focus sm b cob e

linha de luminárias embutidas orientáveis para tecnologia led em alumínio tratado e pintado por processo eletrostático nas cores padrão lumini, com dispositivo antiofuscamento na cor preta.

informações técnicas

fonte de luz
LED integrado

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

vida útil
50.000h

potência (W), facho, temperatura de cor (K),
fluxo nominal (lm nominal), fluxo útil (lm útil)

W		K	lm nominal	lm útil
25	concentrado	2700		
25	médio	2700		
25	aberto	2700		
25	concentrado	3000	2x1550	2x1152
25	médio	3000	2x1550	2x1096
25	aberto	3000	2x1550	2x1053
25	concentrado	4000		
25	médio	4000		
25	aberto	4000		

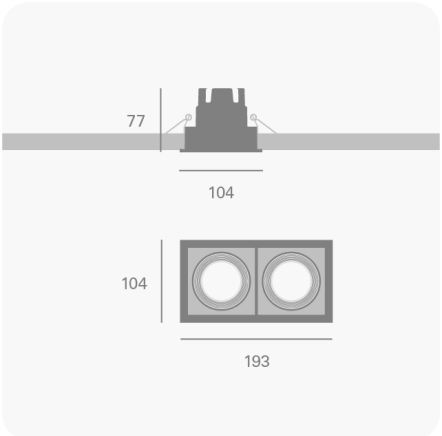
equipamentos
LED driver 350mA (incluso, ponto remoto)

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

instalação
forro de gesso
forro modular
marcenaria

IP
20

dimensões

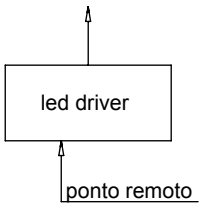


acabamentos e cores

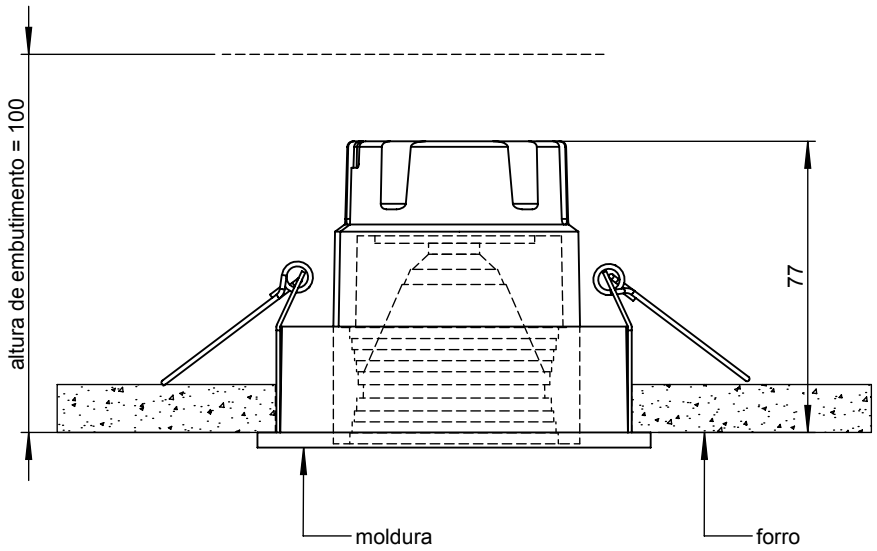
cores

vista lateral

dimensões em milímetros

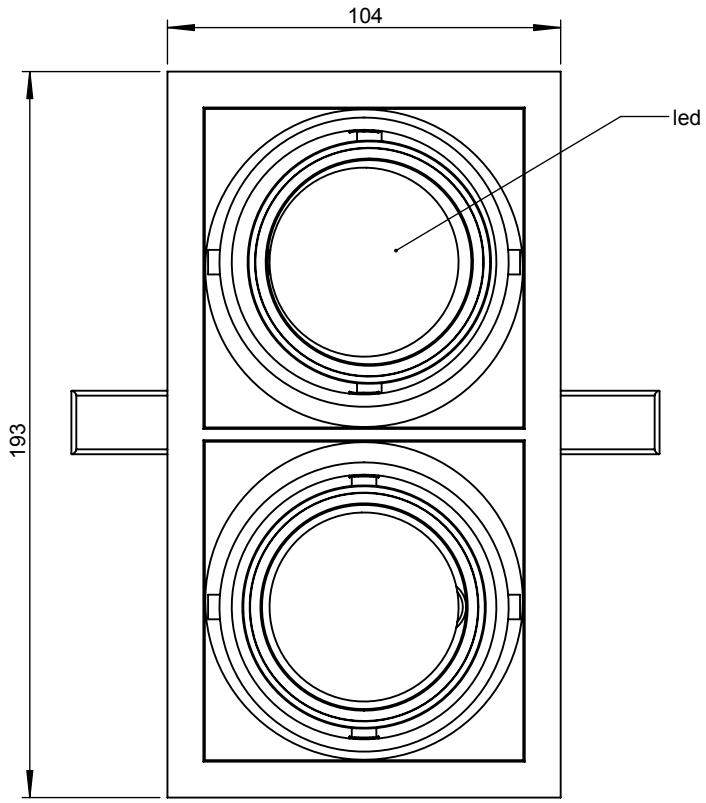


nicho= 95x183 mm



vista inferior

dimensões em milímetros



focus sm b cob serie 2 e

folha
1/1

escala
1:2

data
25/09/2020

desenhista
joao ferreira

aprovação
edmilson

revisões

25/09/2020

para maiores informações,
consulte a área técnica
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lumini

LumCAT:
Luminaire: focus sm a cob serie 2 e fa
LampCAT: modulo led 12.5W 3000K irc 90
Ballast type: led driver 350mA

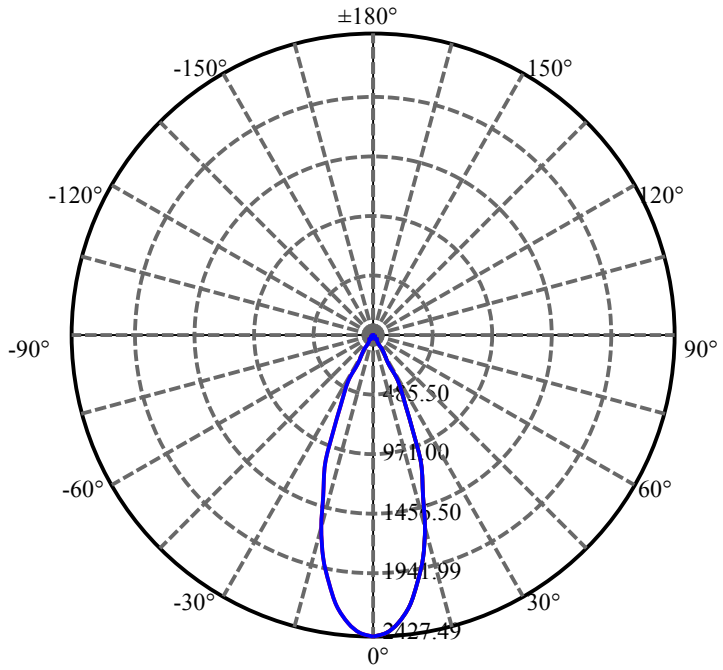
Report No:	Voltage(V): 127.0000
Test No:	Current(A): 0.1100
Number of Lamps: 1	Power (W): 13.7400
Lamp flux(lm): 1550.0	PF: 0.9800
Length(mm): 55	Width(mm): 55
Phm Type: C	Height(mm): 0

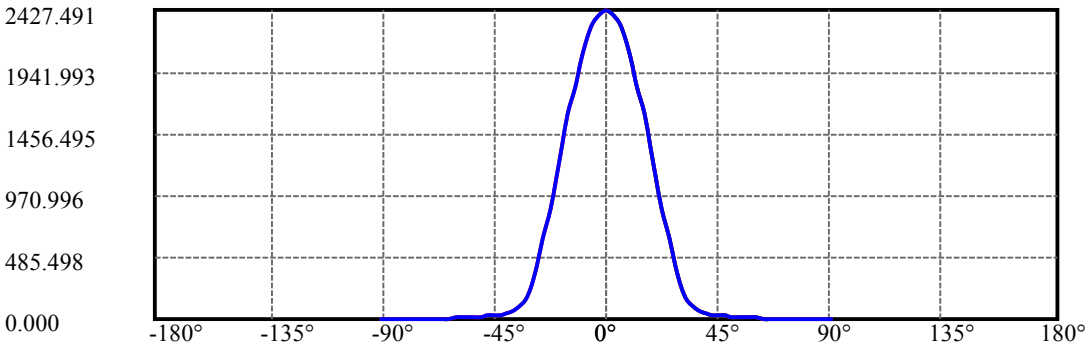
Photometric Results

Lumens(lm): 1052.53, Efficiency(%): 67.91% , Luminous Efficacy(lm/W): 76.60
Central intensity(cd): 2427.491, Maximum intensity(cd): 2427.491
Angle of maximum intensity: C=0.0 γ=0.0
Beam angle of C0 plane : 38.07
Aveage BeamAngle(IEC 61341):38.07

Equipment: equipamento lumini	Date: 5/9/2024	Operator: 01
Temperature(°C): 25.5	Humidity(%): 55.0%	Distance(m): 6.90

Light Distribution Curve [Unit:cd]





C0(Max):

C0/C180:

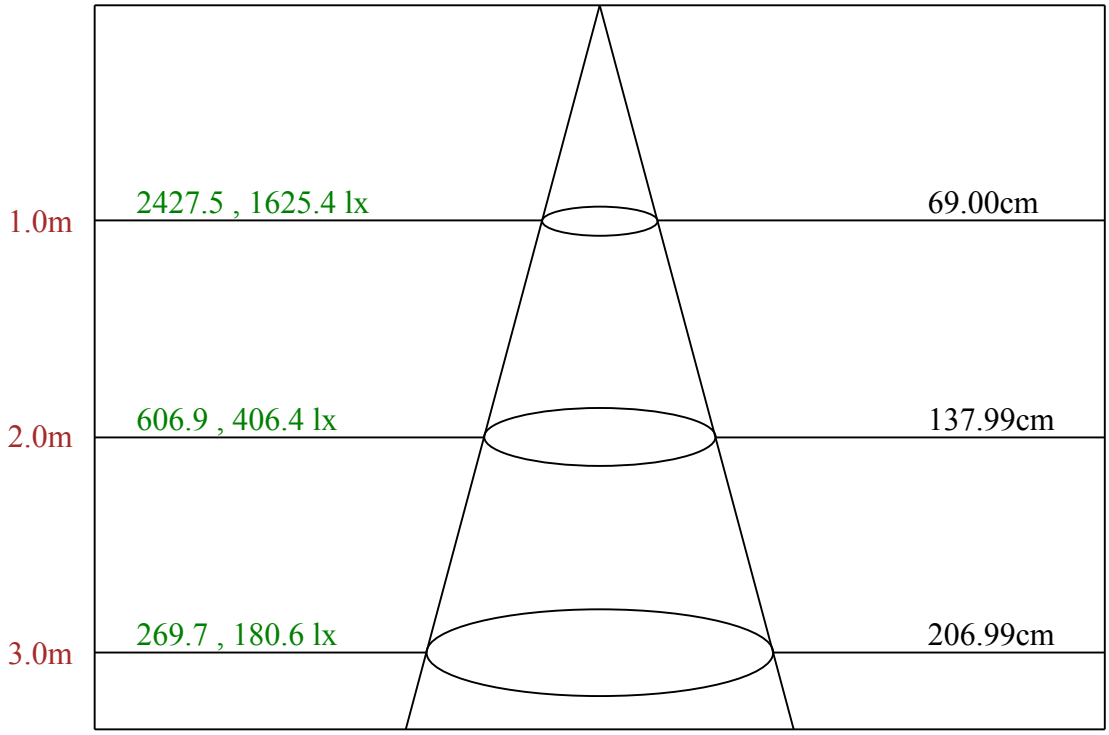
C90/C270:

Equipment: equipamento lumini
Temperature(°C): 25.5

Date: 5/9/2024
Humidity(%): 55.0%

Operator: 01
Distance(m): 6.90

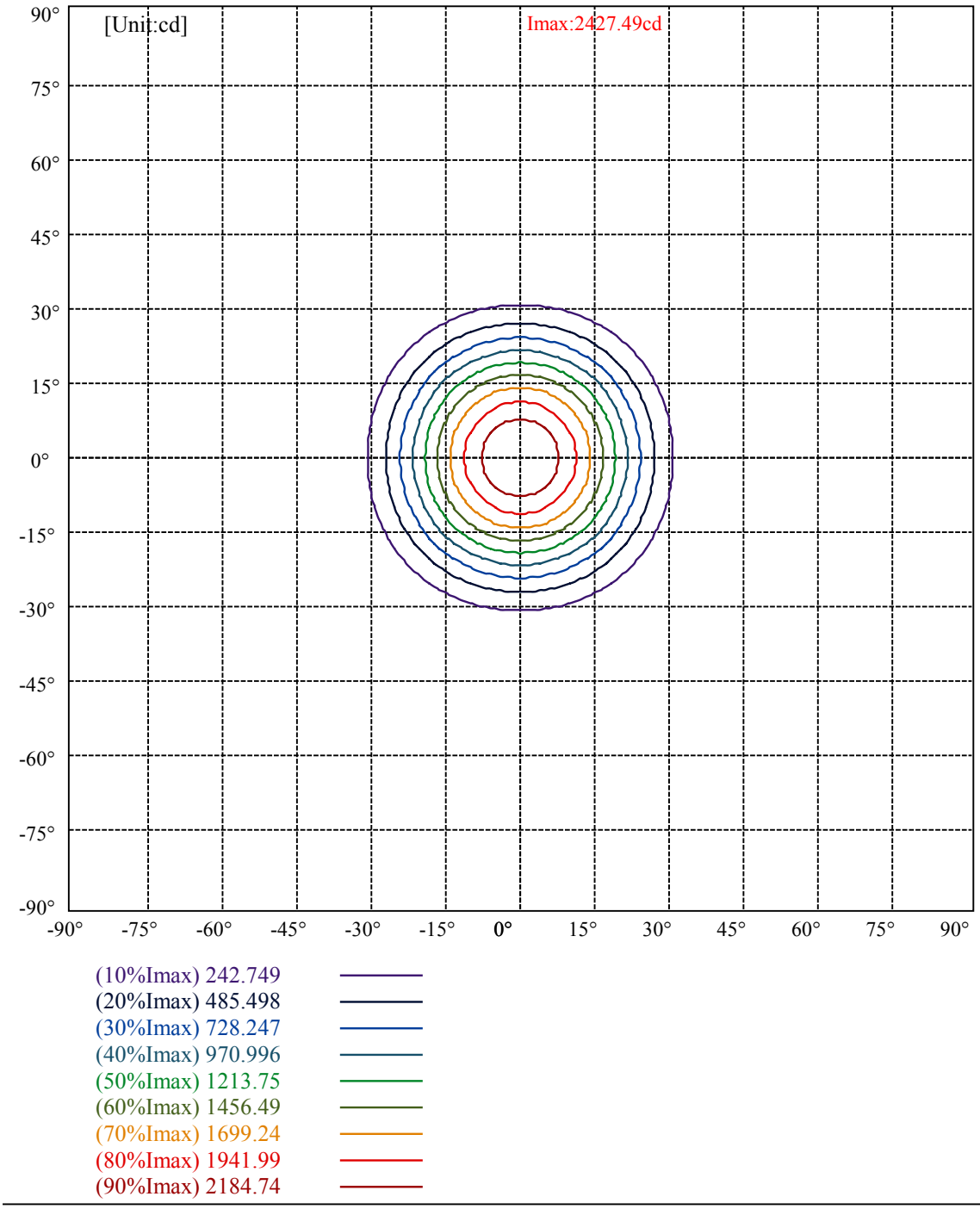
Lux distance Curve



Max , Ave

Beam angle of C0 plane 38.07

ISO-Intensity(V-H)



(10%Imax) 242.749
(20%Imax) 485.498
(30%Imax) 728.247
(40%Imax) 970.996
(50%Imax) 1213.75
(60%Imax) 1456.49
(70%Imax) 1699.24
(80%Imax) 1941.99
(90%Imax) 2184.74

Equipment: equipamento lumini
Temperature(°C): 25.5
Date: 5/9/2024
Humidity(%): 55.0%
Operator: 01
Distance(m): 6.90

Luminance Limitting Curve(no luminous side)

Luminance Table

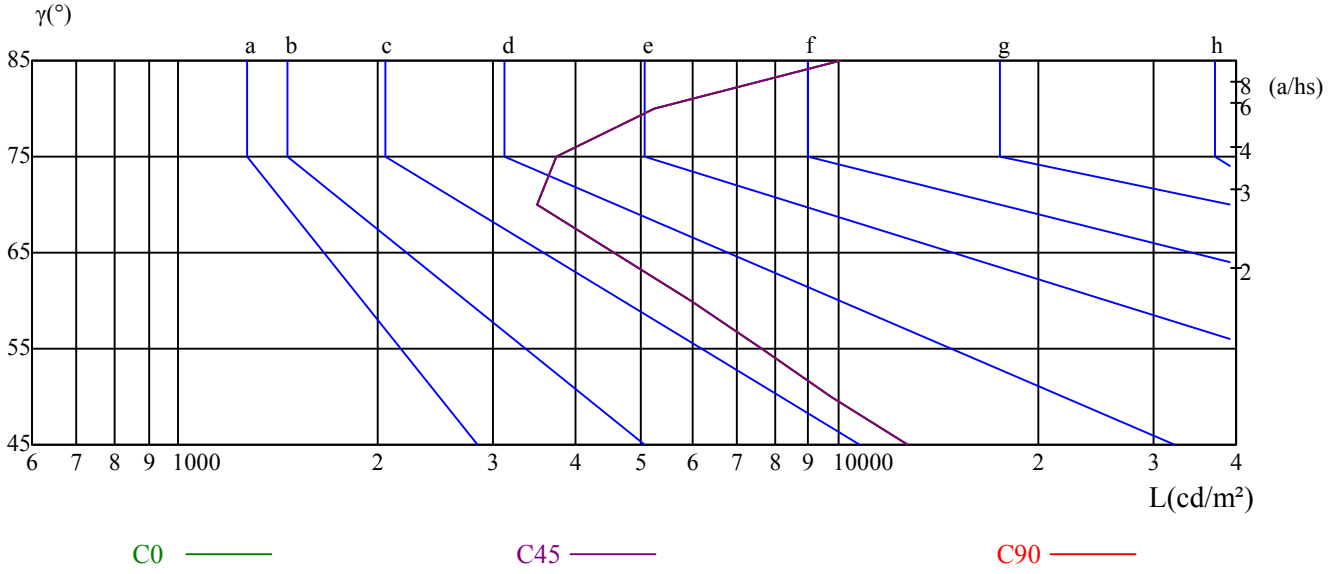
γ	45	50	55	60	65	70	75	80	85
C0	12687	9727	7666	5985	4571	3503	3747	5246	10068
C45	12687	9727	7666	5985	4571	3503	3747	5246	10068
C90	12687	9727	7666	5985	4571	3503	3747	5246	10068

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4571	4571	4571	3747	3747	3747	10068	10068	10068

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 Limitting Curve



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	16.60	17.55	16.97	17.86	18.17	15.43	16.37	15.79	16.68	17.00
	3H	16.64	17.48	17.03	17.82	18.16	15.46	16.29	15.84	16.63	16.98
	4H	16.63	17.40	17.03	17.76	18.13	15.46	16.24	15.87	16.59	16.96
	6H	16.69	17.40	17.11	17.77	18.17	15.57	16.28	15.99	16.66	17.06
	8H	16.73	17.41	17.16	17.79	18.20	15.65	16.33	16.08	16.71	17.12
	12H	16.84	17.48	17.27	17.87	18.29	15.81	16.45	16.24	16.85	17.27
4H	2H	16.45	17.22	16.85	17.58	17.95	15.34	16.12	15.74	16.47	16.84
	3H	16.52	17.17	16.95	17.56	17.98	15.41	16.06	15.84	16.46	16.88
	4H	16.59	17.15	17.03	17.57	18.02	15.52	16.07	15.95	16.50	16.95
	6H	16.69	17.19	17.17	17.64	18.09	15.69	16.19	16.17	16.64	17.09
	8H	16.83	17.29	17.32	17.75	18.22	15.89	16.34	16.37	16.80	17.28
	12H	17.08	17.50	17.57	17.95	18.47	16.20	16.62	16.70	17.08	17.60
8H	4H	16.48	16.93	16.97	17.39	17.87	15.44	15.90	15.93	16.36	16.83
	6H	16.68	17.06	17.19	17.54	18.05	15.75	16.12	16.26	16.60	17.12
	8H	16.98	17.29	17.51	17.81	18.31	16.12	16.43	16.66	16.95	17.45
	12H	17.39	17.63	17.94	18.15	18.67	16.64	16.88	17.18	17.39	17.92
12H	4H	16.45	16.87	16.94	17.33	17.85	15.43	15.85	15.92	16.30	16.82
	6H	16.74	17.05	17.28	17.58	18.07	15.83	16.14	16.37	16.67	17.16
	8H	17.06	17.29	17.60	17.81	18.33	16.24	16.47	16.78	16.99	17.51

Variation with the observer position at spacings:		
S = 1.0H	3.8/-2.8	3.8/-2.8
S = 1.5H	5.7/-3.1	5.7/-3.1
S = 2.0H	7.2/-3.0	7.2/-3.0
Standard tables:	BK3	BK3
Uncorrected UGR	-2.6	-2.6

依据CIE Publ. 117 计算 UGR，S/H = 0.25

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lumini

LumCAT:
Luminaire: focus sm a cob serie 2 e fc
LampCAT: modulo led 12.5W 3000K irc 90
Ballast type: led driver 350mA

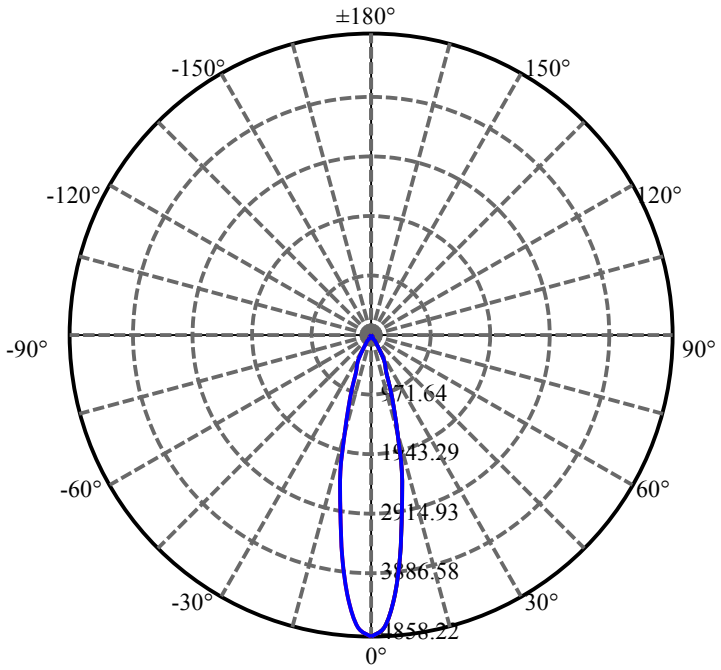
Report No:	Voltage(V): 127.0000
Test No:	Current(A): 0.1100
Number of Lamps: 1	Power (W): 13.7400
Lamp flux(lm): 1550.0	PF: 0.9800
Length(mm): 55	Width(mm): 55
Phm Type: C	Height(mm): 0

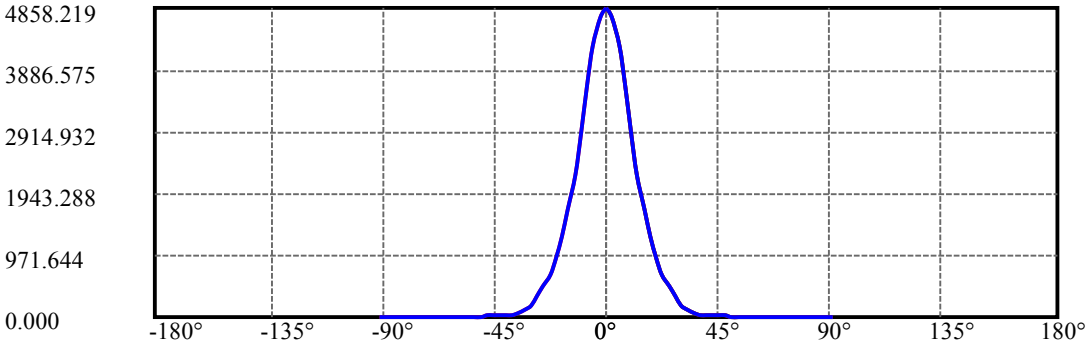
Photometric Results

Lumens(lm): 1152.05, Efficiency(%): 74.33% , Luminous Efficacy(lm/W): 83.85
Central intensity(cd): 4858.219, Maximum intensity(cd): 4858.219
Angle of maximum intensity: C=0.0 γ=0.0
Beam angle of C0 plane : 23.24
Aveage BeamAngle(IEC 61341):23.24

Equipment: equipamento lumini	Date: 5/9/2024	Operator: 01
Temperature(°C): 25.5	Humidity(%): 55.0%	Distance(m): 6.90

Light Distribution Curve [Unit:cd]





C0(Max):

C0/C180:

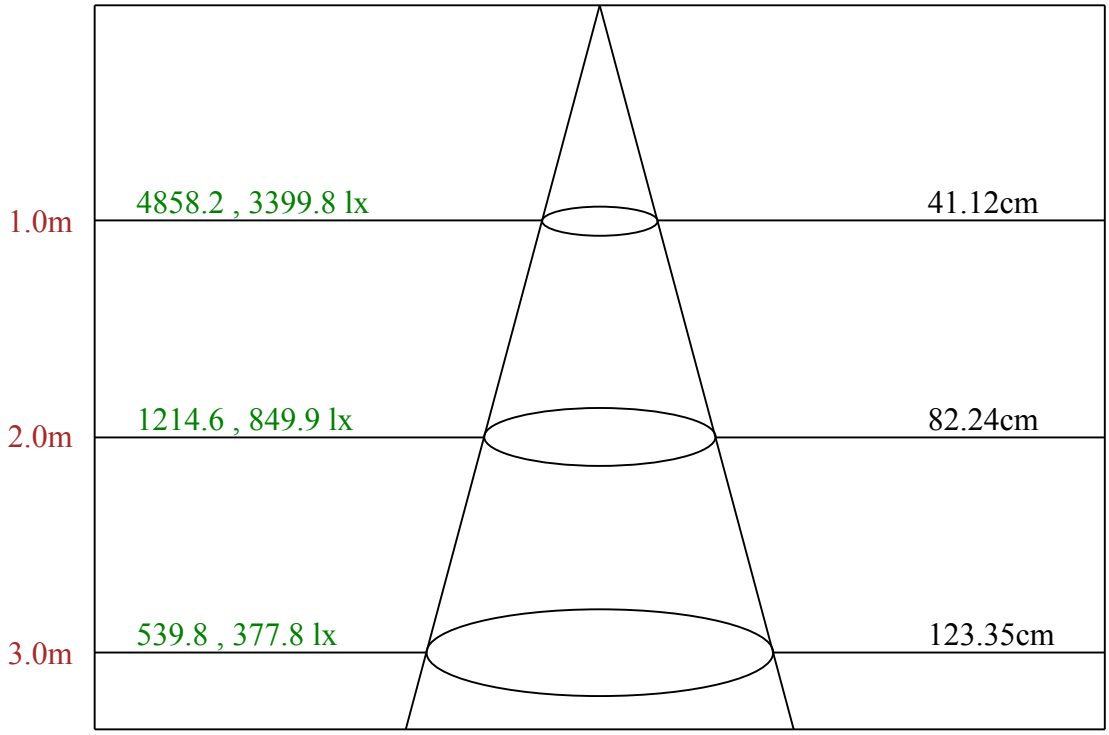
C90/C270:

Equipment: equipamento lumini
Temperature(°C): 25.5

Date: 5/9/2024
Humidity(%): 55.0%

Operator: 01
Distance(m): 6.90

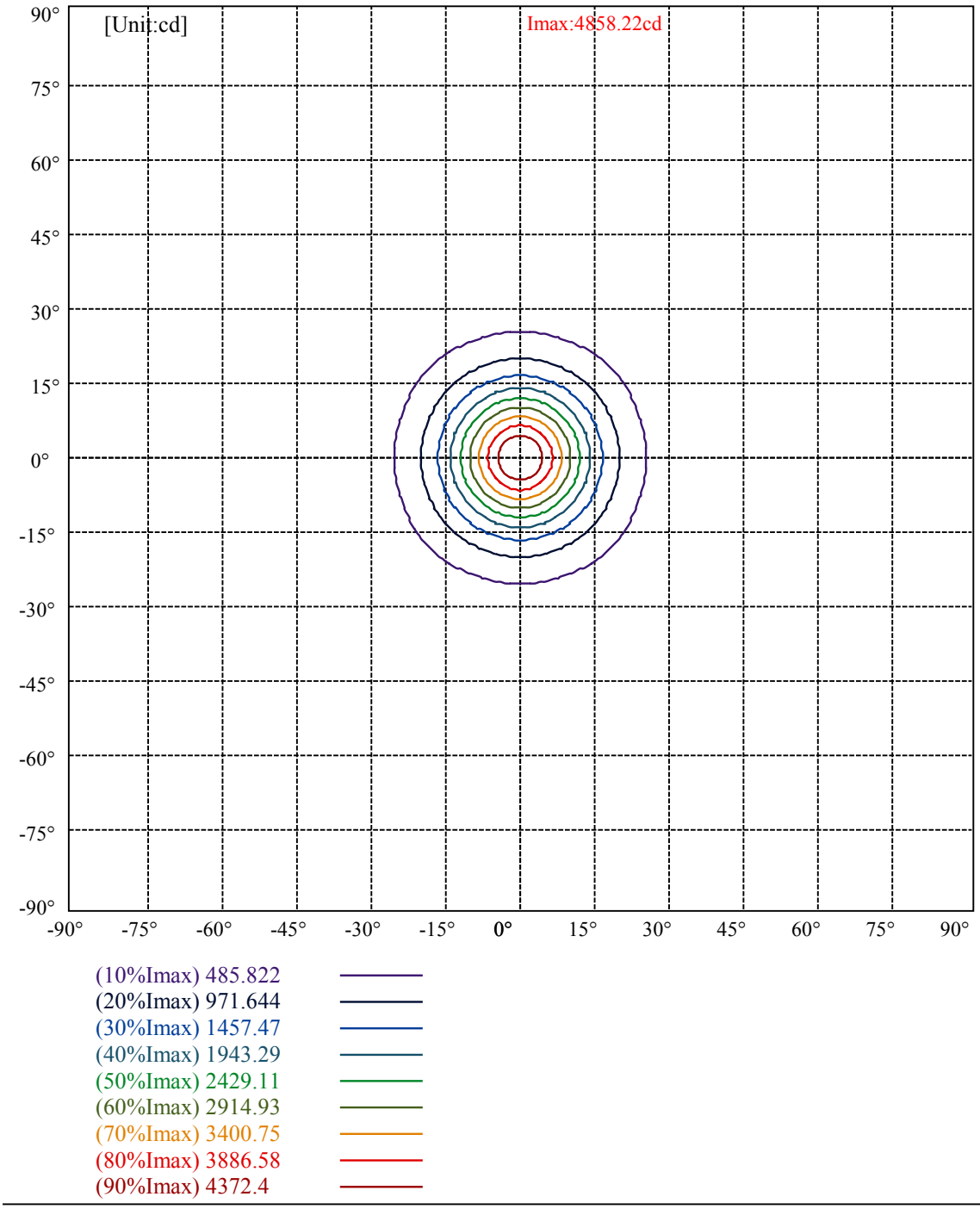
Lux distance Curve



Max , Ave

Beam angle of C0 plane 23.24

ISO-Intensity(V-H)



(10%Imax) 485.822
(20%Imax) 971.644
(30%Imax) 1457.47
(40%Imax) 1943.29
(50%Imax) 2429.11
(60%Imax) 2914.93
(70%Imax) 3400.75
(80%Imax) 3886.58
(90%Imax) 4372.4

Equipment: equipamento lumini
Temperature(°C): 25.5
Date: 5/9/2024
Humidity(%): 55.0%
Operator: 01
Distance(m): 6.90

Luminance Limitting Curve(no luminous side)

Luminance Table

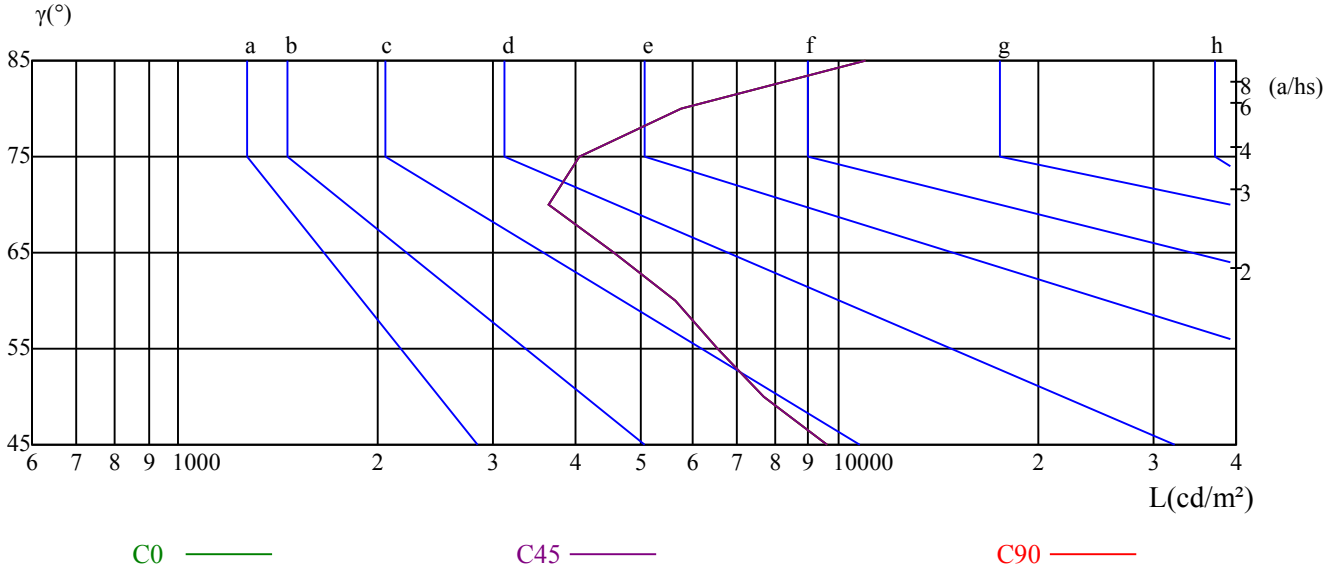
γ	45	50	55	60	65	70	75	80	85
C0	9588	7695	6538	5642	4567	3630	4051	5755	10970
C45	9588	7695	6538	5642	4567	3630	4051	5755	10970
C90	9588	7695	6538	5642	4567	3630	4051	5755	10970

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4567	4567	4567	4051	4051	4051	10970	10970	10970

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 Limitting Curve



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	13.69	14.62	14.05	14.93	15.25	13.76	14.69	14.12	15.00	15.32
	3H	13.92	14.75	14.31	15.09	15.43	13.94	14.77	14.33	15.10	15.45
	4H	14.02	14.78	14.42	15.13	15.50	14.03	14.79	14.43	15.14	15.51
	6H	14.25	14.95	14.67	15.32	15.72	14.25	14.94	14.67	15.32	15.72
	8H	14.43	15.10	14.86	15.48	15.89	14.43	15.09	14.85	15.48	15.89
	12H	14.73	15.36	15.16	15.75	16.17	14.72	15.35	15.15	15.75	16.17
4H	2H	13.66	14.42	14.06	14.78	15.15	13.73	14.49	14.13	14.84	15.21
	3H	13.98	14.61	14.40	15.01	15.43	13.99	14.63	14.41	15.02	15.44
	4H	14.20	14.75	14.64	15.17	15.62	14.20	14.75	14.64	15.17	15.62
	6H	14.55	15.04	15.03	15.49	15.95	14.54	15.02	15.01	15.48	15.93
	8H	14.88	15.33	15.37	15.79	16.27	14.87	15.32	15.35	15.78	16.25
	12H	15.38	15.79	15.87	16.24	16.77	15.36	15.78	15.85	16.23	16.75
8H	4H	14.19	14.64	14.68	15.10	15.57	14.19	14.64	14.68	15.10	15.57
	6H	14.73	15.10	15.24	15.58	16.09	14.72	15.09	15.23	15.57	16.08
	8H	15.28	15.59	15.82	16.11	16.61	15.27	15.57	15.80	16.10	16.60
	12H	16.02	16.25	16.57	16.77	17.30	16.01	16.24	16.55	16.76	17.28
12H	4H	14.19	14.61	14.68	15.06	15.58	14.19	14.61	14.68	15.06	15.58
	6H	14.86	15.16	15.39	15.69	16.18	14.84	15.15	15.38	15.67	16.17
	8H	15.46	15.69	16.01	16.21	16.74	15.45	15.68	15.99	16.20	16.72

Variation with the observer position at spacings:		
S = 1.0H	3.2/-1.9	3.2/-1.9
S = 1.5H	4.6/-2.1	4.6/-2.1
S = 2.0H	5.7/-2.0	5.7/-2.0
Standard tables:	BK4	BK4
Uncorrected UGR	-3.4	-3.4

依据CIE Publ. 117 计算 UGR，S/H = 0.25

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lumini

LumCAT:
Luminaire: focus sm a cob serie 2 e fm
LampCAT: modulo led 12.5W 3000K irc 90
Ballast type: led driver 350mA

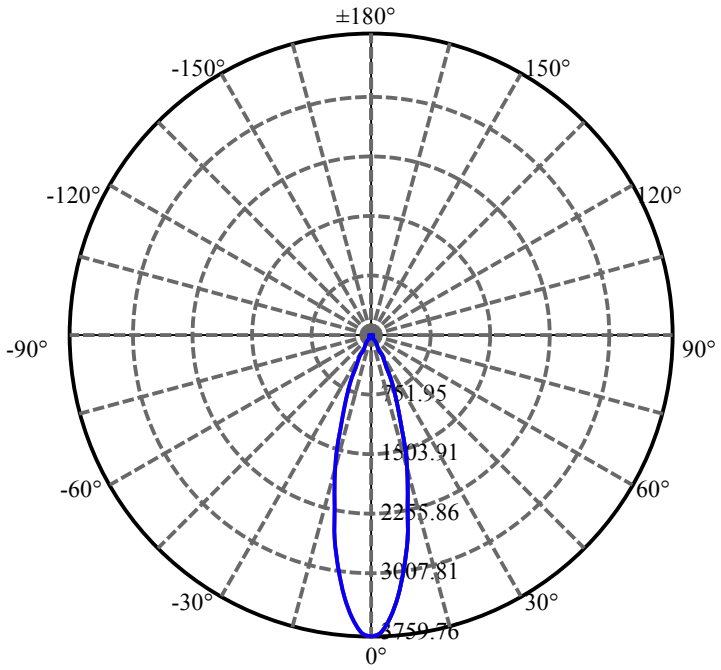
Report No:	Voltage(V): 127.0000
Test No:	Current(A): 0.1100
Number of Lamps: 1	Power (W): 13.7400
Lamp flux(lm): 1550.0	PF: 0.9800
Length(mm): 55	Width(mm): 55
Phm Type: C	Height(mm): 0

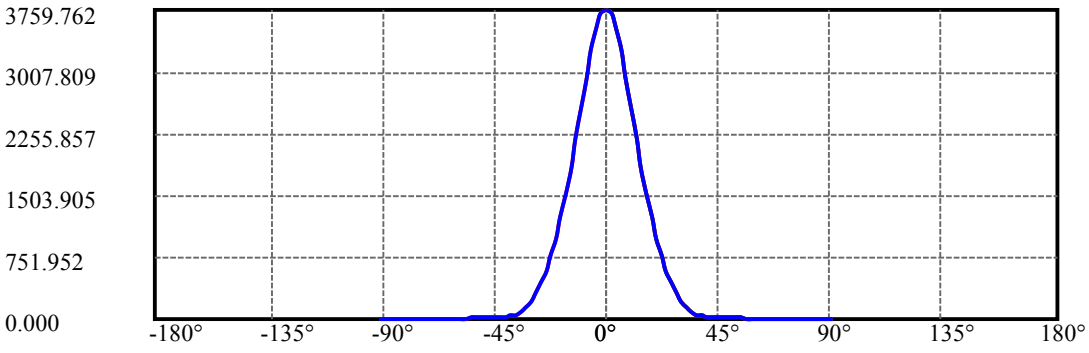
Photometric Results

Lumens(lm): 1095.57, Efficiency(%): 70.68% , Luminous Efficacy(lm/W): 79.74
Central intensity(cd): 3759.762, Maximum intensity(cd): 3759.762
Angle of maximum intensity: C=0.0 γ=0.0
Beam angle of C0 plane : 27.65
Aveage BeamAngle(IEC 61341):27.65

Equipment: equipamento lumini	Date: 5/9/2024	Operator: 01
Temperature(°C): 25.5	Humidity(%): 55.0%	Distance(m): 6.90

Light Distribution Curve [Unit:cd]





C0(Max):

C0/C180:

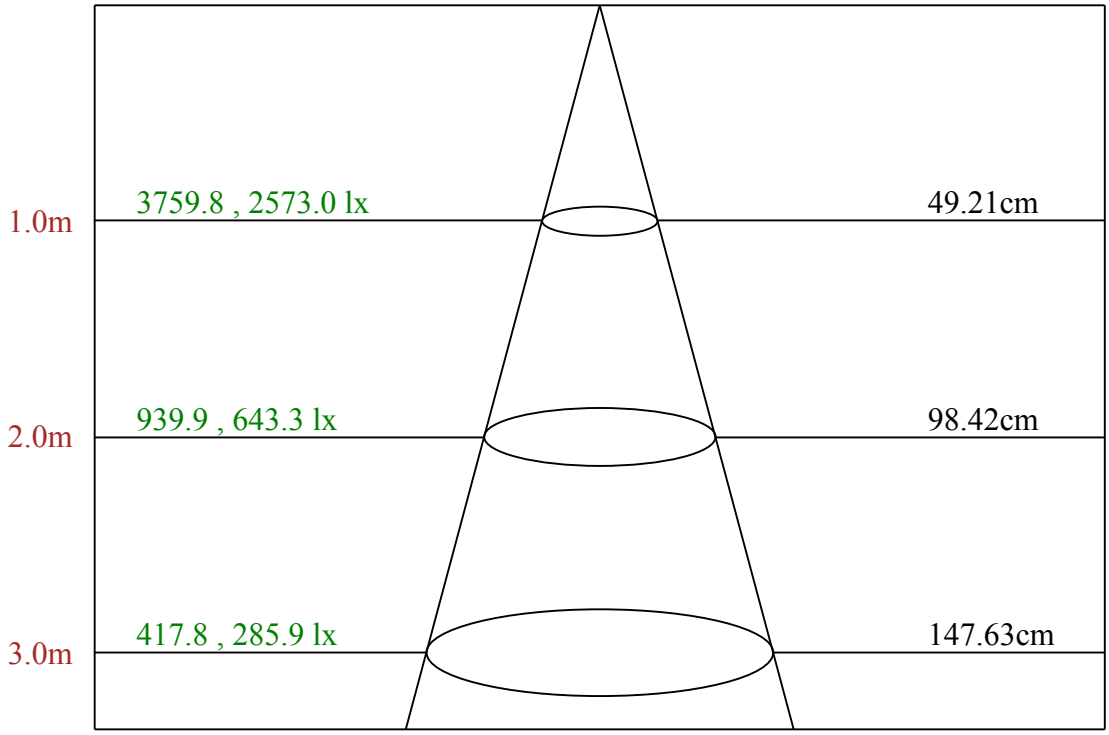
C90/C270:

Equipment: equipamento lumini
Temperature(°C): 25.5

Date: 5/9/2024
Humidity(%): 55.0%

Operator: 01
Distance(m): 6.90

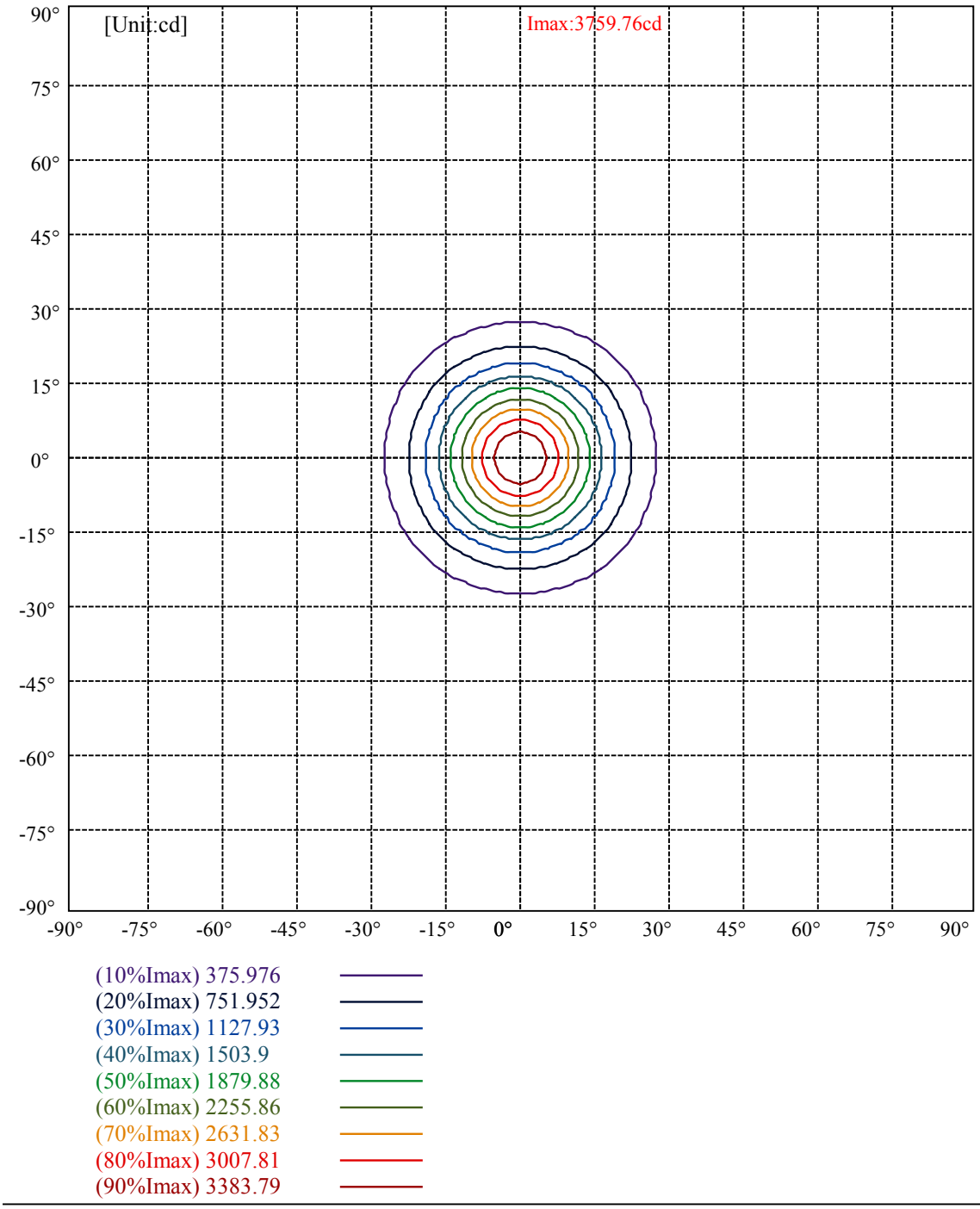
Lux distance Curve



Max , Ave

Beam angle of C0 plane 27.65

ISO-Intensity(V-H)



Equipment: equipamento lumini
Temperature(°C): 25.5

Date: 5/9/2024
Humidity(%): 55.0%

Operator: 01
Distance(m): 6.90

Luminance Limitting Curve(no luminous side)

Luminance Table

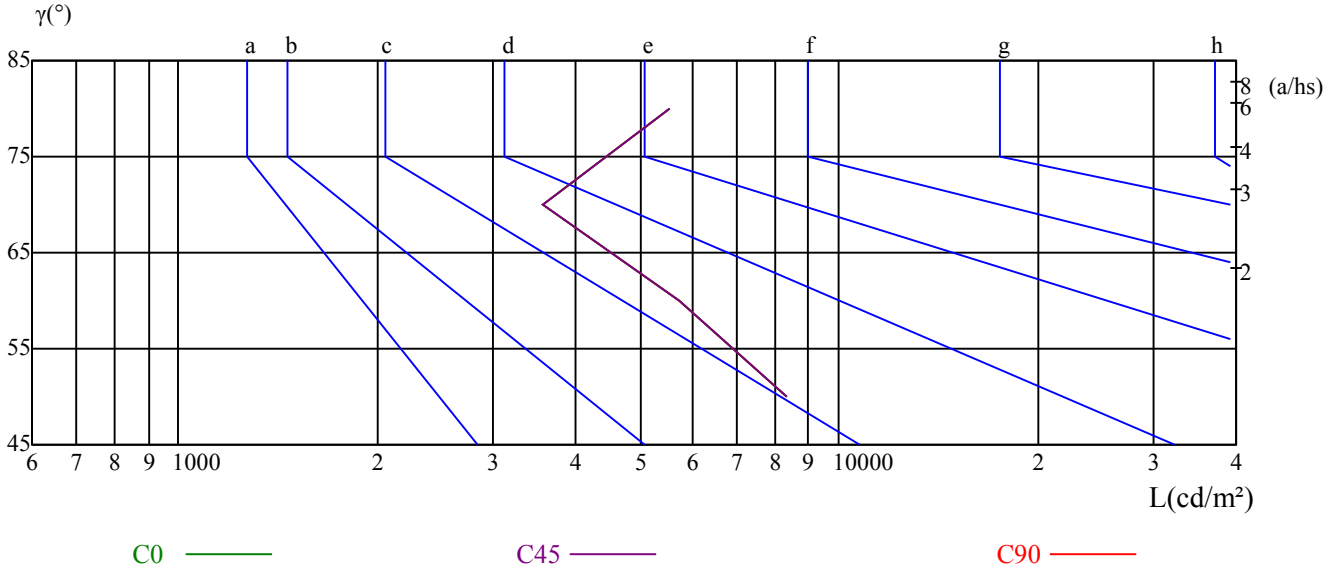
γ	45	50	55	60	65	70	75	80	85
C0	0	8359	0	5733	0	3572	0	5529	0
C45	0	8359	0	5733	0	3572	0	5529	0
C90	0	8359	0	5733	0	3572	0	5529	0

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4567	4567	4567	4051	4051	4051	10970	10970	10970

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 Limitting Curve



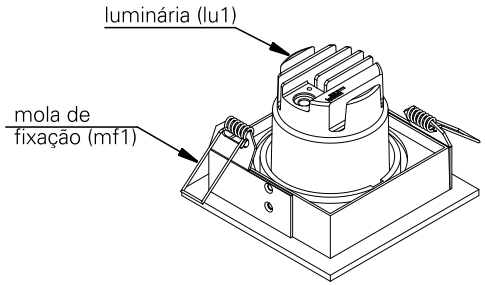
Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	14.44	15.37	14.80	15.68	16.00	14.49	15.42	14.85	15.73	16.05
	3H	14.59	15.42	14.98	15.76	16.11	14.65	15.48	15.03	15.81	16.16
	4H	14.64	15.41	15.05	15.77	16.13	14.70	15.46	15.10	15.82	16.19
	6H	14.83	15.53	15.24	15.90	16.30	14.87	15.57	15.29	15.95	16.35
	8H	14.97	15.63	15.39	16.02	16.43	15.01	15.68	15.43	16.06	16.47
	12H	15.20	15.83	15.63	16.23	16.64	15.24	15.87	15.67	16.27	16.69
4H	2H	14.39	15.16	14.79	15.51	15.88	14.44	15.21	14.84	15.56	15.93
	3H	14.61	15.25	15.04	15.65	16.07	14.66	15.30	15.08	15.70	16.11
	4H	14.77	15.33	15.21	15.75	16.20	14.82	15.37	15.26	15.80	16.25
	6H	15.05	15.54	15.53	16.00	16.45	15.09	15.58	15.57	16.04	16.49
	8H	15.33	15.78	15.82	16.24	16.72	15.37	15.82	15.85	16.28	16.75
	12H	15.74	16.16	16.23	16.61	17.13	15.78	16.19	16.27	16.65	17.17
8H	4H	14.73	15.19	15.22	15.65	16.12	14.78	15.23	15.27	15.69	16.17
	6H	15.18	15.55	15.69	16.03	16.54	15.22	15.59	15.72	16.07	16.58
	8H	15.66	15.97	16.19	16.49	16.99	15.69	16.00	16.22	16.52	17.02
	12H	16.29	16.53	16.84	17.05	17.57	16.32	16.56	16.87	17.07	17.60
12H	4H	14.73	15.15	15.22	15.60	16.12	14.77	15.19	15.27	15.64	16.17
	6H	15.29	15.59	15.82	16.12	16.62	15.32	15.63	15.86	16.15	16.65
	8H	15.81	16.04	16.35	16.56	17.08	15.83	16.07	16.38	16.59	17.11
Variation with the observer position at spacings:											
S = 1.0H		3.4/-2.2					3.4/-2.2				
S = 1.5H		5.0/-2.3					5.0/-2.3				
S = 2.0H		6.3/-2.3					6.3/-2.3				
Standard tables:		BK3					BK3				
Uncorrected UGR		-3.4					-3.4				

依据CIE Publ. 117 计算 UGR，S/H = 0.25

manual do usuário

focus

	nicho
focus sm a cob série 2 e	96x96mm
focus sm b cob série 2 e	96x183mm
focus sm a série 3 e	96x96mm
focus sm b bath série 3 e	96x183mm
focus sm b série 3 e	96x183mm
focus sm b difusa série 2 e	96x183mm
focus sm a bath série 3 e	96x96mm
focus sm a difusa série 2 e	96x96mm
focus xsm a e	62x62mm
focus sm a dtw e	96x96mm
focus sm a e tr	96x96mm
focus sm b dtw e	96x183mm
focus sm b e tr	96x183mm



atenção

leia atentamente todas as instruções relacionadas ao seu produto antes de utilizá-lo.

antes de iniciar a instalação, certifique-se que a energia elétrica esteja desligada.

não são permitidas modificações no produto, esse deve atender à finalidade para a qual foi projetado e ser utilizado de acordo com as especificações técnicas.

em caso de dúvidas, entre em contato com o fabricante.

lumini.com.br

especificações técnicas

fonte de luz
módulo led integrado (incluso)

índice de proteção
IP20 - luminária para uso interno

peso
focus sm a cob série 2 e - 0,6 kg
focus sm b cob série 2 e - 1,1 kg
focus sm a série 3 e - 0,5 kg
focus sm b bath série 3 e - 0,4 kg
focus sm b série 3 e - 0,8 kg
focus sm b difusa série 2 e - 0,8 kg
focus sm a bath série 3 e - 0,4 kg
focus sm a difusa série 2 e - 0,5 kg
focus xsm a e - 0,3 kg
focus sm a dtw e - 0,5 kg
focus sm a e tr - 0,5 kg
focus sm b dtw e - 0,8 kg
focus sm b e tr - 0,8 kg

cuidados com o produto
o produto deve ser manuseado com cuidado para evitar riscos e deformações.

para limpeza, utilize detergente neutro e um pano de algodão macio. finalize com um pano de algodão seco.

instalação

conteúdo da embalagem
1 luminária

ferramentas necessárias
serra

informações importantes
para a instalação, lave as mãos e seque as mãos, use luvas descartáveis.

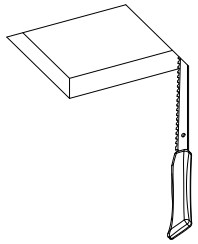
antes de iniciar a instalação, certifique-se que a energia elétrica esteja desligada.

retire a luminária da embalagem com cuidado e apoie-o em uma superfície limpa e seca.

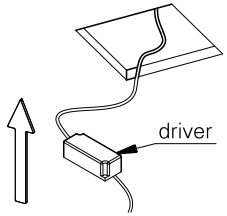
instalação passo a passo

lumini

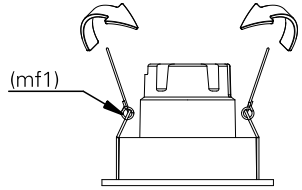
1. faça um nicho no forro conforme o modelo do produto na tabela.



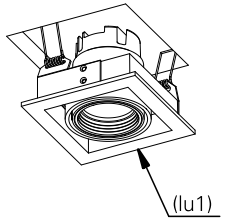
2. aloje o driver sobre o forro.
faça a ligação elétrica. isole os fios separadamente com fita isolante. repita a operação envolvendo o conjunto dos fios, vedando completamente a emenda.
obs: drivers não se aplicam para versões tr



3. levante as molas de fixação (mf1) conforme a ilustração abaixo.



4. segurando as molas de fixação, encaixe a luminária (lu1) no nicho.



5. a luminária após instalada deverá ficar como ilustrado na imagem.
ligue a rede elétrica e teste o seu funcionamento.