

FICHA TÉCNICA

LED
Reflector
SOLUM 200W

AHORA **150 LÚMENES** POR WATT

Son ideales para diferentes aplicaciones a la intemperie donde hay humedad, lluvia y polvo.

Proporcionan una iluminación uniforme en zonas amplias como jardines calles y parques.



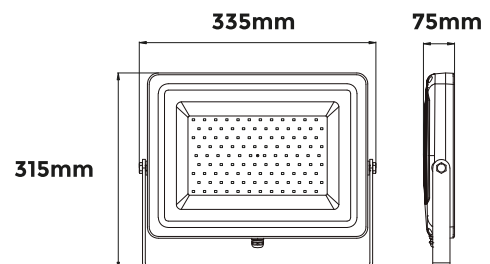
DISEÑO, POTENCIA Y ALTA RESISTENCIA



Montaje Universal para:

Techo, Pared ó Piso. Ideal para usarse en Letreros, Espectaculares, Gasolineras, Fachadas, Jardines, Bodegas, Casetas de Cobro, etc.

Dimensiones:



MODELO DE ALTA RESISTENCIA, CUENTA CON UN DISEÑO VANGUARDISTA Y REFLEJA LUZ BRILLANTE SIN PERDER CLARIDAD.



80%
AHORRO
DE ENERGÍA

200W
WATT


AC 85 - 265V
50/60Hz


30 000lm


6500K

CRI
≥ 90


50,000 H


Hg
0.0mg
LIBRE DE MERCURIO

DESCRIPCIÓN

LED REFLECTOR SOLUM 150 200W - 85-265V 6500K LUZ DÍA - IP66



La información contenida en esta ficha técnica es propiedad de Novalamps Peru S.A.C. Todos los derechos reservados. Nos reservamos el derecho de hacer modificaciones sin previo aviso.

Report No.: TH-3995A

Test Time: 2023/1/2 16:32

Luminaire Property

Luminaire Manufacturer:
 Luminaire Category:
 Lamp Catalog:
 Number of Lamps:
 Luminous Length (mm):
 Luminous Height (mm):
 Current: 0.939 A
 Power Factor: 0.981

Luminaire Description: SOLUM-200W
 Lamp Description:
 Lumens per Lamp:
 Luminous Width (mm):
 Voltage: 219.8 V
 Power: 202.8W

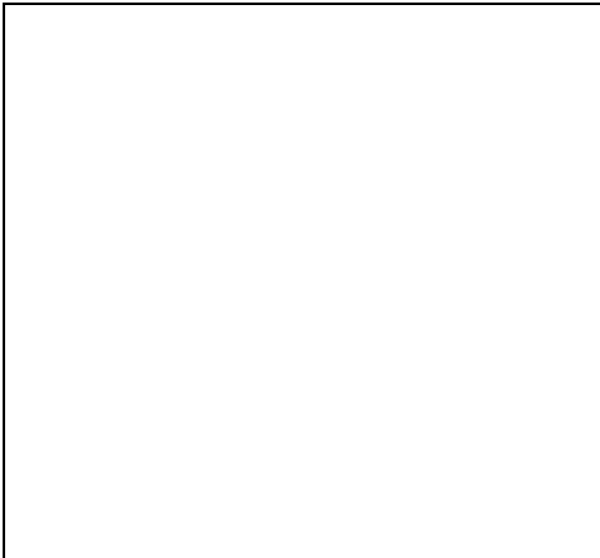
Photometric Results

CIE Class: Direct
 Measurement Flux: 29106.9 lm
 Downward Ratio: 99%
 Horizontal Diffuse Angle(50%): H106.1
 Vertical Diffuse Angle(50%): V107.5
 Luminaire Efficacy Rating (LER): 143.58
 Max. Intensity: 11322.03 cd
 S/MH(C0/C180): 1.26

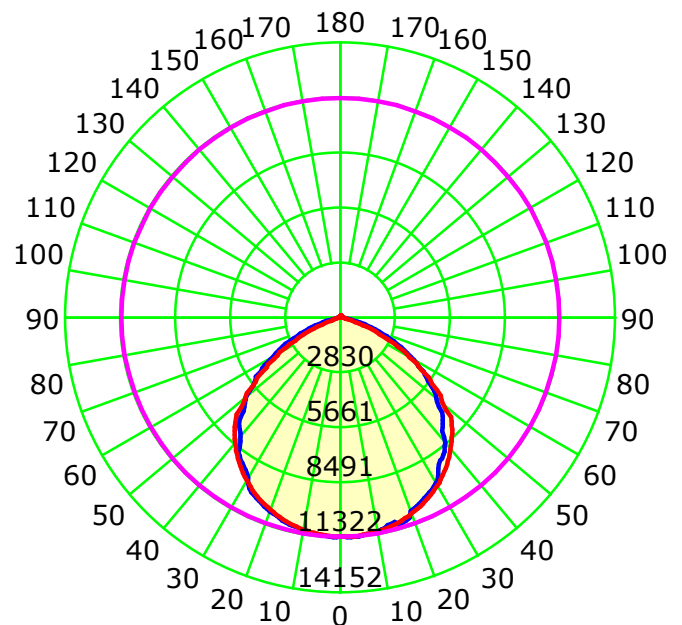
Total Rated Lamp Lumens: 29106.9 lm
 Efficiency: 100%
 Upward Ratio: 1%

C0r0 Intensity: 11282.91 cd
 Pos of Max. Intensity: H180 V1
 S/MH(C90/C270): 1.29

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

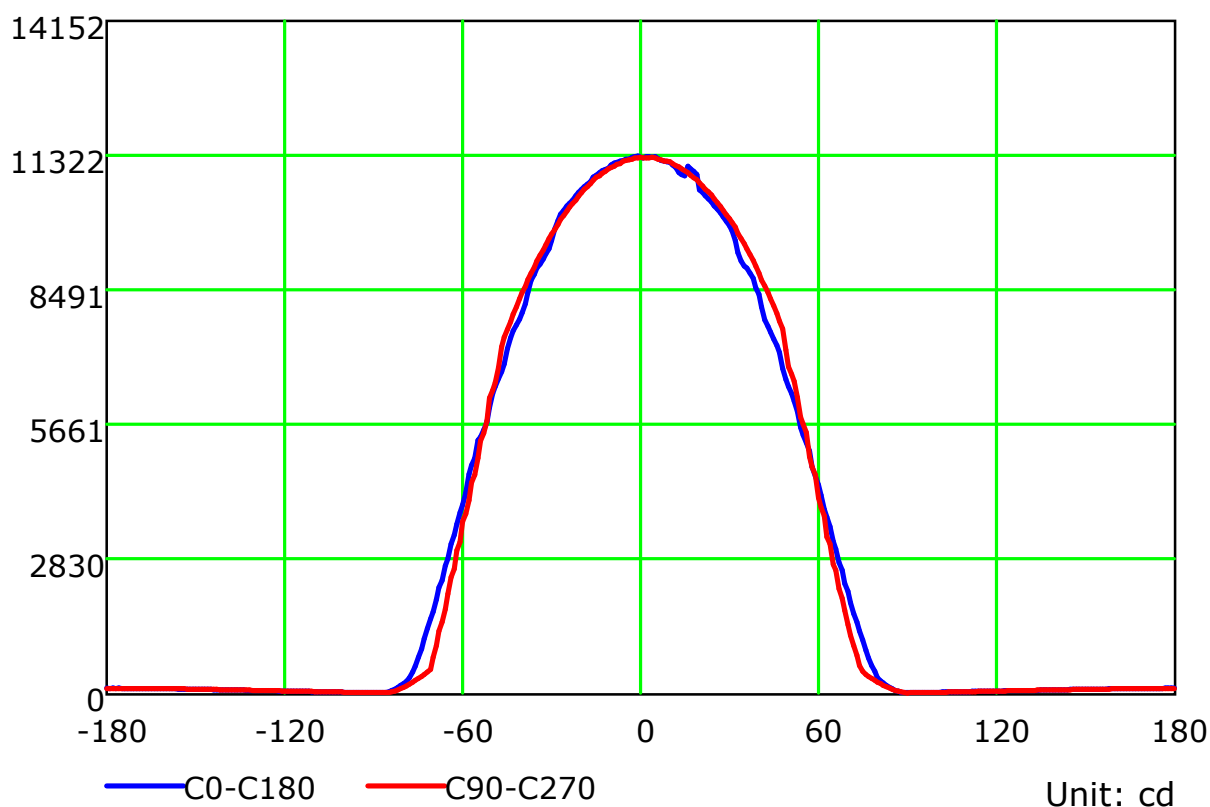
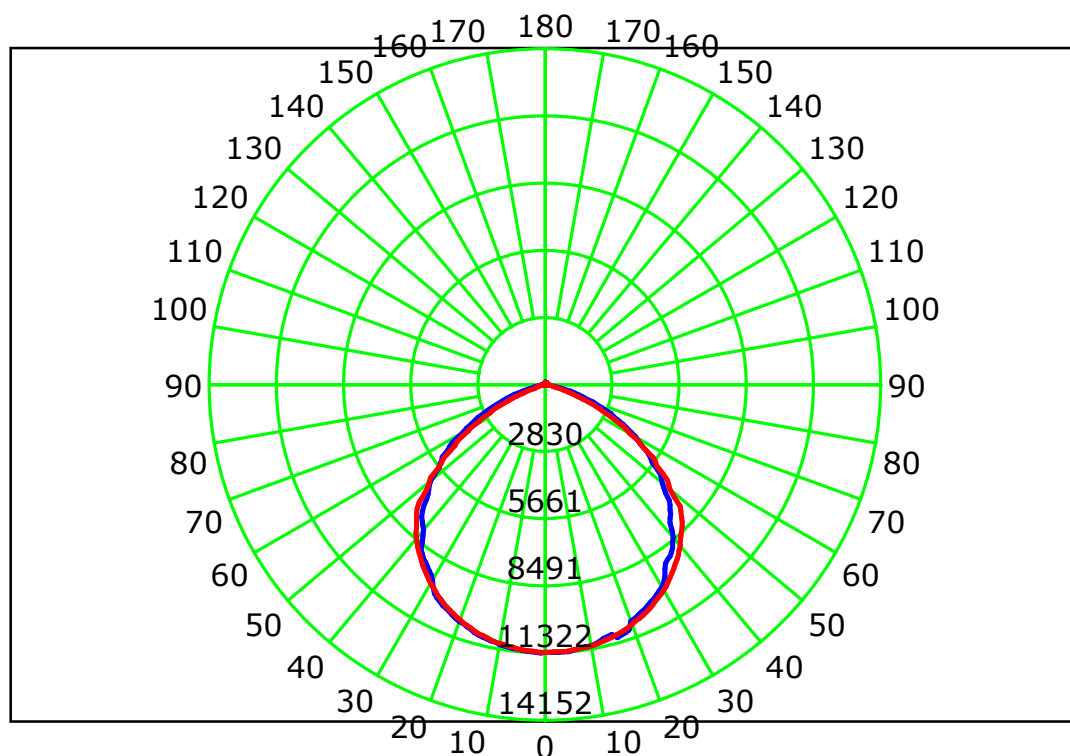
Average Diffuse Angle(50%): 106.8°

— C0-C180 — C90-C270 — G1

C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

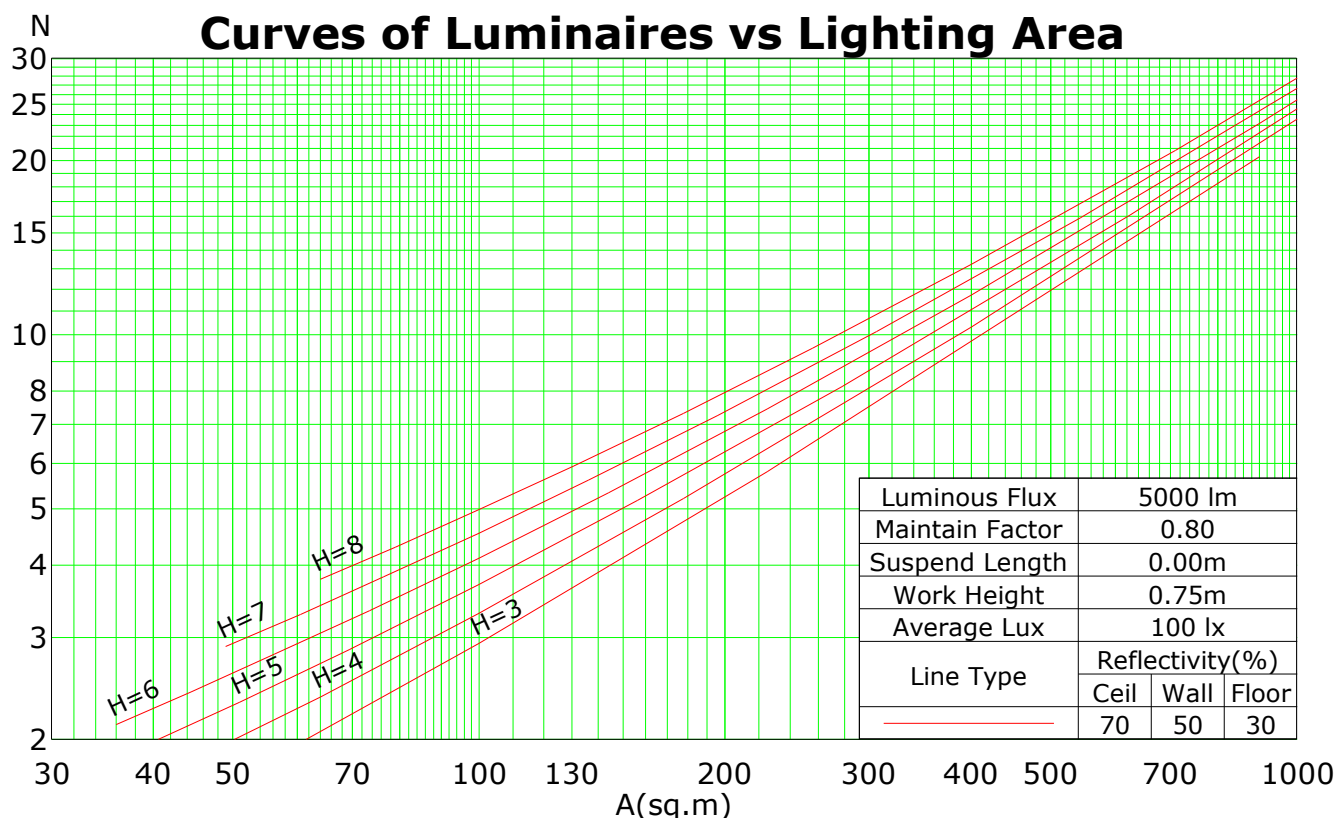
Coefficients Of Utilization - Zonal Cavity Method

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
RCR	RF = 0.2																	
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.16	1.10	1.10	1.10	1.06	1.06	1.06	1.01	1.01	1.01	0.99
1	1.10	1.06	1.02	0.99	1.07	1.04	1.00	0.97	0.99	0.97	0.94	0.95	0.93	0.91	0.91	0.90	0.88	0.86
2	1.01	0.94	0.88	0.83	0.98	0.92	0.86	0.81	0.88	0.83	0.79	0.85	0.81	0.77	0.82	0.78	0.76	0.74
3	0.93	0.83	0.76	0.70	0.90	0.81	0.75	0.69	0.78	0.72	0.68	0.75	0.71	0.66	0.73	0.69	0.65	0.63
4	0.85	0.74	0.66	0.60	0.83	0.73	0.65	0.59	0.70	0.63	0.58	0.68	0.62	0.57	0.65	0.61	0.56	0.54
5	0.78	0.66	0.58	0.52	0.76	0.65	0.57	0.51	0.63	0.56	0.51	0.61	0.55	0.50	0.59	0.54	0.49	0.47
6	0.73	0.60	0.51	0.45	0.71	0.59	0.51	0.45	0.57	0.50	0.45	0.55	0.49	0.44	0.54	0.48	0.44	0.42
7	0.67	0.54	0.46	0.40	0.66	0.54	0.46	0.40	0.52	0.45	0.40	0.50	0.44	0.39	0.49	0.43	0.39	0.37
8	0.63	0.50	0.41	0.36	0.61	0.49	0.41	0.36	0.48	0.40	0.35	0.46	0.40	0.35	0.45	0.39	0.35	0.33
9	0.59	0.46	0.38	0.32	0.57	0.45	0.37	0.32	0.44	0.37	0.32	0.43	0.36	0.32	0.42	0.36	0.31	0.30
10	0.55	0.42	0.34	0.29	0.54	0.42	0.34	0.29	0.40	0.34	0.29	0.39	0.33	0.29	0.39	0.33	0.29	0.27

Spacing Criteria (0-180): 1.26

Spacing Criteria (90-270): 1.29

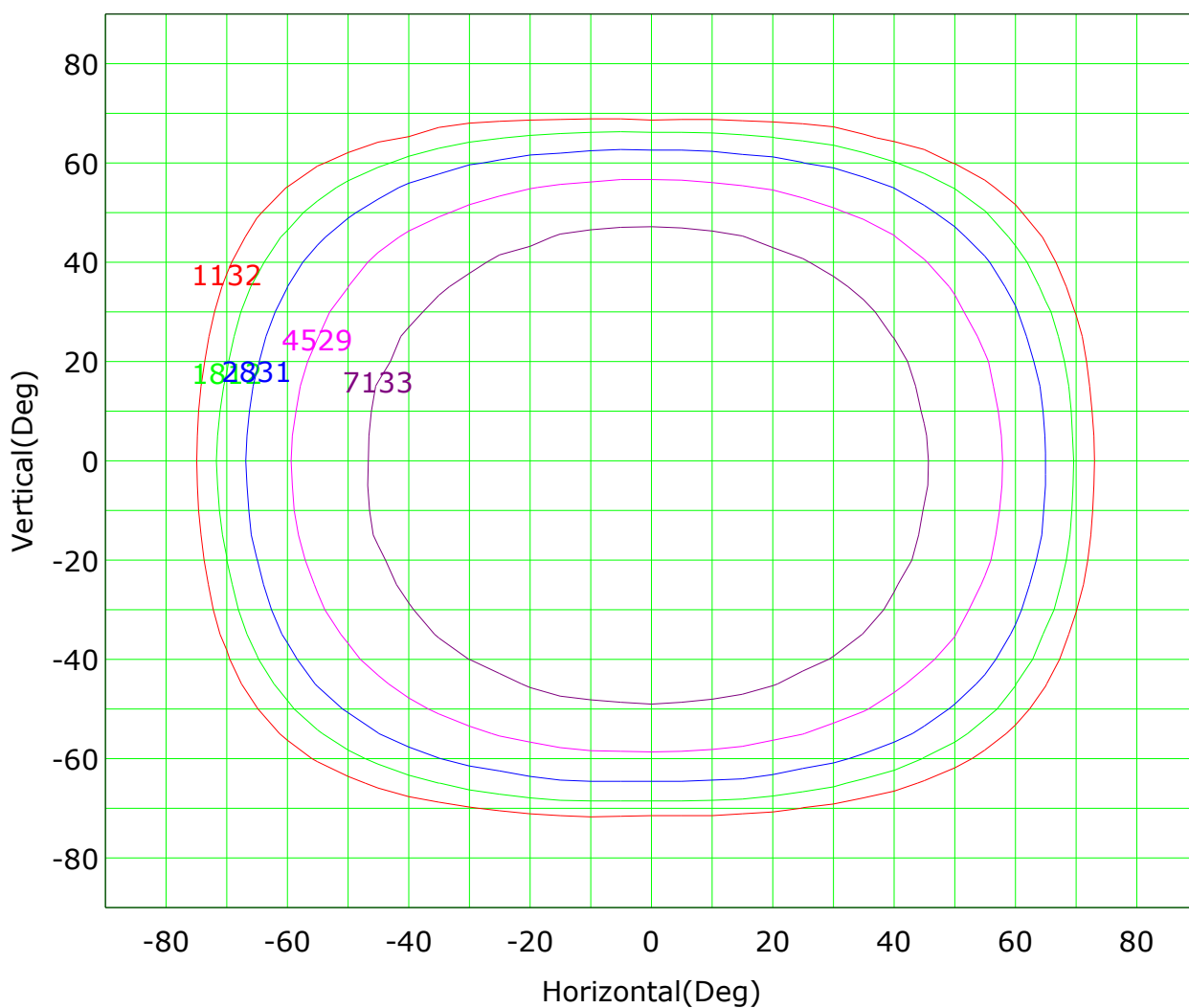
Spacing Criteria (Diagonal): 1.39



C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

Isocandela (rectangle)



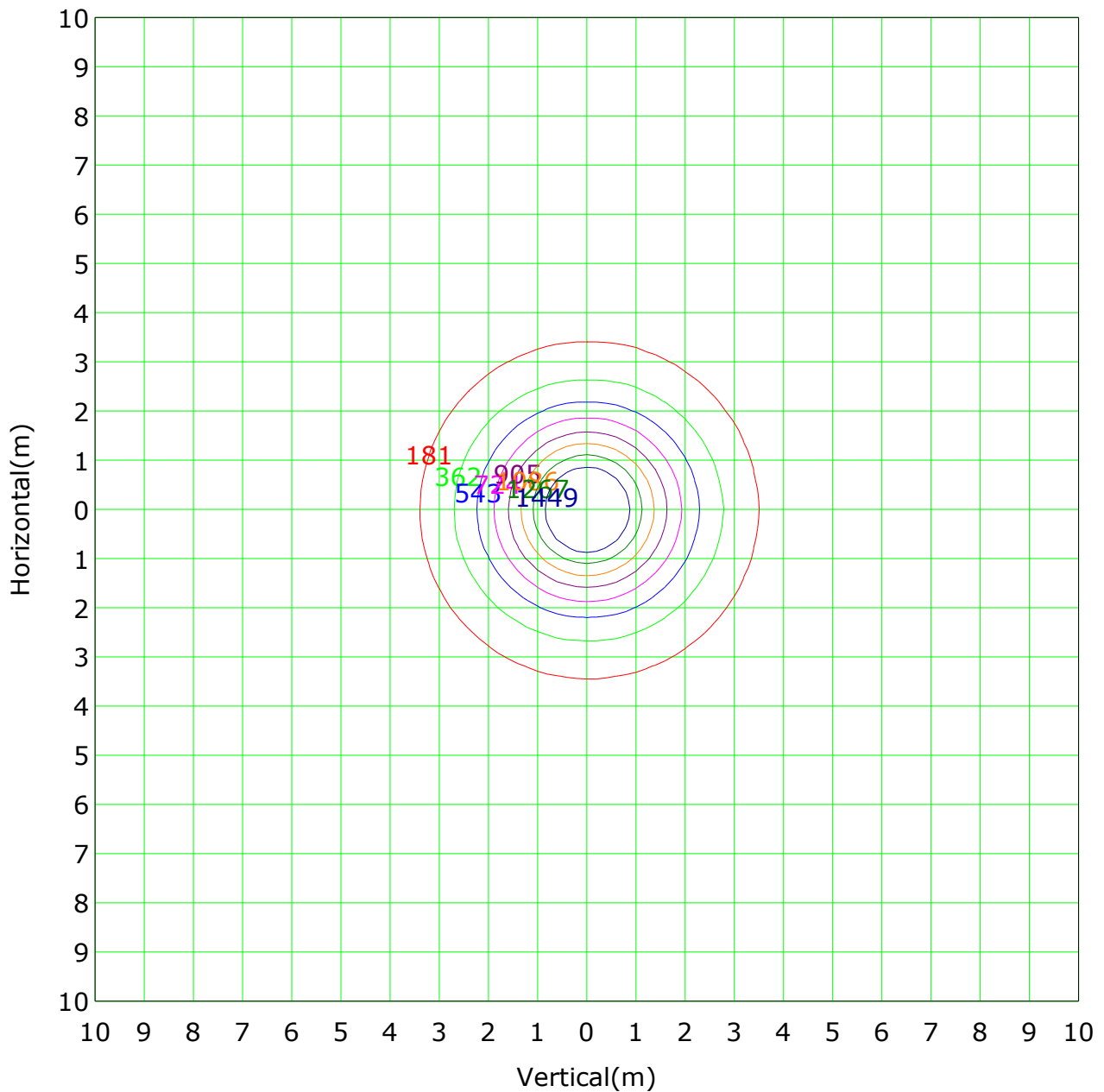
Imax (100%): 11322 cd

(10%): 1132 cd	(16%): 1812 cd
(25%): 2831 cd	(40%): 4529 cd
(63%): 7133 cd	(100%): 11322 cd

C Plane (°):0.0-360.0: 90.0
Test Lab: Inventfine instrument
Test Type: TYPE C
Temperature: 26
Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.607 m [K=1.0000]
Humidity: 65
Inspector:

IsoLux Plot



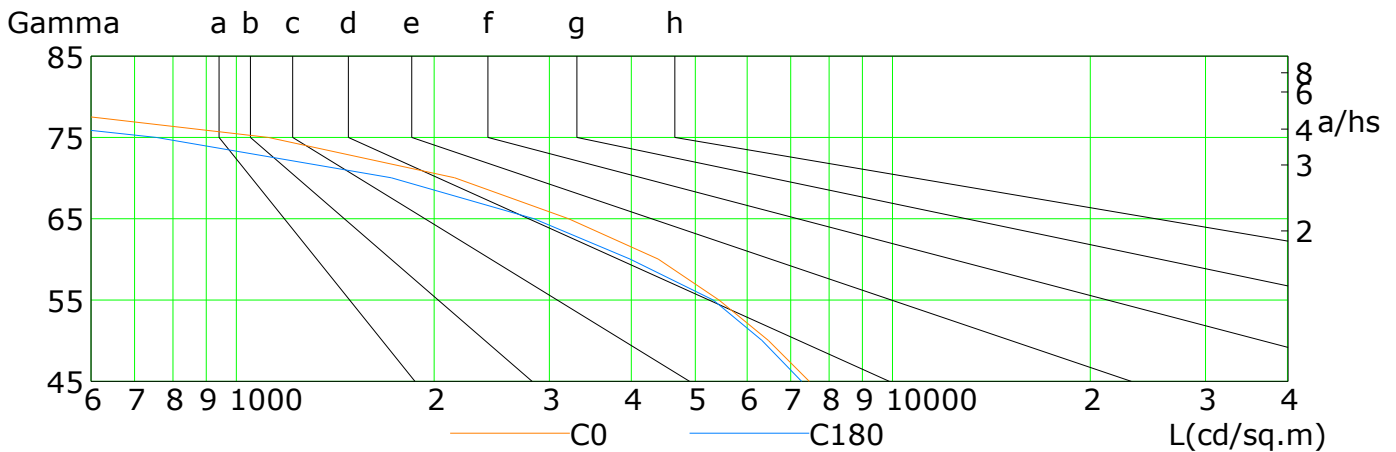
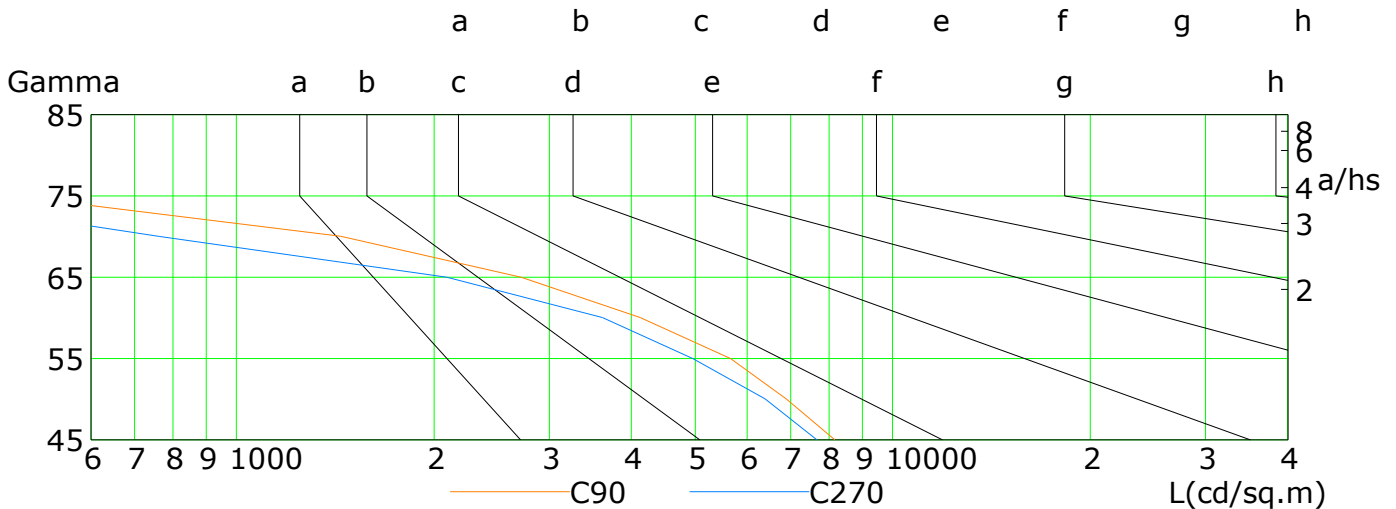
Mounting Height: 2.5m Max Lux(100%): 1810.7 lx	
(10%): 181.1 lx	(20%): 362.1 lx
(30%): 543.2 lx	(40%): 724.3 lx
(50%): 905.3 lx	(60%): 1086.4 lx
(70%): 1267.5 lx	(80%): 1448.6 lx

C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

Lum Limit Curve

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

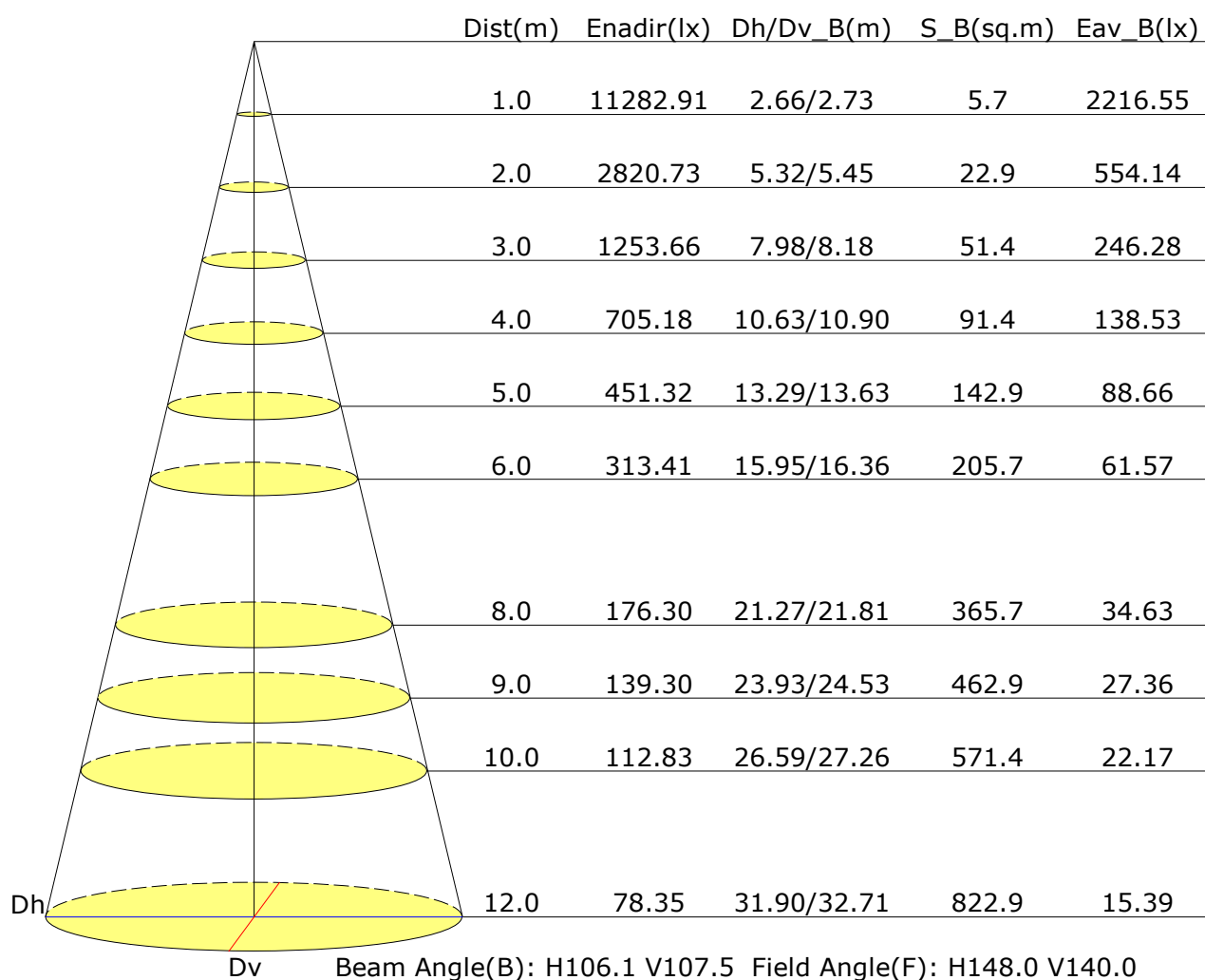


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	7464	6468	5439	4389	3208	2153	1119	330	95
C90	8163	6884	5668	4123	2718	1442	462	238	85
C180	7262	6321	5329	3976	2841	1722	756	207	36
C270	7668	6388	4959	3614	2095	760	315	123	22

C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

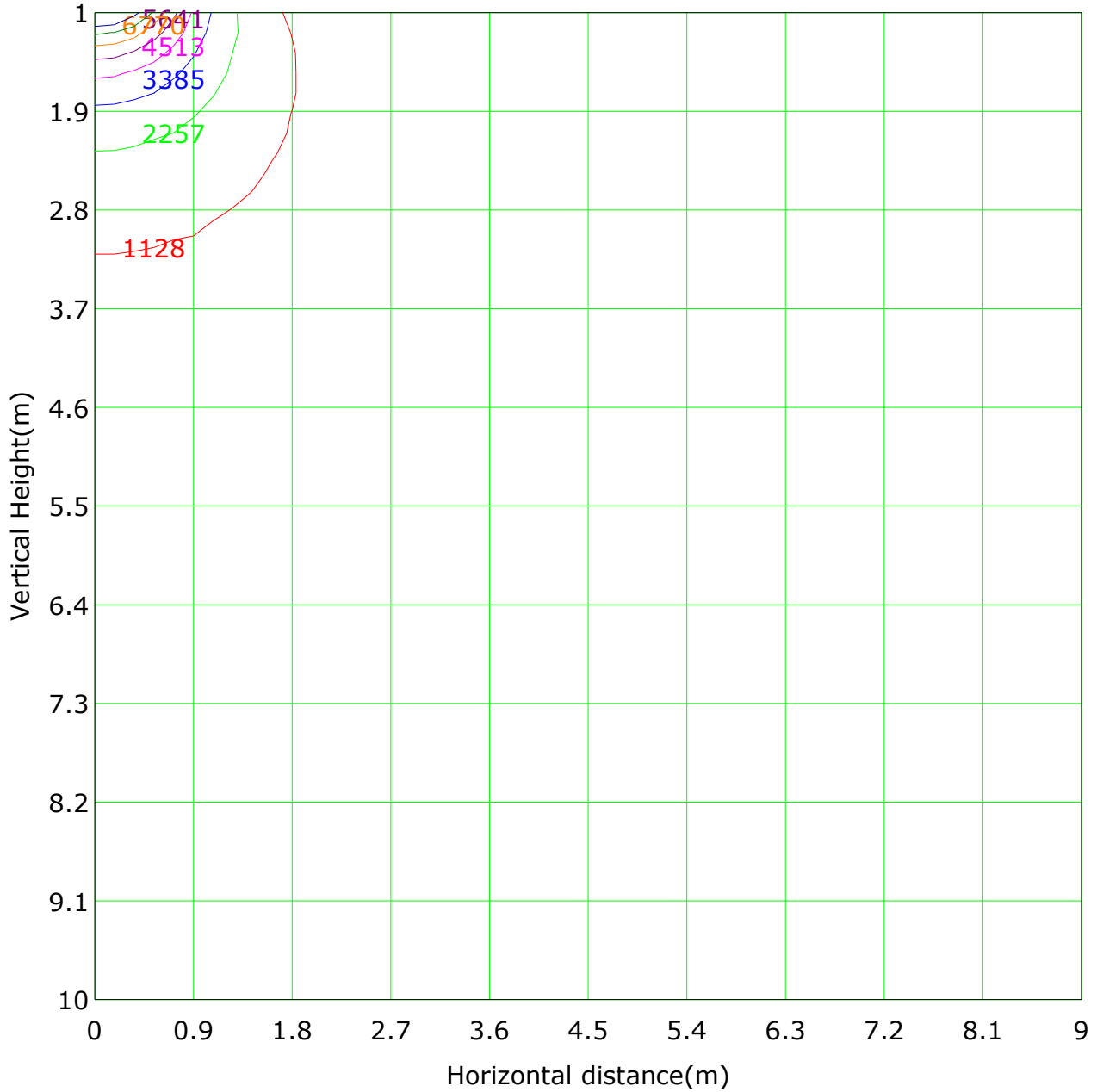
Illuminance at a Distance



C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 10.0m Max Lux: 11282.9 lx

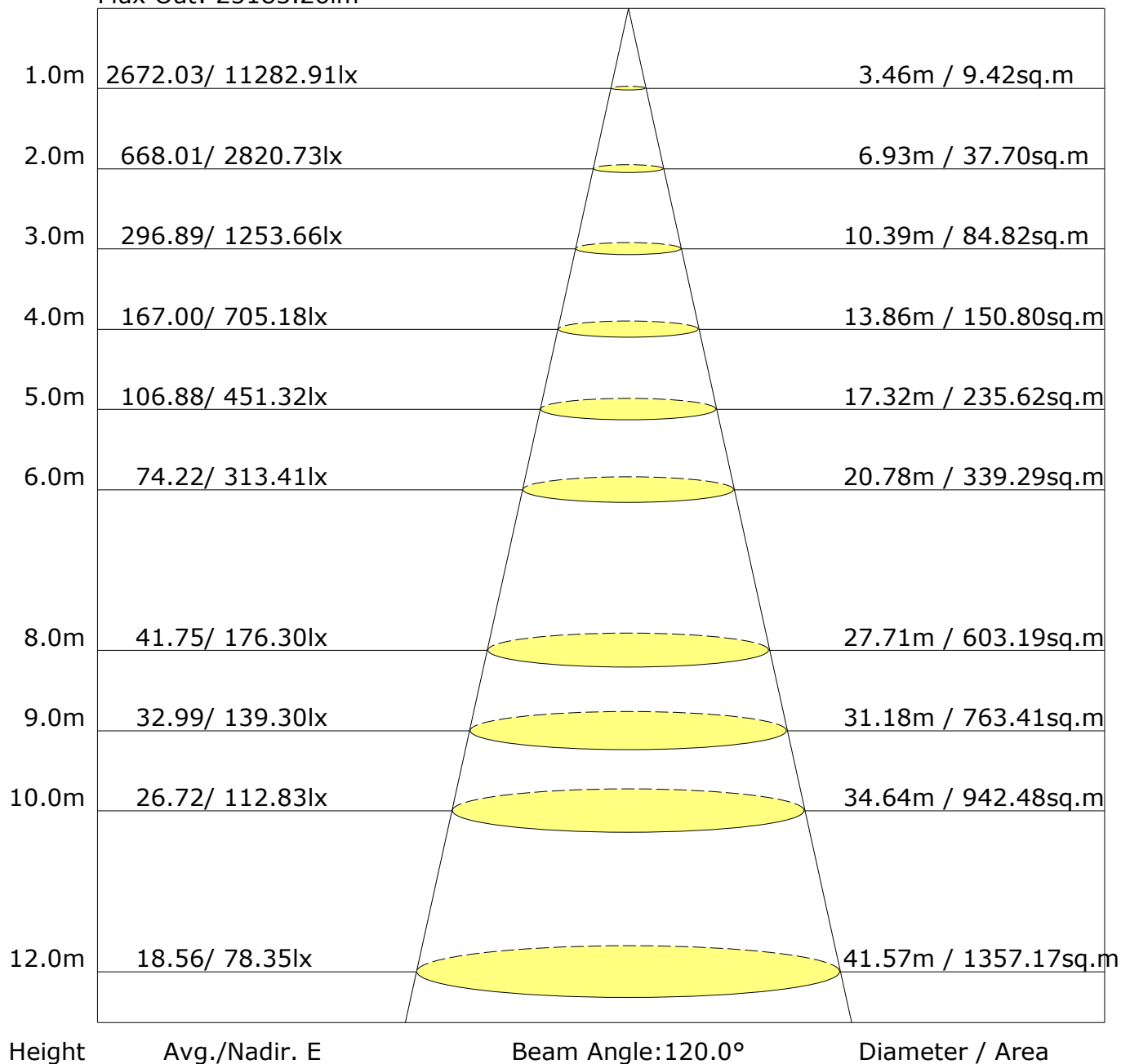
(10%):1128.3 lx	(20%):2256.6 lx
(30%):3384.9 lx	(40%):4513.2 lx
(50%):5641.5 lx	(60%):6769.7 lx
(70%):7898.0 lx	(80%):9026.3 lx

C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

The Average Illuminance Effective Figure

Flux Out: 25183.26lm



C Plane (°): 0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°): 0.0-180.0: 1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

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 29107lm ($8\log(F/F_0) = 11.7$).

C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	11285.2	10.8	10.8	0.04	0.04
1.0-2.0	11285.8	32.4	43.2	0.11	0.15
2.0-3.0	11281.4	54.0	97.2	0.19	0.33
3.0-4.0	11272.0	75.5	172.6	0.26	0.59
4.0-5.0	11264.8	96.9	269.5	0.33	0.93
5.0-6.0	11248.4	118.2	387.8	0.41	1.33
6.0-7.0	11220.1	139.3	527.1	0.48	1.81
7.0-8.0	11196.9	160.3	687.3	0.55	2.36
8.0-9.0	11175.9	181.1	868.5	0.62	2.98
9.0-10.0	11152.2	201.8	1070.3	0.69	3.68
10.0-11.0	11116.3	222.1	1292.5	0.76	4.44
11.0-12.0	11073.0	242.1	1534.6	0.83	5.27
12.0-13.0	11026.6	261.7	1796.3	0.90	6.17
13.0-14.0	10980.7	281.1	2077.4	0.97	7.14
14.0-15.0	10940.6	300.4	2377.8	1.03	8.17
15.0-16.0	10926.3	320.2	2698.0	1.10	9.27
16.0-17.0	10899.2	339.5	3037.4	1.17	10.44
17.0-18.0	10840.2	357.5	3394.9	1.23	11.66
18.0-19.0	10784.4	375.3	3770.2	1.29	12.95
19.0-20.0	10690.9	391.3	4161.5	1.34	14.30
20.0-21.0	10593.5	406.8	4568.3	1.40	15.69
21.0-22.0	10526.0	423.1	4991.4	1.45	17.15
22.0-23.0	10456.0	438.8	5430.2	1.51	18.66
23.0-24.0	10385.3	454.1	5884.3	1.56	20.22
24.0-25.0	10312.5	469.0	6353.3	1.61	21.83
25.0-26.0	10231.4	483.0	6836.3	1.66	23.49
26.0-27.0	10148.3	496.6	7332.8	1.71	25.19
27.0-28.0	10057.5	509.3	7842.1	1.75	26.94
28.0-29.0	9949.5	520.6	8362.7	1.79	28.73
29.0-30.0	9826.2	530.6	8893.3	1.82	30.55
30.0-31.0	9702.9	540.0	9433.4	1.86	32.41
31.0-32.0	9577.9	548.8	9982.2	1.89	34.29
32.0-33.0	9435.3	555.9	10538.1	1.91	36.20
33.0-34.0	9296.5	562.7	11100.8	1.93	38.14
34.0-35.0	9181.0	570.3	11671.0	1.96	40.10
35.0-36.0	9077.6	578.1	12249.1	1.99	42.08

C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

Zonal Lumen (Continue 1)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	8968.4	585.0	12834.1	2.01	44.09
37.0-38.0	8832.7	589.6	13423.7	2.03	46.12
38.0-39.0	8665.3	591.5	14015.3	2.03	48.15
39.0-40.0	8501.2	593.0	14608.3	2.04	50.19
40.0-41.0	8340.8	594.0	15202.3	2.04	52.23
41.0-42.0	8169.2	593.6	15795.9	2.04	54.27
42.0-43.0	8015.2	593.8	16389.7	2.04	56.31
43.0-44.0	7877.1	594.6	16984.3	2.04	58.35
44.0-45.0	7723.2	593.6	17577.9	2.04	60.39
45.0-46.0	7539.8	589.7	18167.7	2.03	62.42
46.0-47.0	7356.2	585.2	18752.8	2.01	64.43
47.0-48.0	7134.5	576.8	19329.6	1.98	66.41
48.0-49.0	6856.1	563.1	19892.7	1.93	68.34
49.0-50.0	6615.3	551.6	20444.4	1.90	70.24
50.0-51.0	6416.8	543.0	20987.3	1.87	72.10
51.0-52.0	6179.1	530.3	21517.6	1.82	73.93
52.0-53.0	5918.6	514.9	22032.5	1.77	75.70
53.0-54.0	5663.5	499.2	22531.8	1.72	77.41
54.0-55.0	5439.3	485.6	23017.4	1.67	79.08
55.0-56.0	5216.4	471.4	23488.8	1.62	80.70
56.0-57.0	4958.7	453.4	23942.3	1.56	82.26
57.0-58.0	4693.7	434.1	24376.4	1.49	83.75
58.0-59.0	4425.0	413.7	24790.1	1.42	85.17
59.0-60.0	4160.8	393.1	25183.3	1.35	86.52
60.0-61.0	3899.1	372.1	25555.4	1.28	87.80
61.0-62.0	3660.8	352.8	25908.2	1.21	89.01
62.0-63.0	3394.9	330.2	26238.4	1.13	90.14
63.0-64.0	3151.4	309.3	26547.7	1.06	91.21
64.0-65.0	2888.6	285.9	26833.6	0.98	92.19
65.0-66.0	2618.0	261.2	27094.9	0.90	93.09
66.0-67.0	2365.8	237.9	27332.8	0.82	93.90
67.0-68.0	2123.5	215.1	27547.9	0.74	94.64
68.0-69.0	1897.1	193.6	27741.5	0.67	95.31
69.0-70.0	1638.8	168.3	27909.8	0.58	95.89
70.0-71.0	1410.8	145.8	28055.7	0.50	96.39
71.0-72.0	1214.0	126.3	28181.9	0.43	96.82

C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

Zonal Lumen (Continue 2)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	1044.8	109.3	28291.2	0.38	97.20
73.0-74.0	880.7	92.6	28383.8	0.32	97.52
74.0-75.0	730.3	77.2	28461.0	0.27	97.78
75.0-76.0	601.9	63.9	28524.9	0.22	98.00
76.0-77.0	493.5	52.6	28577.5	0.18	98.18
77.0-78.0	400.1	42.8	28620.3	0.15	98.33
78.0-79.0	320.3	34.4	28654.7	0.12	98.45
79.0-80.0	255.7	27.6	28682.3	0.09	98.54
80.0-81.0	203.1	22.0	28704.3	0.08	98.62
81.0-82.0	163.5	17.7	28722.0	0.06	98.68
82.0-83.0	128.6	14.0	28736.0	0.05	98.73
83.0-84.0	97.7	10.6	28746.6	0.04	98.76
84.0-85.0	71.7	7.8	28754.5	0.03	98.79
85.0-86.0	50.7	5.5	28760.0	0.02	98.81
86.0-87.0	35.5	3.9	28763.9	0.01	98.82
87.0-88.0	25.0	2.7	28766.6	0.01	98.83
88.0-89.0	18.5	2.0	28768.7	0.01	98.84
89.0-90.0	15.7	1.7	28770.4	0.01	98.84
90.0-91.0	15.8	1.7	28772.1	0.01	98.85
91.0-92.0	16.6	1.8	28773.9	0.01	98.86
92.0-93.0	17.6	1.9	28775.9	0.01	98.86
93.0-94.0	18.6	2.0	28777.9	0.01	98.87
94.0-95.0	19.5	2.1	28780.0	0.01	98.88
95.0-96.0	20.4	2.2	28782.3	0.01	98.88
96.0-97.0	21.4	2.3	28784.6	0.01	98.89
97.0-98.0	22.6	2.5	28787.1	0.01	98.90
98.0-99.0	23.9	2.6	28789.6	0.01	98.91
99.0-100.0	24.9	2.7	28792.3	0.01	98.92
100.0-101.0	26.0	2.8	28795.1	0.01	98.93
101.0-102.0	27.3	2.9	28798.1	0.01	98.94
102.0-103.0	28.4	3.0	28801.1	0.01	98.95
103.0-104.0	29.5	3.1	28804.3	0.01	98.96
104.0-105.0	30.9	3.3	28807.5	0.01	98.97
105.0-106.0	32.3	3.4	28811.0	0.01	98.98
106.0-107.0	33.6	3.5	28814.5	0.01	99.00
107.0-108.0	35.0	3.7	28818.2	0.01	99.01

C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

Zonal Lumen (Continue 3)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	36.2	3.8	28821.9	0.01	99.02
109.0-110.0	37.3	3.9	28825.8	0.01	99.03
110.0-111.0	38.7	4.0	28829.7	0.01	99.05
111.0-112.0	39.9	4.1	28833.8	0.01	99.06
112.0-113.0	41.2	4.2	28838.0	0.01	99.08
113.0-114.0	42.7	4.3	28842.3	0.01	99.09
114.0-115.0	43.9	4.4	28846.7	0.02	99.11
115.0-116.0	45.1	4.5	28851.1	0.02	99.12
116.0-117.0	46.3	4.5	28855.7	0.02	99.14
117.0-118.0	47.6	4.6	28860.3	0.02	99.15
118.0-119.0	49.0	4.7	28865.0	0.02	99.17
119.0-120.0	50.5	4.8	28869.8	0.02	99.19
120.0-121.0	51.8	4.9	28874.7	0.02	99.20
121.0-122.0	52.9	5.0	28879.7	0.02	99.22
122.0-123.0	54.2	5.0	28884.7	0.02	99.24
123.0-124.0	55.4	5.1	28889.8	0.02	99.25
124.0-125.0	56.9	5.1	28894.9	0.02	99.27
125.0-126.0	58.1	5.2	28900.1	0.02	99.29
126.0-127.0	59.1	5.2	28905.3	0.02	99.31
127.0-128.0	60.3	5.2	28910.5	0.02	99.33
128.0-129.0	61.4	5.3	28915.8	0.02	99.34
129.0-130.0	62.6	5.3	28921.1	0.02	99.36
130.0-131.0	63.8	5.3	28926.4	0.02	99.38
131.0-132.0	65.1	5.3	28931.8	0.02	99.40
132.0-133.0	66.4	5.4	28937.2	0.02	99.42
133.0-134.0	67.6	5.4	28942.5	0.02	99.44
134.0-135.0	68.7	5.4	28947.9	0.02	99.45
135.0-136.0	69.7	5.4	28953.3	0.02	99.47
136.0-137.0	70.8	5.3	28958.6	0.02	99.49
137.0-138.0	72.1	5.3	28964.0	0.02	99.51
138.0-139.0	73.7	5.4	28969.3	0.02	99.53
139.0-140.0	75.0	5.3	28974.6	0.02	99.55
140.0-141.0	76.0	5.3	28979.9	0.02	99.56
141.0-142.0	77.1	5.3	28985.2	0.02	99.58
142.0-143.0	78.3	5.2	28990.4	0.02	99.60
143.0-144.0	79.4	5.2	28995.6	0.02	99.62

C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

Zonal Lumen (Continue 4)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	80.9	5.2	29000.8	0.02	99.64
145.0-146.0	82.5	5.1	29005.9	0.02	99.65
146.0-147.0	83.8	5.1	29011.0	0.02	99.67
147.0-148.0	84.6	5.0	29015.9	0.02	99.69
148.0-149.0	85.2	4.9	29020.8	0.02	99.70
149.0-150.0	86.3	4.8	29025.6	0.02	99.72
150.0-151.0	87.4	4.7	29030.3	0.02	99.74
151.0-152.0	88.7	4.6	29035.0	0.02	99.75
152.0-153.0	89.9	4.6	29039.5	0.02	99.77
153.0-154.0	90.9	4.4	29044.0	0.02	99.78
154.0-155.0	92.0	4.3	29048.3	0.01	99.80
155.0-156.0	93.2	4.2	29052.6	0.01	99.81
156.0-157.0	94.2	4.1	29056.7	0.01	99.83
157.0-158.0	95.3	4.0	29060.7	0.01	99.84
158.0-159.0	96.0	3.9	29064.5	0.01	99.85
159.0-160.0	96.7	3.7	29068.3	0.01	99.87
160.0-161.0	97.6	3.6	29071.8	0.01	99.88
161.0-162.0	98.6	3.4	29075.3	0.01	99.89
162.0-163.0	99.6	3.3	29078.5	0.01	99.90
163.0-164.0	100.4	3.1	29081.7	0.01	99.91
164.0-165.0	101.0	3.0	29084.6	0.01	99.92
165.0-166.0	101.4	2.8	29087.4	0.01	99.93
166.0-167.0	102.1	2.6	29090.0	0.01	99.94
167.0-168.0	103.1	2.4	29092.5	0.01	99.95
168.0-169.0	104.0	2.3	29094.7	0.01	99.96
169.0-170.0	104.4	2.1	29096.8	0.01	99.97
170.0-171.0	104.8	1.9	29098.7	0.01	99.97
171.0-172.0	105.2	1.7	29100.4	0.01	99.98
172.0-173.0	105.6	1.5	29101.9	0.01	99.98
173.0-174.0	106.0	1.3	29103.3	0.00	99.99
174.0-175.0	106.3	1.1	29104.4	0.00	99.99
175.0-176.0	106.7	0.9	29105.3	0.00	99.99
176.0-177.0	107.0	0.7	29106.0	0.00	100.00
177.0-178.0	107.3	0.5	29106.5	0.00	100.00
178.0-179.0	107.4	0.3	29106.8	0.00	100.00
179.0-180.0	107.5	0.1	29106.9	0.00	100.00

C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

Zonal Lumen (Continue 5)

cone flux(90°): 17577.93 lm

%lum = 60.4%

%lamp = 60.4%

cone flux(120°): 25183.27 lm

%lum = 86.5%

%lamp = 86.5%

Candlepower Table

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G0.0	11282.9	11282.9	11282.9	11282.9	11282.9					
G1.0	11277.0	11277.5	11322.0	11273.1	11277.0					
G2.0	11299.4	11268.9	11296.4	11271.9	11299.4					
G3.0	11305.8	11277.2	11281.7	11249.5	11305.8					
G4.0	11285.6	11290.7	11253.2	11232.4	11285.6					
G5.0	11304.1	11275.4	11252.3	11224.4	11304.1					
G6.0	11260.9	11246.8	11215.0	11208.5	11260.9					
G7.0	11224.7	11237.5	11207.3	11160.1	11224.7					
G8.0	11212.3	11211.8	11182.3	11138.9	11212.3					
G9.0	11189.4	11206.1	11161.4	11104.9	11189.4					
G10.0	11175.8	11190.6	11122.9	11066.3	11175.8					
G11.0	11127.3	11150.6	11054.1	11042.5	11127.3					
G12.0	11070.8	11115.6	11026.4	10996.8	11070.8					
G13.0	10962.3	11087.9	11005.0	10948.1	10962.3					
G14.0	10923.2	11050.5	10965.2	10903.6	10923.2					
G15.0	10897.3	11006.3	10913.8	10865.3	10897.3					
G16.0	11099.7	10958.8	10866.1	10803.5	11099.7					
G17.0	11040.5	10914.9	10774.1	10736.3	11040.5					
G18.0	10996.1	10859.6	10726.4	10673.6	10996.1					
G19.0	10925.2	10817.2	10662.6	10614.7	10925.2					
G20.0	10599.3	10748.5	10617.0	10542.4	10599.3					
G21.0	10546.1	10678.3	10546.1	10469.8	10546.1					
G22.0	10476.1	10620.7	10485.2	10385.9	10476.1					
G23.0	10414.6	10566.3	10383.4	10316.0	10414.6					
G24.0	10342.9	10496.7	10322.9	10239.8	10342.9					
G25.0	10264.9	10417.3	10263.2	10152.0	10264.9					
G26.0	10192.3	10336.9	10163.4	10061.5	10192.3					
G27.0	10120.8	10247.6	10085.5	9978.2	10120.8					
G28.0	10031.7	10165.5	9959.0	9872.1	10031.7					
G29.0	9942.8	10081.2	9777.2	9766.1	9942.8					
G30.0	9844.9	9999.4	9529.6	9668.1	9844.9					
G31.0	9733.4	9907.4	9367.2	9572.8	9733.4					
G32.0	9533.4	9813.0	9250.5	9445.3	9533.4					
G33.0	9276.0	9689.0	9143.7	9331.5	9276.0					
G34.0	9103.1	9573.1	9032.8	9222.5	9103.1					
G35.0	8996.3	9468.6	8952.5	9099.1	8996.3					
G36.0	8955.7	9354.2	8818.1	8976.6	8955.7					

C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G37.0	8852.5	9237.7	8704.2	8848.2	8852.5					
G38.0	8740.7	9117.9	8445.1	8715.0	8740.7					
G39.0	8544.5	8992.2	8196.6	8570.4	8544.5					
G40.0	8401.0	8854.5	8007.2	8443.4	8401.0					
G41.0	8140.7	8703.9	7872.4	8303.6	8140.7					
G42.0	7862.1	8577.9	7757.7	8134.9	7862.1					
G43.0	7728.6	8443.1	7633.9	7983.1	7728.6					
G44.0	7606.3	8306.0	7487.1	7828.7	7606.3					
G45.0	7464.5	8162.7	7262.1	7668.0	7464.5					
G46.0	7323.0	7997.2	6940.3	7500.4	7323.0					
G47.0	7174.8	7842.7	6776.5	7294.6	7174.8					
G48.0	6842.7	7671.0	6626.2	6847.2	6842.7					
G49.0	6614.1	7236.1	6465.9	6545.5	6614.1					
G50.0	6468.3	6883.6	6320.9	6388.4	6468.3					
G51.0	6314.4	6722.3	6016.5	6219.9	6314.4					
G52.0	6157.9	6565.8	5706.7	5728.8	6157.9					
G53.0	5933.2	6230.6	5548.5	5477.0	5933.2					
G54.0	5594.4	5820.5	5393.2	5310.6	5594.4					
G55.0	5439.1	5668.5	5328.8	4959.4	5439.1					
G56.0	5279.4	5497.6	4956.7	4602.1	5279.4					
G57.0	5105.8	4986.3	4799.9	4442.0	5105.8					
G58.0	4762.9	4767.6	4615.8	4068.9	4762.9					
G59.0	4573.2	4609.6	4225.5	3776.2	4573.2					
G60.0	4389.0	4123.0	3976.1	3614.0	4389.0					
G61.0	4174.9	3919.6	3806.4	3190.1	4174.9					
G62.0	3880.2	3738.3	3562.2	3014.5	3880.2					
G63.0	3707.8	3301.0	3334.0	2621.1	3707.8					
G64.0	3507.5	3142.4	3151.0	2446.7	3507.5					
G65.0	3207.5	2717.9	2841.3	2094.5	3207.5					
G66.0	3042.8	2589.8	2683.4	1766.8	3042.8					
G67.0	2751.3	2206.5	2384.5	1501.3	2751.3					
G68.0	2593.1	2004.9	2236.9	1309.8	2593.1					
G69.0	2306.3	1742.6	1973.0	1010.5	2306.3					
G70.0	2153.0	1442.4	1722.4	760.2	2153.0					
G71.0	1907.2	1225.0	1568.0	508.4	1907.2					
G72.0	1678.3	1004.8	1371.2	449.3	1678.3					
G73.0	1502.4	804.4	1146.2	401.5	1502.4					

C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

Candlepower Table (Continue 2)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G74.0	1311.8	586.1	933.3	359.6	1311.8					
G75.0	1119.5	462.1	755.6	314.5	1119.5					
G76.0	911.8	402.3	578.8	270.3	911.8					
G77.0	749.5	354.6	448.9	231.8	749.5					
G78.0	580.6	316.9	328.8	189.7	580.6					
G79.0	462.1	280.5	250.0	154.1	462.1					
G80.0	330.0	238.4	207.4	123.1	330.0					
G81.0	261.5	203.1	165.3	96.2	261.5					
G82.0	216.8	169.7	125.6	69.9	216.8					
G83.0	173.8	135.6	88.2	49.0	173.8					
G84.0	132.9	109.0	59.7	33.5	132.9					
G85.0	95.0	85.1	36.5	21.5	95.0					
G86.0	65.0	64.2	23.2	15.2	65.0					
G87.0	43.5	43.6	15.3	14.0	43.5					
G88.0	26.8	27.8	15.0	14.3	26.8					
G89.0	17.1	15.5	15.9	15.5	17.1					
G90.0	15.3	13.1	16.5	16.7	15.3					
G91.0	16.2	13.7	17.7	17.0	16.2					
G92.0	16.8	14.3	18.5	18.2	16.8					
G93.0	18.2	16.1	19.4	19.1	18.2					
G94.0	19.1	16.7	20.3	20.0	19.1					
G95.0	20.0	17.0	21.8	20.9	20.0					
G96.0	20.9	18.5	22.6	21.8	20.9					
G97.0	22.1	19.4	23.2	23.0	22.1					
G98.0	23.2	20.9	24.4	24.5	23.2					
G99.0	24.1	22.1	25.9	26.0	24.1					
G100.0	25.0	23.0	26.5	26.6	25.0					
G101.0	26.5	24.5	27.9	27.8	26.5					
G102.0	27.7	25.7	29.1	29.3	27.7					
G103.0	28.8	26.9	30.0	29.9	28.8					
G104.0	29.7	28.1	31.2	31.4	29.7					
G105.0	31.5	29.6	32.4	33.5	31.5					
G106.0	32.6	30.8	33.8	34.3	32.6					
G107.0	34.1	32.6	35.0	35.8	34.1					
G108.0	35.3	34.0	36.2	37.0	35.3					
G109.0	36.5	35.2	37.1	37.9	36.5					
G110.0	37.4	36.1	38.8	39.7	37.4					

C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

Candlepower Table (Continue 3)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G111.0	39.1	37.6	39.7	40.9	39.1					
G112.0	40.6	38.5	40.9	41.5	40.6					
G113.0	41.8	40.3	42.4	43.6	41.8					
G114.0	42.6	42.1	43.8	44.8	42.6					
G115.0	44.1	43.0	44.7	46.0	44.1					
G116.0	45.3	44.5	45.6	47.2	45.3					
G117.0	46.8	45.4	47.1	48.4	46.8					
G118.0	47.9	47.2	48.2	49.9	47.9					
G119.0	48.8	48.7	50.0	51.1	48.8					
G120.0	50.9	50.5	51.2	52.9	50.9					
G121.0	51.8	51.4	52.1	53.8	51.8					
G122.0	53.2	53.2	53.2	55.0	53.2					
G123.0	54.7	53.8	54.1	56.5	54.7					
G124.0	55.6	55.3	55.9	57.7	55.6					
G125.0	57.7	56.8	57.7	58.8	57.7					
G126.0	57.4	58.3	57.9	60.3	57.4					
G127.0	59.1	58.8	59.4	61.5	59.1					
G128.0	60.0	60.3	60.3	62.7	60.0					
G129.0	61.2	61.8	61.2	63.3	61.2					
G130.0	62.7	63.0	62.4	65.4	62.7					
G131.0	63.8	63.9	63.5	66.0	63.8					
G132.0	64.7	65.4	65.6	67.8	64.7					
G133.0	66.2	66.6	66.8	68.4	66.2					
G134.0	67.4	67.8	67.7	70.2	67.4					
G135.0	68.2	68.4	68.8	71.4	68.2					
G136.0	69.7	69.6	69.4	72.3	69.7					
G137.0	70.9	70.8	70.3	73.5	70.9					
G138.0	72.1	72.3	72.1	75.0	72.1					
G139.0	74.7	73.2	73.5	76.5	74.7					
G140.0	75.3	74.1	74.4	78.0	75.3					
G141.0	76.5	75.3	75.6	78.9	76.5					
G142.0	76.8	77.1	76.2	80.7	76.8					
G143.0	77.9	78.3	77.7	81.5	77.9					
G144.0	79.4	79.5	77.9	83.0	79.4					
G145.0	81.2	80.4	81.5	84.2	81.2					
G146.0	82.1	81.5	83.2	85.7	82.1					
G147.0	82.9	83.0	85.0	86.6	82.9					

C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

Candlepower Table (Continue 4)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G148.0	84.4	83.6	83.2	87.5	84.4					
G149.0	84.4	84.5	84.4	89.6	84.4					
G150.0	85.3	85.7	85.9	90.2	85.3					
G151.0	86.8	86.6	86.8	92.0	86.8					
G152.0	87.7	88.4	88.2	92.9	87.7					
G153.0	88.8	89.6	89.1	94.1	88.8					
G154.0	89.7	90.5	90.6	94.7	89.7					
G155.0	91.2	92.0	92.1	95.3	91.2					
G156.0	92.4	92.9	93.2	96.2	92.4					
G157.0	93.5	93.5	94.7	97.4	93.5					
G158.0	94.7	94.1	95.9	98.3	94.7					
G159.0	94.7	94.7	96.8	98.9	94.7					
G160.0	95.6	95.6	98.0	99.5	95.6					
G161.0	96.2	96.8	99.1	100.4	96.2					
G162.0	98.0	97.1	100.3	101.0	98.0					
G163.0	98.8	98.0	101.5	101.9	98.8					
G164.0	99.7	99.2	101.5	102.5	99.7					
G165.0	99.7	100.1	102.1	103.1	99.7					
G166.0	100.3	100.1	102.9	103.4	100.3					
G167.0	100.9	101.0	104.1	103.9	100.9					
G168.0	102.9	102.8	104.4	104.5	102.9					
G169.0	103.5	103.4	105.3	104.8	103.5					
G170.0	104.1	103.7	105.3	105.1	104.1					
G171.0	105.0	103.9	105.6	105.4	105.0					
G172.0	104.7	104.2	106.8	105.7	104.7					
G173.0	105.3	104.8	107.1	105.7	105.3					
G174.0	106.8	105.7	106.5	106.3	106.8					
G175.0	107.4	105.1	106.5	106.3	107.4					
G176.0	107.6	105.7	108.2	106.6	107.6					
G177.0	107.9	106.3	107.1	106.6	107.9					
G178.0	107.9	106.0	108.5	107.8	107.9					
G179.0	108.2	106.3	107.6	106.6	108.2					
G180.0	108.5	106.3	109.1	107.5	108.5					

C Plane (°):0.0-360.0: 90.0
 Test Lab: Inventfine instrument
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.607 m [K=1.0000]
 Humidity: 65
 Inspector:

LED Average Luminance Report

Avg.L	cd/m ²
L 0-180(65) av	1.#J
L 0-180(75) av	1.#J
L 0-180(85) av	1.#J
L 90-270(65) av	1.#J
L 90-270(75) av	1.#J
L 90-270(85) av	1.#J
L 45(65) av	1.#J
L 45(75) av	1.#J
L 45(85) av	1.#J

Standard: GB/T 29293-2012

C Plane (°):0.0-360.0: 90.0
Test Lab: Inventfine instrument
Test Type: TYPE C
Temperature: 26
Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.607 m [K=1.0000]
Humidity: 65
Inspector: