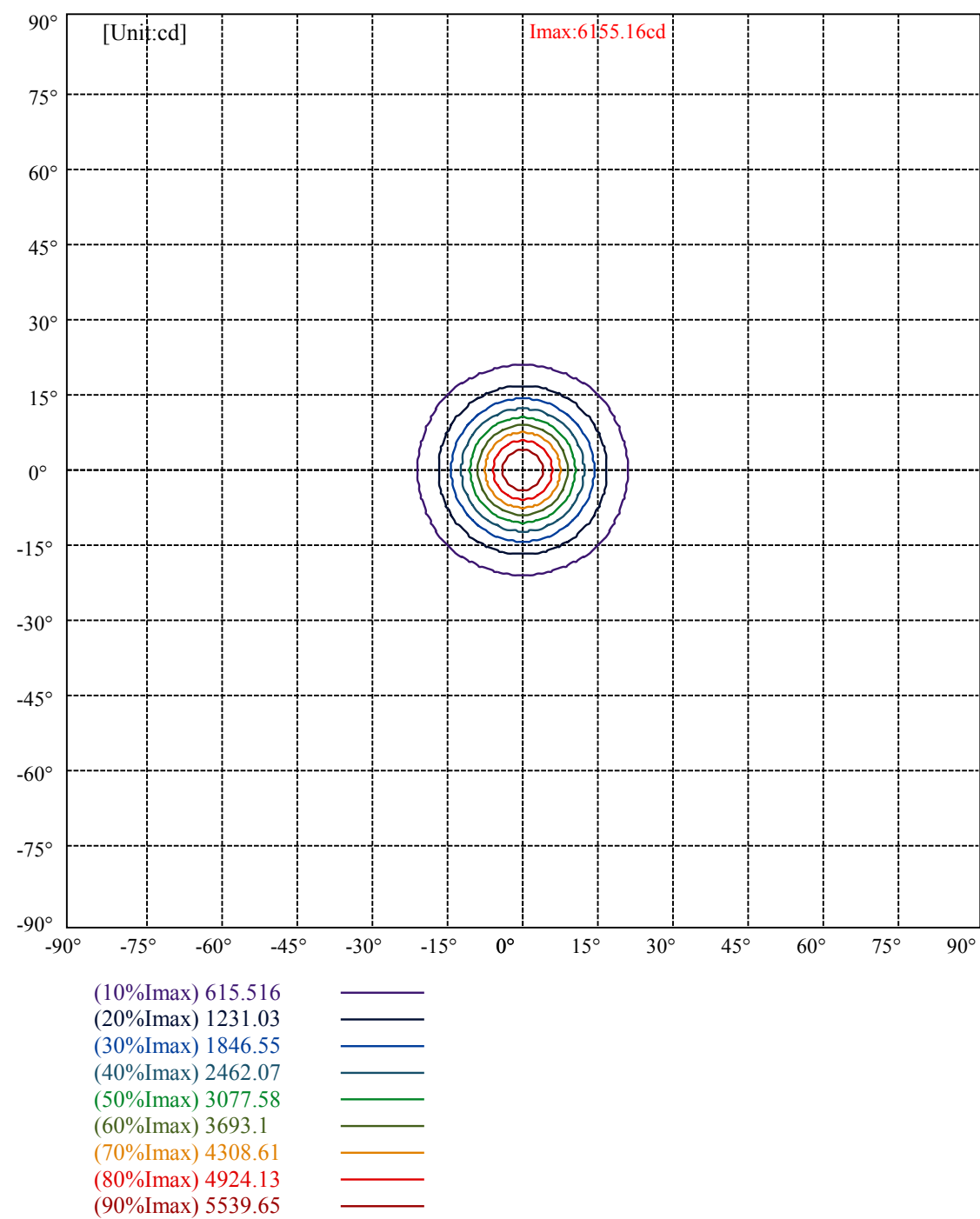
Date: 13/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 20.74



Luminance Table

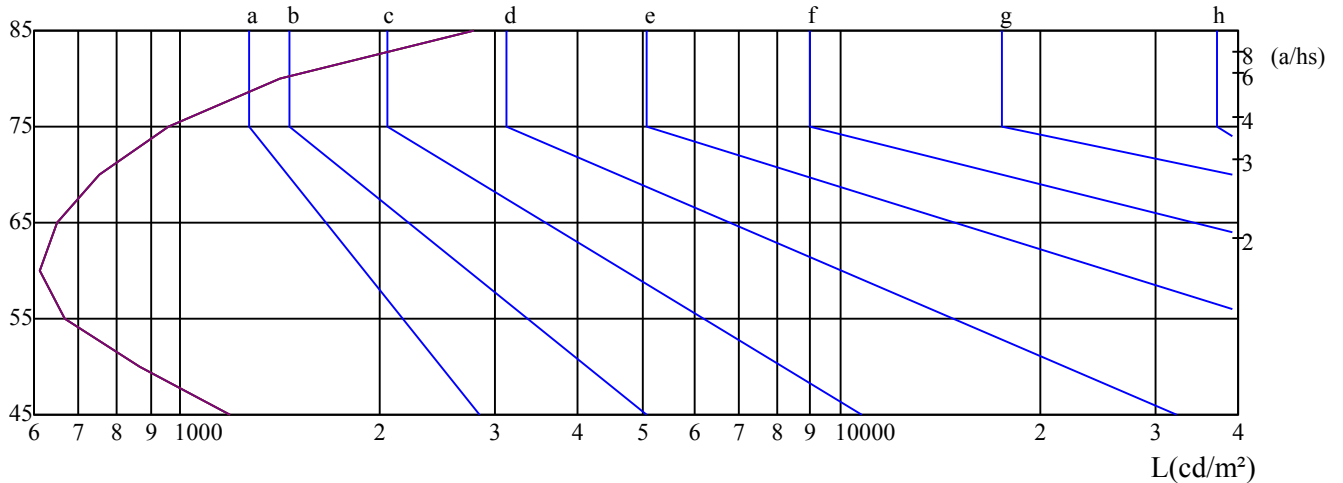
γ	45	50	55	60	65	70	75	80	85
C0	1189	869	668	614	652	755	962	1416	2782
C45	1189	869	668	614	652	755	962	1416	2782
C90	1189	869	668	614	652	755	962	1416	2782

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
652	652	652	962	962	962	2782	2782	2782

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

 $\gamma(^{\circ})$ 

C0 ———

C45 ———

C90 ———

Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	2.91	3.80	3.31	4.16	4.52	3.60	4.49	4.00	4.85	5.21
	3H	3.72	4.52	4.15	4.90	5.29	4.30	5.10	4.73	5.48	5.88
	4H	4.43	5.17	4.87	5.57	5.98	4.93	5.66	5.37	6.06	6.48
	6H	5.54	6.21	6.00	6.63	7.08	5.93	6.60	6.39	7.02	7.47
	8H	6.27	6.91	6.73	7.34	7.80	6.60	7.24	7.06	7.67	8.13
	12H	7.20	7.81	7.67	8.25	8.71	7.50	8.10	7.96	8.54	9.01
4H	2H	3.00	3.74	3.44	4.13	4.55	3.62	4.35	4.06	4.75	5.17
	3H	4.12	4.74	4.58	5.17	5.64	4.60	5.22	5.07	5.66	6.12
	4H	5.15	5.68	5.63	6.15	6.64	5.53	6.07	6.01	6.53	7.03
	6H	6.54	7.01	7.05	7.50	8.00	6.83	7.30	7.34	7.79	8.29
	8H	7.47	7.91	7.99	8.40	8.92	7.71	8.14	8.23	8.64	9.16
	12H	8.62	9.02	9.14	9.51	10.08	8.84	9.24	9.36	9.73	10.29
8H	4H	5.56	5.99	6.08	6.49	7.01	5.88	6.32	6.41	6.82	7.34
	6H	7.28	7.64	7.82	8.15	8.71	7.51	7.86	8.05	8.38	8.94
	8H	8.48	8.77	9.05	9.33	9.88	8.66	8.96	9.23	9.51	10.06
	12H	9.88	10.10	10.46	10.66	11.23	10.05	10.28	10.63	10.83	11.40
12H	4H	5.69	6.09	6.22	6.58	7.15	6.00	6.40	6.53	6.89	7.46
	6H	7.59	7.88	8.16	8.44	8.99	7.79	8.09	8.36	8.65	9.19
	8H	8.87	9.09	9.45	9.65	10.22	9.03	9.26	9.61	9.81	10.38
Variation with the observer position at spacings:											
S = 1.0H		1.7/-1.2					1.7/-1.2				
S = 1.5H		2.0/-1.3					2.0/-1.3				
S = 2.0H		2.2/-1.2					2.2/-1.2				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-8.5					-8.5				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 34 c serie 3 fm

LampCAT: modulo led 12W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 127.7800

Test No:

Current(A): 0.1120

Number of Lamps: 1

Power (W): 14.0050

Lamp flux(lm): 1430.0

PF: 0.9760

Length(mm): 340

Width(mm): 40

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1113.47, Efficiency(%): 77.87% , Luminous Efficacy(lm/W): 79.51

Central intensity(cd): 4104.018, Maximum intensity(cd): 4104.018

Angle of maximum intensity: C=0.0 γ =0.0

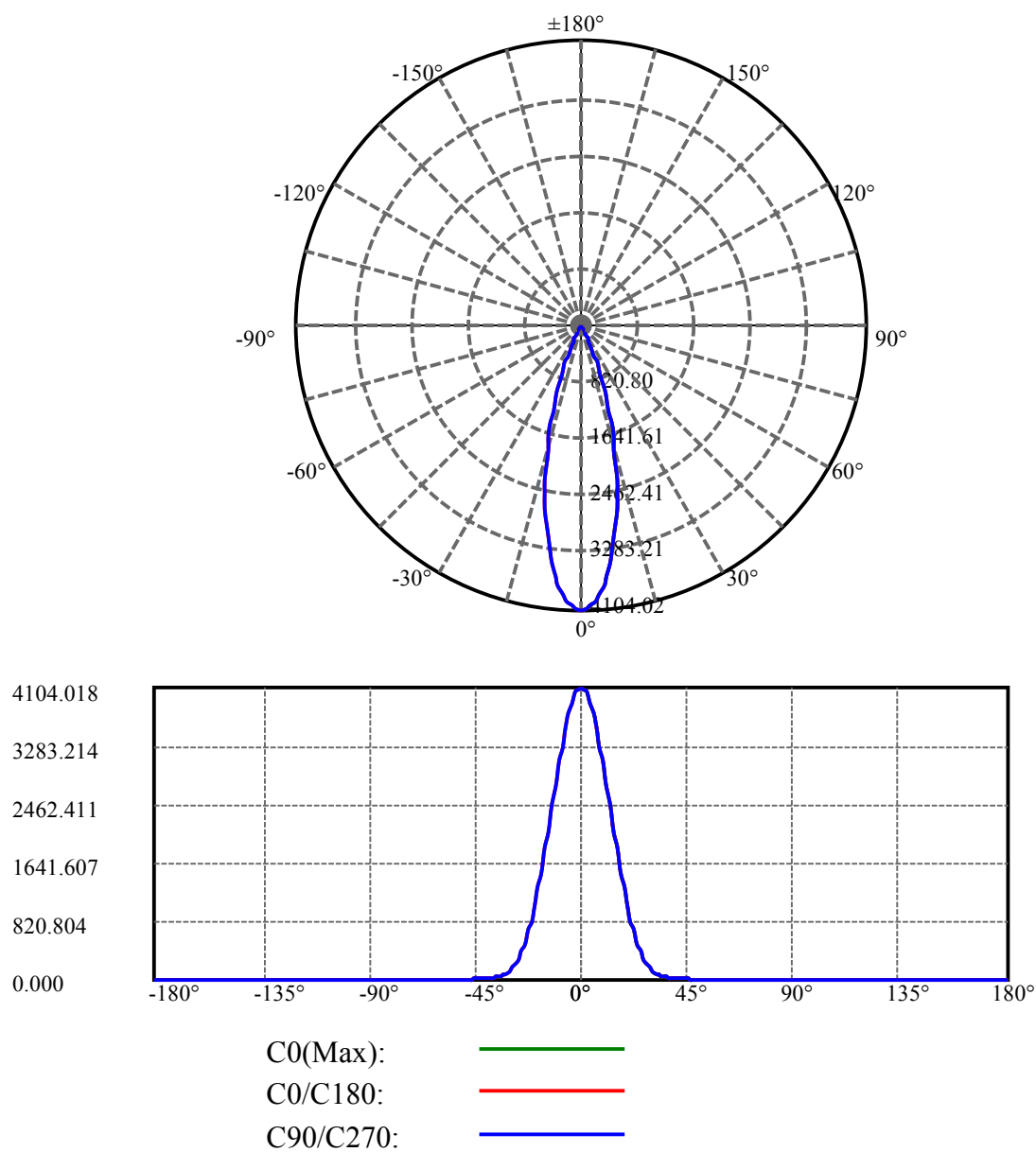
Beam angle of C0 plane : 28.20

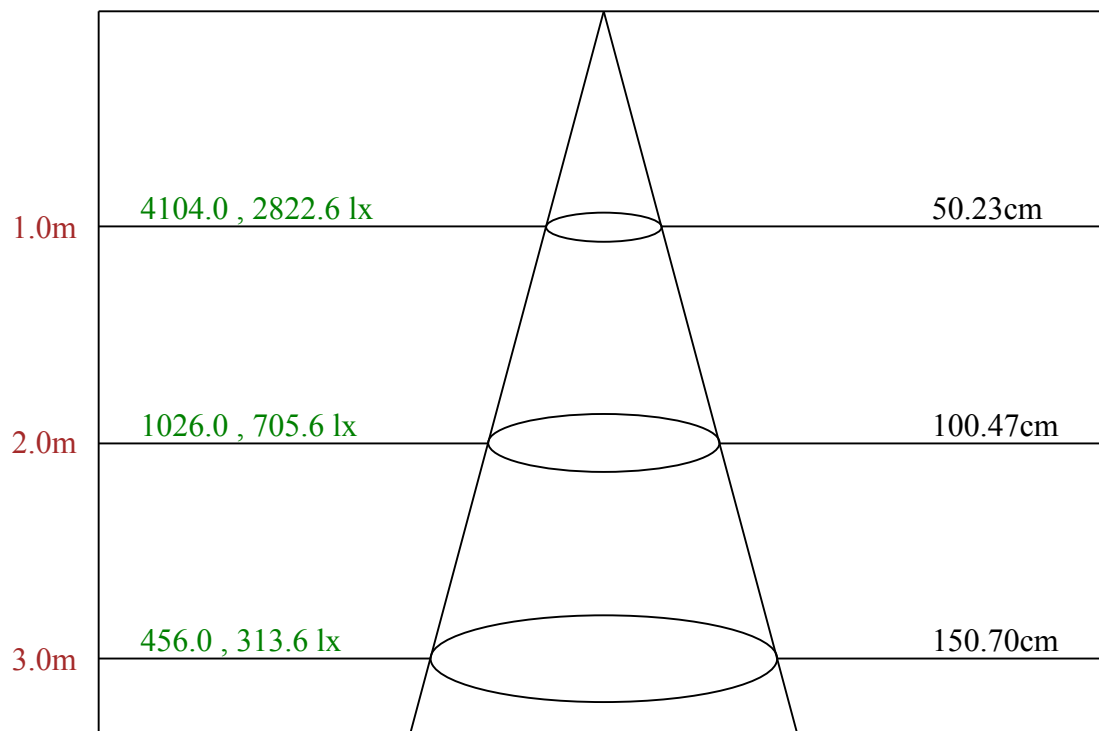
Aveage BeamAngle(IEC 61341):28.20

Equipment: equipamento lumini
Temperature(°C): 25.5

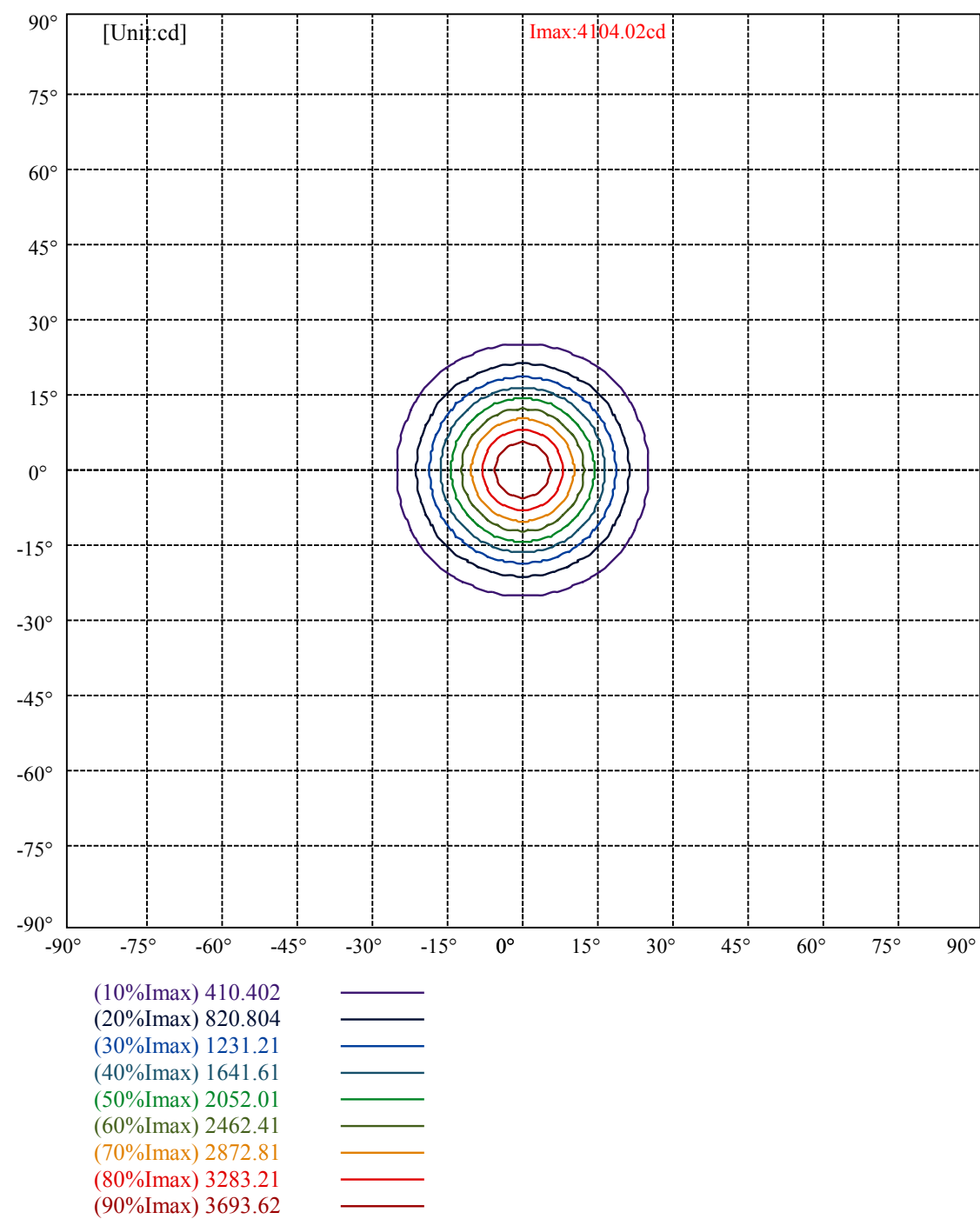
Date: 13/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 28.20



Luminance Table

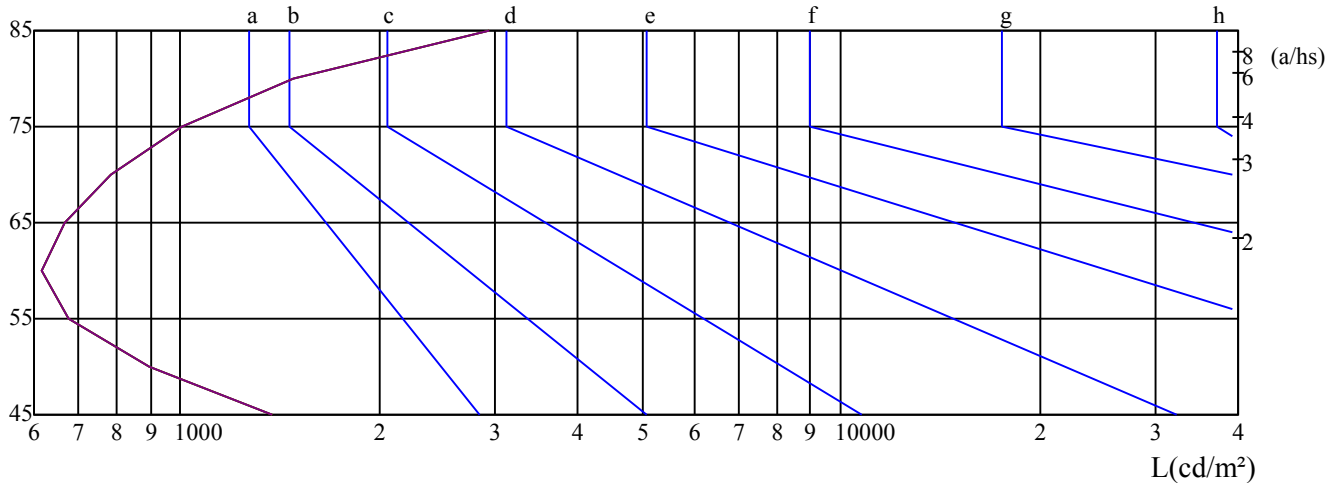
γ	45	50	55	60	65	70	75	80	85
C0	1376	895	679	616	666	782	1006	1479	2927
C45	1376	895	679	616	666	782	1006	1479	2927
C90	1376	895	679	616	666	782	1006	1479	2927

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
666	666	666	1006	1006	1006	2927	2927	2927

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

 $\gamma(^{\circ})$ 

C0 ———

C45 ———

C90 ———

Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	5.95	6.85	6.36	7.21	7.58	5.80	6.69	6.20	7.05	7.42
	3H	6.24	7.04	6.67	7.42	7.82	6.09	6.89	6.52	7.27	7.67
	4H	6.59	7.33	7.03	7.73	8.15	6.44	7.18	6.89	7.58	8.00
	6H	7.26	7.93	7.72	8.35	8.80	7.13	7.80	7.59	8.22	8.67
	8H	7.75	8.39	8.21	8.82	9.28	7.63	8.27	8.09	8.70	9.16
	12H	8.44	9.05	8.91	9.48	9.95	8.31	8.91	8.77	9.35	9.82
4H	2H	5.81	6.55	6.25	6.95	7.37	5.66	6.40	6.11	6.80	7.22
	3H	6.29	6.91	6.75	7.34	7.81	6.15	6.77	6.61	7.20	7.67
	4H	6.89	7.43	7.37	7.89	8.39	6.76	7.30	7.24	7.76	8.26
	6H	7.84	8.31	8.35	8.81	9.31	7.73	8.20	8.24	8.70	9.20
	8H	8.56	9.00	9.08	9.49	10.02	8.46	8.89	8.98	9.39	9.91
	12H	9.52	9.92	10.04	10.41	10.98	9.40	9.80	9.92	10.29	10.86
8H	4H	7.09	7.53	7.61	8.03	8.55	6.98	7.41	7.50	7.91	8.44
	6H	8.35	8.71	8.89	9.22	9.78	8.26	8.62	8.80	9.13	9.69
	8H	9.35	9.64	9.92	10.20	10.75	9.26	9.56	9.83	10.12	10.66
	12H	10.59	10.81	11.17	11.37	11.94	10.48	10.71	11.06	11.26	11.83
12H	4H	7.17	7.57	7.69	8.06	8.63	7.06	7.46	7.59	7.95	8.52
	6H	8.59	8.88	9.16	9.44	9.99	8.50	8.80	9.07	9.36	9.91
	8H	9.67	9.89	10.25	10.45	11.02	9.59	9.81	10.17	10.37	10.94
Variation with the observer position at spacings:											
S = 1.0H		2.8/-1.9					2.8/-1.9				
S = 1.5H		3.4/-1.7					3.4/-1.7				
S = 2.0H		3.9/-1.5					3.9/-1.5				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-7.5					-7.5				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 34 c serie 3 fa

LampCAT: modulo led 12W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 127.8100

Test No:

Current(A): 0.1120

Number of Lamps: 1

Power (W): 13.9910

Lamp flux(lm): 1430.0

PF: 0.9760

Length(mm): 340

Width(mm): 40

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 873.68, Efficiency(%): 61.10% , Luminous Efficacy(lm/W): 62.45

Central intensity(cd): 1041.612, Maximum intensity(cd): 1044.355

Angle of maximum intensity: C=0.0 γ =6.0

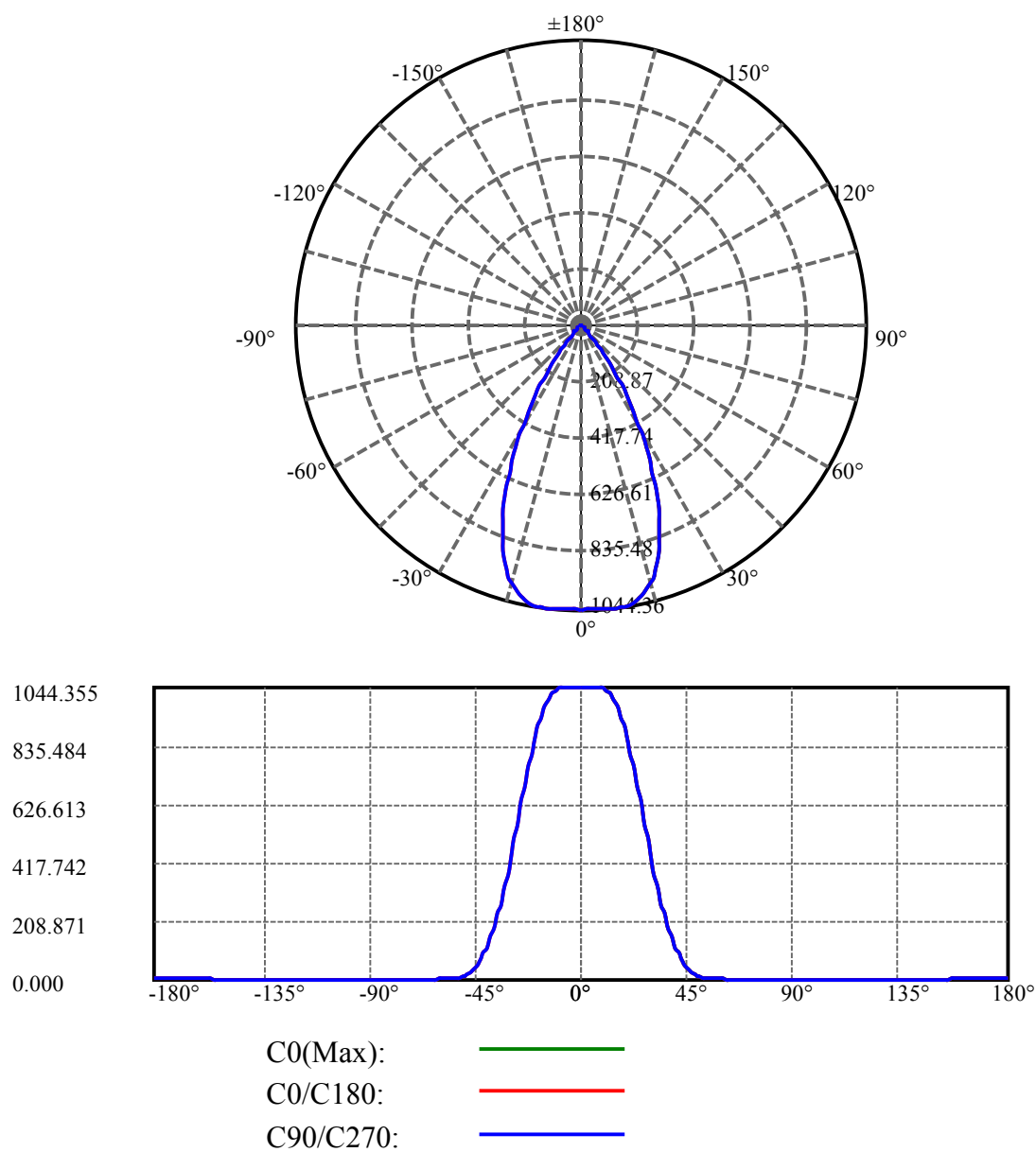
Beam angle of C0 plane : 55.39

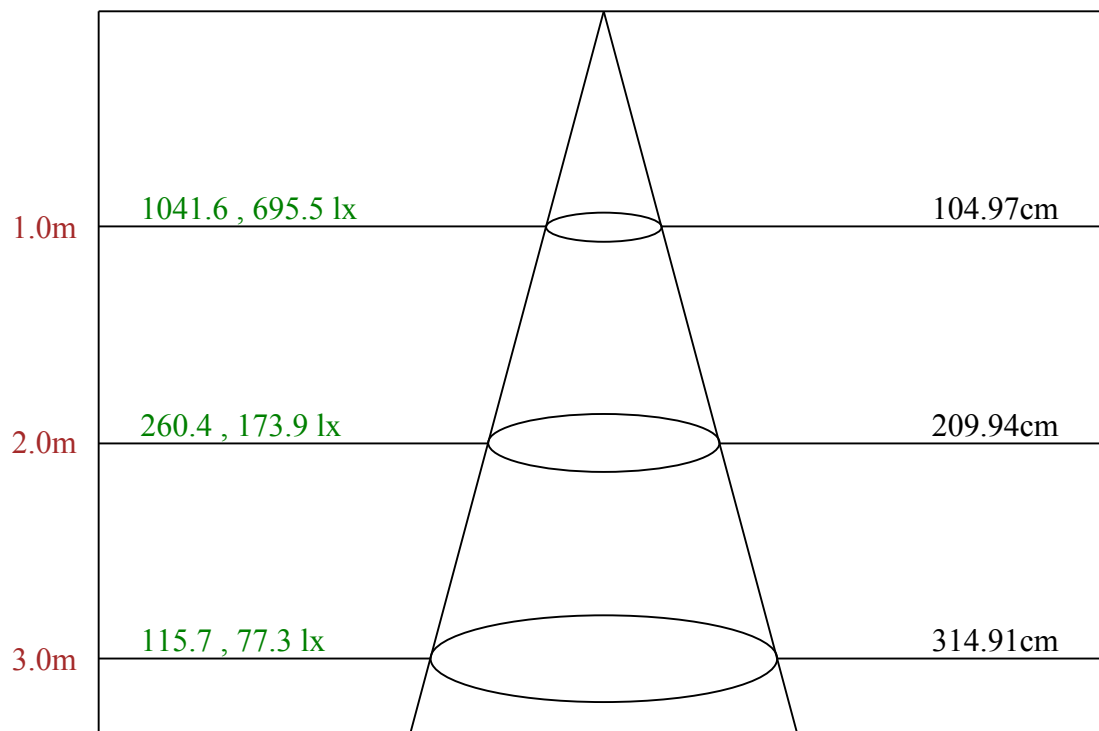
Aveage BeamAngle(IEC 61341):55.39

Equipment: equipamento lumini
Temperature(°C): 25.5

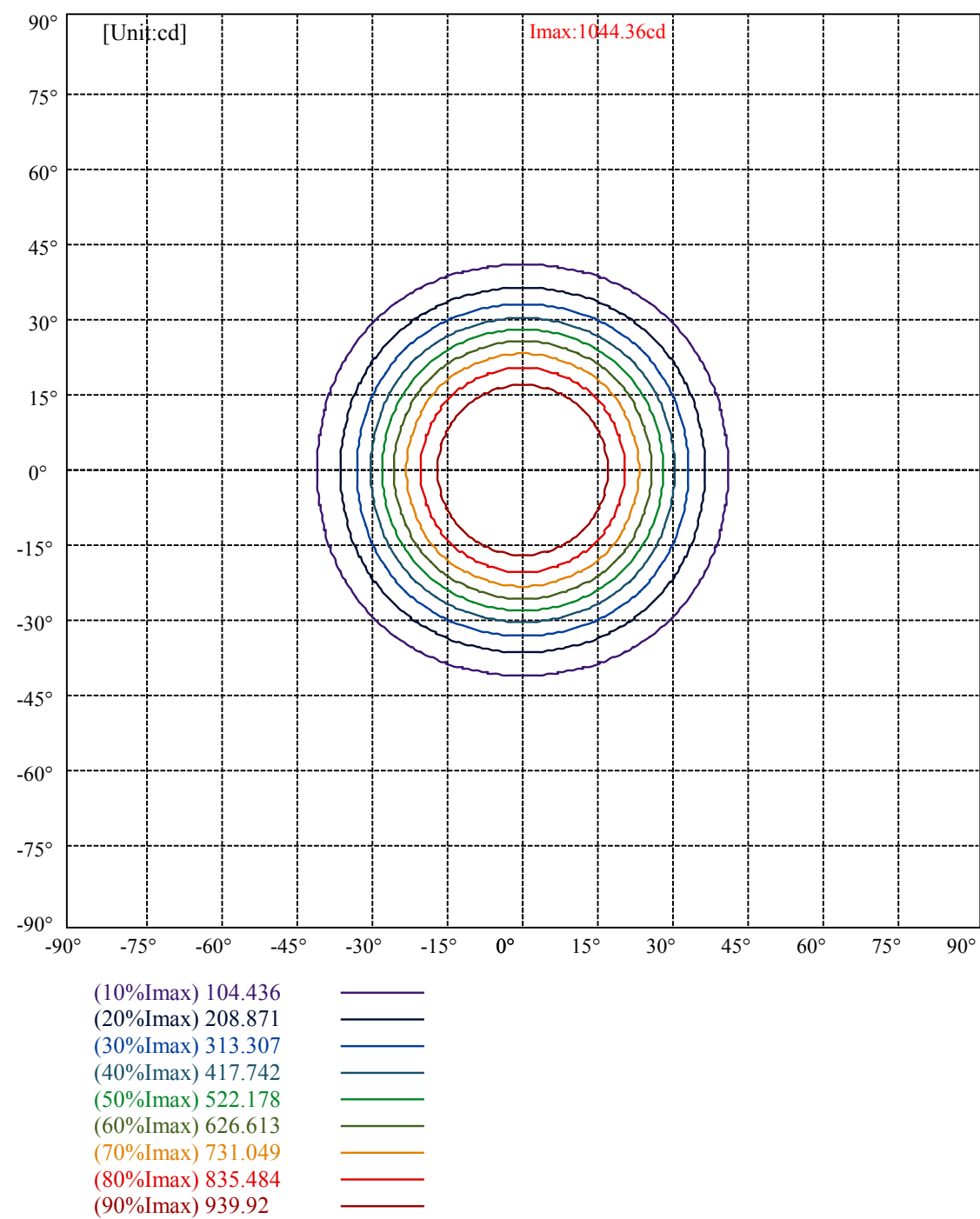
Date: 13/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 55.39



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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	4352	1239	566	485	479	531	661	965	1888
C45	4352	1239	566	485	479	531	661	965	1888
C90	4352	1239	566	485	479	531	661	965	1888

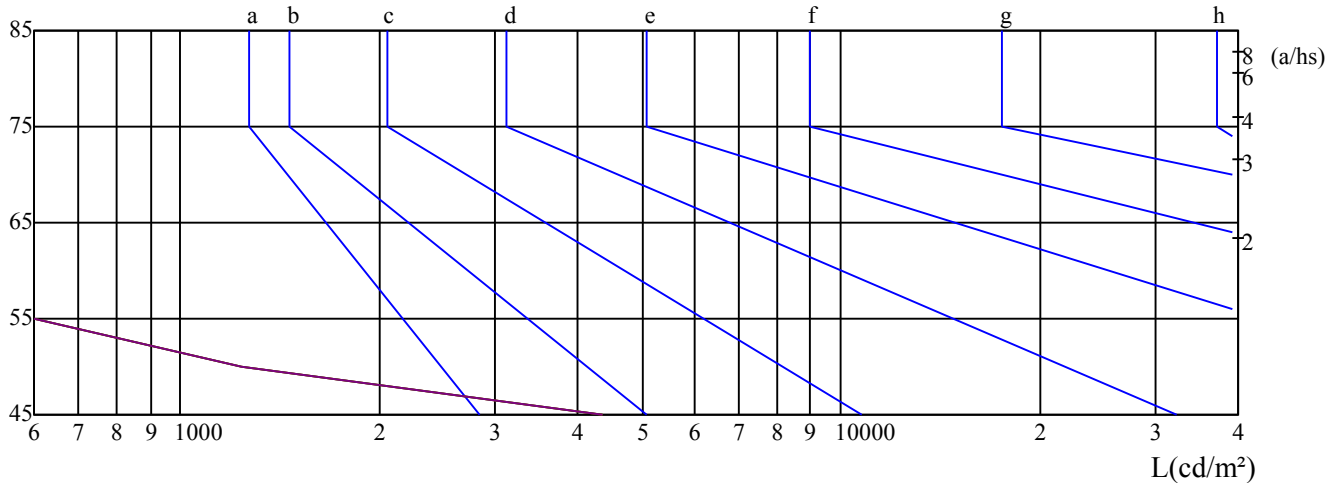
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
479	479	479	661	661	661	1888	1888	1888

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

Equipment: equipamento lumini
Temperature($^{\circ}\text{C}$): 25.5

Date: 13/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	16.17	17.11	16.57	17.46	17.83	16.56	17.50	16.96	17.85	18.21
	3H	15.98	16.81	16.40	17.19	17.58	16.36	17.20	16.79	17.57	17.97
	4H	15.89	16.66	16.32	17.05	17.46	16.27	17.04	16.71	17.43	17.85
	6H	15.82	16.53	16.28	16.94	17.39	16.21	16.91	16.66	17.32	17.77
	8H	15.77	16.44	16.23	16.87	17.32	16.15	16.82	16.61	17.25	17.70
	12H	15.74	16.38	16.21	16.81	17.27	16.12	16.75	16.58	17.19	17.65
4H	2H	15.86	16.63	16.30	17.02	17.44	16.25	17.02	16.68	17.41	17.82
	3H	15.63	16.28	16.09	16.71	17.17	16.02	16.66	16.48	17.09	17.56
	4H	15.58	16.14	16.05	16.60	17.09	15.96	16.52	16.44	16.98	17.47
	6H	15.49	15.98	15.99	16.47	16.96	15.86	16.36	16.37	16.84	17.34
	8H	15.48	15.93	15.99	16.42	16.94	15.85	16.30	16.37	16.80	17.31
	12H	15.50	15.92	16.03	16.41	16.97	15.87	16.29	16.39	16.77	17.33
8H	4H	15.39	15.85	15.91	16.34	16.86	15.77	16.23	16.29	16.72	17.24
	6H	15.31	15.68	15.85	16.20	16.75	15.68	16.06	16.22	16.57	17.12
	8H	15.37	15.69	15.94	16.24	16.78	15.74	16.05	16.30	16.60	17.14
	12H	15.46	15.70	16.03	16.25	16.81	15.81	16.05	16.38	16.59	17.16
12H	4H	15.34	15.76	15.87	16.25	16.81	15.72	16.14	16.25	16.63	17.19
	6H	15.31	15.62	15.88	16.18	16.72	15.68	15.99	16.25	16.55	17.09
	8H	15.35	15.59	15.93	16.14	16.70	15.71	15.95	16.29	16.50	17.07
Variation with the observer position at spacings:											
S = 1.0H		5.0/-11.1					5.0/-11.1				
S = 1.5H		7.6/-9.2					7.6/-9.2				
S = 2.0H		9.4/-7.8					9.4/-7.8				
Standard tables:		BK1					BK1				
Uncorrected UGR		-4.8					-4.8				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 34 c serie 3 fc

LampCAT: modulo led 24W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 127.6200

Test No:

Current(A): 0.2050

Number of Lamps: 1

Power (W): 25.9730

Lamp flux(lm): 2715.0

PF: 0.9940

Length(mm): 340

Width(mm): 40

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1904.99, Efficiency(%): 70.17% , Luminous Efficacy(lm/W): 73.35

Central intensity(cd): 10914.600, Maximum intensity(cd): 10914.600

Angle of maximum intensity: C=0.0 γ =0.0

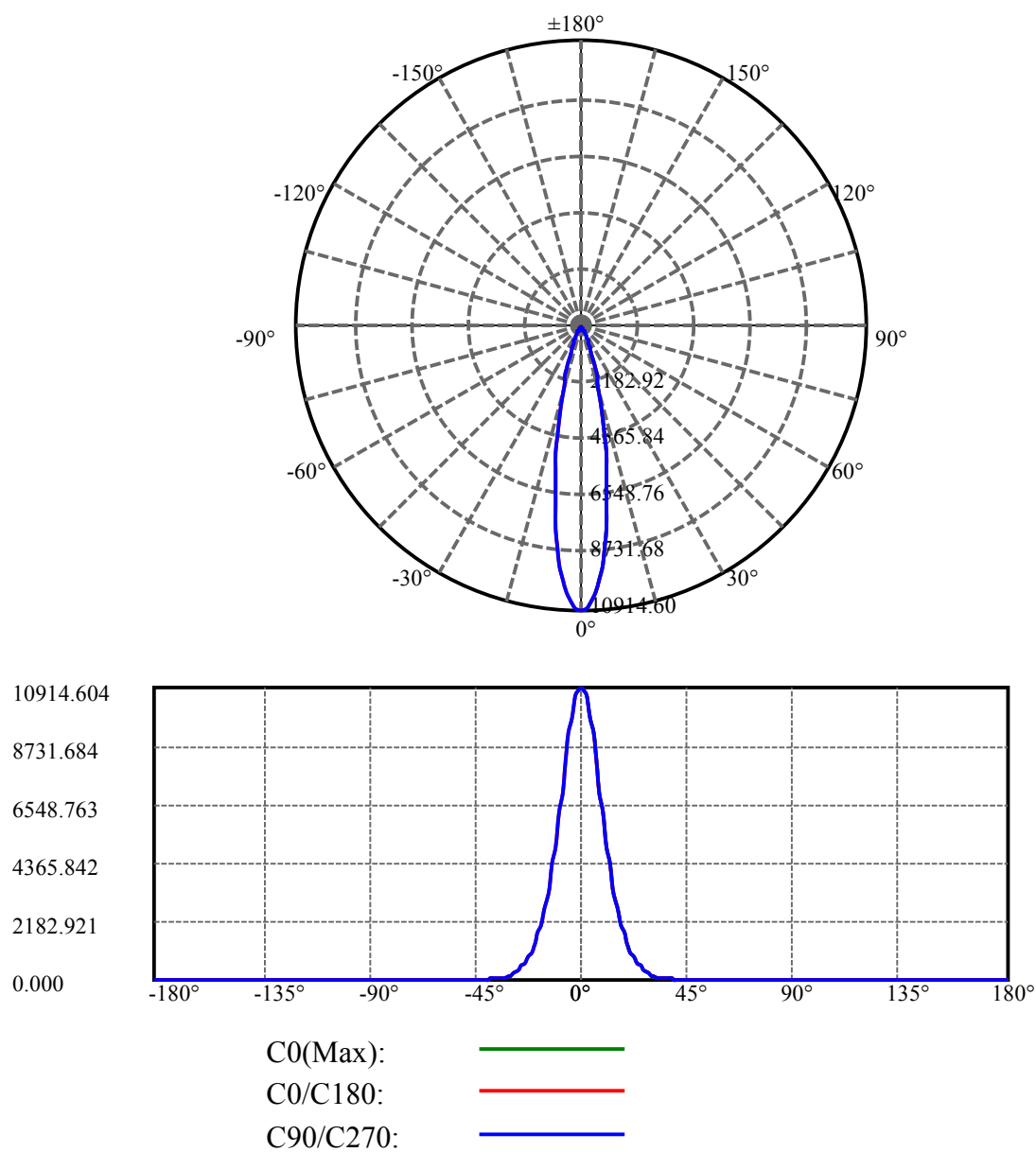
Beam angle of C0 plane : 20.45

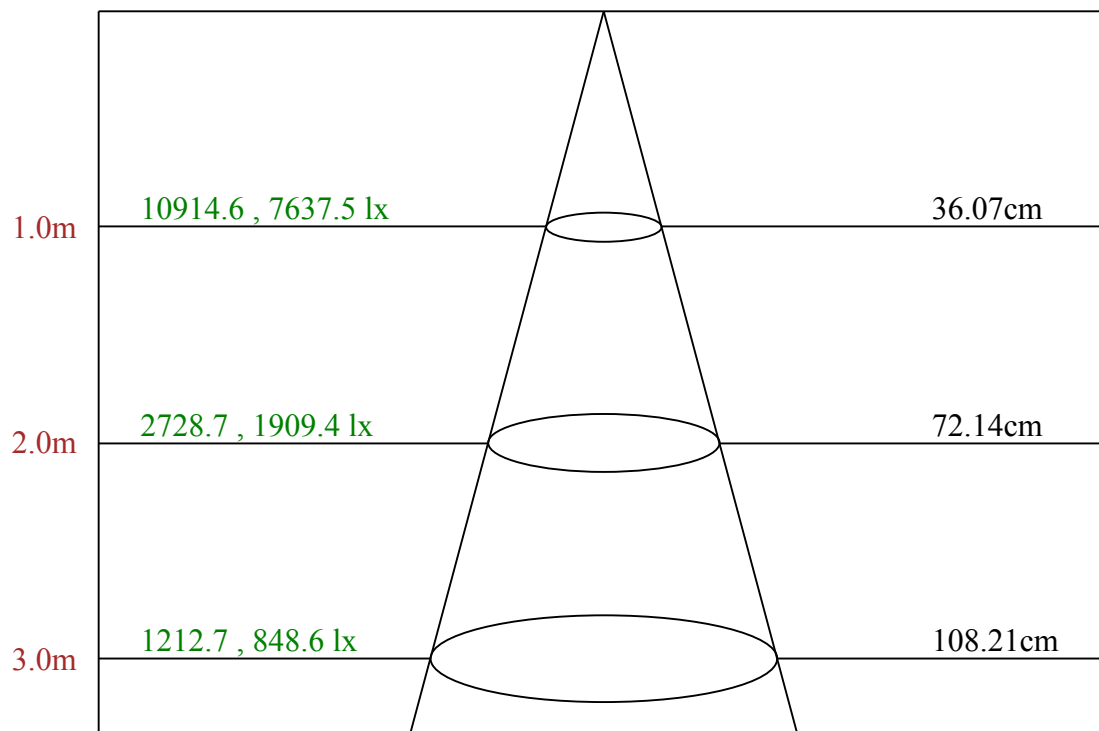
Aveage BeamAngle(IEC 61341):20.45

Equipment: equipamento lumini
Temperature(°C): 25.5

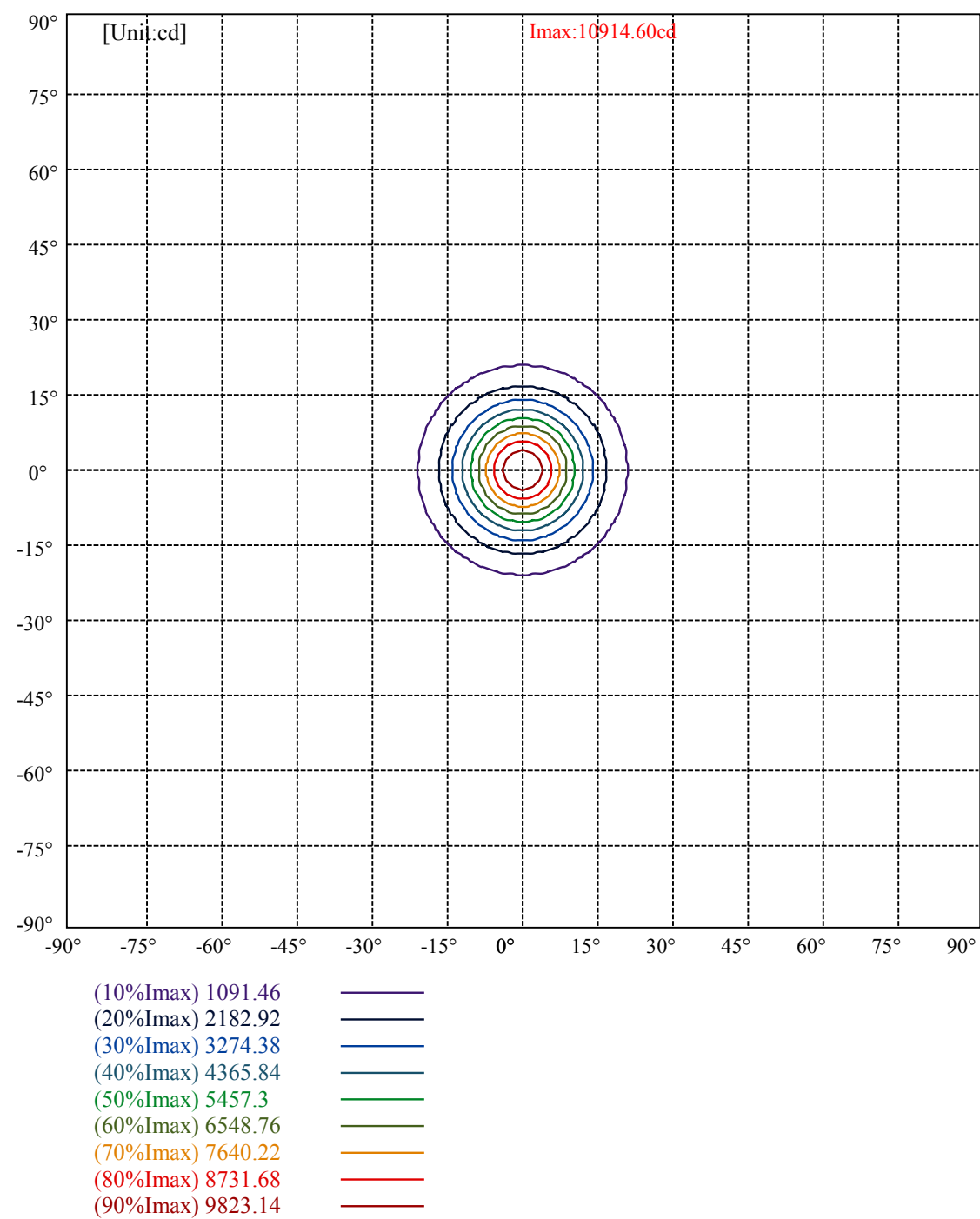
Date: 12/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 20.45



Luminance Table

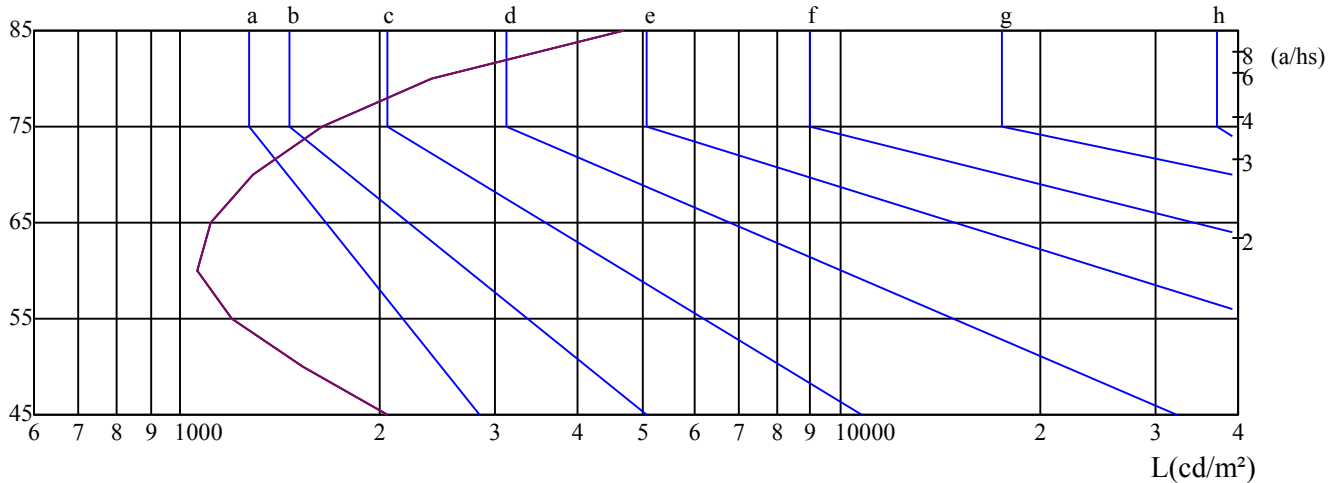
γ	45	50	55	60	65	70	75	80	85
C0	2056	1537	1197	1059	1113	1290	1642	2394	4704
C45	2056	1537	1197	1059	1113	1290	1642	2394	4704
C90	2056	1537	1197	1059	1113	1290	1642	2394	4704

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1113	1113	1113	1642	1642	1642	4704	4704	4704

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

 $\gamma(^{\circ})$ 

C0 ———

C45 ———

C90 ———

Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	5.77	6.66	6.17	7.01	7.38	5.61	6.50	6.01	6.85	7.22
	3H	6.37	7.17	6.80	7.55	7.94	6.23	7.02	6.65	7.40	7.80
	4H	6.95	7.69	7.39	8.08	8.50	6.81	7.55	7.25	7.94	8.36
	6H	7.89	8.56	8.35	8.98	9.43	7.76	8.43	8.22	8.85	9.30
	8H	8.53	9.17	8.99	9.59	10.05	8.41	9.05	8.87	9.48	9.93
	12H	9.37	9.98	9.84	10.41	10.88	9.24	9.85	9.71	10.28	10.75
4H	2H	5.76	6.50	6.20	6.89	7.31	5.62	6.35	6.06	6.75	7.17
	3H	6.63	7.25	7.10	7.69	8.15	6.51	7.13	6.97	7.56	8.03
	4H	7.51	8.05	7.99	8.51	9.01	7.40	7.93	7.87	8.39	8.89
	6H	8.74	9.21	9.25	9.70	10.20	8.63	9.10	9.14	9.59	10.09
	8H	9.59	10.02	10.11	10.52	11.04	9.49	9.93	10.01	10.42	10.94
	12H	10.67	11.07	11.19	11.56	12.12	10.55	10.95	11.08	11.44	12.01
8H	4H	7.84	8.27	8.36	8.77	9.29	7.74	8.17	8.26	8.67	9.19
	6H	9.38	9.74	9.92	10.25	10.81	9.30	9.65	9.84	10.17	10.73
	8H	10.50	10.80	11.07	11.36	11.90	10.42	10.72	10.99	11.28	11.82
	12H	11.85	12.07	12.43	12.62	13.19	11.75	11.97	12.33	12.53	13.09
12H	4H	7.94	8.34	8.47	8.83	9.40	7.85	8.25	8.37	8.74	9.31
	6H	9.66	9.95	10.22	10.51	11.05	9.58	9.87	10.15	10.43	10.97
	8H	10.86	11.08	11.44	11.64	12.20	10.79	11.01	11.36	11.56	12.13
Variation with the observer position at spacings:											
S = 1.0H		1.7/-1.2					1.7/-1.2				
S = 1.5H		2.0/-1.2					2.0/-1.2				
S = 2.0H		2.3/-1.3					2.3/-1.3				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-6.6					-6.6				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 34 c serie 3 fm

LampCAT: modulo led 24W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 127.6500

Test No:

Current(A): 0.2040

Number of Lamps: 1

Power (W): 25.9340

Lamp flux(lm): 2715.0

PF: 0.9940

Length(mm): 340

Width(mm): 40

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1952.95, Efficiency(%): 71.93% , Luminous Efficacy(lm/W): 75.30

Central intensity(cd): 6985.399, Maximum intensity(cd): 6985.399

Angle of maximum intensity: C=0.0 γ =0.0

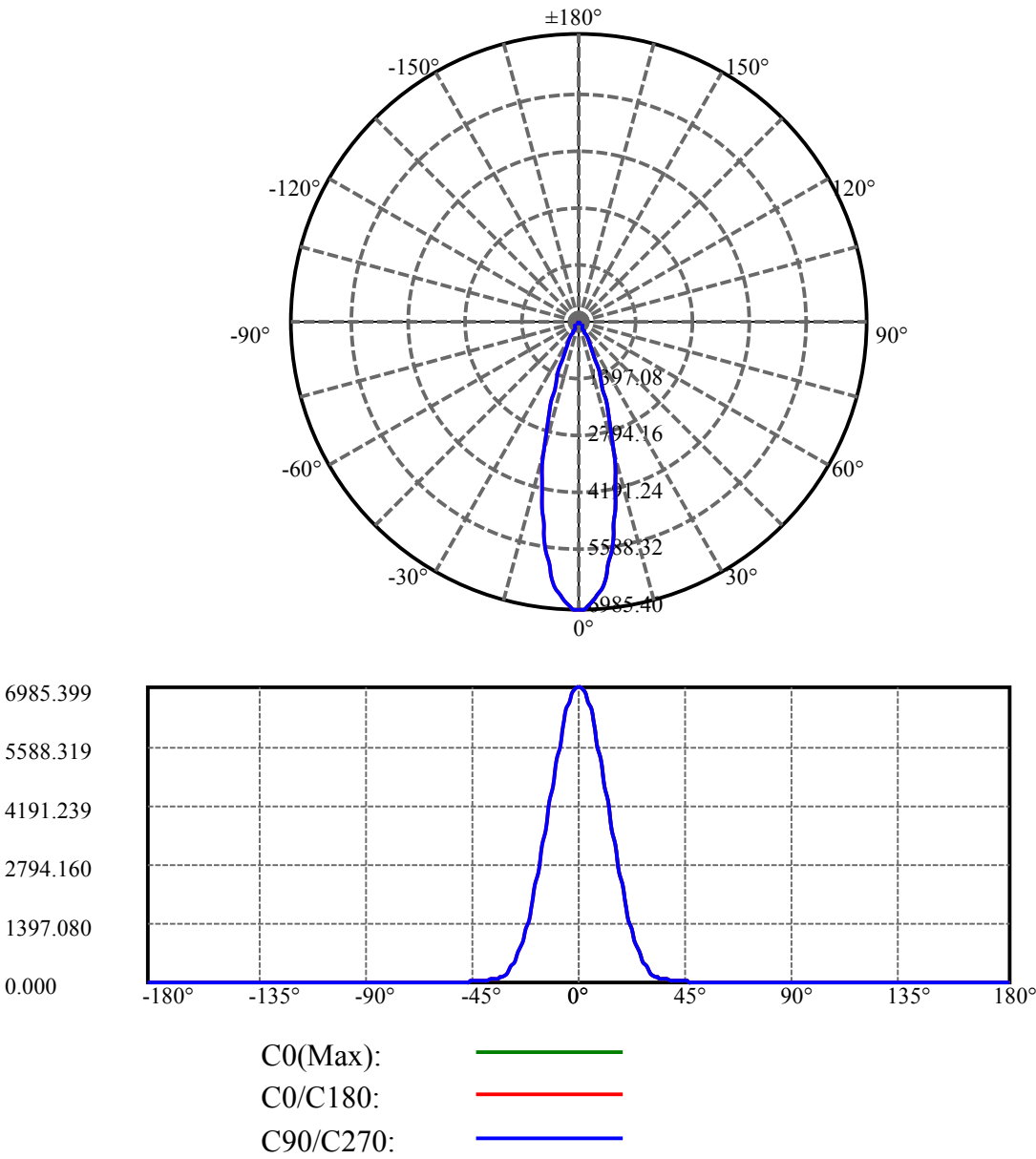
Beam angle of C0 plane : 28.57

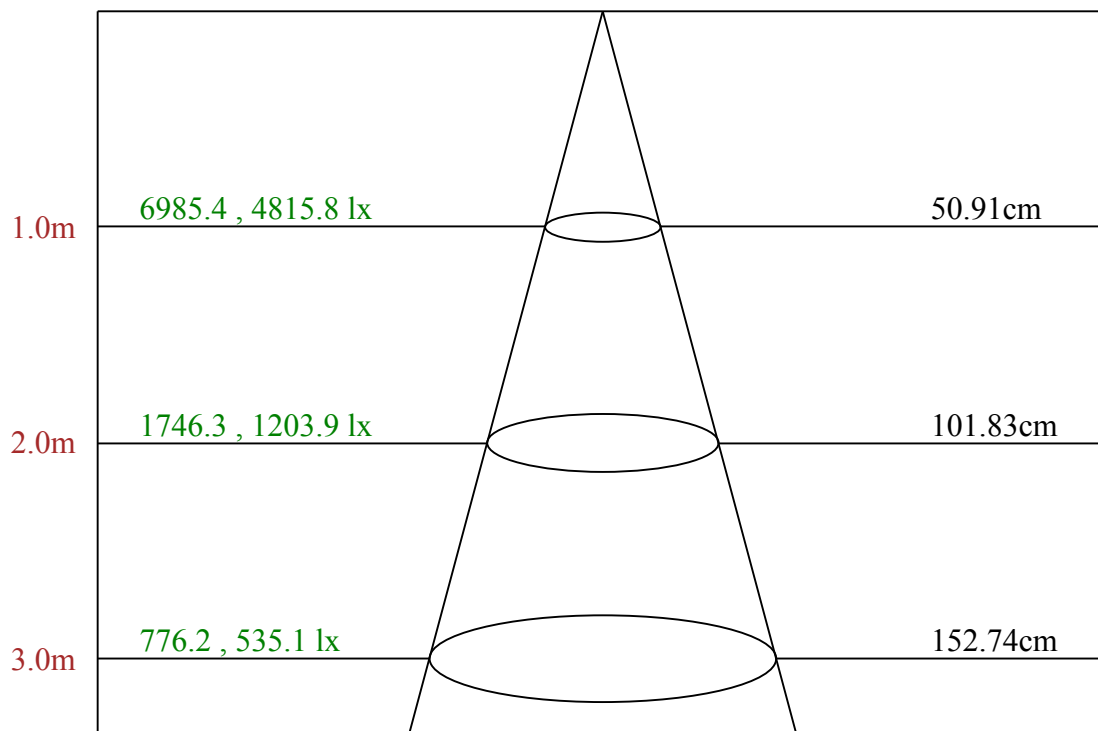
Aveage BeamAngle(IEC 61341):28.57

Equipment: equipamento lumini
Temperature(°C): 25.5

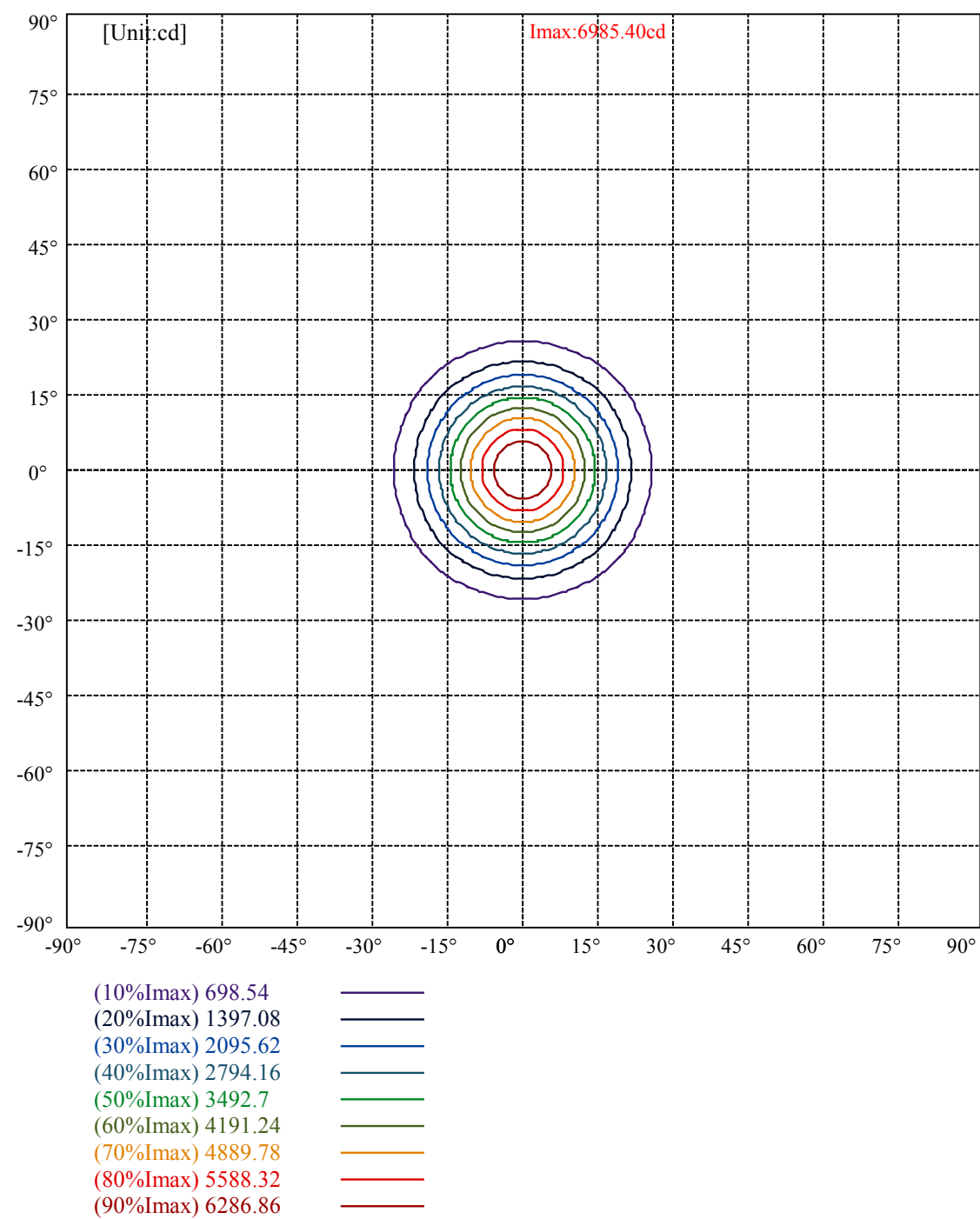
Date: 09/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 28.57



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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	2440	1591	1169	1054	1132	1329	1706	2495	4930
C45	2440	1591	1169	1054	1132	1329	1706	2495	4930
C90	2440	1591	1169	1054	1132	1329	1706	2495	4930

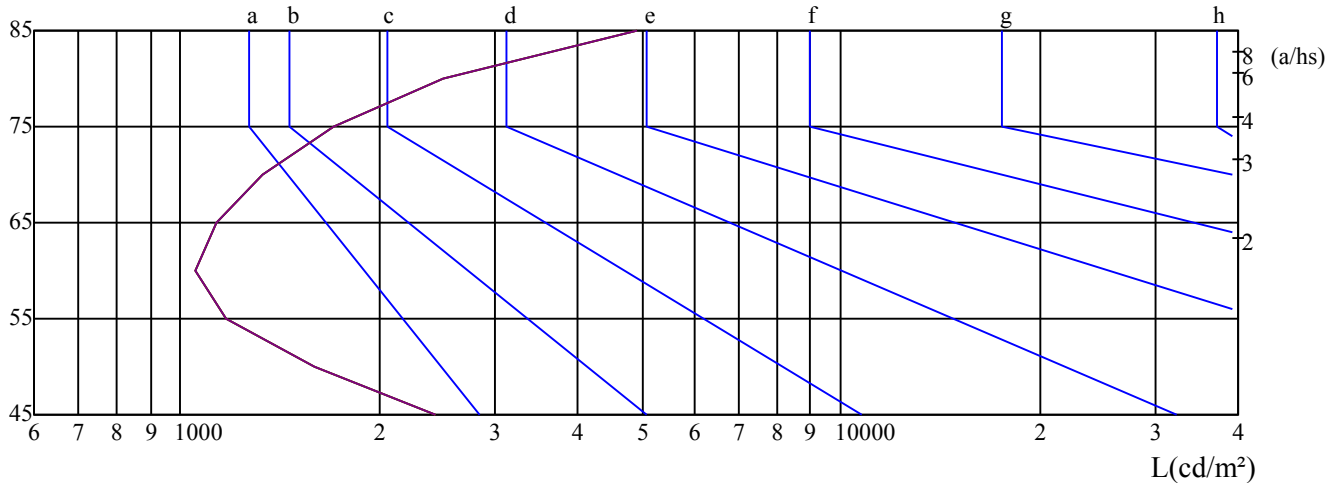
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1132	1132	1132	1706	1706	1706	4930	4930	4930

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

Equipment: equipamento lumini
Temperature($^{\circ}\text{C}$): 25.5

Date: 09/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	7.98	8.87	8.38	9.23	9.59	8.28	9.17	8.68	9.53	9.90
	3H	8.22	9.02	8.65	9.40	9.80	8.48	9.27	8.90	9.65	10.05
	4H	8.55	9.28	8.99	9.68	10.10	8.75	9.49	9.19	9.89	10.31
	6H	9.18	9.85	9.64	10.27	10.72	9.32	9.99	9.78	10.41	10.86
	8H	9.65	10.29	10.11	10.72	11.18	9.74	10.38	10.20	10.81	11.27
	12H	10.31	10.92	10.78	11.36	11.82	10.34	10.95	10.81	11.39	11.85
4H	2H	7.81	8.55	8.25	8.95	9.36	8.10	8.84	8.54	9.24	9.65
	3H	8.23	8.85	8.69	9.29	9.75	8.45	9.07	8.92	9.51	9.98
	4H	8.80	9.34	9.28	9.80	10.30	8.97	9.50	9.44	9.97	10.46
	6H	9.71	10.18	10.22	10.67	11.17	9.80	10.27	10.31	10.76	11.26
	8H	10.41	10.85	10.93	11.35	11.87	10.44	10.88	10.97	11.38	11.90
	12H	11.34	11.74	11.87	12.23	12.80	11.31	11.72	11.84	12.21	12.77
8H	4H	8.98	9.41	9.50	9.91	10.43	9.12	9.56	9.65	10.06	10.58
	6H	10.19	10.54	10.73	11.06	11.62	10.25	10.61	10.79	11.12	11.68
	8H	11.17	11.46	11.73	12.02	12.56	11.17	11.47	11.74	12.02	12.57
	12H	12.38	12.60	12.96	13.16	13.73	12.33	12.55	12.91	13.11	13.67
12H	4H	9.04	9.45	9.57	9.94	10.50	9.19	9.59	9.71	10.08	10.65
	6H	10.41	10.71	10.98	11.27	11.81	10.47	10.77	11.04	11.33	11.87
	8H	11.47	11.69	12.05	12.25	12.82	11.47	11.70	12.05	12.25	12.82
Variation with the observer position at spacings:											
S = 1.0H		2.9/-2.0					2.9/-2.0				
S = 1.5H		3.6/-1.7					3.6/-1.7				
S = 2.0H		4.1/-1.5					4.1/-1.5				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-5.6					-5.6				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 34 c serie 3 fa

LampCAT: modulo led 24W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 127.6500

Test No:

Current(A): 0.2040

Number of Lamps: 1

Power (W): 25.8890

Lamp flux(lm): 2715.0

PF: 0.9940

Length(mm): 340

Width(mm): 40

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1582.09, Efficiency(%): 58.27% , Luminous Efficacy(lm/W): 61.11

Central intensity(cd): 2021.342, Maximum intensity(cd): 2021.342

Angle of maximum intensity: C=0.0 γ =0.0

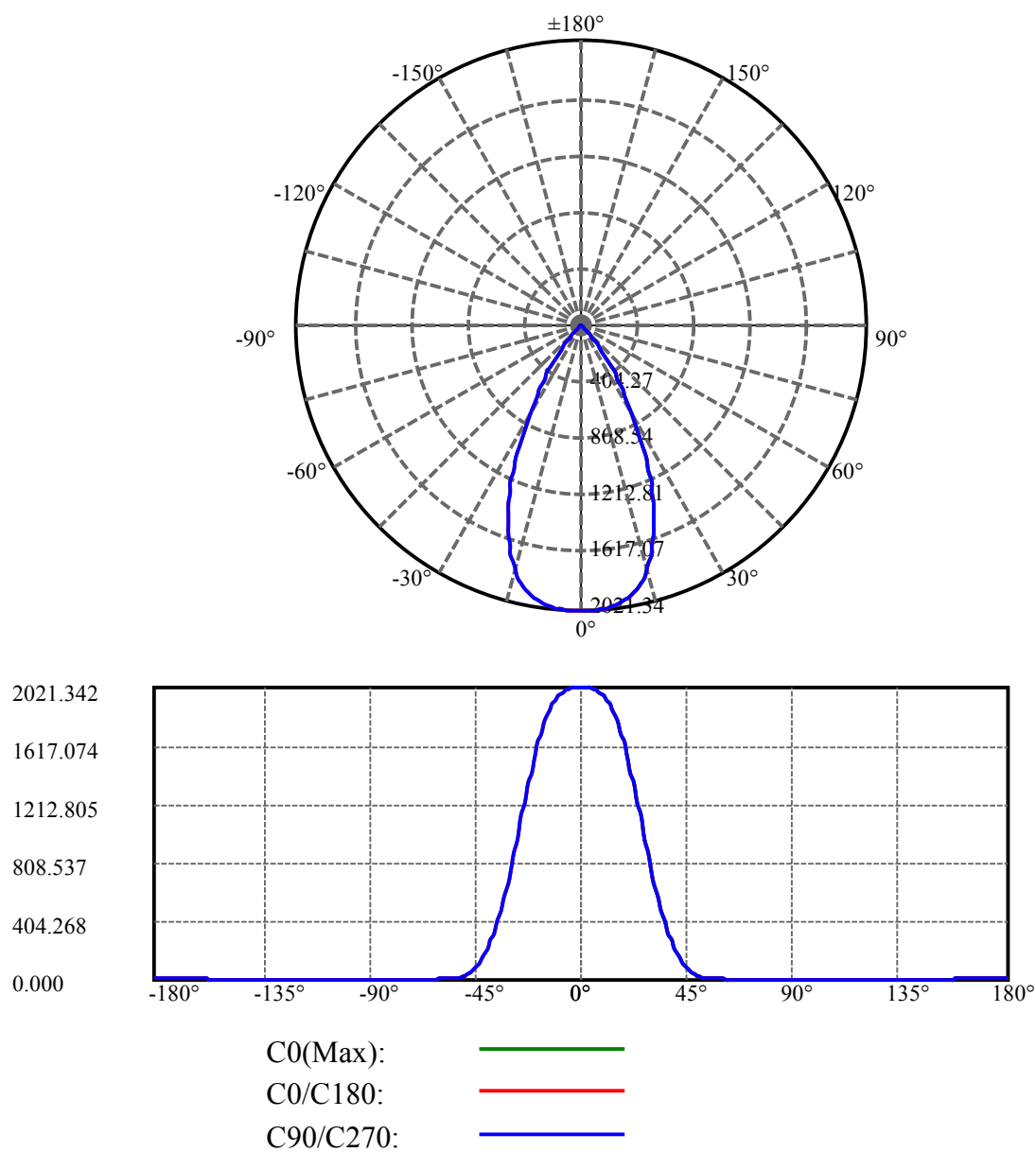
Beam angle of C0 plane : 52.93

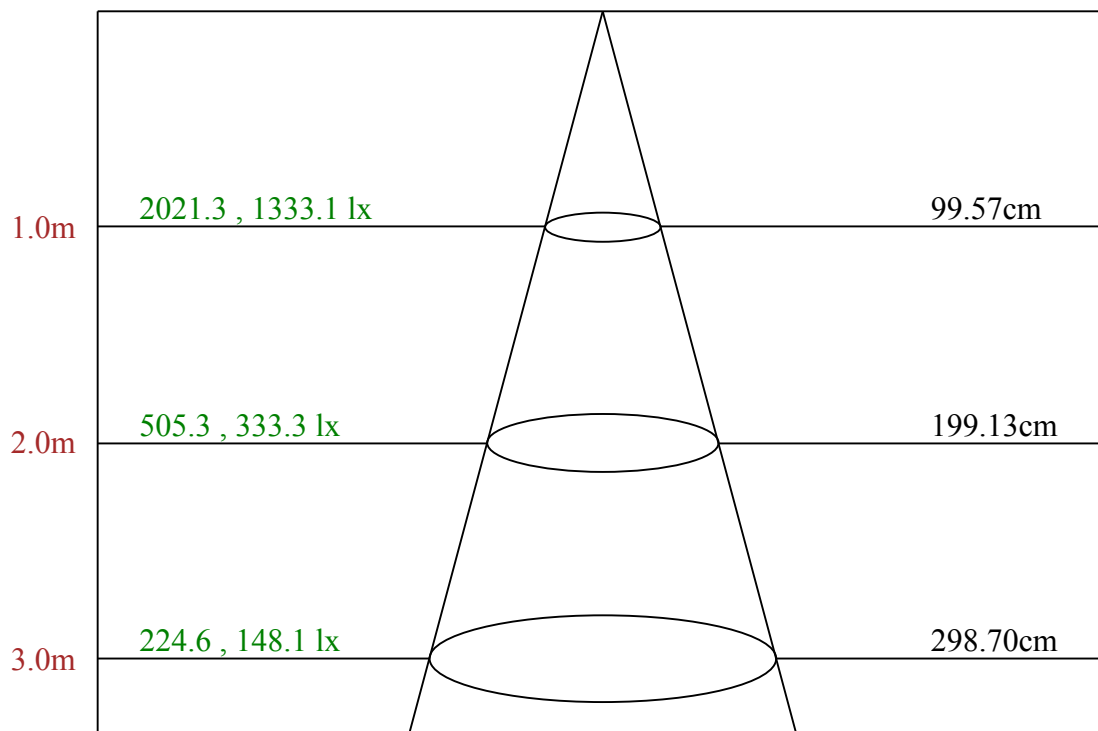
Aveage BeamAngle(IEC 61341):52.93

Equipment: equipamento lumini
Temperature(°C): 25.5

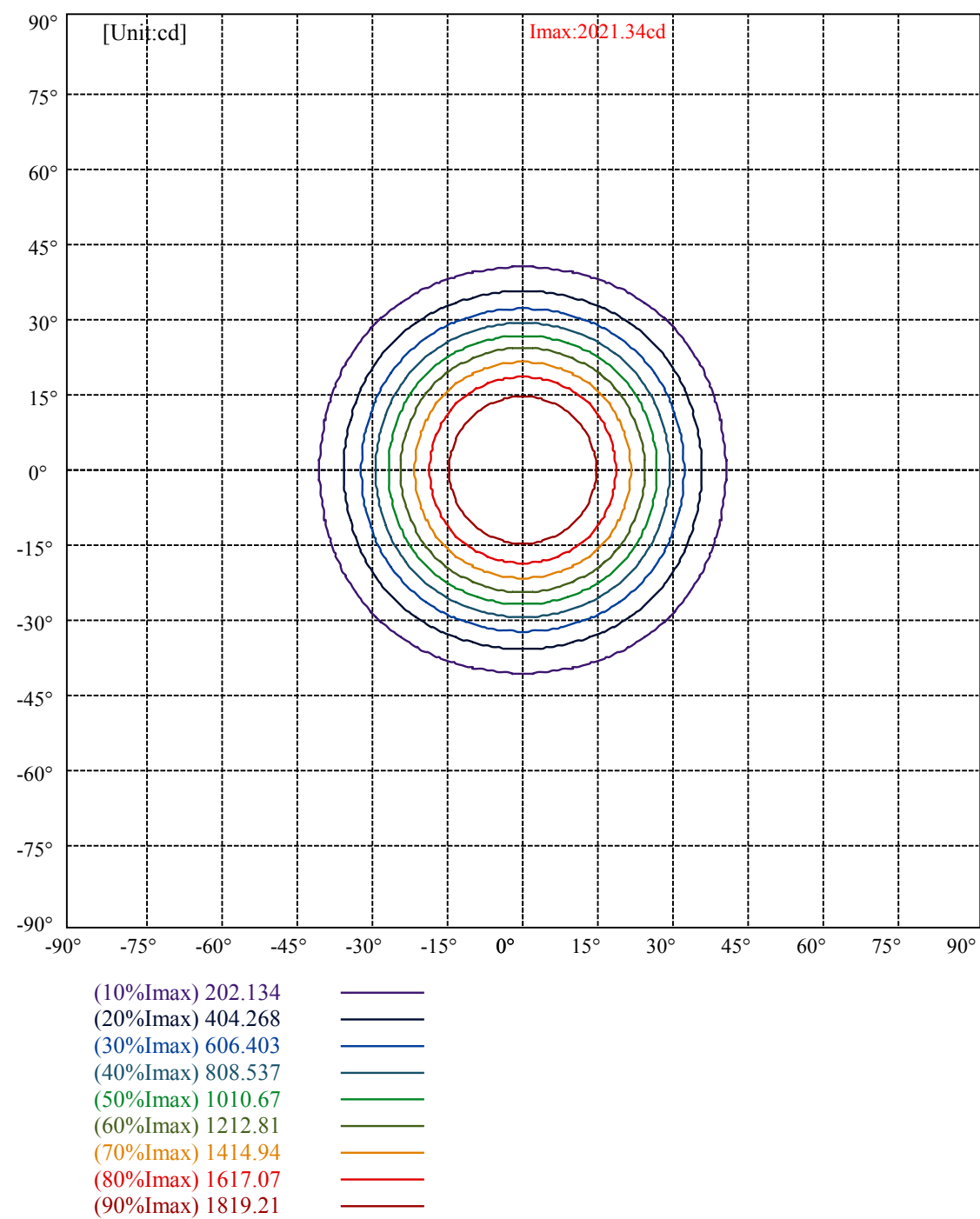
Date: 09/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 52.93



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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

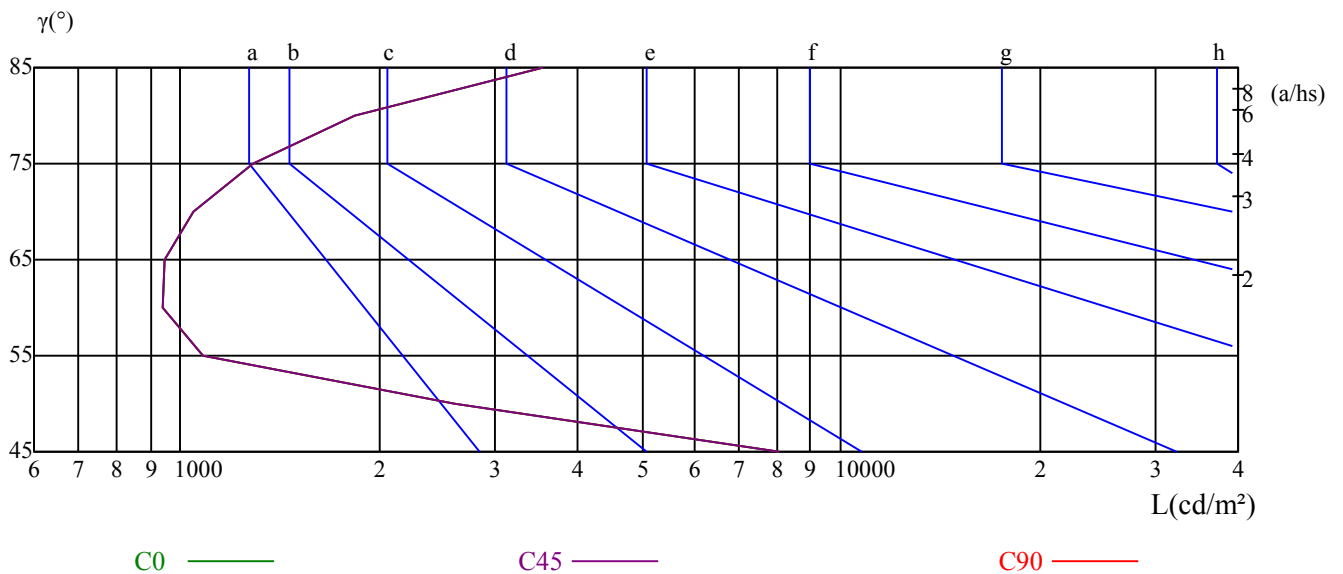
γ	45	50	55	60	65	70	75	80	85
C0	8086	2595	1081	941	943	1047	1292	1840	3545
C45	8086	2595	1081	941	943	1047	1292	1840	3545
C90	8086	2595	1081	941	943	1047	1292	1840	3545

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
943	943	943	1292	1292	1292	3545	3545	3545

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve



Equipment: equipamento lumini
Temperature($^{\circ}$ C): 25.5

Date: 09/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	18.37	19.31	18.77	19.66	20.03	18.47	19.41	18.87	19.76	20.13
	3H	18.18	19.01	18.60	19.39	19.78	18.28	19.11	18.70	19.49	19.89
	4H	18.09	18.86	18.52	19.25	19.67	18.19	18.96	18.63	19.36	19.77
	6H	18.03	18.73	18.48	19.15	19.59	18.13	18.84	18.59	19.25	19.70
	8H	17.98	18.65	18.44	19.08	19.53	18.08	18.76	18.54	19.18	19.64
	12H	17.95	18.59	18.41	19.02	19.48	18.06	18.69	18.52	19.13	19.59
4H	2H	18.06	18.83	18.50	19.22	19.64	18.16	18.93	18.60	19.33	19.74
	3H	17.84	18.48	18.30	18.92	19.38	17.94	18.59	18.40	19.02	19.48
	4H	17.79	18.35	18.26	18.81	19.30	17.89	18.45	18.36	18.91	19.40
	6H	17.70	18.19	18.21	18.68	19.18	17.81	18.30	18.31	18.79	19.28
	8H	17.69	18.15	18.21	18.64	19.16	17.80	18.25	18.32	18.75	19.26
	12H	17.72	18.14	18.24	18.63	19.19	17.83	18.25	18.35	18.74	19.30
8H	4H	17.60	18.06	18.12	18.55	19.07	17.70	18.16	18.22	18.65	19.17
	6H	17.53	17.90	18.07	18.42	18.97	17.64	18.01	18.17	18.52	19.08
	8H	17.60	17.91	18.16	18.47	19.01	17.70	18.02	18.27	18.57	19.11
	12H	17.68	17.92	18.26	18.47	19.04	17.79	18.03	18.36	18.58	19.15
12H	4H	17.56	17.97	18.08	18.46	19.03	17.66	18.08	18.18	18.56	19.13
	6H	17.53	17.85	18.10	18.40	18.94	17.64	17.95	18.20	18.50	19.04
	8H	17.58	17.82	18.15	18.37	18.94	17.68	17.92	18.26	18.47	19.04
Variation with the observer position at spacings:											
S = 1.0H		4.9/-10.5					4.9/-10.5				
S = 1.5H		7.5/-8.6					7.5/-8.6				
S = 2.0H		9.3/-7.3					9.3/-7.3				
Standard tables:		BK1					BK1				
Uncorrected UGR		-2.8					-2.8				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 50 c serie 3 fc

LampCAT: modulo led 18W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 127.7000

Test No:

Current(A): 0.1580

Number of Lamps: 1

Power (W): 19.8920

Lamp flux(lm): 2145.0

PF: 0.9890

Length(mm): 550

Width(mm): 40

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1555.44, Efficiency(%): 72.51% , Luminous Efficacy(lm/W): 78.19

Central intensity(cd): 8847.616, Maximum intensity(cd): 8847.616

Angle of maximum intensity: C=0.0 γ =0.0

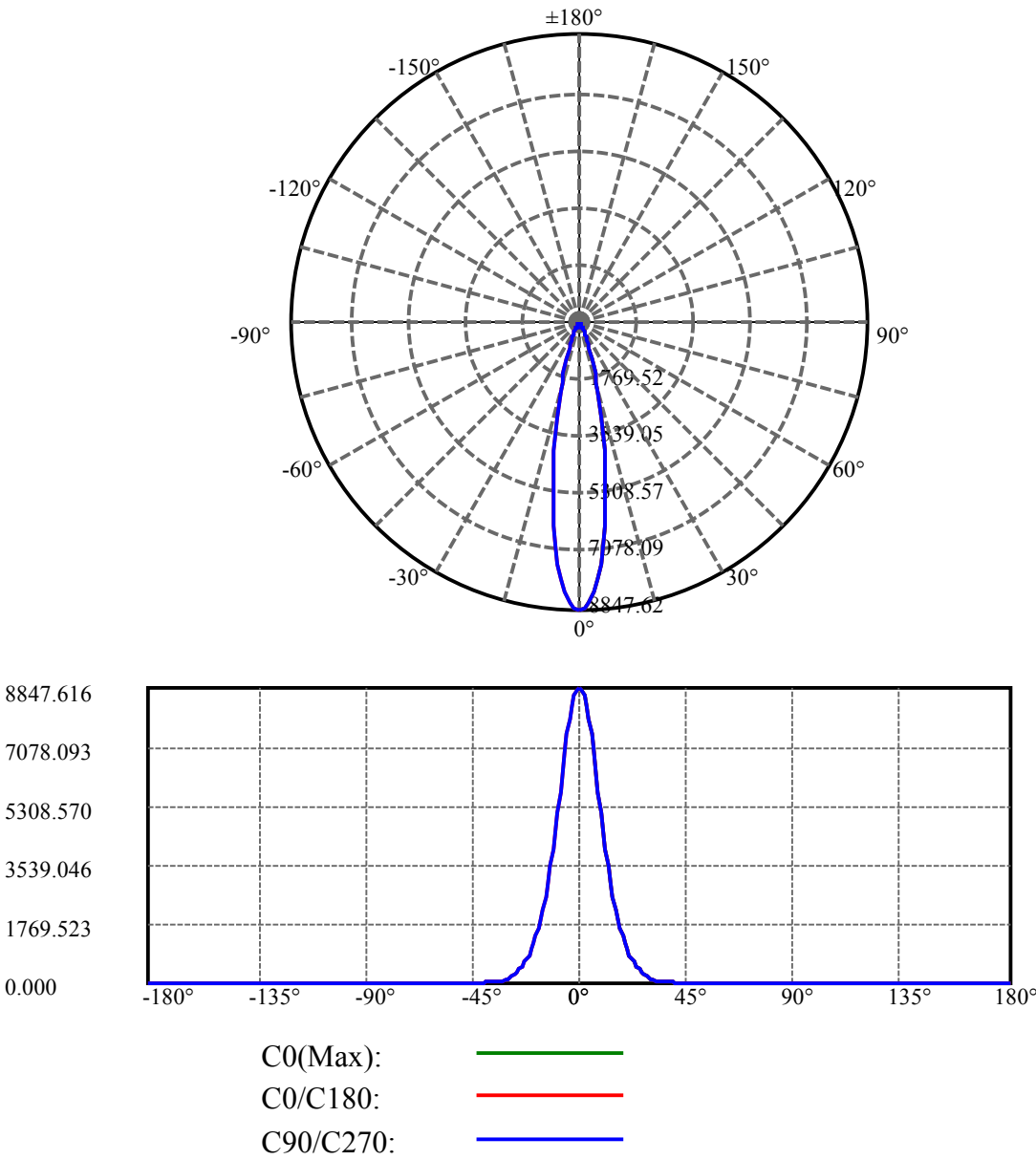
Beam angle of C0 plane : 20.45

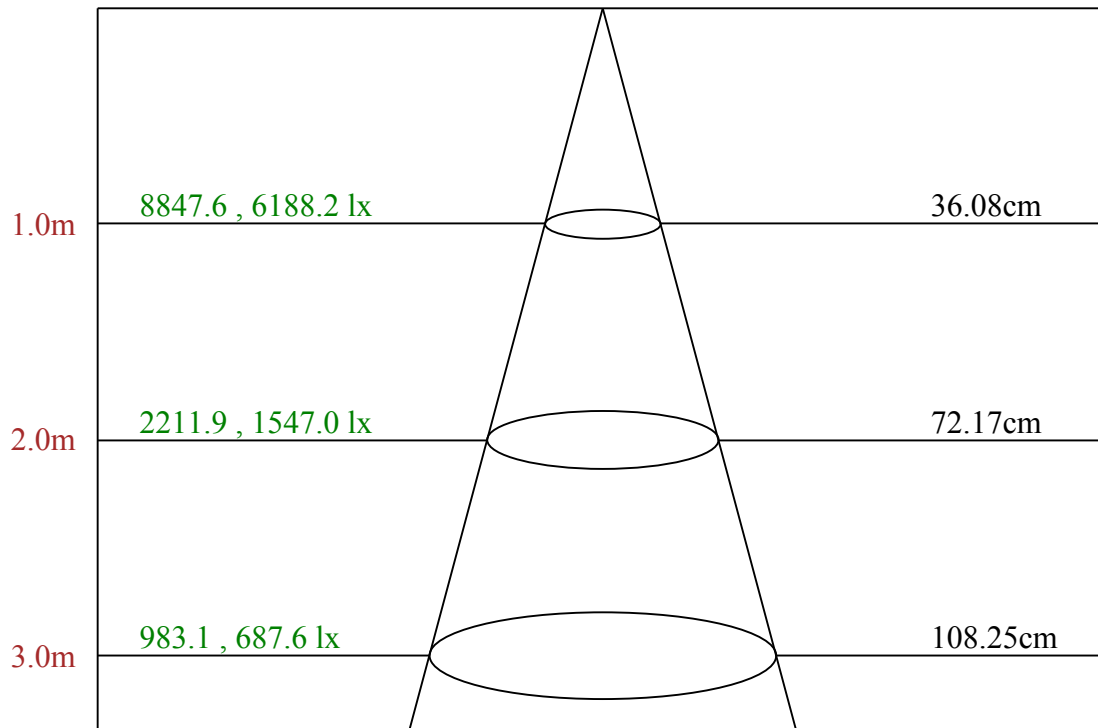
Aveage BeamAngle(IEC 61341):20.45

Equipment: equipamento lumini
Temperature(°C): 25.5

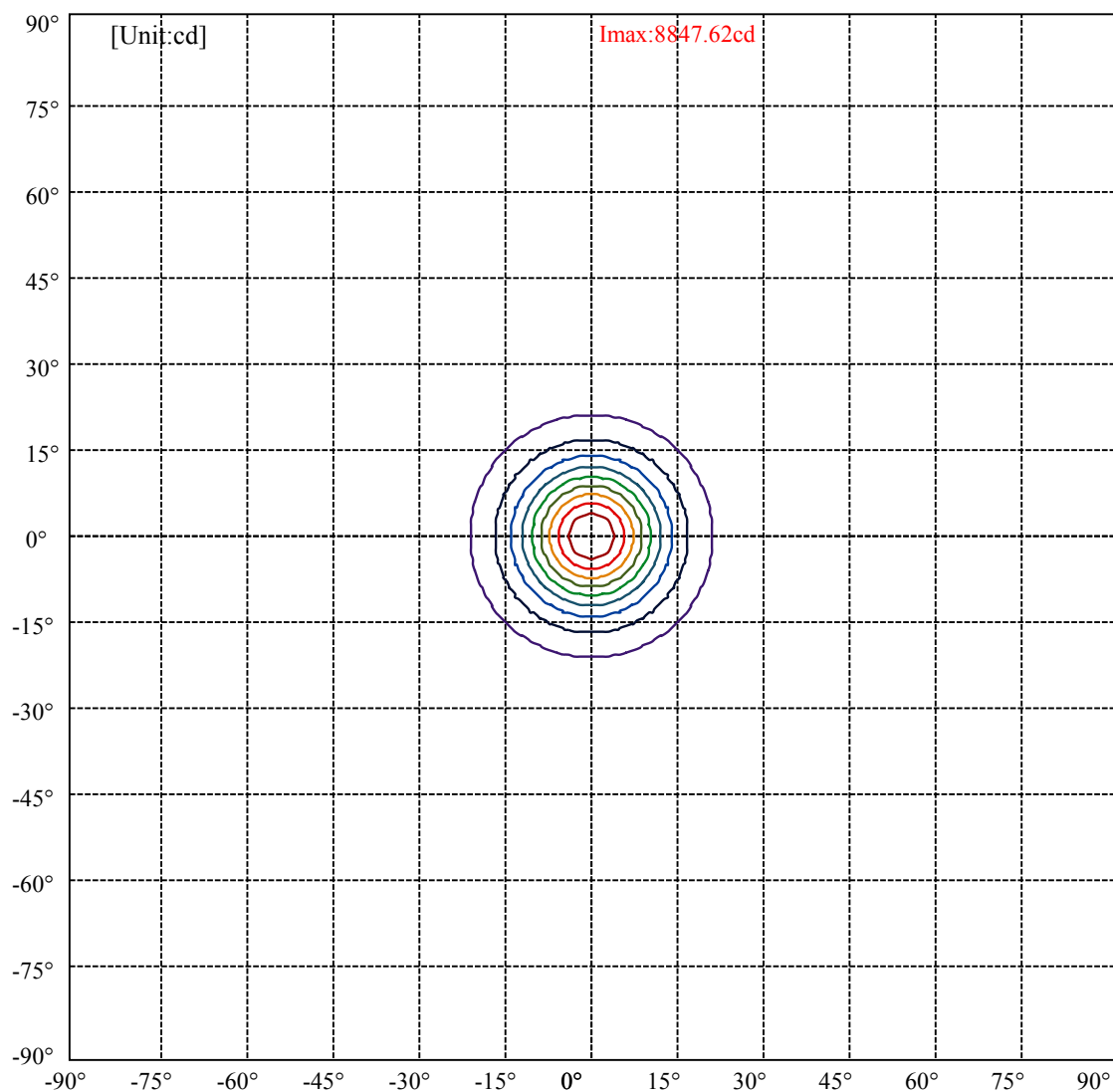
Date: 16/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 20.45



(10%Imax) 884.762	—
(20%Imax) 1769.52	—
(30%Imax) 2654.28	—
(40%Imax) 3539.05	—
(50%Imax) 4423.81	—
(60%Imax) 5308.57	—
(70%Imax) 6193.33	—
(80%Imax) 7078.09	—
(90%Imax) 7962.85	—

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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	1048	787	603	551	586	675	858	1252	2449
C45	1048	787	603	551	586	675	858	1252	2449
C90	1048	787	603	551	586	675	858	1252	2449

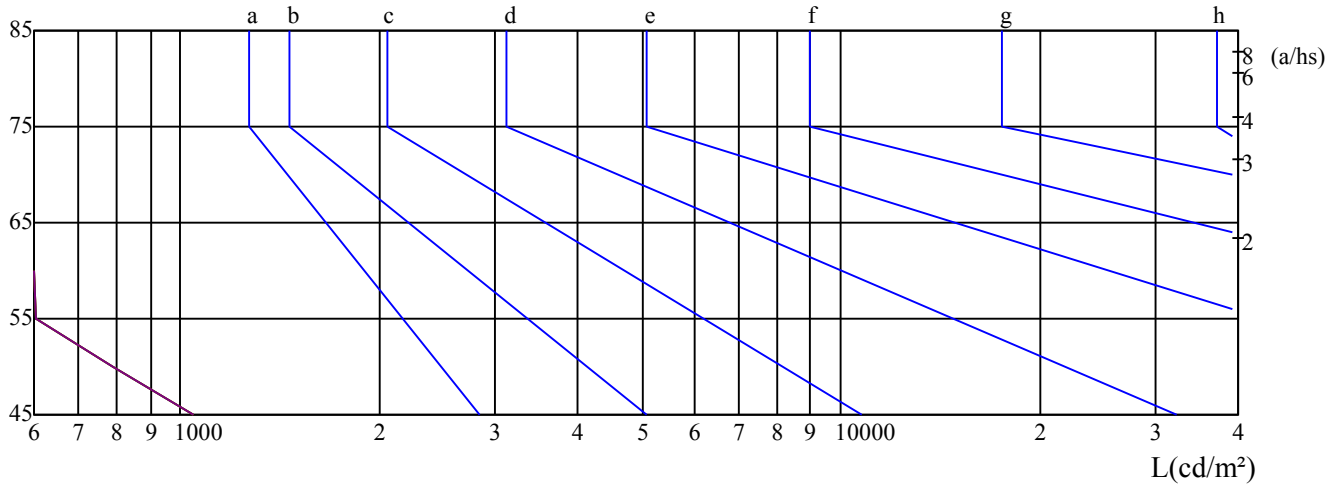
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
586	586	586	858	858	858	2449	2449	2449

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

Equipment: equipamento lumini
Temperature($^{\circ}\text{C}$): 25.5

Date: 16/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	4.33	5.22	4.73	5.58	5.95	2.95	3.84	3.35	4.20	4.57
	3H	4.84	5.63	5.26	6.01	6.41	3.68	4.47	4.10	4.85	5.25
	4H	5.33	6.07	5.78	6.47	6.89	4.32	5.06	4.77	5.46	5.88
	6H	6.16	6.83	6.62	7.25	7.70	5.35	6.02	5.81	6.44	6.89
	8H	6.74	7.38	7.20	7.81	8.26	6.04	6.68	6.50	7.10	7.56
	12H	7.51	8.12	7.98	8.56	9.02	6.92	7.52	7.38	7.96	8.43
4H	2H	4.27	5.01	4.71	5.41	5.82	3.02	3.76	3.46	4.16	4.58
	3H	5.02	5.63	5.48	6.07	6.54	4.04	4.66	4.50	5.09	5.56
	4H	5.80	6.33	6.27	6.79	7.29	4.99	5.53	5.47	5.99	6.49
	6H	6.90	7.37	7.41	7.86	8.36	6.29	6.76	6.80	7.26	7.76
	8H	7.70	8.13	8.22	8.63	9.15	7.18	7.62	7.71	8.12	8.64
	12H	8.72	9.12	9.24	9.61	10.18	8.28	8.68	8.81	9.17	9.74
8H	4H	6.06	6.49	6.58	6.99	7.51	5.36	5.80	5.89	6.30	6.82
	6H	7.47	7.83	8.02	8.35	8.91	6.99	7.34	7.53	7.86	8.42
	8H	8.55	8.84	9.11	9.40	9.94	8.15	8.44	8.72	9.00	9.55
	12H	9.83	10.06	10.41	10.61	11.18	9.50	9.72	10.08	10.28	10.85
12H	4H	6.15	6.55	6.67	7.04	7.60	5.49	5.89	6.01	6.38	6.95
	6H	7.72	8.02	8.29	8.58	9.12	7.28	7.57	7.85	8.13	8.68
	8H	8.87	9.10	9.45	9.65	10.22	8.52	8.74	9.10	9.30	9.86
Variation with the observer position at spacings:											
S = 1.0H		1.7/-1.2					1.7/-1.2				
S = 1.5H		2.0/-1.3					2.0/-1.3				
S = 2.0H		2.2/-1.2					2.2/-1.2				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-8.8					-8.8				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 50 c serie 3 fm

LampCAT: modulo led 18W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 127.7400

Test No:

Current(A): 0.1580

Number of Lamps: 1

Power (W): 19.9040

Lamp flux(lm): 2145.0

PF: 0.9890

Length(mm): 550

Width(mm): 40

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1644.28, Efficiency(%): 76.66% , Luminous Efficacy(lm/W): 82.61

Central intensity(cd): 6464.248, Maximum intensity(cd): 6464.248

Angle of maximum intensity: C=0.0 γ =0.0

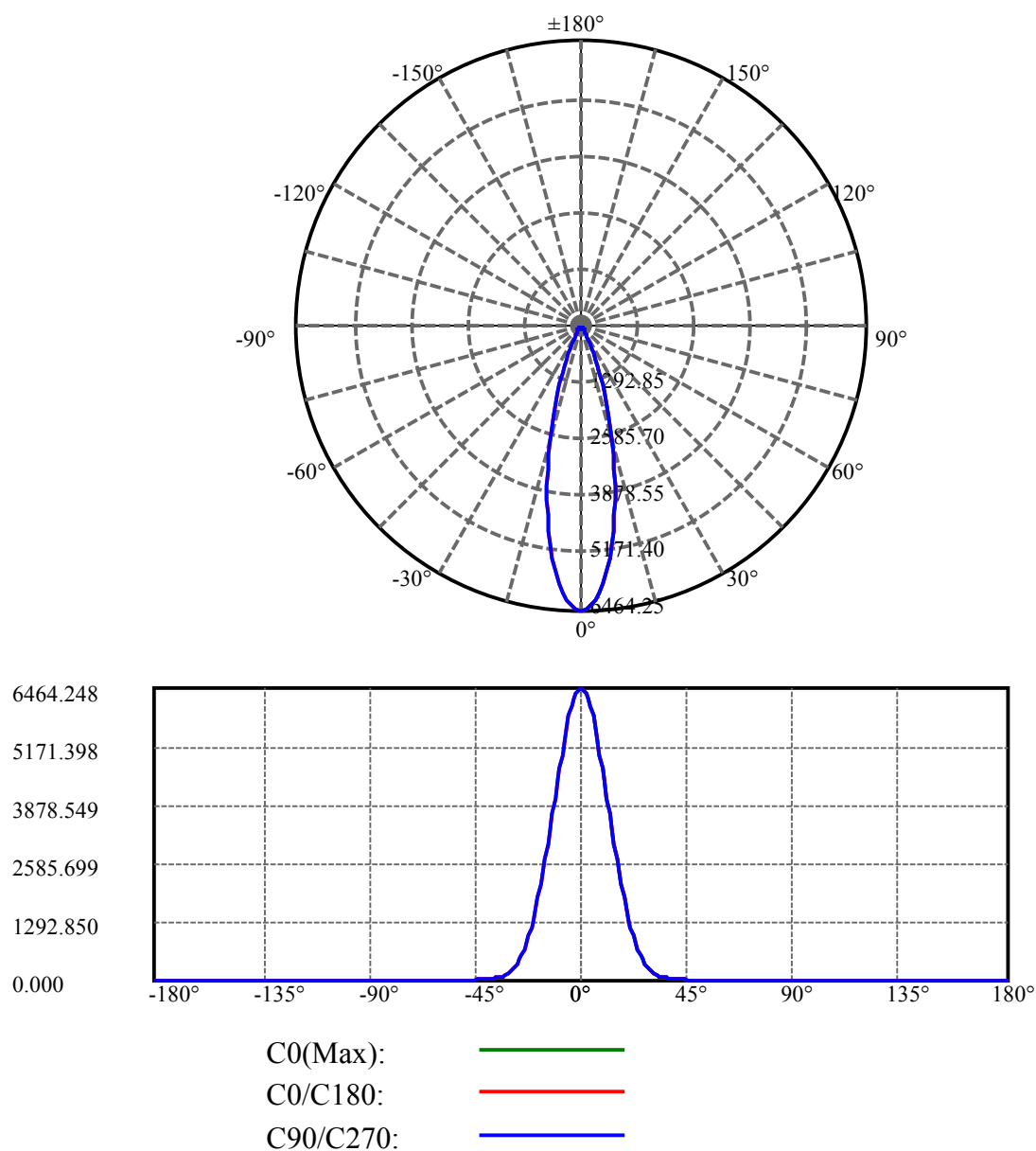
Beam angle of C0 plane : 26.67

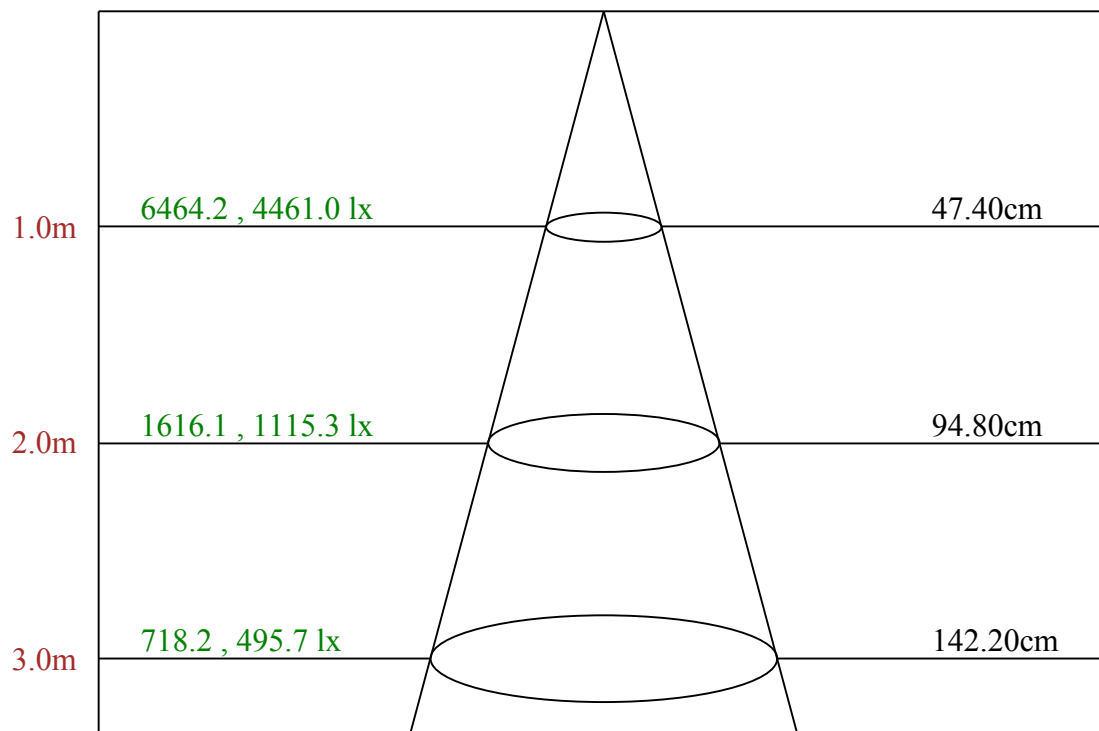
Aveage BeamAngle(IEC 61341):26.67

Equipment: equipamento lumini
Temperature(°C): 25.5

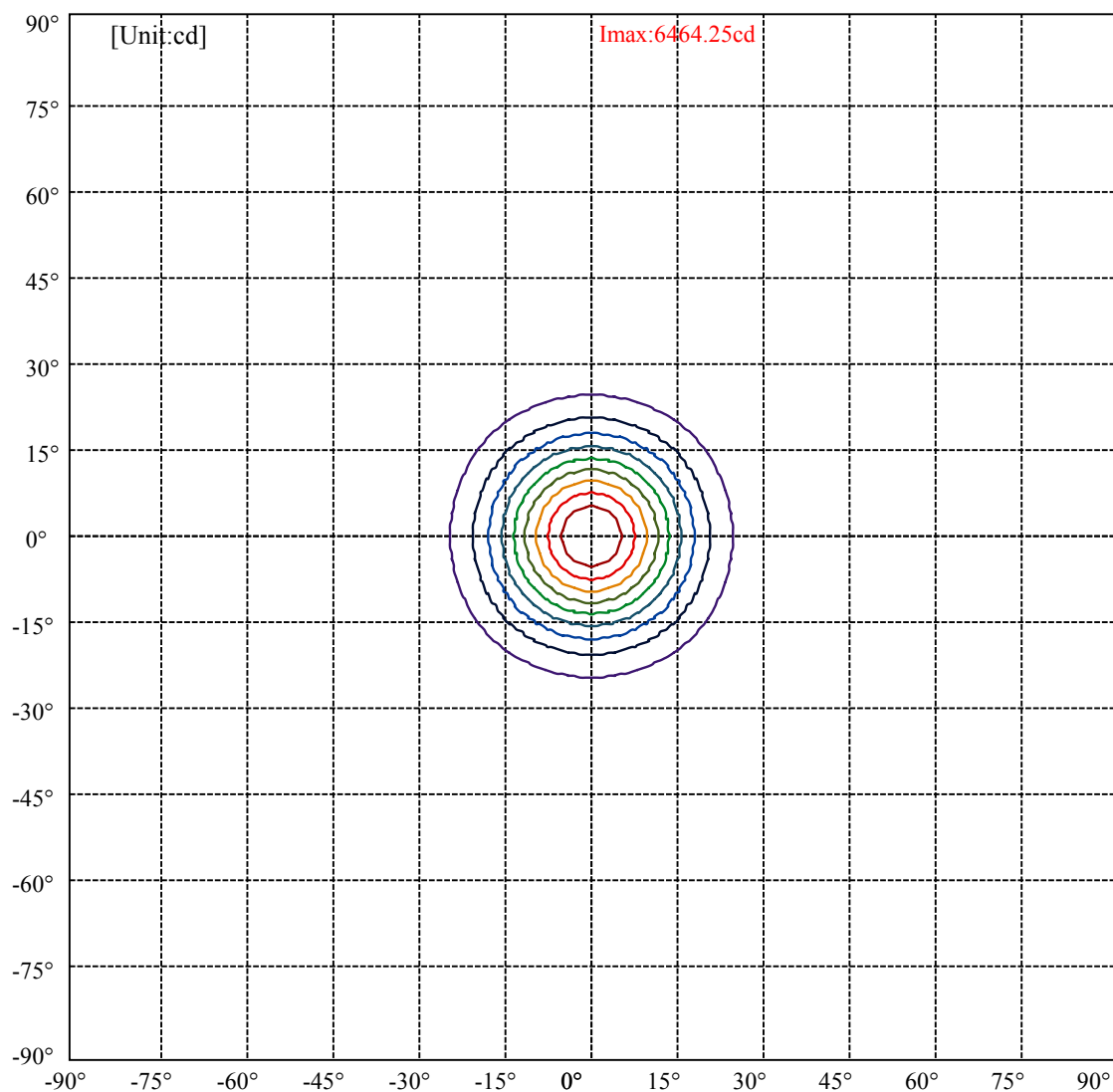
Date: 17/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 26.67



(10%Imax) 646.425	—
(20%Imax) 1292.85	—
(30%Imax) 1939.27	—
(40%Imax) 2585.7	—
(50%Imax) 3232.12	—
(60%Imax) 3878.55	—
(70%Imax) 4524.97	—
(80%Imax) 5171.4	—
(90%Imax) 5817.82	—

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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

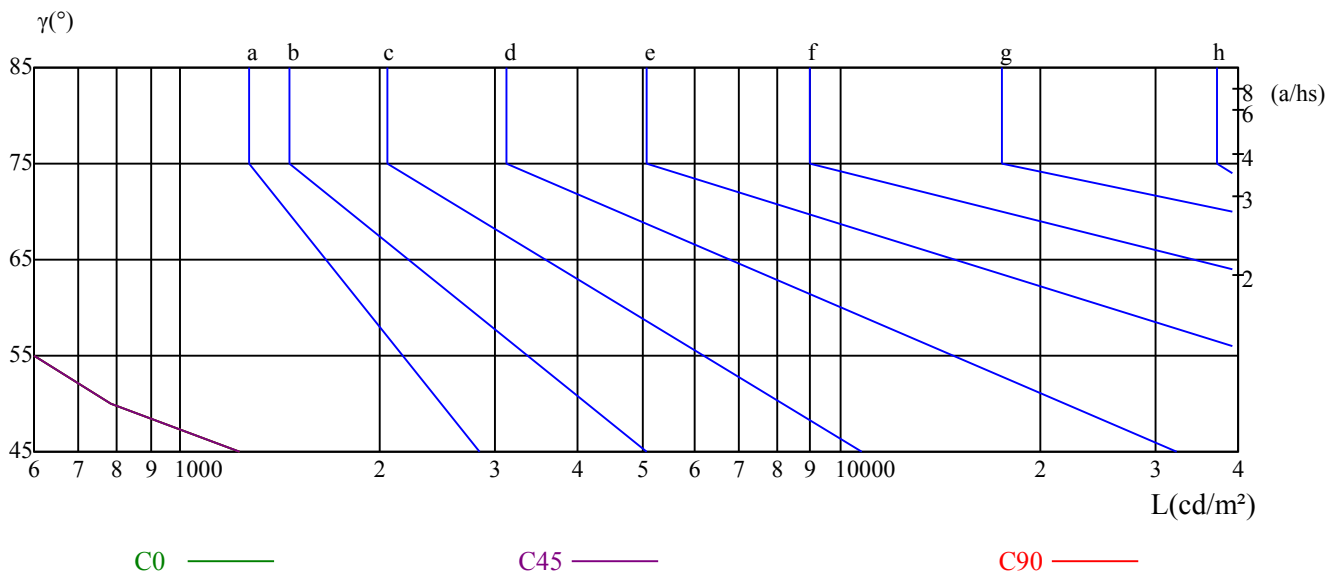
γ	45	50	55	60	65	70	75	80	85
C0	1225	787	594	526	564	656	842	1232	2427
C45	1225	787	594	526	564	656	842	1232	2427
C90	1225	787	594	526	564	656	842	1232	2427

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
564	564	564	842	842	842	2427	2427	2427

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve



Equipment: equipamento lumini
Temperature($^{\circ}\text{C}$): 25.5

Date: 17/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	4.83	5.73	5.23	6.08	6.45	5.61	6.50	6.01	6.85	7.22
	3H	5.14	5.94	5.57	6.32	6.71	5.82	6.61	6.24	6.99	7.39
	4H	5.51	6.25	5.95	6.64	7.06	6.10	6.84	6.54	7.23	7.65
	6H	6.21	6.88	6.67	7.30	7.75	6.68	7.35	7.14	7.77	8.22
	8H	6.72	7.36	7.18	7.79	8.24	7.11	7.75	7.57	8.18	8.63
	12H	7.42	8.03	7.88	8.46	8.92	7.73	8.33	8.19	8.77	9.23
4H	2H	4.70	5.44	5.14	5.83	6.25	5.43	6.17	5.87	6.56	6.98
	3H	5.20	5.82	5.67	6.26	6.72	5.80	6.42	6.27	6.86	7.32
	4H	5.84	6.37	6.31	6.83	7.33	6.33	6.86	6.80	7.33	7.82
	6H	6.82	7.29	7.33	7.78	8.28	7.17	7.64	7.68	8.13	8.63
	8H	7.55	7.99	8.07	8.48	9.00	7.83	8.26	8.35	8.76	9.28
	12H	8.51	8.91	9.04	9.40	9.97	8.71	9.11	9.23	9.59	10.16
8H	4H	6.05	6.48	6.57	6.98	7.50	6.49	6.92	7.01	7.42	7.94
	6H	7.33	7.69	7.88	8.20	8.76	7.62	7.98	8.16	8.49	9.05
	8H	8.35	8.64	8.91	9.20	9.74	8.55	8.84	9.12	9.40	9.94
	12H	9.58	9.81	10.16	10.36	10.92	9.71	9.93	10.29	10.48	11.05
12H	4H	6.13	6.53	6.65	7.01	7.58	6.55	6.95	7.07	7.44	8.00
	6H	7.57	7.87	8.14	8.42	8.97	7.84	8.13	8.40	8.69	9.23
	8H	8.66	8.89	9.24	9.44	10.00	8.84	9.07	9.42	9.62	10.19
Variation with the observer position at spacings:											
S = 1.0H		3.0/-2.0					3.0/-2.0				
S = 1.5H		3.7/-1.7					3.7/-1.7				
S = 2.0H		4.2/-1.5					4.2/-1.5				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-8.2					-8.2				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 50 c serie 3 fa

LampCAT: modulo led 18W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 127.7700

Test No:

Current(A): 0.1570

Number of Lamps: 1

Power (W): 19.8800

Lamp flux(lm): 2145.0

PF: 0.9890

Length(mm): 550

Width(mm): 40

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1349.71, Efficiency(%): 62.92% , Luminous Efficacy(lm/W): 67.89

Central intensity(cd): 1758.475, Maximum intensity(cd): 1758.475

Angle of maximum intensity: C=0.0 γ =0.0

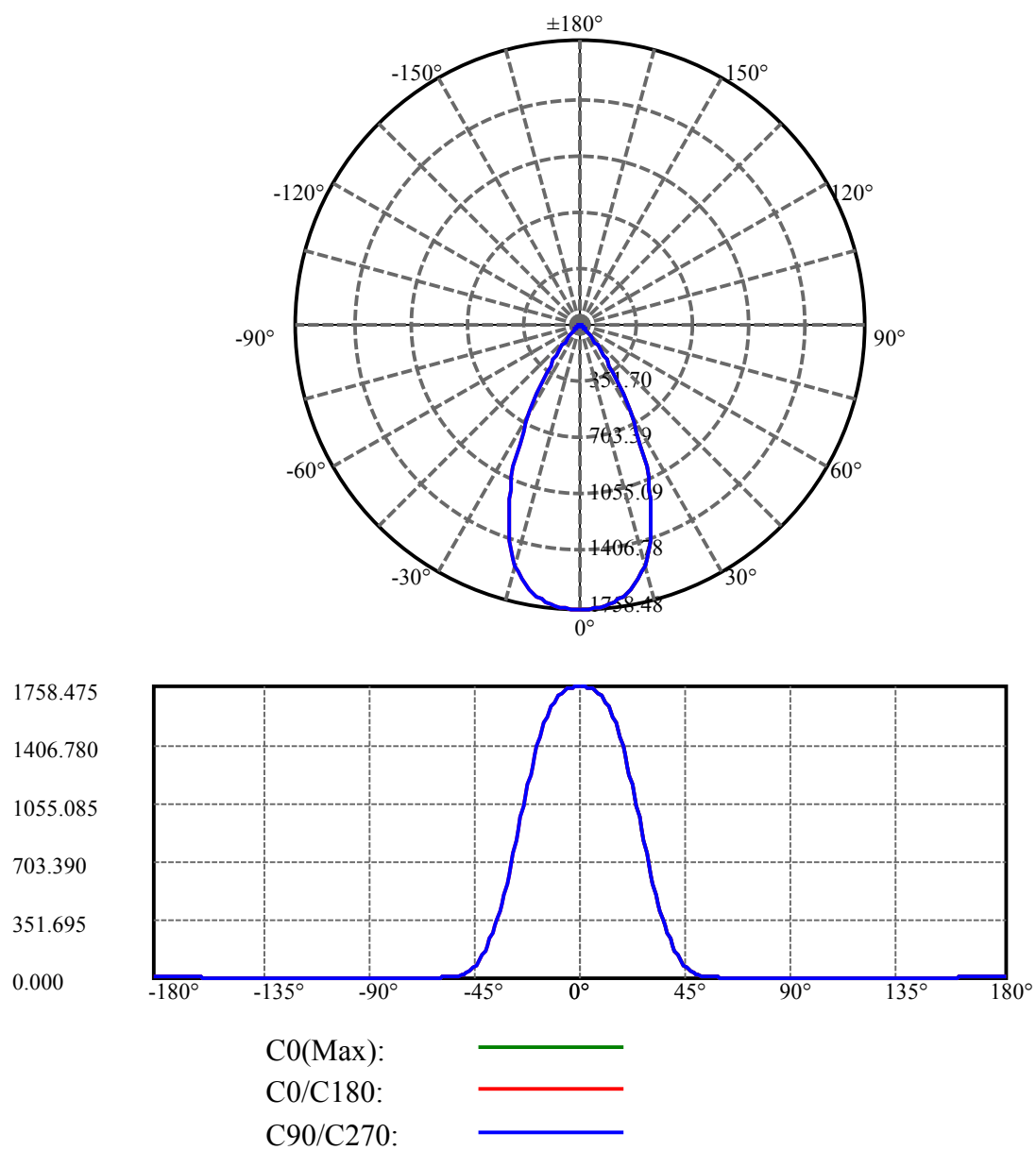
Beam angle of C0 plane : 52.39

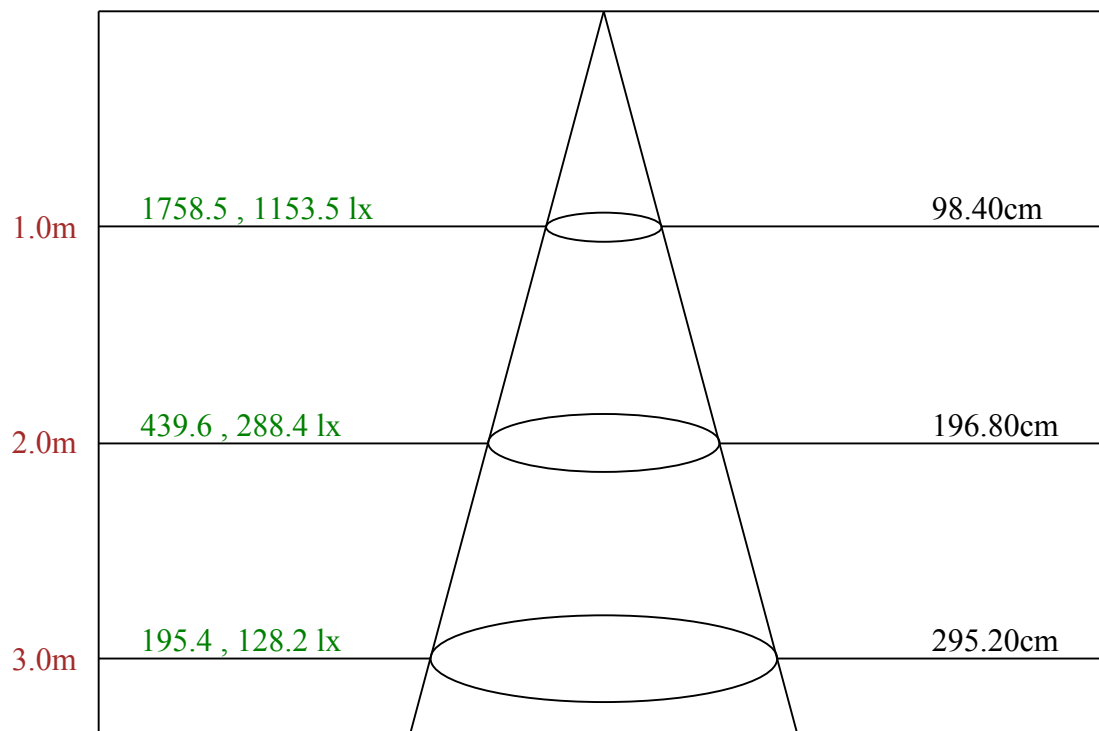
Aveage BeamAngle(IEC 61341):52.39

Equipment: equipamento lumini
Temperature(°C): 25.5

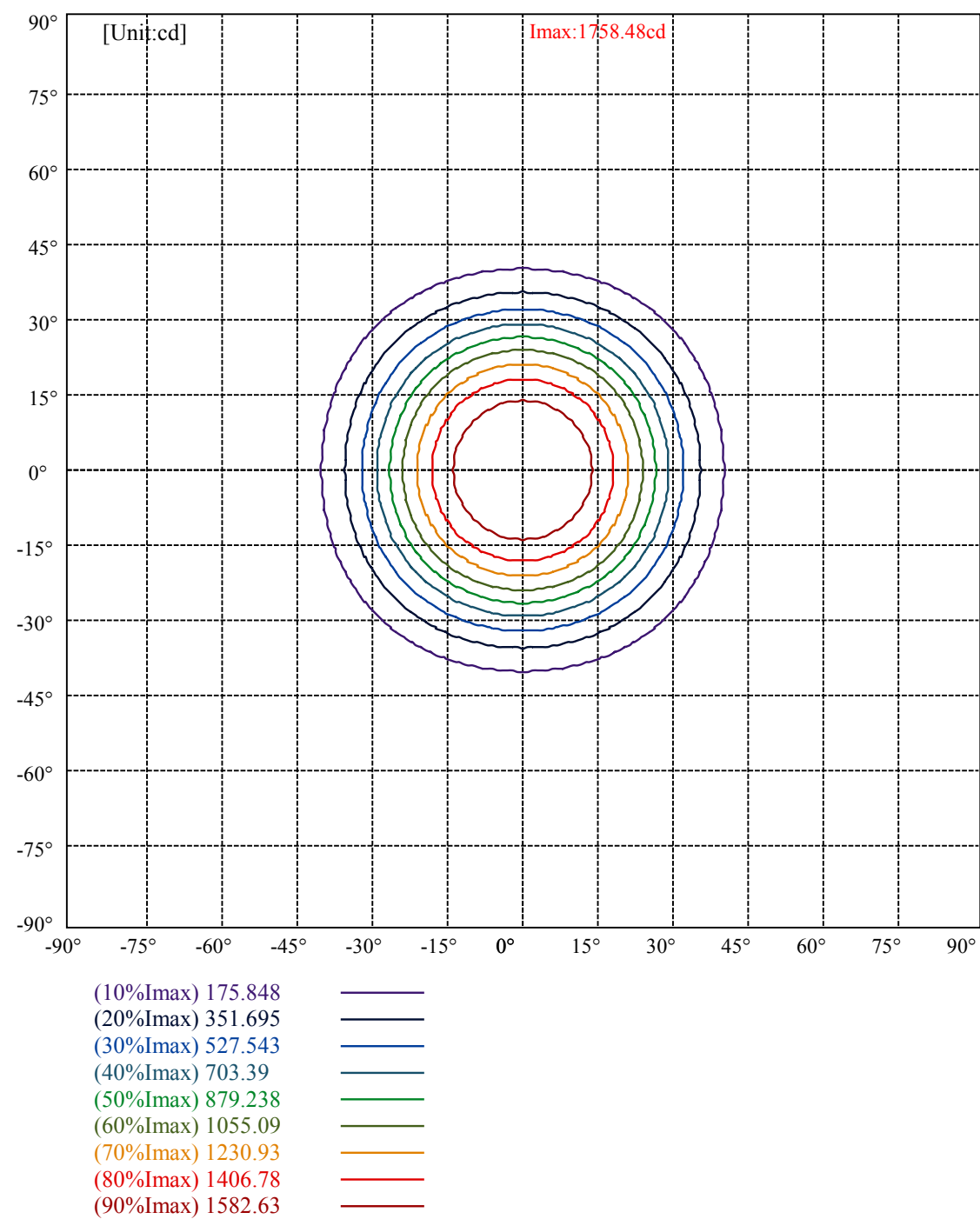
Date: 16/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 52.39



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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	4147	1289	543	470	475	524	646	938	1831
C45	4147	1289	543	470	475	524	646	938	1831
C90	4147	1289	543	470	475	524	646	938	1831

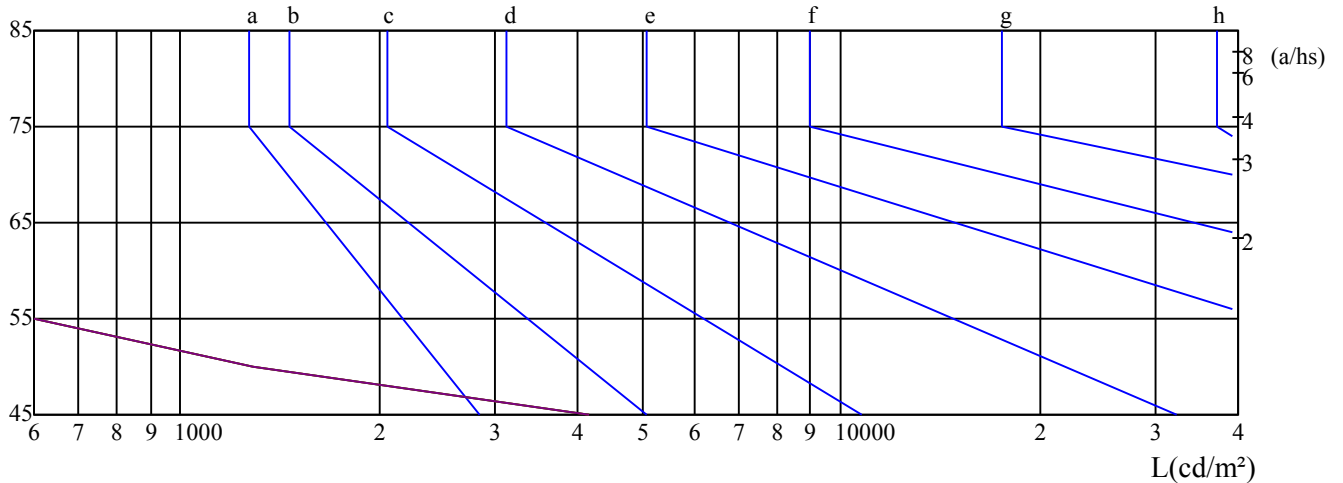
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
475	475	475	646	646	646	1831	1831	1831

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

Equipment: equipamento lumini
Temperature($^{\circ}\text{C}$): 25.5

Date: 16/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	15.79	16.73	16.19	17.08	17.45	16.24	17.18	16.64	17.53	17.90
	3H	15.60	16.43	16.02	16.81	17.20	16.05	16.88	16.47	17.26	17.65
	4H	15.51	16.28	15.95	16.67	17.09	15.96	16.73	16.39	17.12	17.53
	6H	15.45	16.16	15.91	16.57	17.02	15.89	16.60	16.35	17.01	17.46
	8H	15.41	16.08	15.86	16.50	16.96	15.84	16.51	16.30	16.94	17.39
	12H	15.38	16.02	15.84	16.45	16.91	15.81	16.45	16.27	16.88	17.34
4H	2H	15.48	16.25	15.92	16.65	17.06	15.93	16.70	16.37	17.09	17.51
	3H	15.26	15.90	15.72	16.34	16.80	15.70	16.35	16.16	16.78	17.24
	4H	15.21	15.77	15.68	16.23	16.72	15.65	16.21	16.12	16.67	17.16
	6H	15.13	15.62	15.63	16.10	16.60	15.56	16.05	16.06	16.54	17.03
	8H	15.12	15.57	15.64	16.07	16.59	15.54	16.00	16.06	16.49	17.01
	12H	15.16	15.58	15.68	16.06	16.63	15.57	15.99	16.09	16.47	17.04
8H	4H	15.02	15.48	15.54	15.97	16.49	15.46	15.91	15.98	16.41	16.93
	6H	14.95	15.33	15.49	15.84	16.40	15.38	15.75	15.92	16.26	16.82
	8H	15.03	15.34	15.59	15.89	16.43	15.44	15.75	16.00	16.30	16.85
	12H	15.12	15.36	15.70	15.91	16.48	15.51	15.75	16.09	16.30	16.87
12H	4H	14.97	15.39	15.50	15.88	16.44	15.41	15.83	15.94	16.32	16.88
	6H	14.96	15.27	15.52	15.82	16.36	15.38	15.69	15.94	16.24	16.78
	8H	15.01	15.25	15.58	15.80	16.36	15.41	15.65	15.99	16.20	16.77
Variation with the observer position at spacings:											
S = 1.0H		4.9/-10.7					4.9/-10.7				
S = 1.5H		7.5/-8.8					7.5/-8.8				
S = 2.0H		9.3/-7.5					9.3/-7.5				
Standard tables:		BK1					BK1				
Uncorrected UGR		-5.1					-5.1				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 50 c serie 3 fc

LampCAT: modulo led 36W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 127.5900

Test No:

Current(A): 0.3020

Number of Lamps: 1

Power (W): 38.3020

Lamp flux(lm): 4072.0

PF: 0.9940

Length(mm): 550

Width(mm): 40

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2842.28, Efficiency(%): 69.80% , Luminous Efficacy(lm/W): 74.21

Central intensity(cd): 16528.750, Maximum intensity(cd): 16528.750

Angle of maximum intensity: C=0.0 γ =0.0

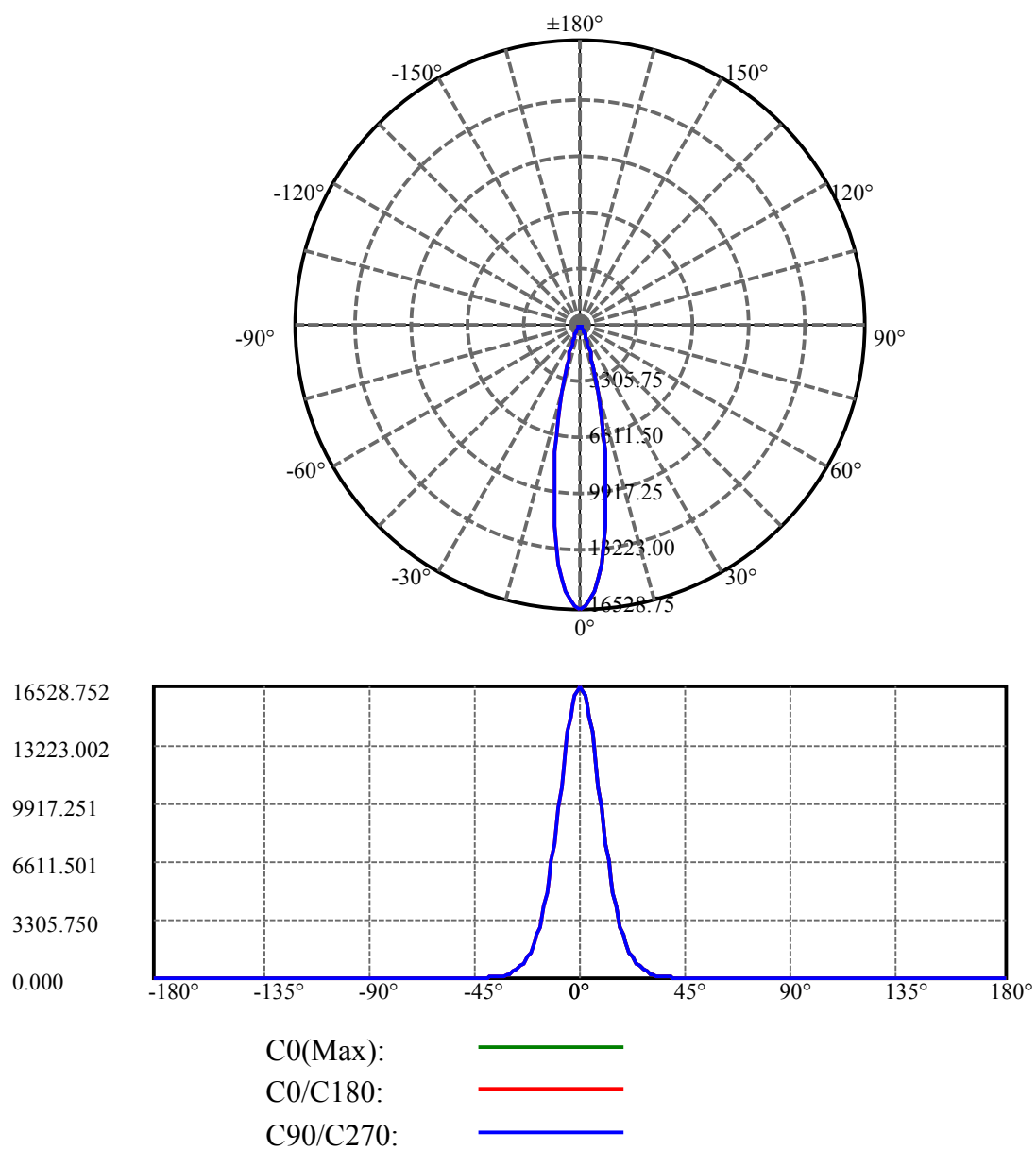
Beam angle of C0 plane : 20.70

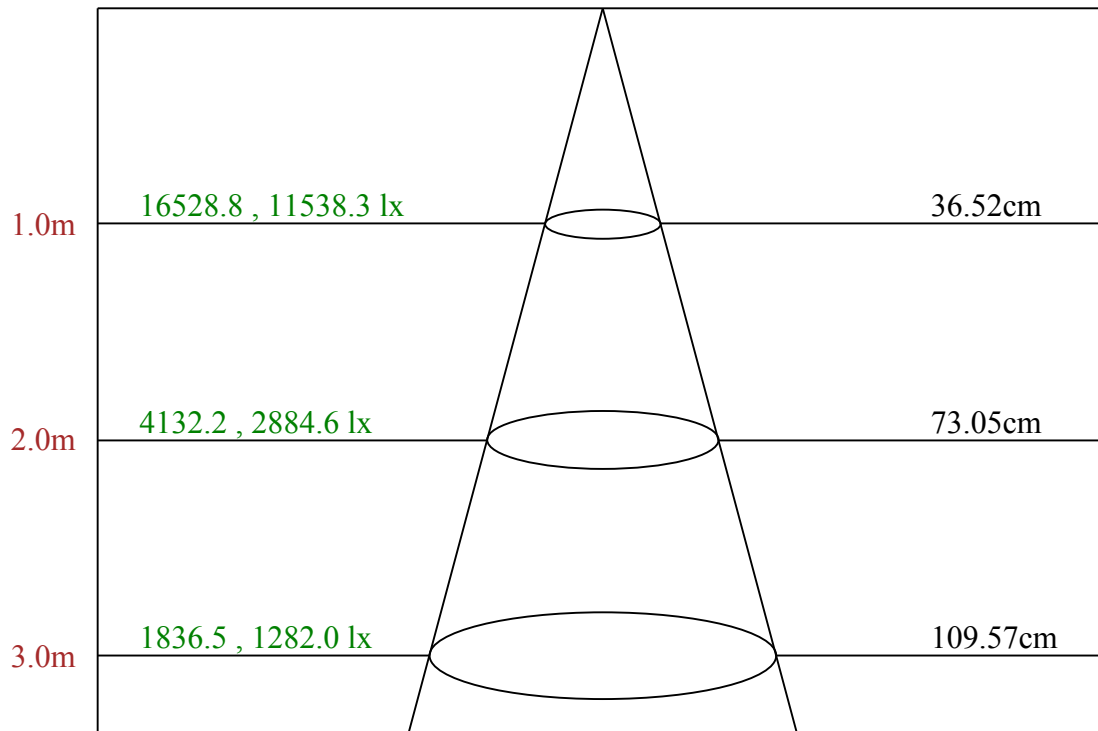
Aveage BeamAngle(IEC 61341):20.70

Equipment: equipamento lumini
Temperature(°C): 25.5

Date: 08/05/2025
Humidity(%): 60.0%

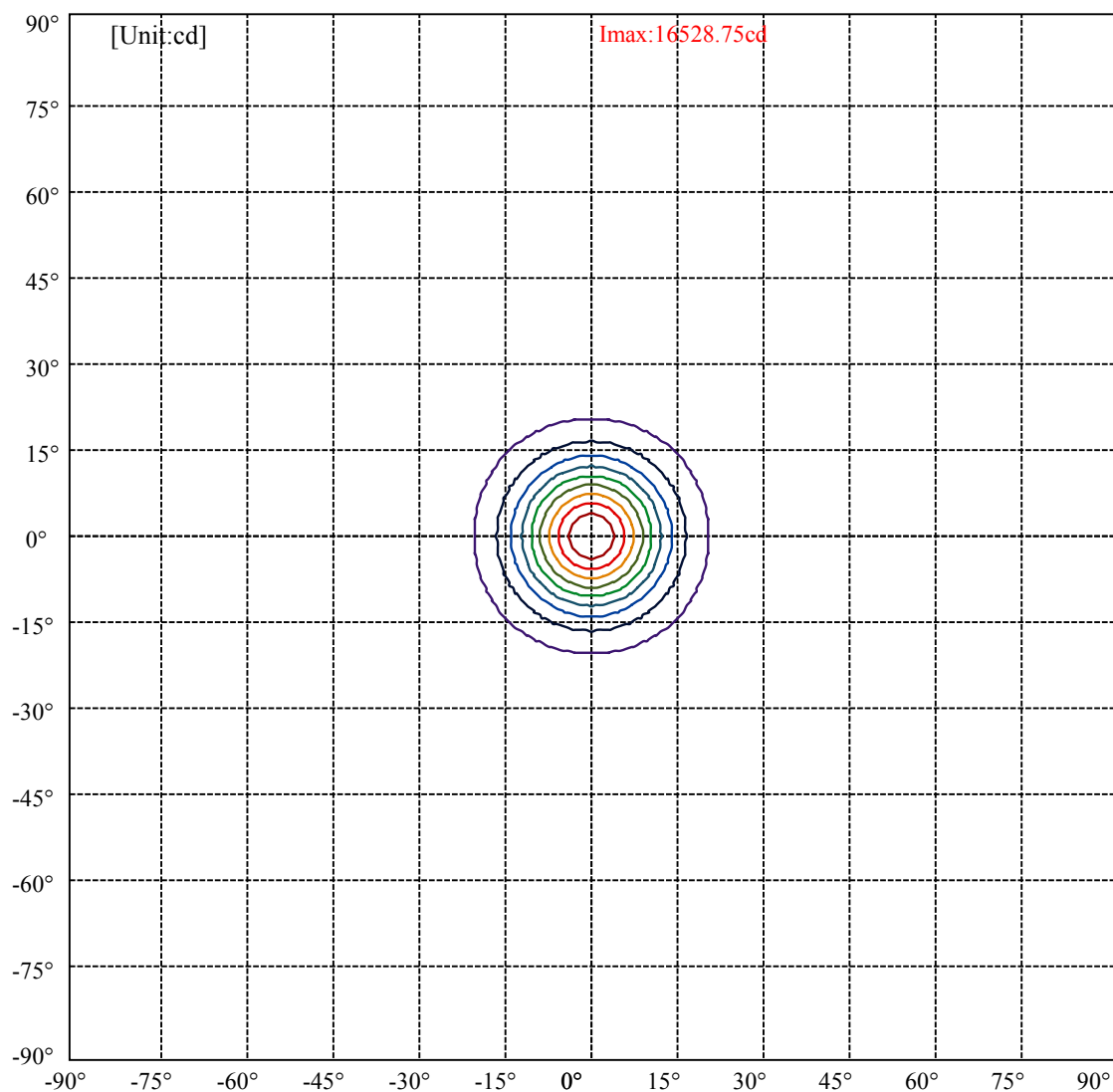
Operator: 01
Distance(m): 6.90





Max , Ave

Beam angle of C0 plane 20.70



(10%Imax)	1652.88	—
(20%Imax)	3305.75	—
(30%Imax)	4958.63	—
(40%Imax)	6611.5	—
(50%Imax)	8264.38	—
(60%Imax)	9917.25	—
(70%Imax)	11570.1	—
(80%Imax)	13223	—
(90%Imax)	14875.9	—

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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	1922	1414	1112	991	1047	1210	1525	2198	4271
C45	1922	1414	1112	991	1047	1210	1525	2198	4271
C90	1922	1414	1112	991	1047	1210	1525	2198	4271

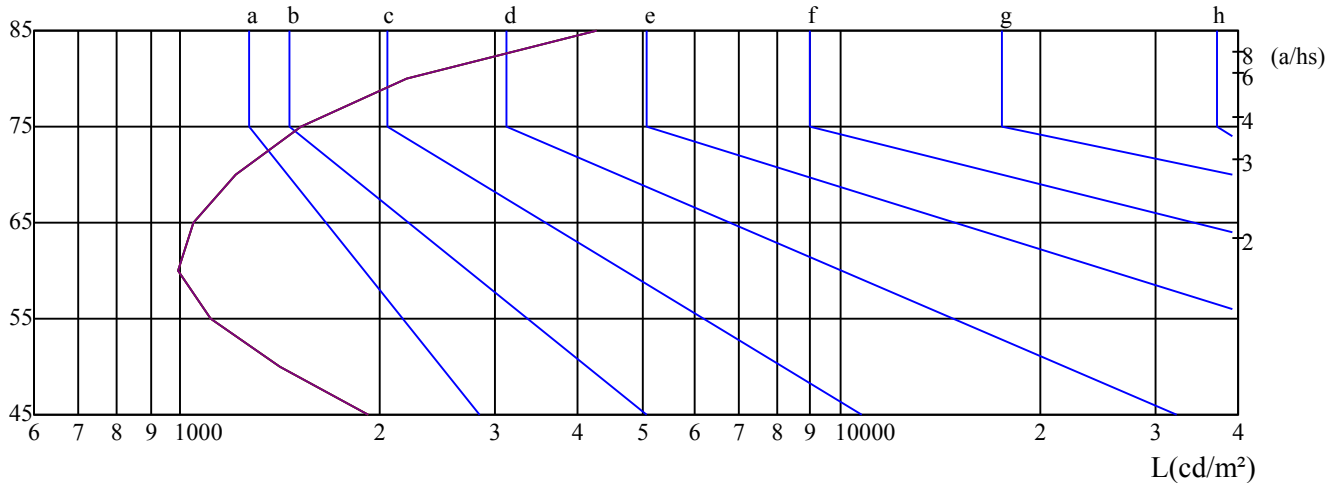
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1047	1047	1047	1525	1525	1525	4271	4271	4271

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

Equipment: equipamento lumini
Temperature($^{\circ}$ C): 25.5

Date: 08/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	5.68	6.57	6.08	6.92	7.29	5.28	6.18	5.69	6.53	6.90
	3H	6.30	7.10	6.73	7.47	7.87	5.93	6.72	6.35	7.10	7.50
	4H	6.88	7.62	7.32	8.01	8.43	6.51	7.25	6.95	7.64	8.06
	6H	7.82	8.49	8.27	8.90	9.35	7.45	8.12	7.90	8.54	8.98
	8H	8.44	9.08	8.90	9.50	9.96	8.08	8.72	8.54	9.14	9.60
	12H	9.24	9.85	9.70	10.28	10.75	8.91	9.51	9.37	9.95	10.41
4H	2H	5.67	6.41	6.11	6.80	7.22	5.32	6.05	5.76	6.45	6.87
	3H	6.56	7.18	7.02	7.61	8.08	6.24	6.85	6.70	7.29	7.75
	4H	7.43	7.97	7.91	8.43	8.92	7.12	7.65	7.59	8.11	8.61
	6H	8.65	9.12	9.16	9.61	10.11	8.33	8.80	8.84	9.29	9.79
	8H	9.48	9.91	10.00	10.41	10.93	9.17	9.60	9.69	10.10	10.62
	12H	10.51	10.91	11.04	11.40	11.97	10.22	10.62	10.74	11.11	11.68
8H	4H	7.73	8.17	8.26	8.67	9.18	7.46	7.90	7.98	8.39	8.91
	6H	9.26	9.62	9.80	10.13	10.69	9.00	9.35	9.54	9.87	10.42
	8H	10.36	10.66	10.93	11.21	11.76	10.10	10.40	10.67	10.95	11.50
	12H	11.66	11.88	12.23	12.43	13.00	11.41	11.64	11.99	12.19	12.76
12H	4H	7.83	8.23	8.36	8.72	9.29	7.58	7.98	8.10	8.47	9.03
	6H	9.52	9.82	10.09	10.37	10.92	9.28	9.58	9.85	10.13	10.67
	8H	10.70	10.92	11.28	11.47	12.04	10.47	10.69	11.04	11.24	11.81
Variation with the observer position at spacings:											
S = 1.0H		1.6/-1.1					1.6/-1.1				
S = 1.5H		1.8/-1.2					1.8/-1.2				
S = 2.0H		2.1/-1.2					2.1/-1.2				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-7.0					-7.0				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 50 c serie 3 fm

LampCAT: modulo led 36W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 127.6300

Test No:

Current(A): 0.3020

Number of Lamps: 1

Power (W): 38.3570

Lamp flux(lm): 4072.0

PF: 0.9940

Length(mm): 550

Width(mm): 40

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2940.64, Efficiency(%): 72.22% , Luminous Efficacy(lm/W): 76.66

Central intensity(cd): 11524.200, Maximum intensity(cd): 11524.200

Angle of maximum intensity: C=0.0 γ =0.0

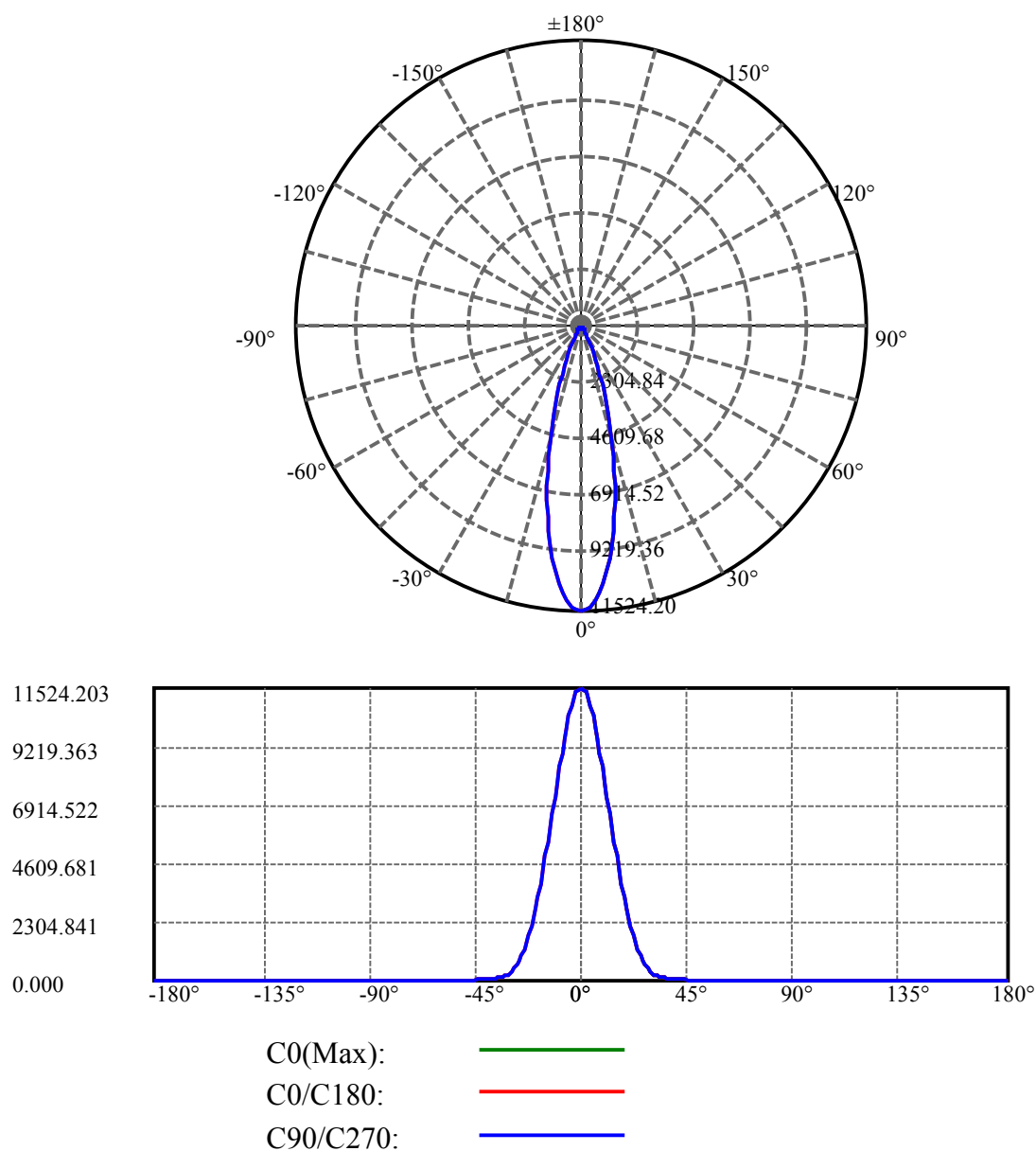
Beam angle of C0 plane : 26.92

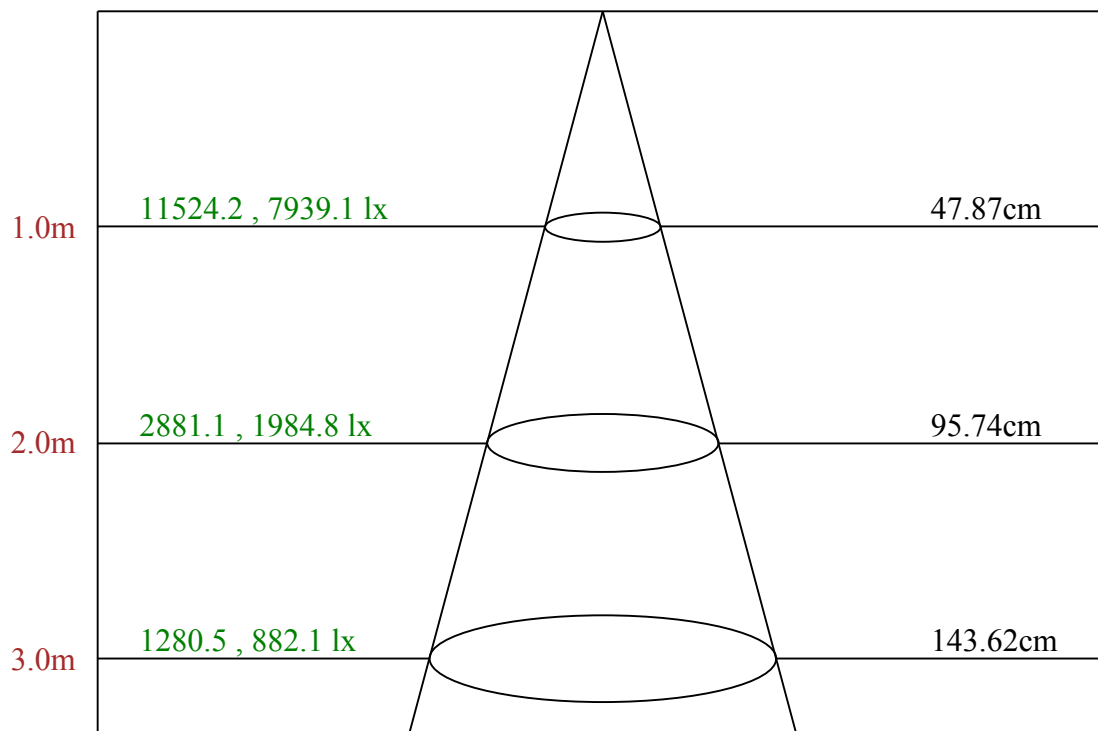
Aveage BeamAngle(IEC 61341):26.92

Equipment: equipamento lumini
Temperature(°C): 25.5

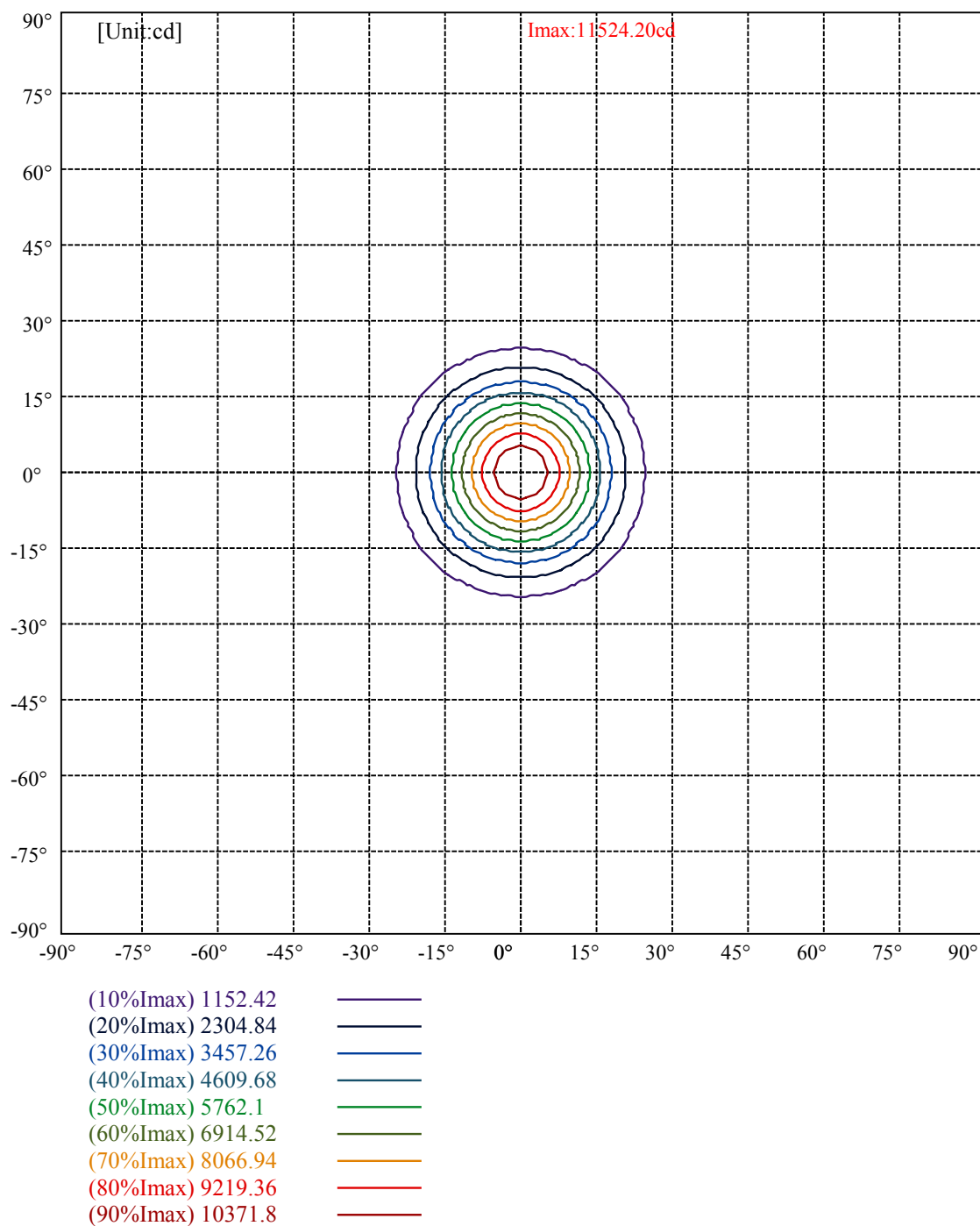
Date: 09/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 26.92



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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	2226	1422	1074	988	1060	1235	1580	2309	4532
C45	2226	1422	1074	988	1060	1235	1580	2309	4532
C90	2226	1422	1074	988	1060	1235	1580	2309	4532

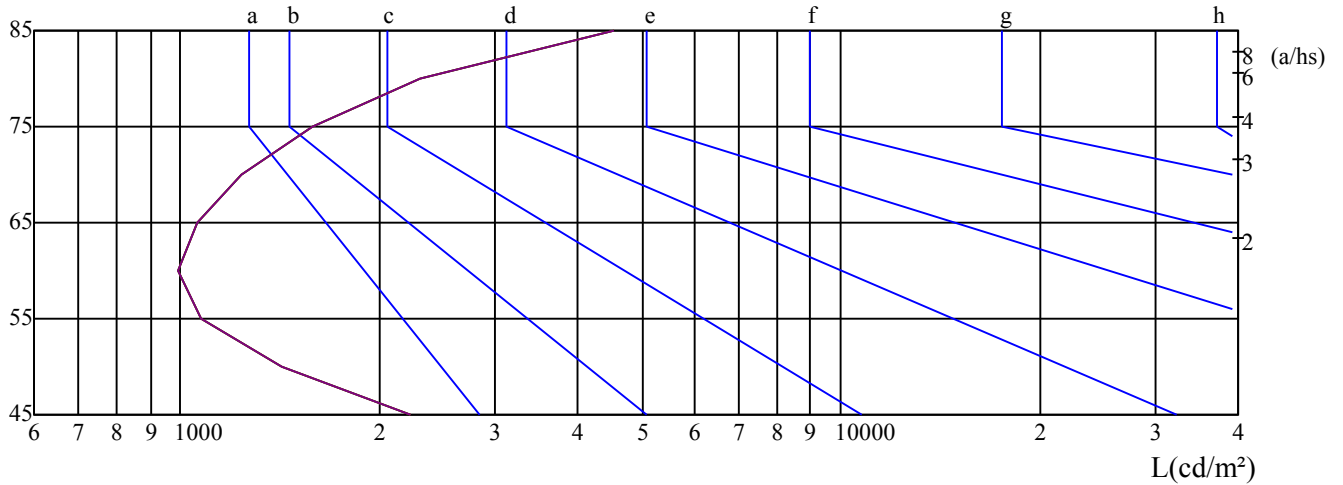
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1060	1060	1060	1580	1580	1580	4532	4532	4532

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

Equipment: equipamento lumini
Temperature($^{\circ}$ C): 25.5

Date: 09/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	7.17	8.06	7.57	8.42	8.78	7.47	8.36	7.87	8.72	9.09
	3H	7.49	8.29	7.92	8.67	9.06	7.73	8.53	8.16	8.91	9.31
	4H	7.88	8.61	8.32	9.01	9.43	8.07	8.80	8.51	9.20	9.62
	6H	8.59	9.26	9.05	9.68	10.13	8.70	9.37	9.16	9.79	10.24
	8H	9.10	9.74	9.56	10.17	10.63	9.16	9.81	9.62	10.23	10.69
	12H	9.81	10.41	10.27	10.85	11.32	9.81	10.42	10.28	10.86	11.32
4H	2H	7.03	7.77	7.47	8.17	8.58	7.32	8.06	7.76	8.45	8.87
	3H	7.55	8.17	8.02	8.61	9.07	7.76	8.38	8.23	8.82	9.29
	4H	8.21	8.74	8.68	9.21	9.70	8.35	8.89	8.83	9.35	9.84
	6H	9.20	9.67	9.71	10.17	10.66	9.26	9.73	9.77	10.22	10.72
	8H	9.94	10.38	10.46	10.87	11.39	9.95	10.38	10.47	10.88	11.40
	12H	10.91	11.31	11.43	11.80	12.36	10.86	11.26	11.38	11.75	12.31
8H	4H	8.42	8.85	8.94	9.35	9.87	8.54	8.98	9.07	9.48	10.00
	6H	9.72	10.08	10.26	10.59	11.15	9.76	10.11	10.30	10.63	11.19
	8H	10.73	11.03	11.30	11.59	12.13	10.72	11.02	11.29	11.57	12.12
	12H	11.98	12.20	12.55	12.75	13.32	11.91	12.13	12.49	12.68	13.25
12H	4H	8.49	8.90	9.02	9.39	9.95	8.62	9.02	9.14	9.51	10.08
	6H	9.96	10.25	10.53	10.81	11.35	9.99	10.29	10.56	10.85	11.39
	8H	11.05	11.27	11.63	11.83	12.39	11.04	11.26	11.61	11.81	12.38
Variation with the observer position at spacings:											
S = 1.0H		2.8/-1.9					2.8/-1.9				
S = 1.5H		3.5/-1.6					3.5/-1.6				
S = 2.0H		3.9/-1.5					3.9/-1.5				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		-6.0					-6.0				

依据CIE Publ. 117 计算 UGR, S/H = 0.25



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LumCAT:

Luminaire: concentra 50 c serie 3 fa

LampCAT: modulo led 36W 30K irc 90

Ballast type: led driver 700mA

Report No:

Voltage(V): 127.6400

Test No:

Current(A): 0.3010

Number of Lamps: 1

Power (W): 38.2350

Lamp flux(lm): 4072.0

PF: 0.9940

Length(mm): 550

Width(mm): 40

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2269.76, Efficiency(%): 55.74% , Luminous Efficacy(lm/W): 59.36

Central intensity(cd): 3074.321, Maximum intensity(cd): 3074.321

Angle of maximum intensity: C=0.0 γ =1.0

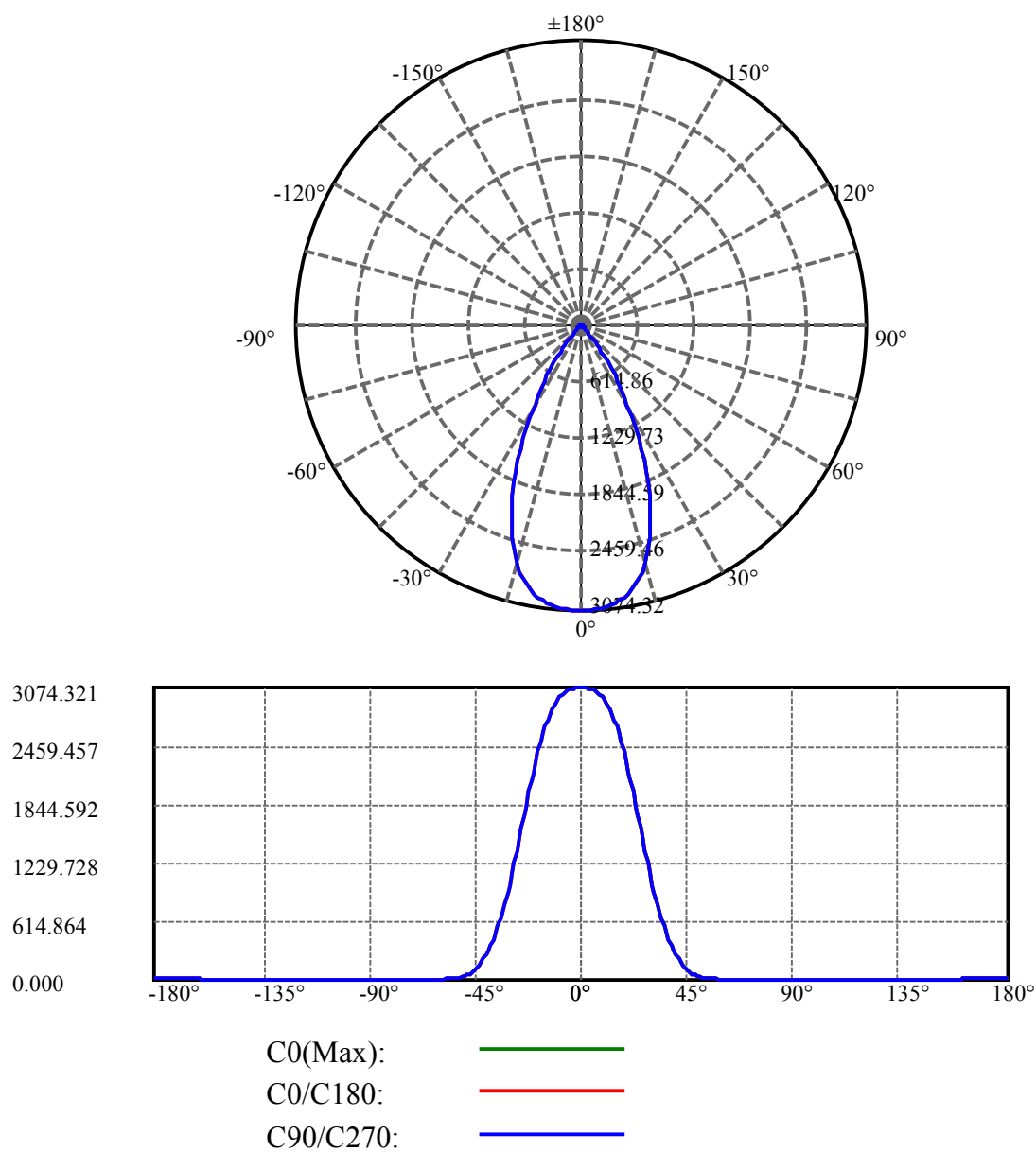
Beam angle of C0 plane : 51.16

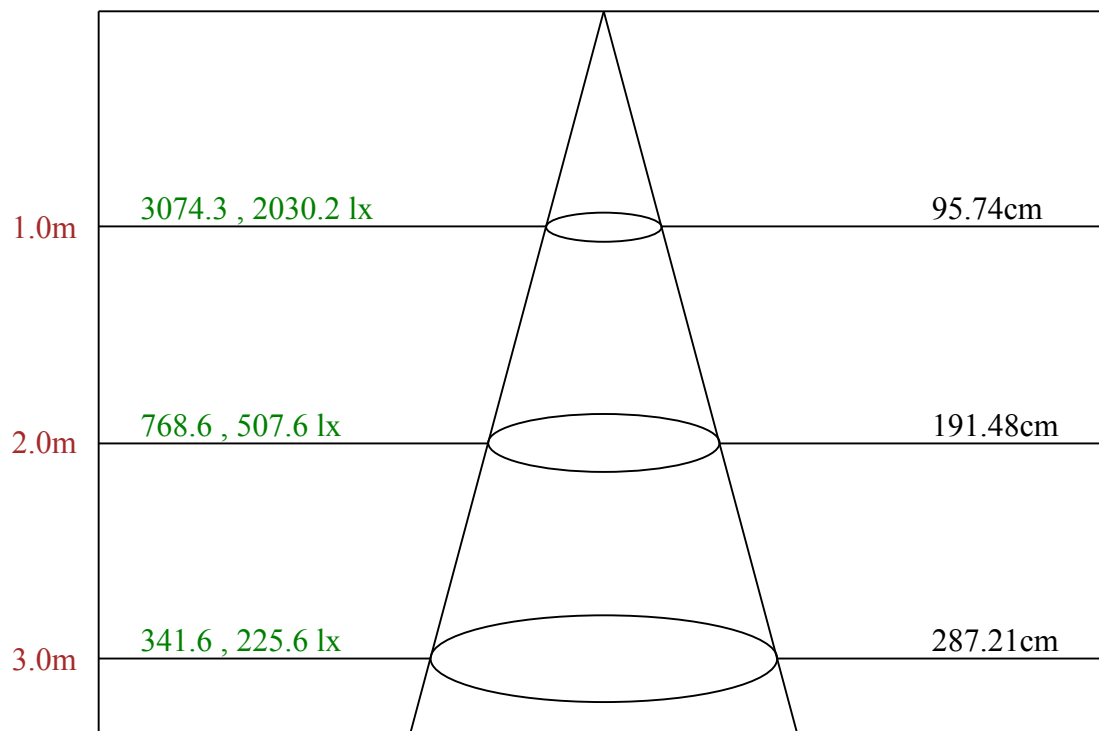
Aveage BeamAngle(IEC 61341):51.16

Equipment: equipamento lumini
Temperature(°C): 25.5

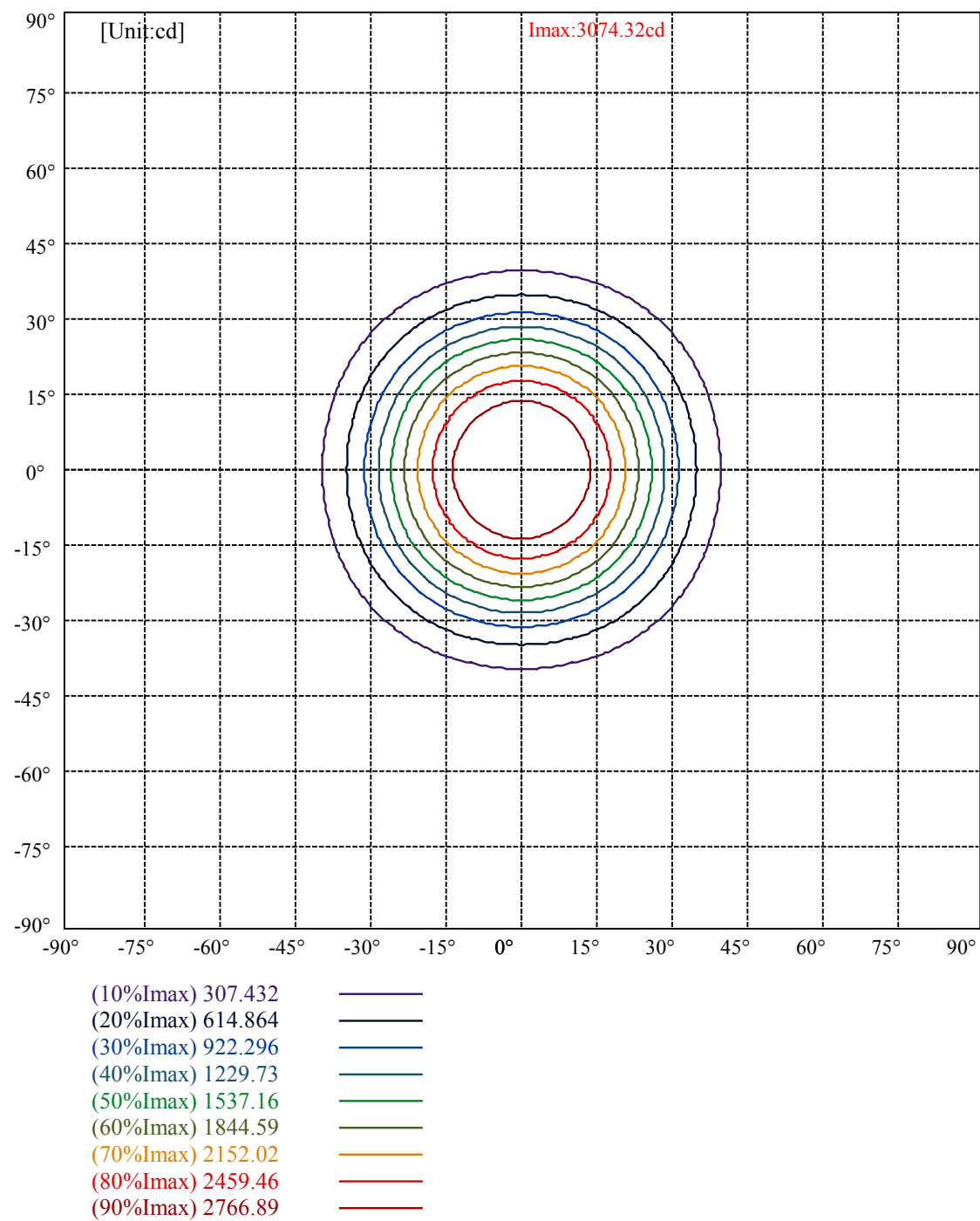
Date: 08/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90





Max , Ave Beam angle of C0 plane 51.16



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Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:6

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	6588	2038	907	799	801	878	1091	1577	3073
C45	6588	2038	907	799	801	878	1091	1577	3073
C90	6588	2038	907	799	801	878	1091	1577	3073

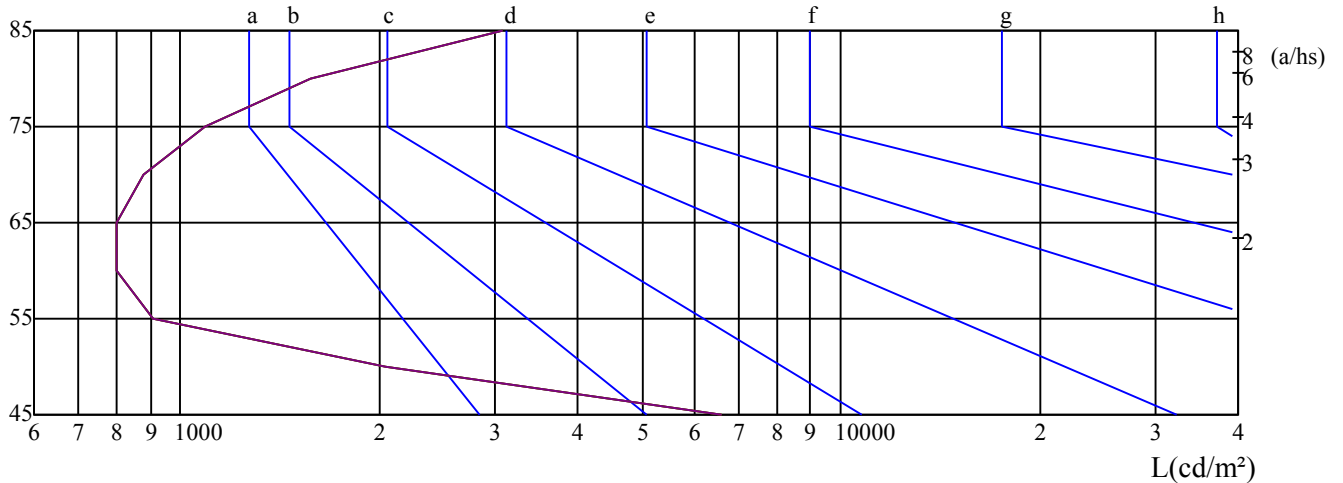
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
801	801	801	1091	1091	1091	3073	3073	3073

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 —

C45 —

C90 —

Equipment: equipamento lumini
Temperature($^{\circ}$ C): 25.5

Date: 08/05/2025
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.90

Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	18.44	19.38	18.84	19.73	20.09	17.82	18.75	18.22	19.10	19.47
	3H	18.25	19.08	18.67	19.45	19.85	17.62	18.45	18.05	18.83	19.22
	4H	18.15	18.92	18.59	19.31	19.73	17.53	18.30	17.97	18.69	19.11
	6H	18.09	18.79	18.54	19.20	19.65	17.47	18.17	17.93	18.59	19.03
	8H	18.03	18.70	18.49	19.13	19.58	17.42	18.09	17.88	18.52	18.97
	12H	18.00	18.63	18.46	19.07	19.53	17.39	18.03	17.86	18.46	18.92
4H	2H	18.13	18.90	18.57	19.29	19.70	17.50	18.27	17.94	18.67	19.08
	3H	17.90	18.54	18.36	18.97	19.44	17.28	17.92	17.74	18.35	18.82
	4H	17.84	18.40	18.32	18.86	19.35	17.23	17.78	17.70	18.24	18.74
	6H	17.75	18.24	18.25	18.72	19.22	17.14	17.63	17.65	18.12	18.61
	8H	17.73	18.18	18.25	18.68	19.19	17.13	17.58	17.65	18.08	18.59
	12H	17.75	18.16	18.27	18.65	19.22	17.16	17.58	17.68	18.06	18.63
8H	4H	17.65	18.10	18.17	18.60	19.12	17.04	17.49	17.56	17.99	18.50
	6H	17.56	17.94	18.10	18.45	19.00	16.97	17.34	17.50	17.85	18.40
	8H	17.62	17.93	18.18	18.48	19.02	17.03	17.34	17.60	17.90	18.44
	12H	17.68	17.92	18.26	18.47	19.04	17.12	17.36	17.69	17.91	18.47
12H	4H	17.60	18.02	18.13	18.51	19.07	16.99	17.41	17.52	17.90	18.46
	6H	17.56	17.87	18.13	18.43	18.97	16.97	17.28	17.53	17.83	18.37
	8H	17.59	17.83	18.17	18.38	18.95	17.01	17.25	17.59	17.80	18.36
Variation with the observer position at spacings:											
S = 1.0H		5.0/-10.3					5.0/-10.3				
S = 1.5H		7.6/-8.4					7.6/-8.4				
S = 2.0H		9.4/-7.2					9.4/-7.2				
Standard tables:		BK1					BK1				
Uncorrected UGR		-3.6					-3.6				

依据CIE Publ. 117 计算 UGR, S/H = 0.25