

Report No.: PKS200407100-10

Test Time: 2020/4/7 18:45

Luminaire Property

Luminaire Manufacturer: AFX
Luminaire Category:
Luminaire Description: TRBF15LAJD1SN
Lamp Description:
Lumens per Lamp:
Luminous Width (mm):
Voltage: 120.0 V
Power: 28.03 W

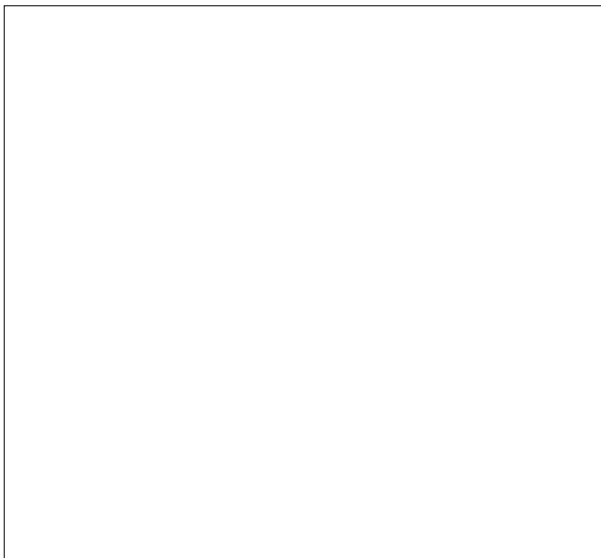
Lamp Catalog:
Number of Lamps:
Luminous Length (mm):
Luminous Height (mm):
Current: 0.236 A
Power Factor: 0.989

Photometric Results

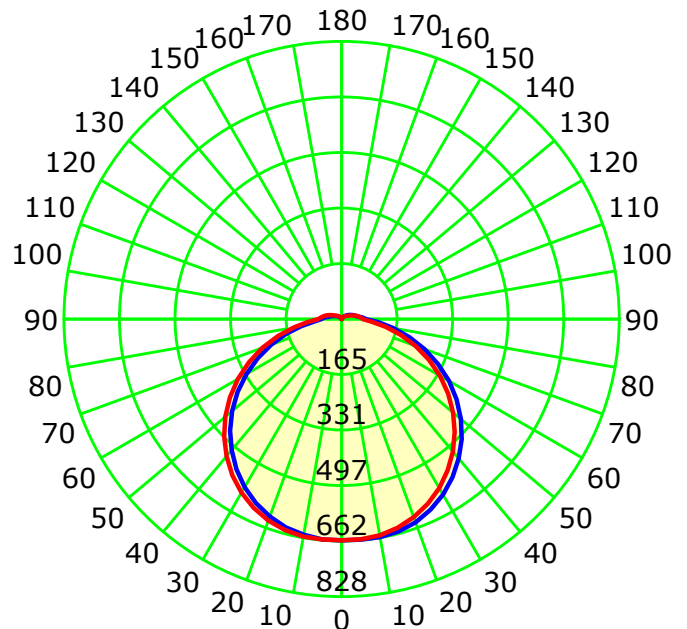
CIE Class: Direct
Measurement Flux: 2387.5 lm
Downward Ratio: 93%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 181.7, 181.9, 180.9, 182.5
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 123.5, 123.5, 123.6, 123.3
Luminaire Efficacy Rating (LER): 85.23
Max. Intensity: 663 cd
S/MH(C0/C180): 1.33

Total Rated Lamp Lumens: 2387.5 lm
Efficiency: 100%
Upward Ratio: 7%
C0r0 Intensity: 660.1 cd
Pos of Max. Intensity: H337.5 V5
S/MH(C90/C270): 1.32

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

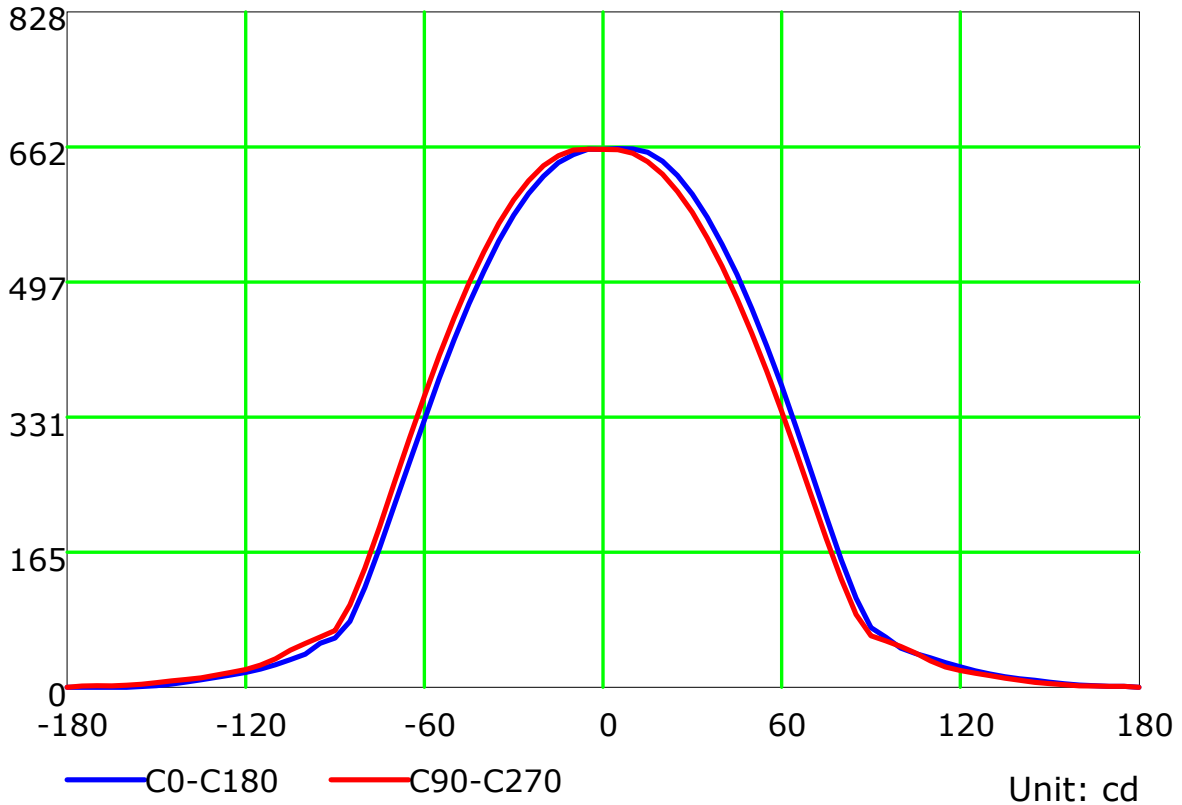
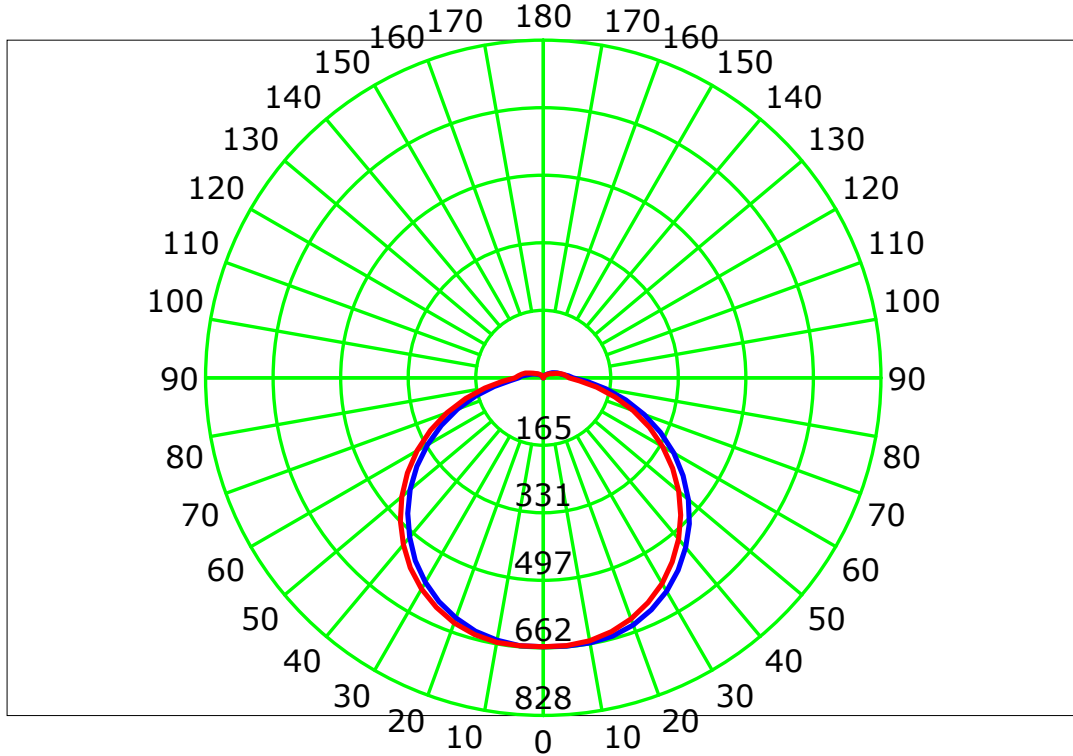
Average Diffuse Angle(50%): 123.5°

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5
Test Lab: BACL
Test Type: TYPE C
Temperature: 24.8 °C
Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
Test Device: GPM-1900
Distance: 14.073 m
Humidity: 48
Inspector:

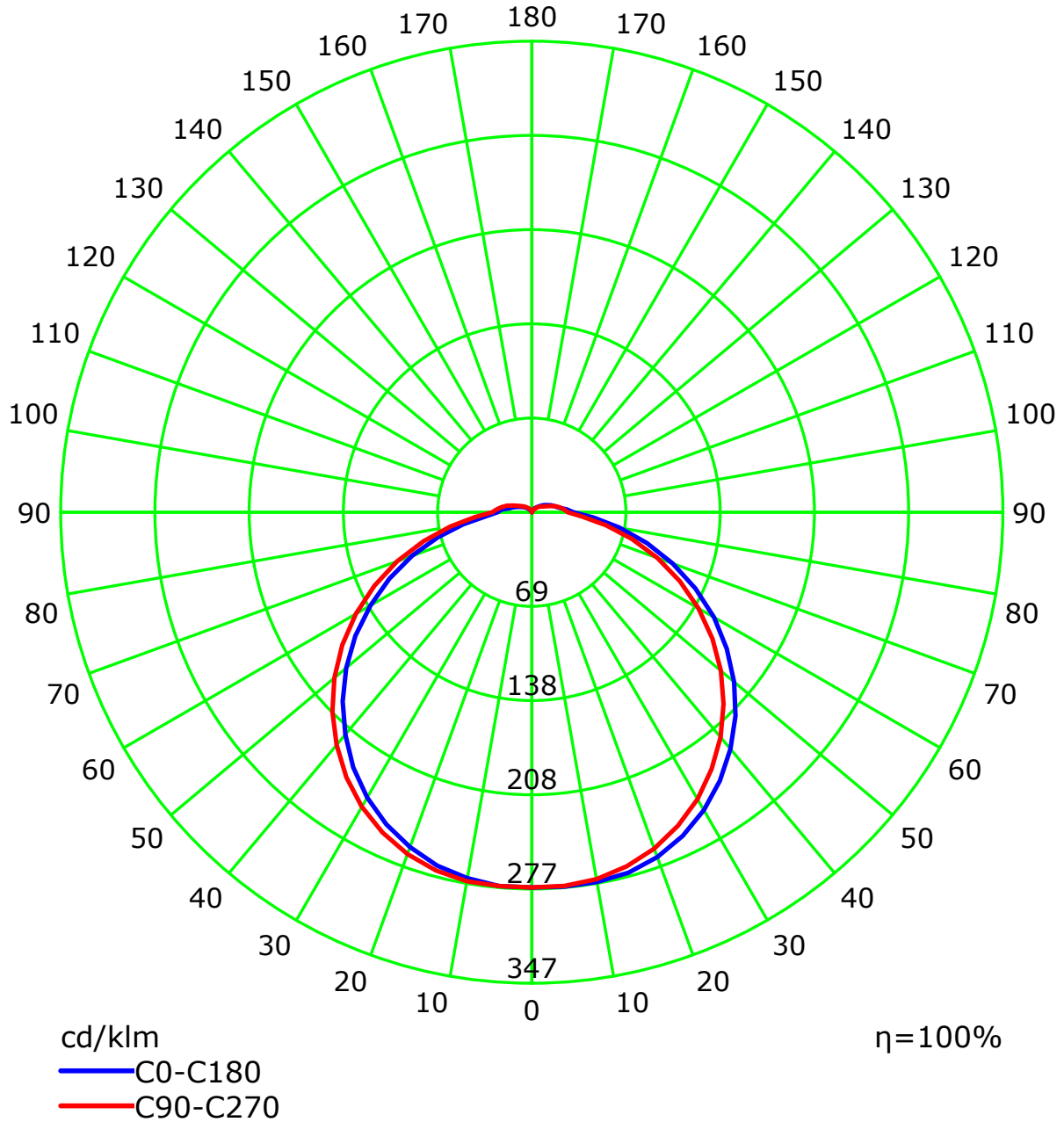
Luminous Intensity Distribution Curve



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Inspector:

Luminous Intensity Distribution Curve(cd/klm)



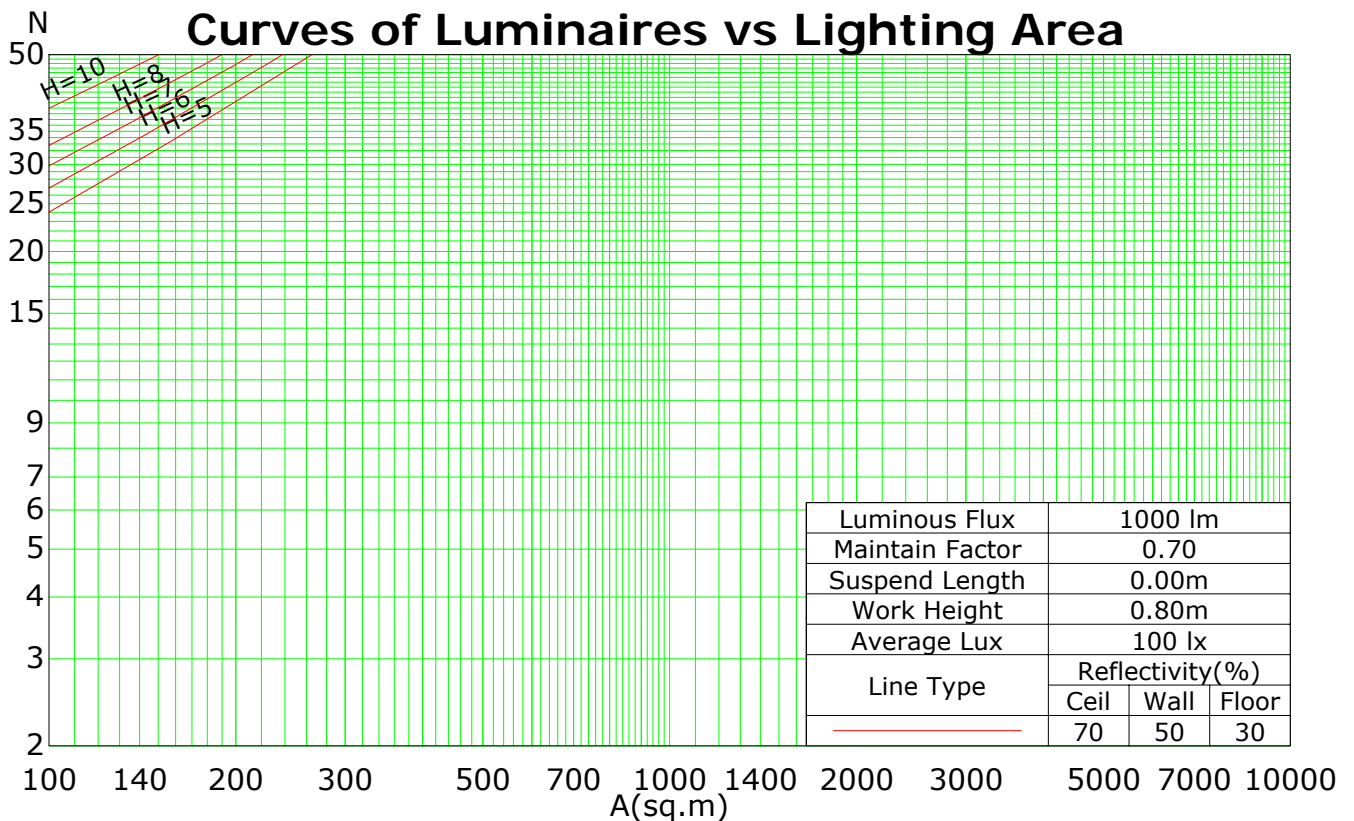
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Humidity: 48
Inspector:

Coefficients Of Utilization - Zonal Cavity Method

RC	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.3	0.3	0.3	0.1	0.1	0.1	0
RW	0.7	0.5	0.3	0.1	0.7	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0
RCCR	RF = 0.2																	
0	1.17	1.17	1.17	1.17	1.14	1.14	1.14	1.14	1.07	1.07	1.07	1.01	1.01	1.01	.96	.96	.96	.93
1	1.06	1.00	.95	.91	1.02	.97	.93	.89	.92	.88	.85	.86	.83	.81	.82	.79	.77	.74
2	.95	.86	.79	.73	.92	.84	.77	.71	.79	.73	.69	.75	.70	.66	.71	.67	.63	.61
3	.87	.75	.67	.60	.83	.73	.65	.59	.69	.62	.57	.65	.60	.55	.62	.57	.53	.50
4	.79	.66	.57	.50	.76	.65	.56	.49	.61	.54	.48	.58	.52	.46	.55	.49	.45	.43
5	.72	.59	.50	.43	.70	.57	.49	.42	.54	.47	.41	.52	.45	.40	.49	.43	.39	.36
6	.67	.53	.44	.37	.64	.52	.43	.37	.49	.41	.36	.47	.40	.35	.44	.39	.34	.32
7	.62	.48	.39	.33	.60	.47	.38	.32	.44	.37	.31	.42	.36	.31	.40	.35	.30	.28
8	.57	.44	.35	.29	.55	.43	.34	.29	.41	.33	.28	.39	.32	.27	.37	.31	.27	.25
9	.54	.40	.31	.26	.52	.39	.31	.26	.37	.30	.25	.36	.29	.25	.34	.28	.24	.22
10	.50	.37	.29	.23	.49	.36	.28	.23	.34	.27	.23	.33	.27	.22	.32	.26	.22	.20

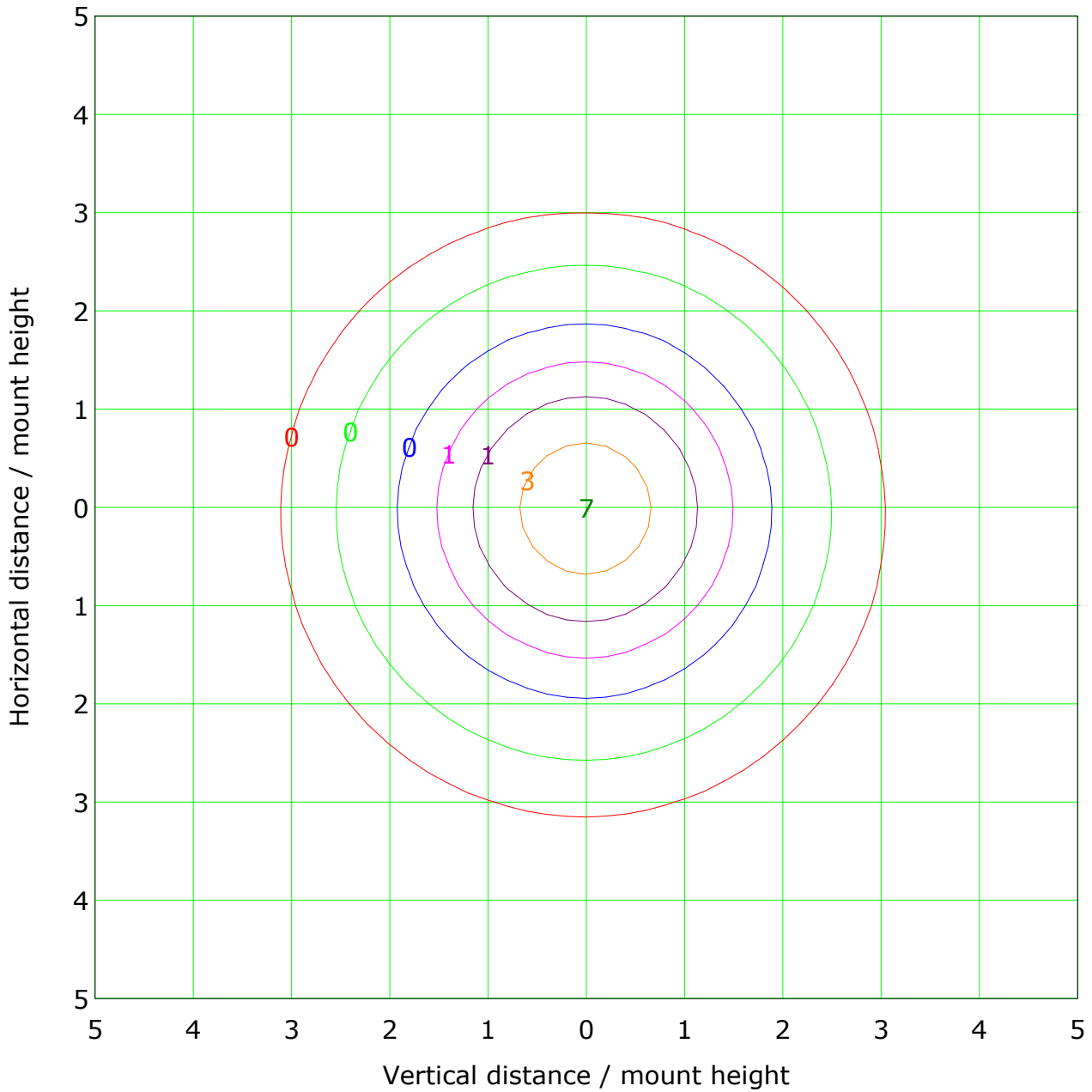
Spacing Criteria (0-180): 1.33
 Spacing Criteria (90-270): 1.32
 Spacing Criteria (Diagonal): 1.45



C Plane (°):0.0-360.0: 22.5
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 Test Device: GPM-1900
 Distance: 14.073 m
 Humidity: 48
 Inspector:

IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 6.6 lx	
— (1%):	0.1 lx	— (2%):	0.1 lx
— (5%):	0.3 lx	— (10%):	0.7 lx
— (20%):	1.3 lx	— (50%):	3.3 lx
— (100%):	6.6 lx		

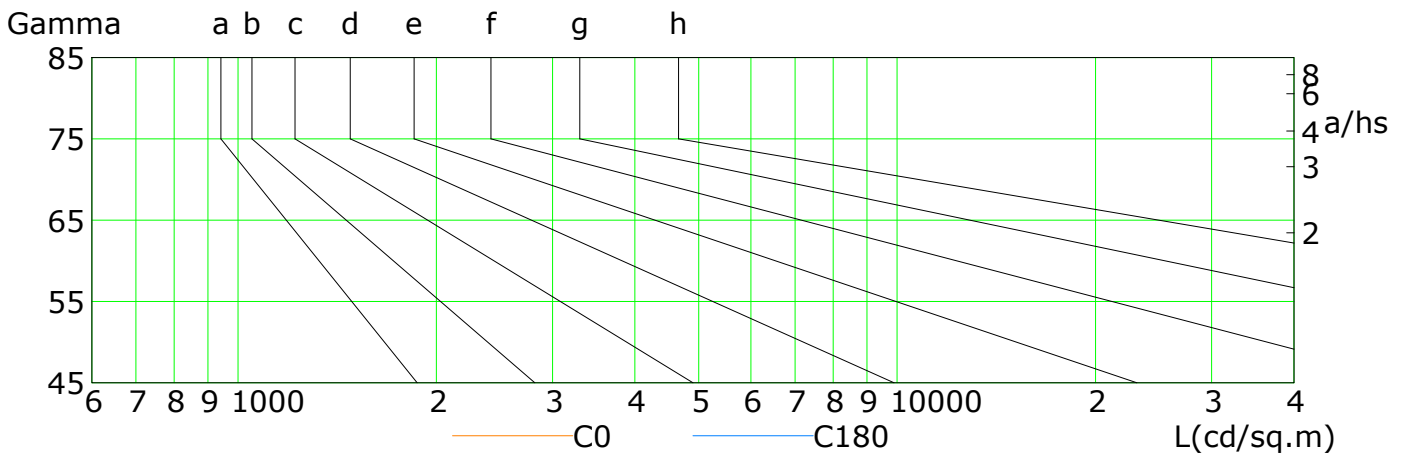
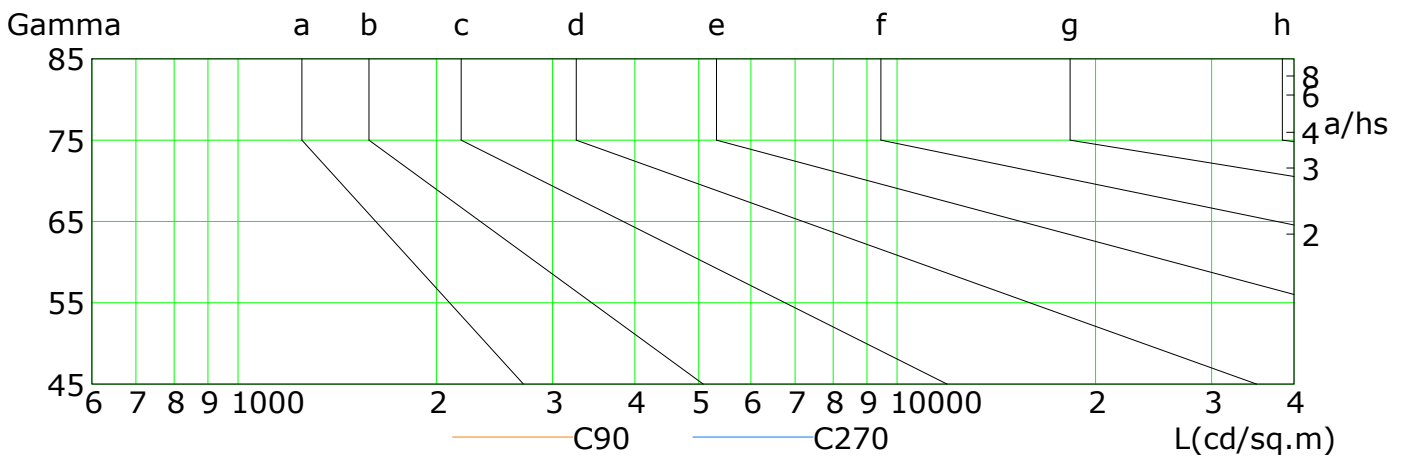
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 Test Type: TYPE C
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 Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)								
		2000	1000	500	<=300					
1.15	A									
1.50	B									
1.85	C									
2.20	D									
2.55	E									

a b c d e f g h



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	507	465	419	370	318	264	210	157	109
C90	477	434	388	339	287	235	182	133	89
C180	471	427	379	328	276	224	172	122	81
C270	496	453	407	357	306	252	197	146	101

C Plane (°):0.0-360.0: 22.5

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Test Type: TYPE C

Temperature: 24.8 'C

Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0

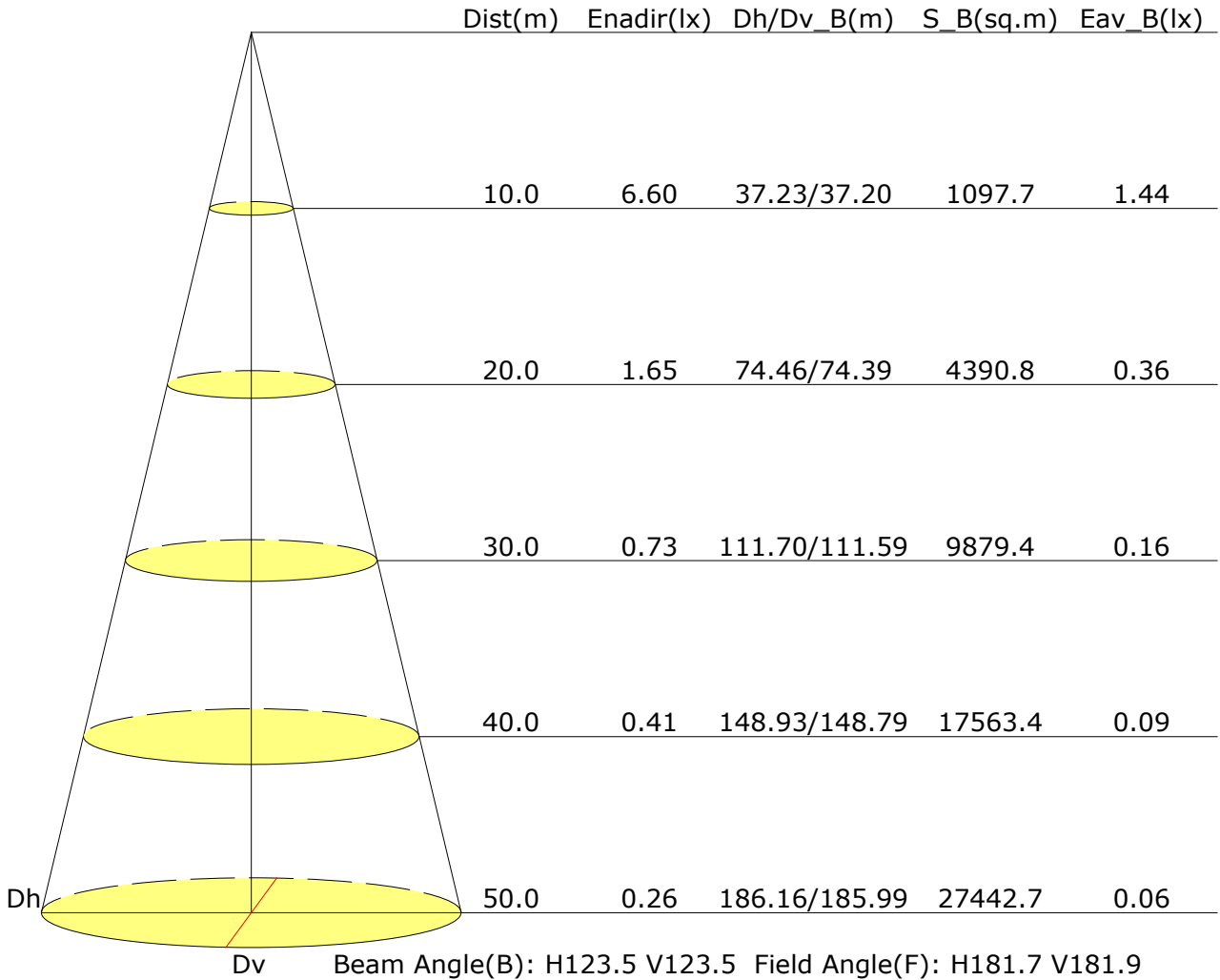
Test Device: GPM-1900

Distance: 14.073 m

Humidity: 48

Inspector:

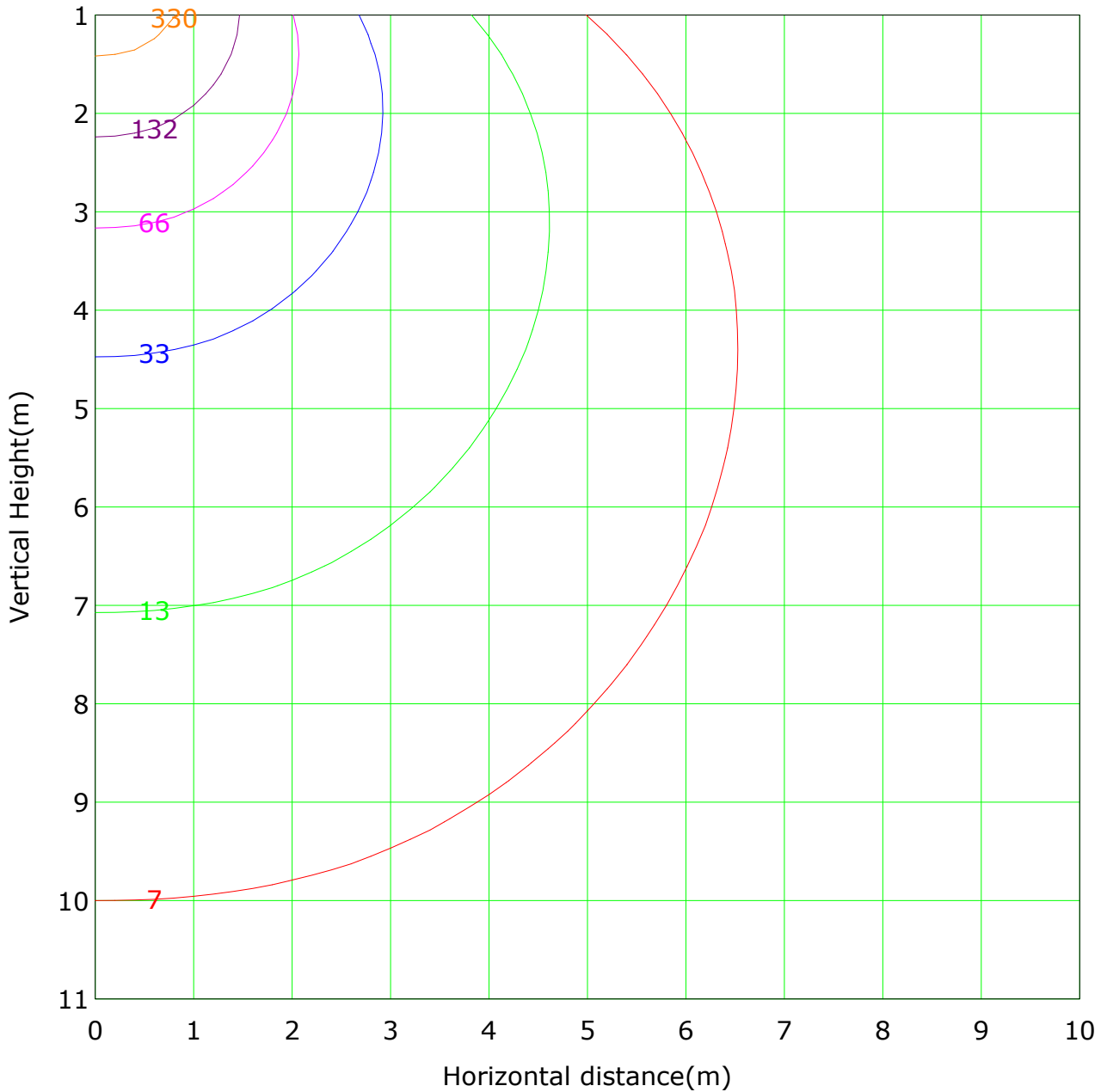
Illuminance at a Distance



C Plane (°):0.0-360.0: 22.5
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 Test Type: TYPE C
 Temperature: 24.8 °C
 Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
 Test Device: GPM-1900
 Distance: 14.073 m
 Humidity: 48
 Inspector:

Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 660.1 lx

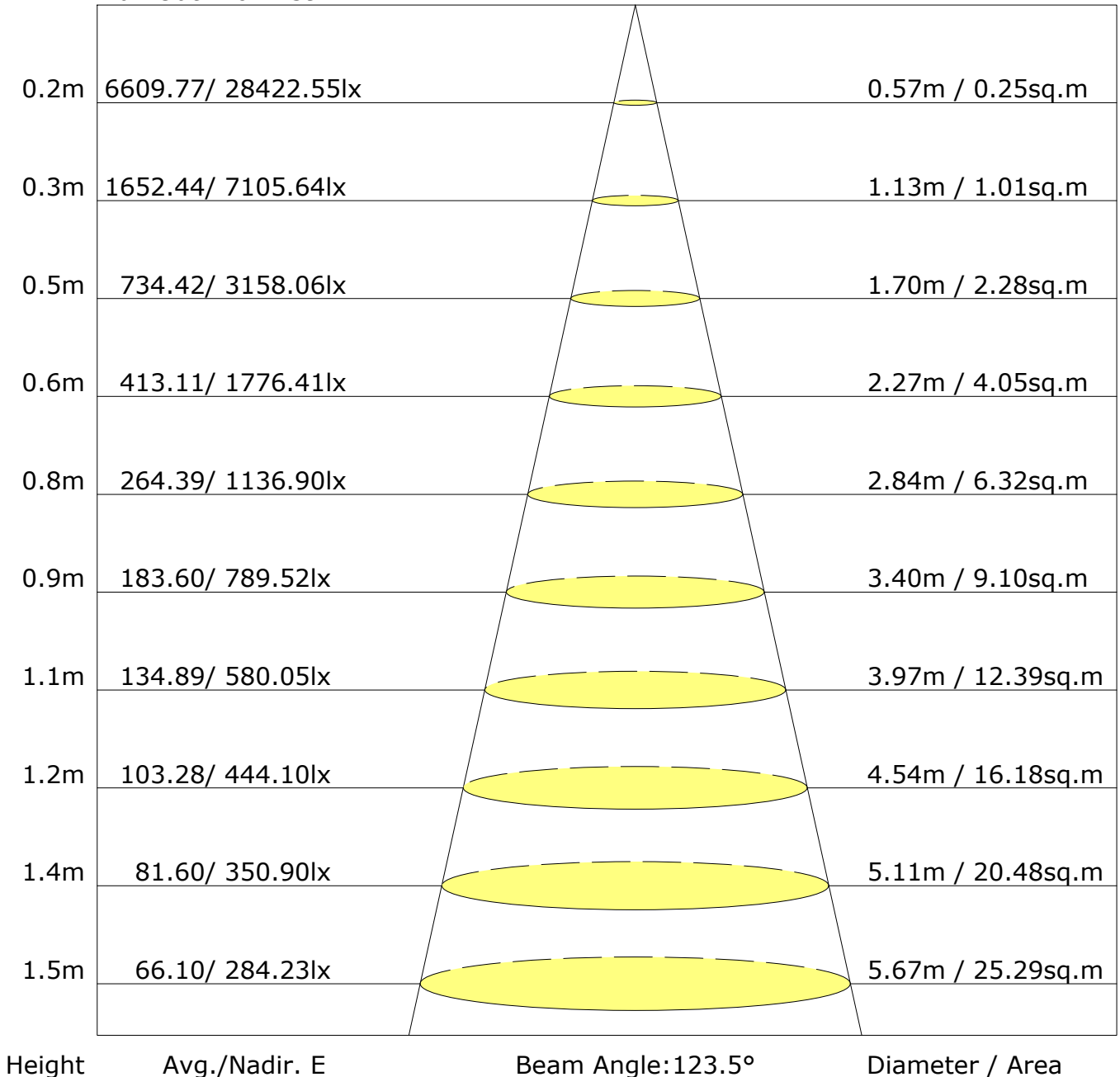
— (1%): 6.6 lx	— (2%): 13.2 lx
— (5%): 33.0 lx	— (10%): 66.0 lx
— (20%): 132.0 lx	— (50%): 330.1 lx
— (100%): 660.1 lx	

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 Test Lab: BACL
 Test Type: TYPE C
 Temperature: 24.8 'C
 Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
 Test Device: GPM-1900
 Distance: 14.073 m
 Humidity: 48
 Inspector:

The Average Illuminance Effective Figure

Flux Out: 1671.39lm



UGR Table

Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
3H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
12H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
X=4H Y=2H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
3H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
12H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
X=8H Y=4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
12H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
X=12H Y=4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
Variations with the observer position at spacings:										
S=1.0H	-1.\$/-1.\$					-1.\$/-1.\$				
S=1.5H	-1.\$/-1.\$					-1.\$/-1.\$				
S=2.0H	-1.\$/-1.\$					-1.\$/-1.\$				

Calculate in accordance with CIE Pub.117. The table is revised with 2387Im ($8\log(F/F_0) = 3.0$).

C Plane (°):0.0-360.0: 22.5
 Test Lab: BACL
 Test Type: TYPE C
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 Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
 Test Device: GPM-1900
 Distance: 14.073 m
 Humidity: 48
 Inspector:

Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-5.0	660.5	15.8	15.8	0.66	0.66
5.0-10.0	659.4	47.2	63.0	1.98	2.64
10.0-15.0	653.6	77.5	140.5	3.25	5.89
15.0-20.0	642.6	105.9	246.4	4.44	10.32
20.0-25.0	626.1	131.3	377.8	5.50	15.82
25.0-30.0	604.1	152.9	530.7	6.40	22.23
30.0-35.0	576.6	169.8	700.5	7.11	29.34
35.0-40.0	544.1	181.6	882.0	7.60	36.94
40.0-45.0	507.1	187.8	1069.8	7.87	44.81
45.0-50.0	466.1	188.4	1258.2	7.89	52.70
50.0-55.0	421.4	183.3	1441.5	7.68	60.38
55.0-60.0	373.5	172.7	1614.1	7.23	67.61
60.0-65.0	322.8	157.0	1771.1	6.57	74.18
65.0-70.0	270.1	136.8	1907.9	5.73	79.91
70.0-75.0	216.7	113.3	2021.2	4.74	84.66
75.0-80.0	164.8	88.2	2109.4	3.69	88.35
80.0-85.0	117.5	63.9	2173.2	2.67	91.02
85.0-90.0	81.2	44.5	2217.7	1.86	92.89
90.0-95.0	63.0	34.5	2252.1	1.44	94.33
95.0-100.0	54.8	29.8	2281.9	1.25	95.58
100.0-105.0	46.5	24.9	2306.8	1.04	96.62
105.0-110.0	38.4	20.1	2326.9	0.84	97.46
110.0-115.0	31.1	15.8	2342.7	0.66	98.12
115.0-120.0	25.2	12.3	2354.9	0.51	98.64
120.0-125.0	20.4	9.5	2364.4	0.40	99.03
125.0-130.0	16.6	7.2	2371.6	0.30	99.33
130.0-135.0	13.3	5.4	2377.0	0.23	99.56
135.0-140.0	10.4	3.9	2380.8	0.16	99.72
140.0-145.0	8.0	2.7	2383.5	0.11	99.83
145.0-150.0	5.9	1.7	2385.3	0.07	99.91
150.0-155.0	4.1	1.0	2386.3	0.04	99.95
155.0-160.0	2.7	0.6	2386.9	0.02	99.97
160.0-165.0	1.9	0.3	2387.2	0.01	99.99
165.0-170.0	1.6	0.2	2387.4	0.01	99.99
170.0-175.0	1.5	0.1	2387.5	0.00	100.00
175.0-180.0	0.7	0.0	2387.5	0.00	100.00

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Gamma Plane (°):0.0-180.0:5.0
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 Inspector:

Candlepower Table

Unit: cd

G\C	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5	C180.0	C202.5
G0.0	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
G5.0	661.1	662.0	662.0	661.1	659.8	659.9	660.1	661.1	660.3	660.5
G10.0	660.6	660.7	659.0	657.8	655.4	654.6	654.0	654.7	653.8	655.8
G15.0	656.7	652.9	651.2	649.2	645.1	643.7	643.0	644.3	643.9	645.7
G20.0	645.6	642.1	638.2	634.8	629.7	627.0	626.6	627.3	627.1	630.3
G25.0	628.2	624.0	619.2	614.6	608.6	606.3	604.7	606.0	606.0	610.5
G30.0	605.2	600.1	595.4	588.8	583.0	579.0	577.8	579.9	579.5	584.2
G35.0	576.8	572.1	566.2	558.7	551.5	548.1	547.0	547.9	547.9	552.8
G40.0	543.5	538.5	531.6	524.1	516.6	512.0	510.2	512.1	510.6	517.5
G45.0	506.8	500.4	493.3	484.9	477.1	471.8	470.5	471.6	470.9	476.4
G50.0	464.6	458.8	450.8	443.1	434.1	428.1	425.9	428.5	426.6	431.6
G55.0	418.8	413.1	404.6	396.7	387.9	382.1	379.1	381.0	379.2	384.8
G60.0	370.2	363.8	356.0	347.0	338.7	332.7	329.5	330.6	327.9	335.1
G65.0	317.6	312.2	304.3	295.3	287.5	281.9	278.1	277.7	276.2	282.9
G70.0	263.7	257.4	249.3	243.1	234.8	228.7	225.6	225.5	224.1	228.3
G75.0	209.5	203.9	195.5	189.6	182.4	176.9	173.2	173.8	171.6	176.0
G80.0	156.6	151.9	145.1	139.6	133.0	128.2	124.6	124.6	122.5	127.5
G85.0	109.5	105.7	99.9	94.5	89.4	85.6	82.6	82.8	80.9	84.5
G90.0	73.4	71.8	68.1	65.2	63.4	62.0	61.3	60.8	60.6	62.6
G95.0	61.5	60.8	59.9	58.4	57.0	56.1	54.8	53.9	54.0	56.1
G100.0	48.3	52.8	53.1	51.5	50.1	48.8	47.9	46.2	40.8	47.6
G105.0	41.5	43.5	46.4	43.9	42.1	39.4	40.9	37.4	34.1	38.1
G110.0	36.2	36.5	40.0	35.0	32.5	29.1	32.8	29.3	27.8	31.1
G115.0	30.3	31.0	33.6	28.9	25.0	23.5	26.0	23.7	22.6	23.7
G120.0	25.3	25.8	27.3	23.5	20.7	19.9	21.3	19.4	18.3	19.8
G125.0	20.3	20.6	21.1	18.5	17.3	16.3	17.0	16.6	15.2	15.8
G130.0	16.5	16.8	16.7	14.7	14.5	13.6	13.8	13.2	12.3	13.0
G135.0	13.1	13.2	13.2	12.0	11.3	10.4	11.1	10.1	9.4	10.1
G140.0	10.5	10.2	10.8	9.2	8.7	7.7	8.0	7.7	6.7	7.6
G145.0	8.7	8.3	8.5	7.2	6.3	5.4	5.2	5.4	4.0	5.2
G150.0	6.4	6.3	5.9	5.3	4.5	3.3	3.7	3.3	2.1	3.4
G155.0	4.3	4.6	4.6	3.2	3.2	2.0	1.7	2.4	1.2	1.8
G160.0	2.8	2.5	2.9	2.4	2.0	1.3	1.6	1.9	0.0	1.2
G165.0	2.0	2.1	1.8	1.8	1.6	1.3	1.5	1.4	0.0	1.4
G170.0	1.4	2.0	1.8	1.3	1.3	1.0	1.6	1.4	0.0	1.0
G175.0	1.2	1.5	1.8	1.4	1.3	1.2	1.2	1.1	0.0	1.0
G180.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

C Plane (°):0.0-360.0: 22.5

Test Lab: BACL

Test Type: TYPE C

Temperature: 24.8 °C

Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0

Test Device: GPM-1900

Distance: 14.073 m

Humidity: 48

Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C225.0	C247.5	C270.0	C292.5	C315.0	C337.5	C360.0			
G0.0	660.1	660.1	660.1	660.1	660.1	660.1	660.1			
G5.0	660.6	660.8	660.3	661.2	661.6	663.0	661.1			
G10.0	657.5	658.6	659.3	660.2	660.2	661.6	660.6			
G15.0	649.0	650.8	652.4	653.6	654.4	655.3	656.7			
G20.0	634.6	638.8	640.0	642.3	643.2	644.9	645.6			
G25.0	615.3	619.7	621.7	625.2	626.6	627.1	628.2			
G30.0	590.5	595.2	598.3	601.5	603.4	604.5	605.2			
G35.0	559.3	564.4	569.2	573.4	574.6	575.2	576.8			
G40.0	524.3	529.7	534.5	538.9	540.4	542.5	543.5			
G45.0	483.3	489.9	496.2	500.5	503.1	504.3	506.8			
G50.0	440.1	447.4	453.4	457.8	460.7	462.3	464.6			
G55.0	393.0	401.4	407.2	412.2	414.5	416.6	418.8			
G60.0	343.7	351.0	357.4	362.7	366.4	367.0	370.2			
G65.0	291.7	298.3	305.6	311.1	314.6	315.2	317.6			
G70.0	237.2	244.9	252.1	256.5	260.1	262.2	263.7			
G75.0	183.6	191.4	197.2	202.9	205.8	207.4	209.5			
G80.0	133.8	140.1	146.0	151.4	154.2	154.7	156.6			
G85.0	90.9	96.8	101.2	105.5	107.9	108.3	109.5			
G90.0	64.9	67.0	69.8	72.1	73.8	74.7	73.4			
G95.0	58.9	60.2	61.8	62.8	63.3	63.7	61.5			
G100.0	50.8	52.0	53.9	55.1	56.1	54.8	48.3			
G105.0	43.6	43.2	45.6	46.2	49.0	44.8	41.5			
G110.0	35.7	33.6	35.0	36.6	41.2	37.1	36.2			
G115.0	28.3	27.1	27.4	30.1	33.8	31.1	30.3			
G120.0	22.9	22.0	22.0	22.9	25.6	24.5	25.3			
G125.0	18.2	17.6	18.3	19.2	21.0	20.0	20.3			
G130.0	14.6	14.6	15.0	15.5	17.0	16.8	16.5			
G135.0	11.3	11.5	11.7	12.6	13.5	12.9	13.1			
G140.0	8.8	9.3	9.7	10.3	10.5	10.5	10.5			
G145.0	6.6	6.8	7.9	8.4	8.2	8.1	8.7			
G150.0	4.5	5.1	5.7	6.1	7.1	6.3	6.4			
G155.0	2.6	3.5	3.8	3.7	4.8	4.9	4.3			
G160.0	1.2	2.2	2.7	3.3	3.1	3.3	2.8			
G165.0	1.8	1.4	1.9	3.0	2.3	2.1	2.0			
G170.0	1.6	1.9	2.0	2.0	2.2	2.3	1.4			
G175.0	1.0	1.9	1.7	2.2	1.7	1.9	1.2			
G180.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

C Plane (°):0.0-360.0: 22.5
 Test Lab: BACL
 Test Type: TYPE C
 Temperature: 24.8 °C
 Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
 Test Device: GPM-1900
 Distance: 14.073 m
 Humidity: 48
 Inspector: