

Report No.:

Test Time: 2024-04-15 09:47

Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: 4000K

Number of Lamps:

Luminous Length (mm): 300

Luminous Height (mm):

Current: 0.1020 A

Power Factor: 0.9350

Luminaire Description: RAVOLK2300A

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 300

Voltage: 231.30 V

Power: 22.07 W

Photometric Results

CIE Class: Direct

Measurement Flux: 2739 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H114.2

Vertical Diffuse Angle(50%): V109.1

Luminous Efficacy (lm/w): 124.11

Max. Intensity: 945.2 cd

S/MH(C0/C180): 1.25

Total Rated Lamp Lumens: 2739.0 lm

Efficiency: 100%

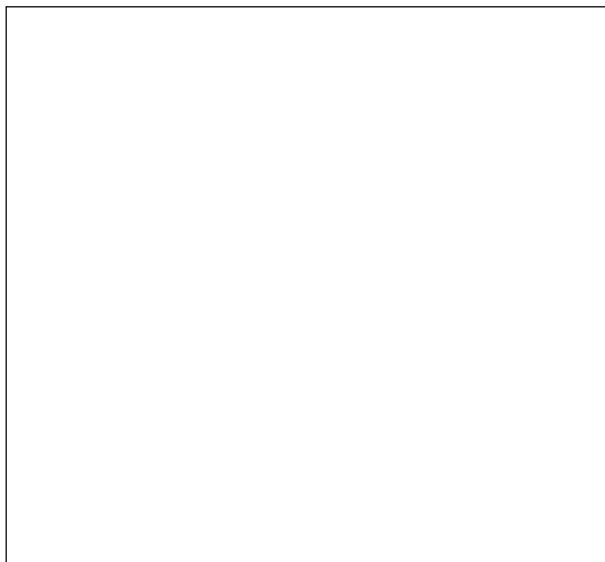
Upward Ratio: 0%

C0r0 Intensity: 943.3 cd

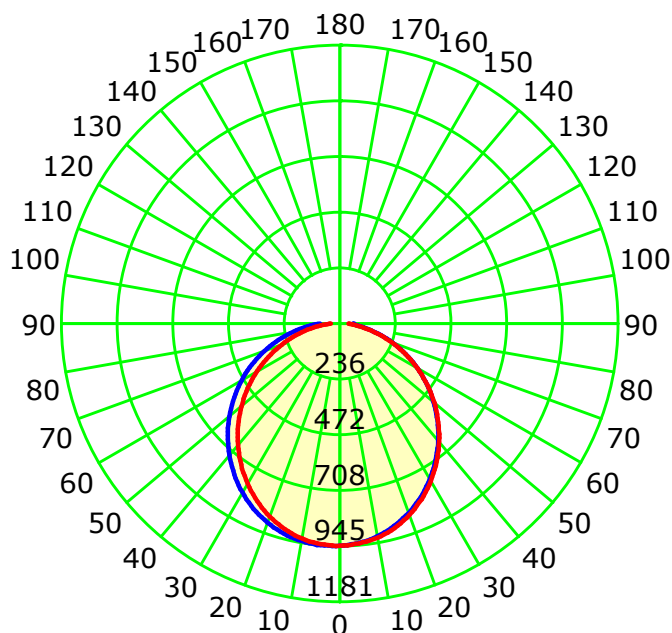
Pos of Max. Intensity: H180 V6

S/MH(C90/C270): 1.23

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 111.6°

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

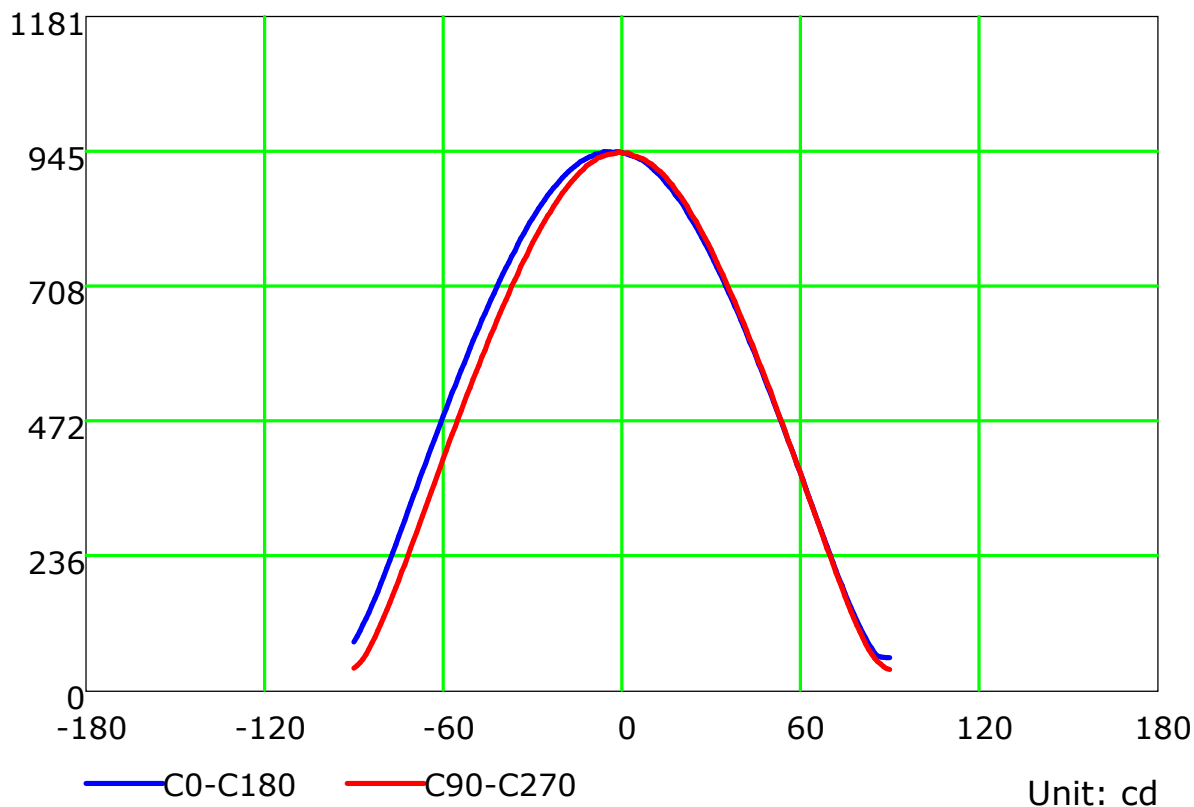
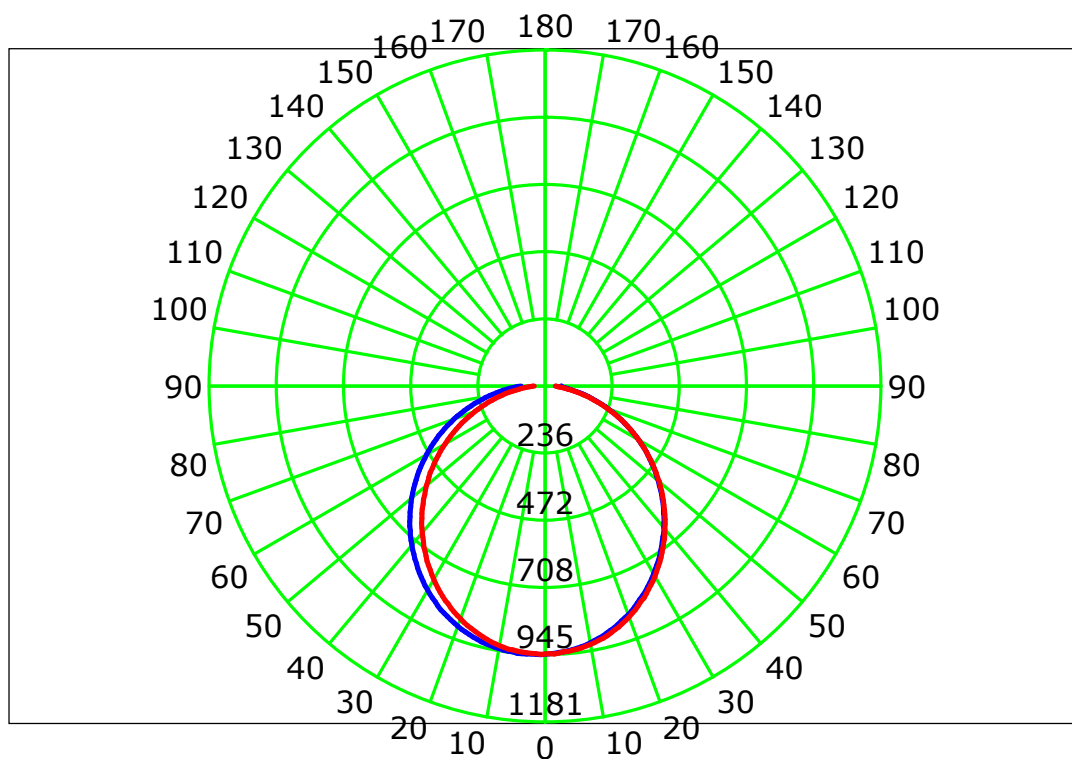
Distance: 7.172 m [K=1.0000]

Humidity:

Inspector:



Luminous Intensity Distribution Curve

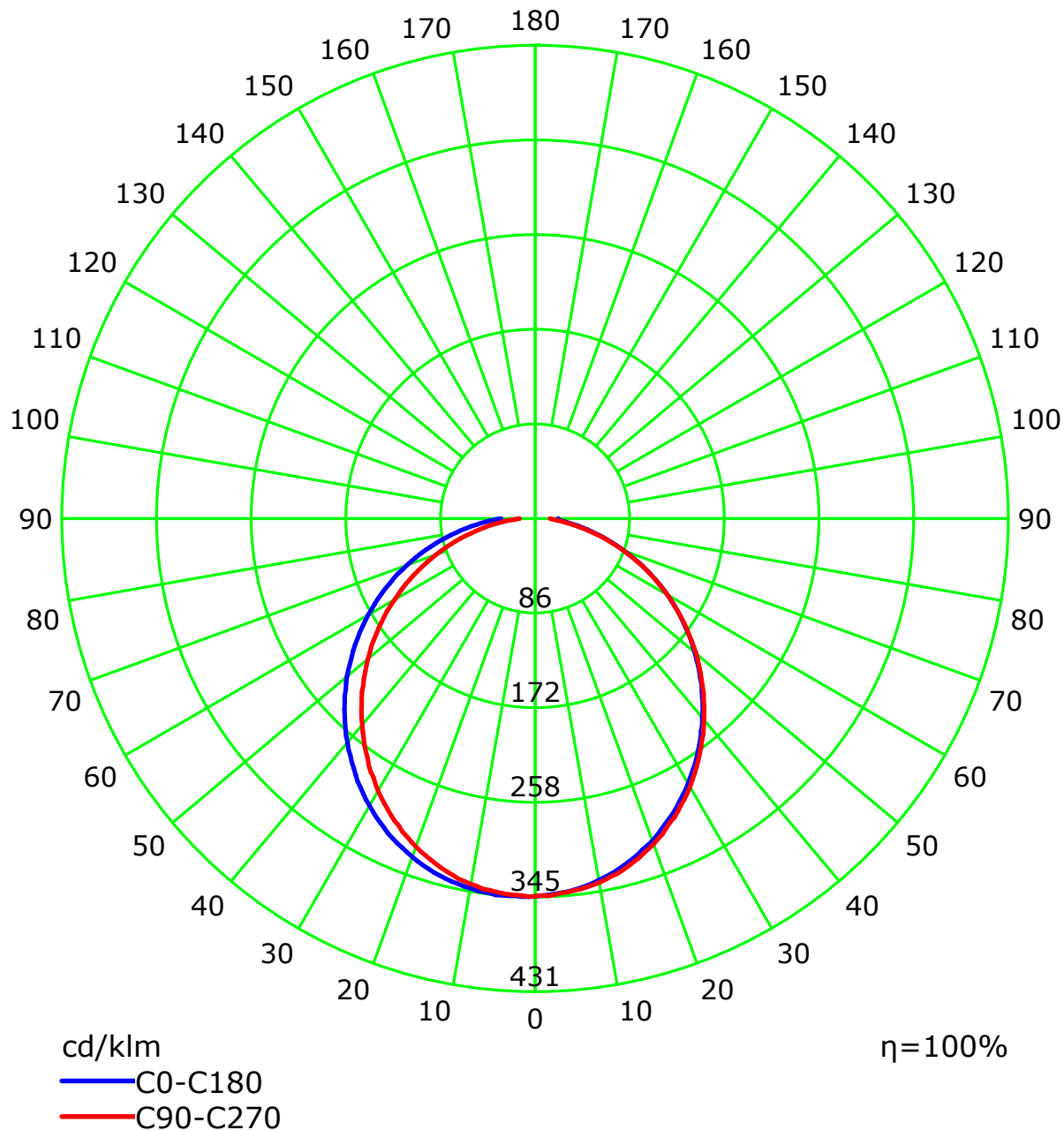


C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:



Luminous Intensity Distribution Curve(cd/klm)



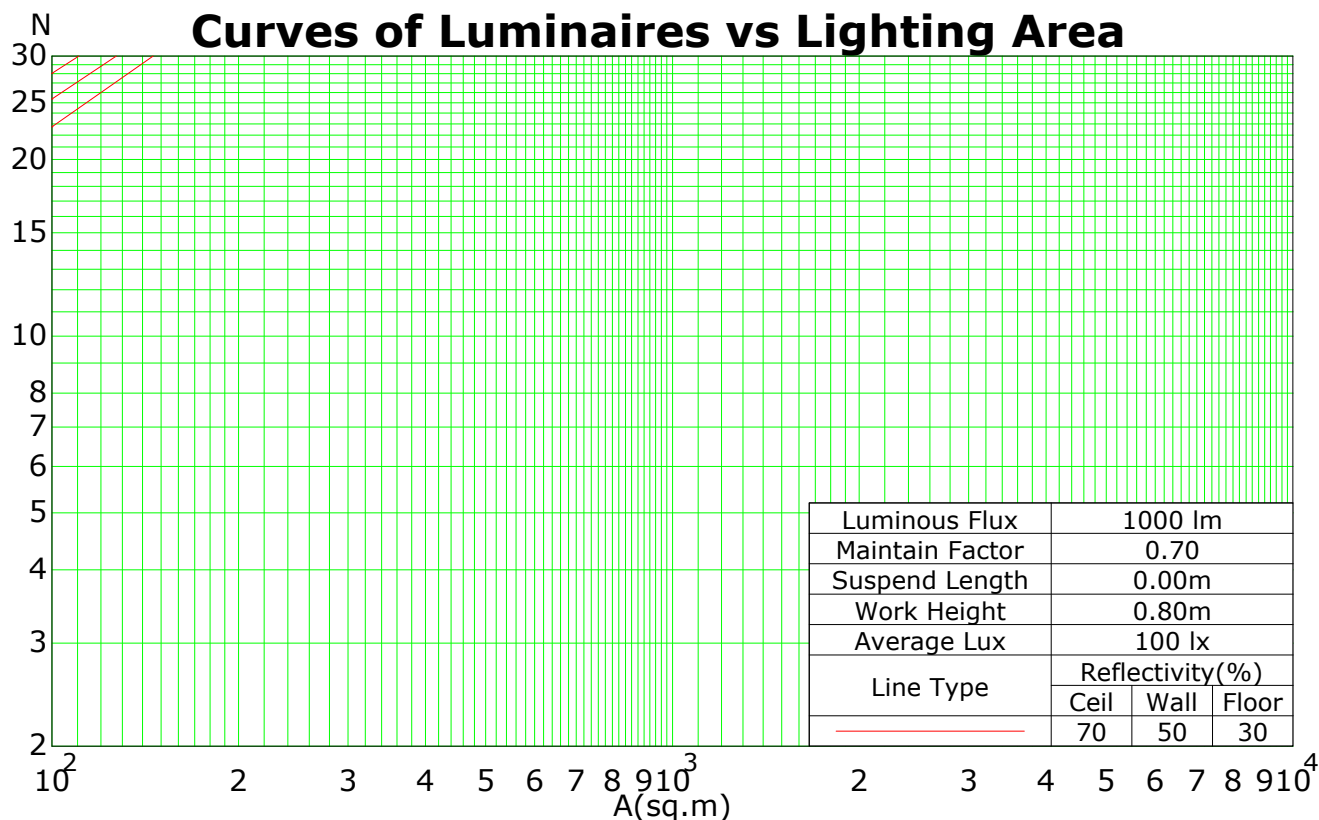
C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
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	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.08	1.03	0.98	0.94	1.05	1.01	0.96	0.93	0.96	0.93	0.90	0.92	0.89	0.87	0.89	0.86	0.84	0.82
2	0.98	0.89	0.82	0.76	0.95	0.87	0.81	0.75	0.84	0.78	0.73	0.80	0.76	0.72	0.77	0.74	0.70	0.68
3	0.89	0.78	0.70	0.63	0.87	0.77	0.69	0.62	0.74	0.67	0.61	0.71	0.65	0.60	0.68	0.63	0.59	0.57
4	0.82	0.69	0.60	0.53	0.79	0.68	0.59	0.53	0.65	0.58	0.52	0.63	0.57	0.51	0.61	0.55	0.51	0.48
5	0.75	0.62	0.53	0.46	0.73	0.61	0.52	0.46	0.59	0.51	0.45	0.57	0.50	0.45	0.55	0.49	0.44	0.42
6	0.69	0.56	0.47	0.40	0.67	0.55	0.46	0.40	0.53	0.45	0.39	0.51	0.44	0.39	0.50	0.43	0.39	0.37
7	0.64	0.50	0.42	0.35	0.62	0.50	0.41	0.35	0.48	0.40	0.35	0.47	0.40	0.35	0.45	0.39	0.34	0.32
8	0.60	0.46	0.37	0.31	0.58	0.45	0.37	0.31	0.44	0.36	0.31	0.43	0.36	0.31	0.42	0.35	0.31	0.29
9	0.56	0.42	0.34	0.28	0.54	0.42	0.34	0.28	0.40	0.33	0.28	0.39	0.33	0.28	0.38	0.32	0.28	0.26
10	0.52	0.39	0.31	0.26	0.51	0.38	0.31	0.26	0.37	0.30	0.25	0.37	0.30	0.25	0.36	0.30	0.25	0.23

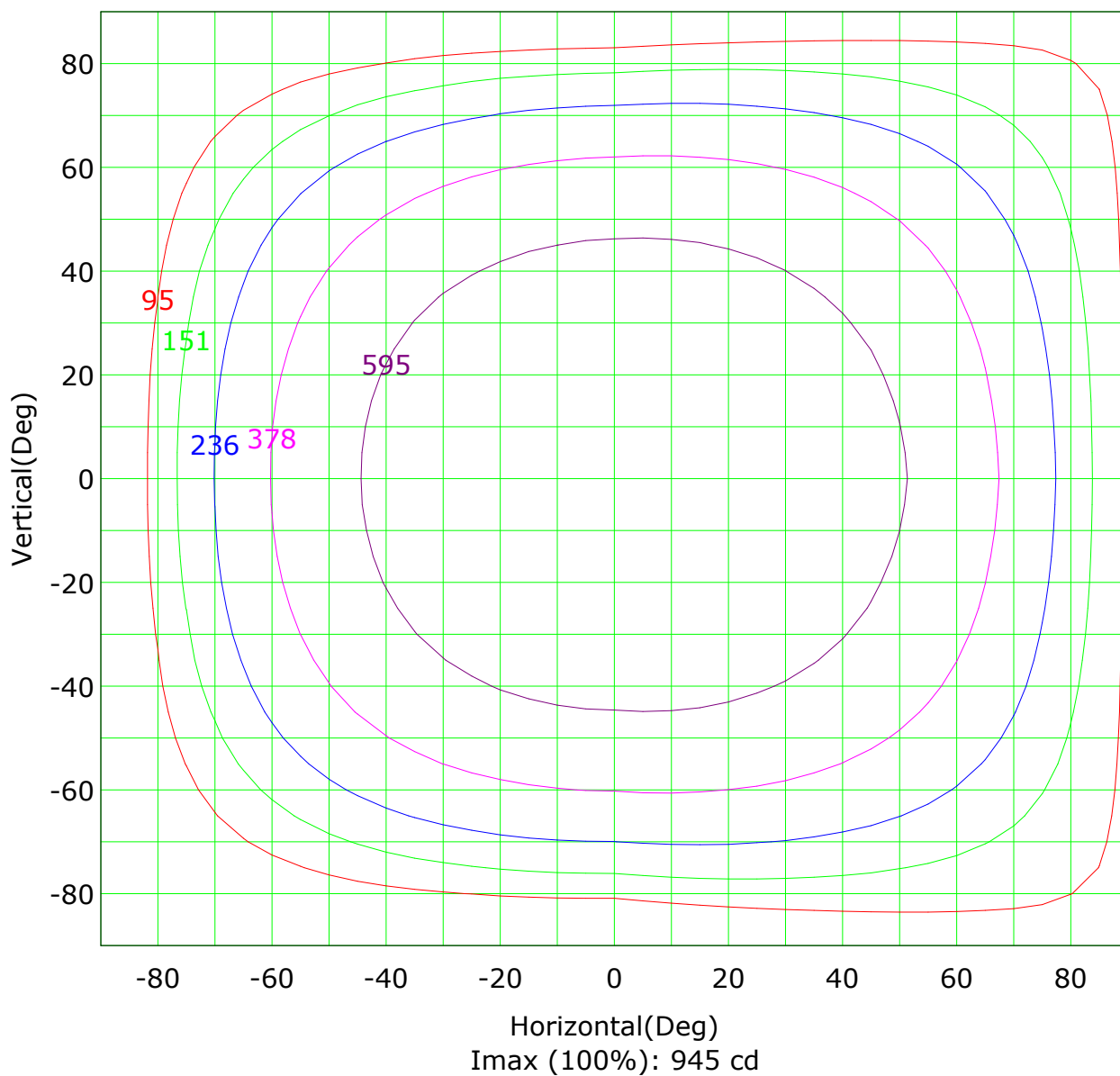
Spacing Criteria (0-180): 1.25
 Spacing Criteria (90-270): 1.23
 Spacing Criteria (Diagonal): 1.36



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

Gamma Plane (°):0.0-90.0:1.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

Isocandela (rectangle)

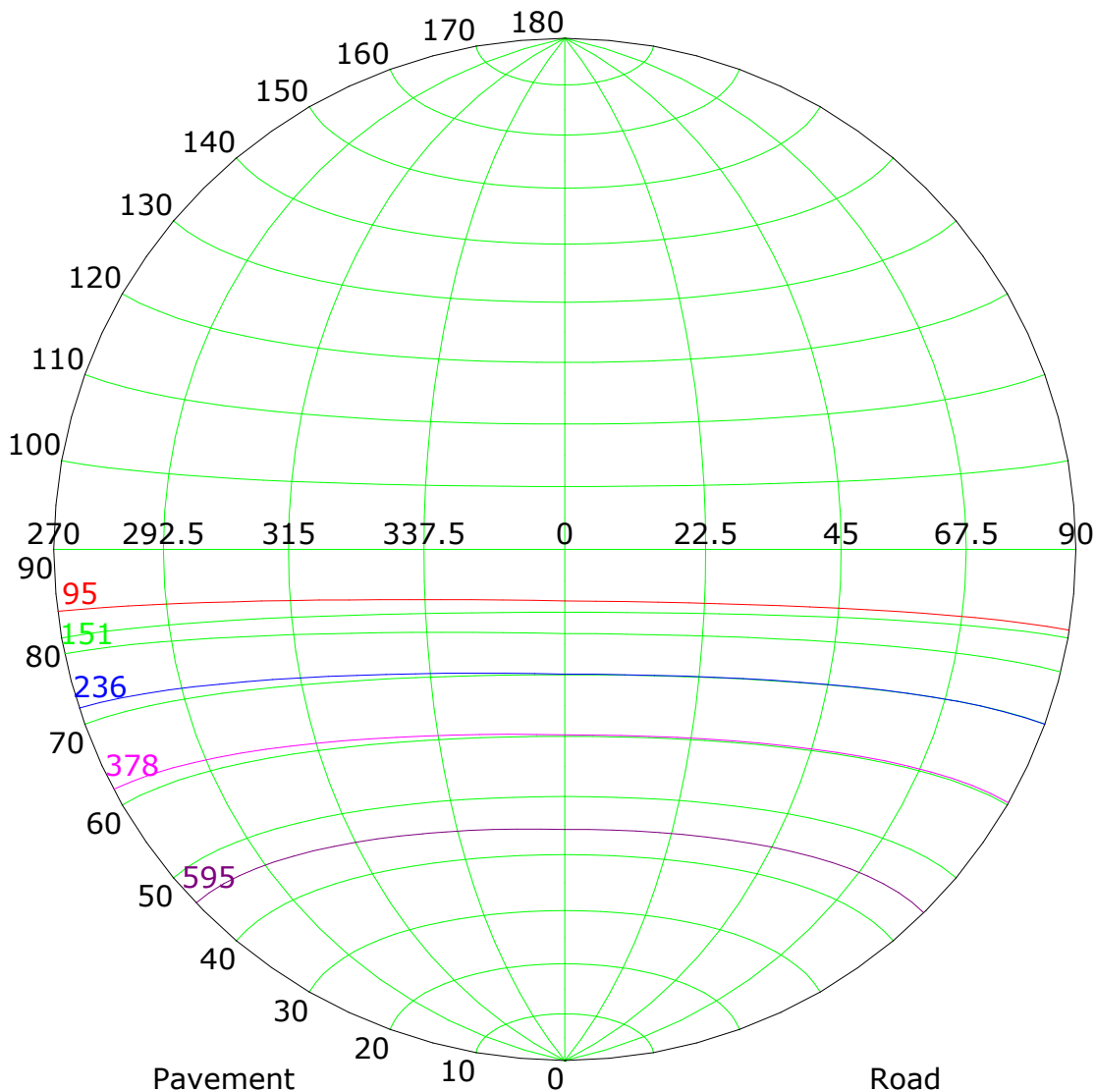


(10%): 95 cd	(16%): 151 cd
(25%): 236 cd	(40%): 378 cd
(63%): 595 cd	(100%): 945 cd

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

Gamma Plane (°):0.0-90.0:1.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

Isocandela (sphere)



Imax (100%): 945 cd

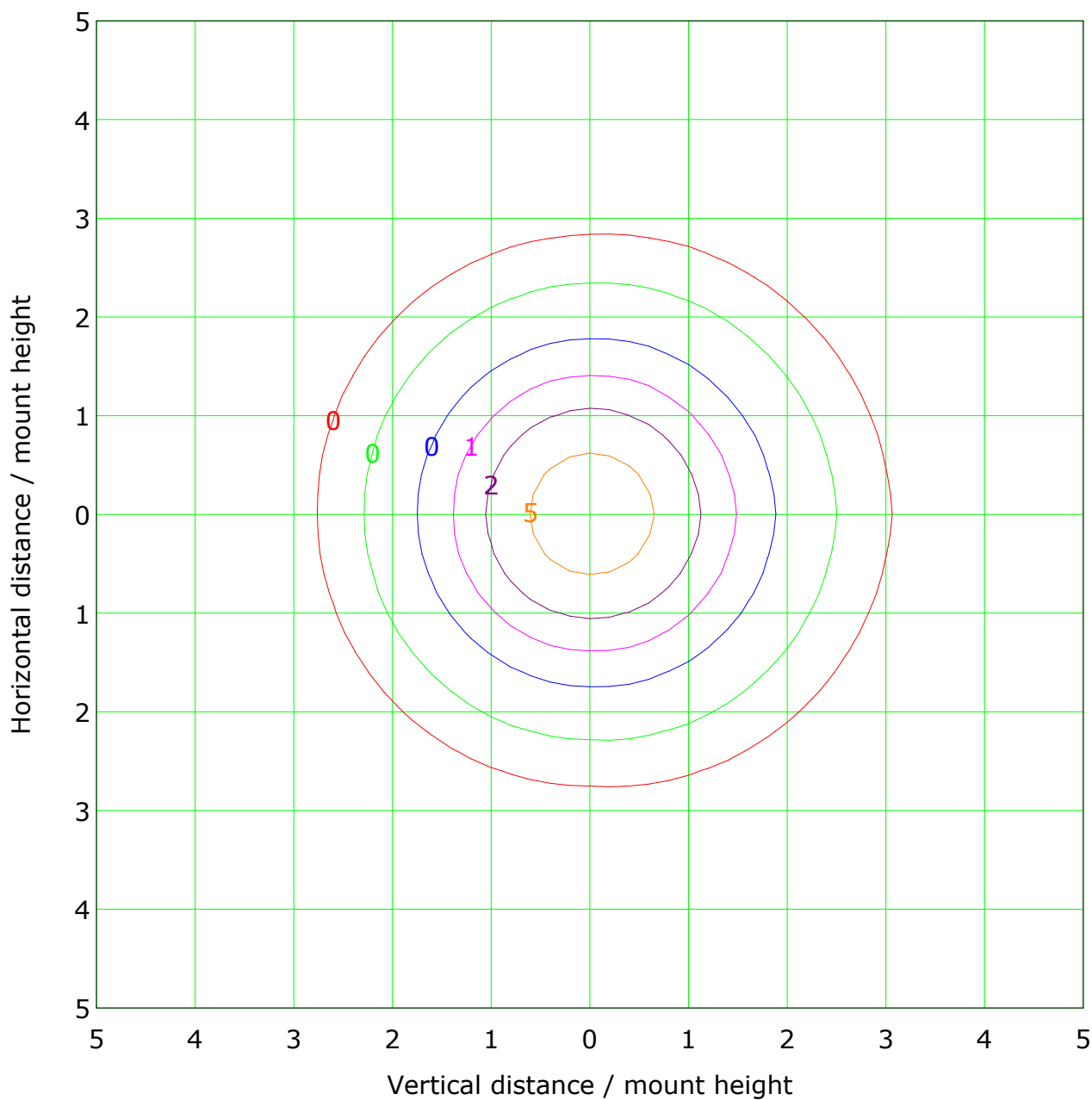
(10%): 95 cd	(16%): 151 cd
(25%): 236 cd	(40%): 378 cd
(63%): 595 cd	(100%): 945 cd

CIE: narrow - short
 CIE: Semi-cut-off luminaire
 Max.At90: 30.989 cd/klm

IES: Non-cut-off
 Max.At80: 72.916 cd/klm
 Max.80-90: 72.916 cd/klm



IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 9.4 lx	
(1%):	0.1 lx	(2%):	0.2 lx
(5%):	0.5 lx	(10%):	0.9 lx
(20%):	1.9 lx	(50%):	4.7 lx
(100%):	9.4 lx		

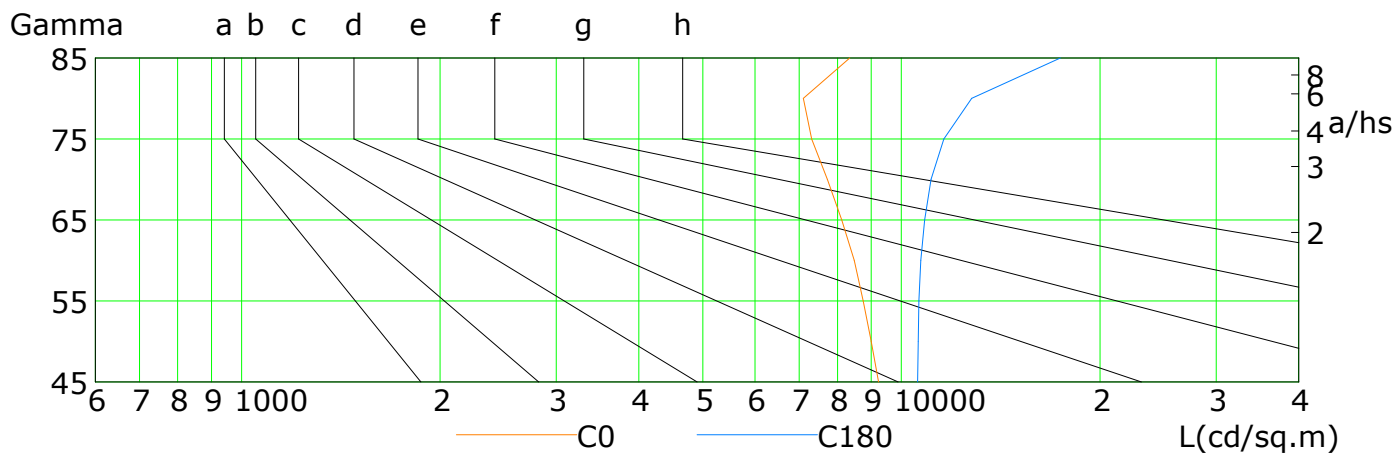
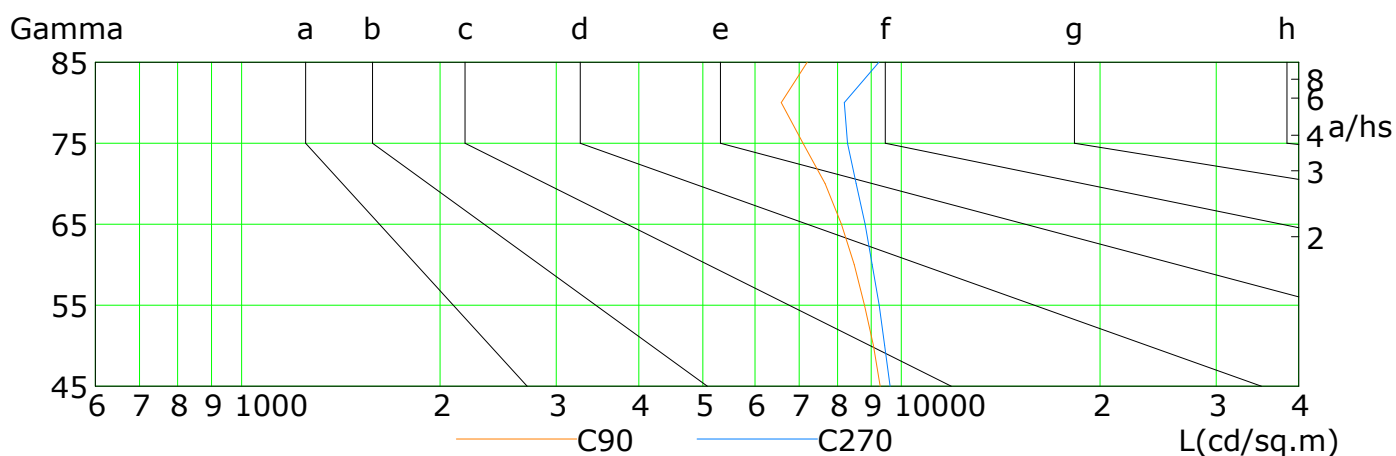
C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
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

a b c d e f g h



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	9238	8999	8749	8478	8124	7722	7309	7104	8355
C90	9289	9075	8789	8486	8108	7662	7092	6577	7202
C180	10581	10601	10628	10697	10850	11095	11592	12779	17408
C270	9610	9430	9252	9031	8809	8542	8283	8192	9244

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

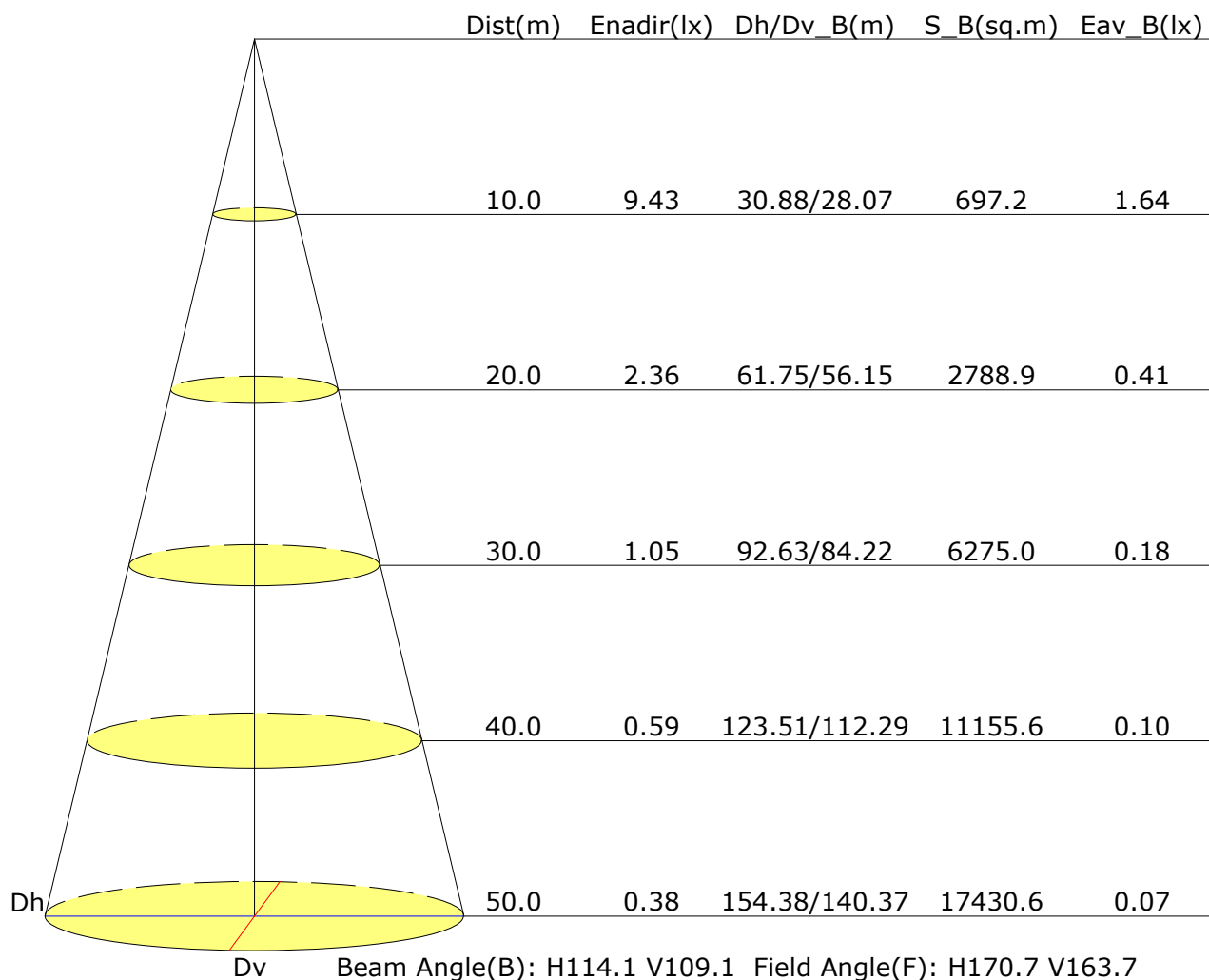
Test Device: GPM-1600L

Distance: 7.172 m [K=1.0000]

Humidity:

Inspector:

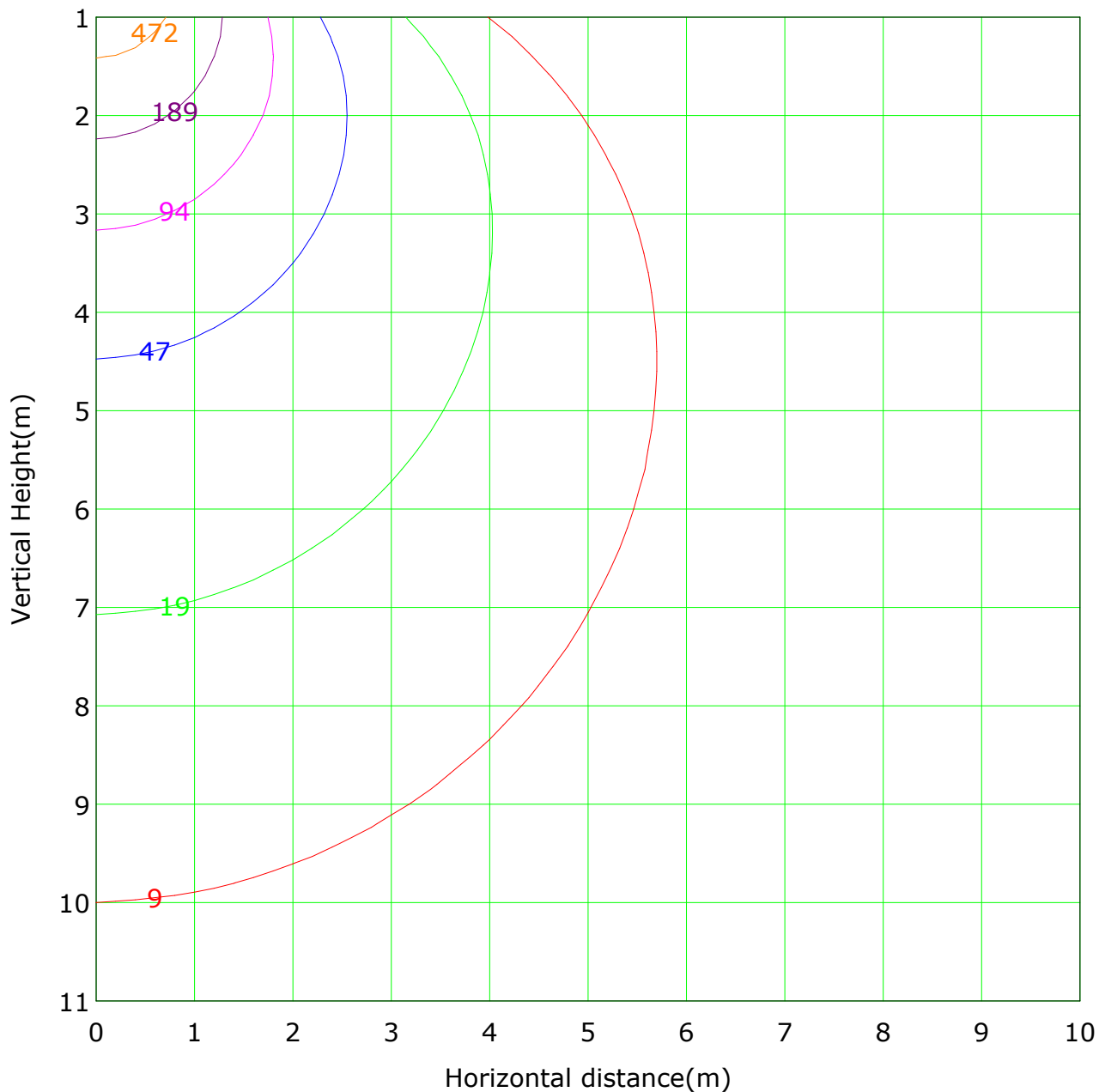
Illuminance at a Distance



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

Gamma Plane (°):0.0-90.0:1.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 943.3 lx

— (1%): 9.4 lx	— (2%): 18.9 lx
— (5%): 47.2 lx	— (10%): 94.3 lx
— (20%): 188.7 lx	— (50%): 471.6 lx
— (100%): 943.3 lx	

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

Gamma Plane (°):0.0-90.0:1.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

Area Flux Table

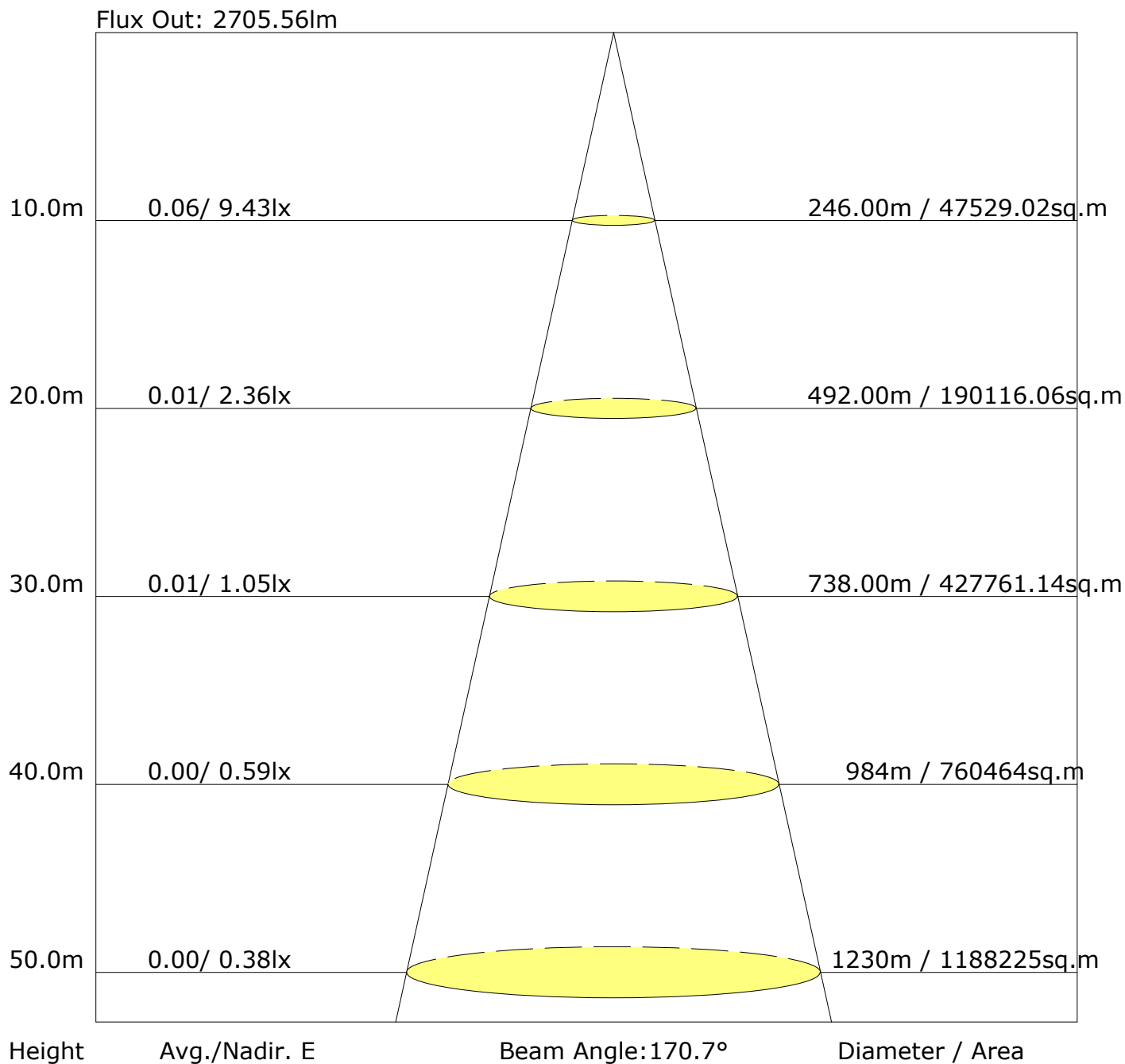
Unit: lm

Vertical plane	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90
Flux(T)	6.0	27.4	62.8	109.0	161.1	213.1	258.3	290.6	305.2	301.7	280.0	241.3	191.7	138.0	87.2	45.2	16.9	3.2	2739
Flux(E)	5.3	26.3	61.4	107.2	158.9	210.7	255.8	287.9	302.2	298.8	277.0	238.2	188.6	134.8	84.0	41.9	13.3	0.4	2693
Horizontal plane	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90
0.2	0.7	1.2	1.6	2.0	2.3	2.4	2.5	2.4	2.3	2.2	2.0	1.7	1.4	1.0	0.7	0.4	0.1	27.1	9.7
0.3	0.9	1.7	2.7	3.7	4.7	5.4	5.9	6.0	5.8	5.4	4.7	3.7	2.7	1.8	1.0	0.5	0.2	57.0	54.8
0.3	1.1	2.4	4.0	5.8	7.5	8.9	9.9	10.2	10.0	9.3	8.0	6.4	4.6	2.9	1.6	0.6	0.2	93.7	92.9
0.3	1.4	3.1	5.3	7.8	10.3	12.4	13.9	14.5	14.3	13.3	11.5	9.1	6.6	4.1	2.1	0.8	0.2	131.0	130.6
0.3	1.6	3.7	6.6	9.7	12.9	15.6	17.6	18.5	18.3	17.0	14.7	11.7	8.4	5.3	2.7	1.0	0.2	166.0	165.7
0.4	1.8	4.3	7.6	11.4	15.2	18.5	21.0	22.1	21.9	20.3	17.5	13.9	10.0	6.3	3.2	1.1	0.2	197.0	196.8
0.4	2.0	4.8	8.5	12.8	17.1	20.9	23.8	25.1	24.9	23.1	19.9	15.7	11.3	7.1	3.6	1.3	0.2	222.4	222.3
0.4	2.1	5.1	9.1	13.8	18.5	22.7	25.7	27.3	27.1	25.0	21.5	17.0	12.2	7.6	3.9	1.4	0.2	240.6	240.4
0.4	2.2	5.3	9.5	14.4	19.3	23.7	26.8	28.4	28.1	26.0	22.3	17.6	12.6	7.9	4.0	1.4	0.2	250.1	250.0
0.4	2.2	5.3	9.5	14.3	19.3	23.6	26.8	28.3	28.1	26.0	22.3	17.6	12.6	7.9	4.0	1.4	0.2	249.7	249.6
0.4	2.1	5.1	9.1	13.7	18.4	22.6	25.6	27.2	26.9	24.9	21.4	16.9	12.1	7.6	3.9	1.3	0.2	239.4	239.2
0.4	2.0	4.7	8.4	12.7	16.9	20.7	23.5	24.9	24.7	22.9	19.7	15.6	11.2	7.0	3.6	1.3	0.2	220.3	220.1
0.4	1.8	4.2	7.5	11.2	15.0	18.3	20.6	21.7	21.5	20.0	17.3	13.7	9.9	6.2	3.1	1.1	0.2	193.8	193.6
0.3	1.6	3.7	6.4	9.5	12.6	15.3	17.2	18.0	17.8	16.6	14.3	11.4	8.2	5.1	2.6	1.0	0.2	161.7	161.4
0.3	1.4	3.0	5.2	7.6	9.9	11.9	13.3	13.8	13.6	12.7	11.0	8.8	6.3	4.0	2.0	0.8	0.2	125.8	125.3
0.3	1.1	2.3	3.8	5.5	7.1	8.4	9.2	9.5	9.3	8.7	7.5	6.0	4.3	2.7	1.5	0.6	0.2	87.9	87.0
0.3	0.9	1.7	2.6	3.4	4.3	4.9	5.2	5.2	5.0	4.7	4.1	3.3	2.5	1.6	1.0	0.5	0.2	51.3	48.3
0.2	0.7	1.1	1.5	1.9	2.1	2.2	2.1	2.0	1.9	1.8	1.7	1.5	1.2	1.0	0.7	0.4	0.1	24.1	4.9

Gamma Plane (°):0.0-90.0:1.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

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

The Average Illuminance Effective Figure



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

Gamma Plane (°):0.0-90.0:1.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 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	19.9	21.3	20.2	21.5	21.8	20.0	21.4	20.3	21.7	21.9
3H	21.4	22.7	21.8	23.0	23.3	21.6	22.9	21.9	23.2	23.4
4H	22.1	23.3	22.4	23.6	23.9	22.3	23.5	22.6	23.8	24.1
6H	22.6	23.7	23.0	24.0	24.4	22.8	23.9	23.2	24.3	24.6
8H	22.8	23.9	23.2	24.2	24.6	23.0	24.1	23.4	24.4	24.8
12H	23.0	24.1	23.4	24.4	24.7	23.2	24.3	23.6	24.6	24.9
X=4H Y=2H	20.6	21.8	20.9	22.1	22.4	20.7	21.9	21.0	22.2	22.5
3H	22.3	23.4	22.7	23.7	24.1	22.5	23.5	22.8	23.8	24.2
4H	23.1	24.0	23.5	24.4	24.8	23.3	24.2	23.7	24.6	24.9
6H	23.7	24.6	24.2	25.0	25.4	23.9	24.8	24.4	25.2	25.6
8H	24.0	24.8	24.5	25.2	25.6	24.2	25.0	24.7	25.4	25.8
12H	24.3	25.0	24.8	25.4	25.9	24.5	25.2	24.9	25.6	26.0
X=8H Y=4H	23.4	24.2	23.9	24.6	25.0	23.6	24.4	24.0	24.8	25.2
6H	24.3	24.9	24.7	25.3	25.8	24.4	25.1	24.9	25.5	26.0
8H	24.6	25.2	25.1	25.7	26.2	24.8	25.4	25.3	25.8	26.3
12H	25.0	25.5	25.5	26.0	26.5	25.2	25.7	25.7	26.1	26.7
X=12H Y=4H	23.5	24.2	23.9	24.6	25.0	23.6	24.3	24.1	24.7	25.2
6H	24.4	24.9	24.8	25.4	25.9	24.5	25.1	25.0	25.5	26.0
8H	24.8	25.3	25.3	25.8	26.3	24.9	25.4	25.4	25.9	26.4
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.1				
S=1.5H	+0.4/-0.5					+0.3/-0.4				
S=2.0H	+0.5/-0.9					+0.5/-0.7				

Calculate in accordance with CIE Pub.117. The table is revised with 2739lm ($8\log(F/F_0) = 3.5$).

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.25									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	0.55	0.66	0.73	0.78	0.86	0.91	0.94	0.99	1.02	
	0.30		0.47	0.58	0.65	0.71	0.79	0.85	0.89	0.95	0.98	
	0.20		0.42	0.52	0.59	0.65	0.74	0.80	0.84	0.91	0.95	
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.87	0.91	0.95	0.98	
	0.30		0.47	0.57	0.64	0.69	0.77	0.82	0.86	0.91	0.95	
	0.20		0.41	0.51	0.59	0.64	0.72	0.78	0.82	0.88	0.92	
0.30	0.50	0.20	0.52	0.62	0.68	0.73	0.80	0.84	0.87	0.91	0.94	
	0.30		0.46	0.56	0.63	0.68	0.75	0.80	0.83	0.88	0.91	
	0.20		0.41	0.51	0.58	0.63	0.71	0.76	0.80	0.86	0.89	
0.00	0.00	0.00	0.39	0.48	0.55	0.60	0.67	0.72	0.76	0.81	0.84	
Rating:22W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 1.25									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	1.02	0.84	0.72	0.63	0.51	0.43	0.37	0.29	0.24	
	0.30		0.85	0.72	0.63	0.56	0.46	0.39	0.34	0.27	0.23	
	0.20		0.73	0.63	0.56	0.50	0.42	0.36	0.32	0.25	0.21	
0.50	0.50	0.20	0.98	0.81	0.69	0.61	0.49	0.44	0.35	0.27	0.23	
	0.30		0.83	0.70	0.61	0.54	0.45	0.38	0.33	0.26	0.22	
	0.20		0.72	0.62	0.55	0.49	0.41	0.35	0.31	0.25	0.21	
0.30	0.50	0.20	0.95	0.78	0.67	0.58	0.47	0.39	0.34	0.26	0.22	
	0.30		0.81	0.69	0.60	0.53	0.43	0.37	0.32	0.25	0.21	
	0.20		0.71	0.61	0.54	0.48	0.40	0.34	0.30	0.24	0.20	
0.00	0.00	0.00	0.61	0.52	0.45	0.40	0.33	0.28	0.24	0.19	0.16	
Rating:22W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.25									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19	
	0.20		0.04	0.06	0.08	0.09	0.11	0.12	0.14	0.15	0.17	
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.21	0.21	
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19	
	0.20		0.04	0.06	0.07	0.09	0.11	0.12	0.13	0.15	0.16	
0.30	0.50	0.20	0.15	0.17	0.17	0.18	0.19	0.19	0.20	0.20	0.20	
	0.30		0.09	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	
	0.20		0.04	0.06	0.07	0.09	0.10	0.12	0.13	0.15	0.16	
0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Rating:22W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												



Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	942.9	0.9	0.9	0.03	0.03
1.0-2.0	942.6	2.7	3.6	0.10	0.13
2.0-3.0	941.6	4.5	8.1	0.16	0.30
3.0-4.0	940.2	6.3	14.4	0.23	0.53
4.0-5.0	939.3	8.1	22.5	0.30	0.82
5.0-6.0	938.0	9.9	32.3	0.36	1.18
6.0-7.0	936.0	11.6	44.0	0.42	1.61
7.0-8.0	933.7	13.4	57.3	0.49	2.09
8.0-9.0	931.0	15.1	72.4	0.55	2.64
9.0-10.0	927.6	16.8	89.2	0.61	3.26
10.0-11.0	924.1	18.5	107.7	0.67	3.93
11.0-12.0	920.3	20.1	127.8	0.73	4.67
12.0-13.0	916.2	21.7	149.5	0.79	5.46
13.0-14.0	911.6	23.3	172.9	0.85	6.31
14.0-15.0	906.3	24.9	197.8	0.91	7.22
15.0-16.0	900.8	26.4	224.2	0.96	8.18
16.0-17.0	895.2	27.9	252.0	1.02	9.20
17.0-18.0	889.0	29.3	281.4	1.07	10.27
18.0-19.0	882.6	30.7	312.1	1.12	11.39
19.0-20.0	876.2	32.1	344.1	1.17	12.56
20.0-21.0	869.2	33.4	377.5	1.22	13.78
21.0-22.0	861.7	34.6	412.2	1.26	15.05
22.0-23.0	853.9	35.8	448.0	1.31	16.36
23.0-24.0	845.5	37.0	485.0	1.35	17.71
24.0-25.0	837.6	38.1	523.0	1.39	19.10
25.0-26.0	829.6	39.2	562.2	1.43	20.53
26.0-27.0	820.2	40.1	602.3	1.47	21.99
27.0-28.0	811.0	41.1	643.4	1.50	23.49
28.0-29.0	802.0	42.0	685.4	1.53	25.02
29.0-30.0	792.4	42.8	728.2	1.56	26.58
30.0-31.0	782.4	43.5	771.7	1.59	28.17
31.0-32.0	771.9	44.2	815.9	1.61	29.79
32.0-33.0	761.6	44.9	860.8	1.64	31.43
33.0-34.0	751.6	45.5	906.3	1.66	33.09
34.0-35.0	740.4	46.0	952.3	1.68	34.77
35.0-36.0	728.7	46.4	998.7	1.69	36.46

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

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
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	717.6	46.8	1045.5	1.71	38.17
37.0-38.0	706.3	47.2	1092.7	1.72	39.89
38.0-39.0	695.0	47.4	1140.1	1.73	41.62
39.0-40.0	683.2	47.7	1187.8	1.74	43.36
40.0-41.0	671.2	47.8	1235.6	1.75	45.11
41.0-42.0	659.6	47.9	1283.5	1.75	46.86
42.0-43.0	646.9	47.9	1331.4	1.75	48.61
43.0-44.0	634.4	47.9	1379.3	1.75	50.36
44.0-45.0	622.3	47.8	1427.1	1.75	52.10
45.0-46.0	609.1	47.6	1474.8	1.74	53.84
46.0-47.0	596.3	47.4	1522.2	1.73	55.57
47.0-48.0	583.4	47.2	1569.4	1.72	57.30
48.0-49.0	570.2	46.8	1616.2	1.71	59.01
49.0-50.0	557.5	46.5	1662.7	1.70	60.70
50.0-51.0	544.0	46.0	1708.7	1.68	62.38
51.0-52.0	530.4	45.5	1754.3	1.66	64.05
52.0-53.0	517.0	45.0	1799.2	1.64	65.69
53.0-54.0	503.3	44.4	1843.6	1.62	67.31
54.0-55.0	489.6	43.7	1887.3	1.60	68.90
55.0-56.0	475.7	43.0	1930.3	1.57	70.47
56.0-57.0	461.7	42.2	1972.5	1.54	72.02
57.0-58.0	448.2	41.5	2014.0	1.51	73.53
58.0-59.0	434.0	40.6	2054.6	1.48	75.01
59.0-60.0	419.7	39.7	2094.2	1.45	76.46
60.0-61.0	405.5	38.7	2132.9	1.41	77.87
61.0-62.0	391.1	37.7	2170.6	1.38	79.25
62.0-63.0	376.9	36.7	2207.3	1.34	80.59
63.0-64.0	362.7	35.6	2242.9	1.30	81.89
64.0-65.0	348.4	34.5	2277.4	1.26	83.14
65.0-66.0	334.2	33.3	2310.7	1.22	84.36
66.0-67.0	319.6	32.1	2342.8	1.17	85.54
67.0-68.0	305.1	30.9	2373.8	1.13	86.66
68.0-69.0	290.8	29.7	2403.4	1.08	87.75
69.0-70.0	276.5	28.4	2431.8	1.04	88.78
70.0-71.0	262.6	27.1	2459.0	0.99	89.77
71.0-72.0	248.5	25.8	2484.8	0.94	90.72

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

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:



Zonal Lumen (Continue 2)

[illegible]

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

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

Zonal Lumen (Continue 3)

cone flux(90°): 1427.14 lm

%lum = 52.1%

%lamp = 52.1%

cone flux(120°): 2094.22 lm

%lum = 76.5%

%lamp = 76.5%

Candlepower Table

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G0.0	943.3	942.7	943.3	942.7	943.3					
G1.0	941.5	941.5	944.2	944.0	941.5					
G2.0	940.6	942.7	944.6	942.0	940.6					
G3.0	938.0	940.3	943.4	941.0	938.0					
G4.0	936.6	937.2	944.5	940.6	936.6					
G5.0	934.8	936.7	944.5	939.5	934.8					
G6.0	932.2	934.0	945.2	937.5	932.2					
G7.0	929.5	932.3	942.0	935.2	929.5					
G8.0	925.8	929.5	941.2	934.1	925.8					
G9.0	921.7	925.7	940.4	929.8	921.7					
G10.0	916.6	923.1	937.2	926.7	916.6					
G11.0	912.0	918.6	935.5	923.0	912.0					
G12.0	907.5	913.6	932.4	919.7	907.5					
G13.0	902.7	910.3	929.7	913.6	902.7					
G14.0	896.3	904.6	926.7	908.8	896.3					
G15.0	889.6	898.7	922.6	903.3	889.6					
G16.0	884.0	891.9	918.7	897.8	884.0					
G17.0	877.4	886.3	914.2	891.6	877.4					
G18.0	869.2	878.4	909.8	885.4	869.2					
G19.0	862.8	872.0	904.5	878.8	862.8					
G20.0	856.0	864.8	899.1	871.7	856.0					
G21.0	848.2	856.8	892.8	864.1	848.2					
G22.0	838.8	849.5	886.8	856.3	838.8					
G23.0	829.7	839.3	881.2	849.1	829.7					
G24.0	821.4	829.9	874.3	838.6	821.4					
G25.0	813.1	823.0	868.2	832.1	813.1					
G26.0	803.9	813.3	860.1	823.2	803.9					
G27.0	793.5	802.3	852.2	813.5	793.5					
G28.0	783.8	793.3	844.7	804.3	783.8					
G29.0	774.8	784.2	836.4	794.9	774.8					
G30.0	763.5	773.4	827.8	784.7	763.5					
G31.0	753.2	761.8	820.3	774.3	753.2					
G32.0	742.1	750.8	810.5	762.4	742.1					
G33.0	732.2	739.7	801.5	753.8	732.2					
G34.0	721.0	728.6	792.4	743.5	721.0					
G35.0	708.7	716.6	782.1	730.0	708.7					
G36.0	697.5	704.8	770.6	719.6	697.5					

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

Distance: 7.172 m [K=1.0000]

Humidity:

Inspector:



Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G37.0	685.9	692.1	761.6	708.9	685.9					
G38.0	673.6	682.4	750.1	695.9	673.6					
G39.0	663.5	668.8	741.3	684.7	663.5					
G40.0	649.5	655.3	729.7	672.7	649.5					
G41.0	638.0	643.8	719.5	661.0	638.0					
G42.0	625.6	631.4	708.1	649.3	625.6					
G43.0	611.8	617.3	696.1	635.5	611.8					
G44.0	599.9	605.4	685.2	623.8	599.9					
G45.0	587.9	591.1	673.4	611.5	587.9					
G46.0	573.3	577.2	661.5	597.1	573.3					
G47.0	560.7	564.7	650.5	585.2	560.7					
G48.0	547.0	551.5	636.7	570.8	547.0					
G49.0	533.4	538.1	625.5	558.7	533.4					
G50.0	520.6	525.0	613.3	545.5	520.6					
G51.0	506.6	509.6	600.5	531.1	506.6					
G52.0	493.3	495.6	587.1	519.3	493.3					
G53.0	480.0	481.3	573.8	506.0	480.0					
G54.0	465.3	467.6	561.5	490.5	465.3					
G55.0	451.7	453.7	548.7	477.6	451.7					
G56.0	437.6	438.3	534.8	463.0	437.6					
G57.0	424.0	424.0	523.0	449.3	424.0					
G58.0	410.6	410.0	508.6	436.3	410.6					
G59.0	395.1	395.8	494.8	421.1	395.1					
G60.0	381.5	381.9	481.4	406.4	381.5					
G61.0	367.7	366.3	467.5	391.5	367.7					
G62.0	352.9	350.9	453.8	378.0	352.9					
G63.0	338.4	337.6	440.5	363.4	338.4					
G64.0	323.8	322.7	426.4	349.0	323.8					
G65.0	309.0	308.4	412.7	335.1	309.0					
G66.0	295.0	294.8	397.6	320.8	295.0					
G67.0	280.5	278.5	384.2	305.8	280.5					
G68.0	266.2	264.1	370.5	291.4	266.2					
G69.0	253.0	249.1	355.0	276.7	253.0					
G70.0	237.7	235.9	341.5	263.0	237.7					
G71.0	224.3	221.8	327.4	249.4	224.3					
G72.0	210.2	206.9	313.3	234.8	210.2					
G73.0	196.5	193.8	298.6	220.6	196.5					

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

Distance: 7.172 m [K=1.0000]

Humidity:

Inspector:



Unit: cd

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

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector: