

Report No.:

Test Time: 2019/4/26 星期五 17:17

Luminaire Property

Luminaire Manufacturer:

Voltage: 120.0 V

Power: 151.80 W

Current: 1.272 A

Power Factor: 0.996

Photometric Results

IES Classification: Type III

Total Rated Lamp Lumens: 22684.8 lm

Efficiency: 100%

Upward Ratio: 1%

Central Intensity: 3863.97 cd

Pos of Max. Intensity: H150 V71

Longitudinal Classification: Medium

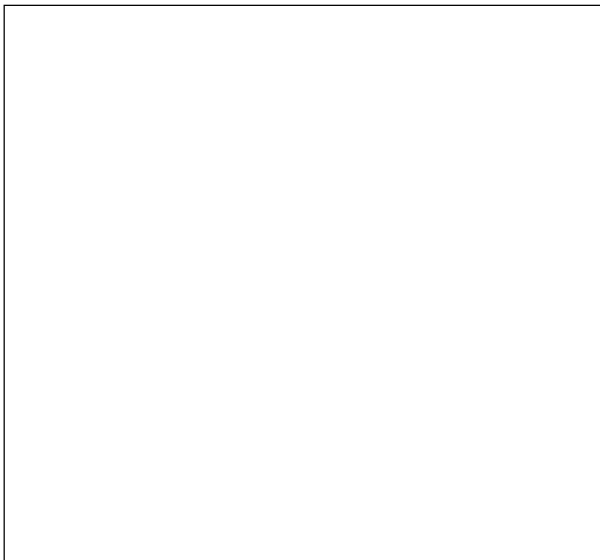
Measurement Flux: 22684.8 lm

Downward Ratio: 99%

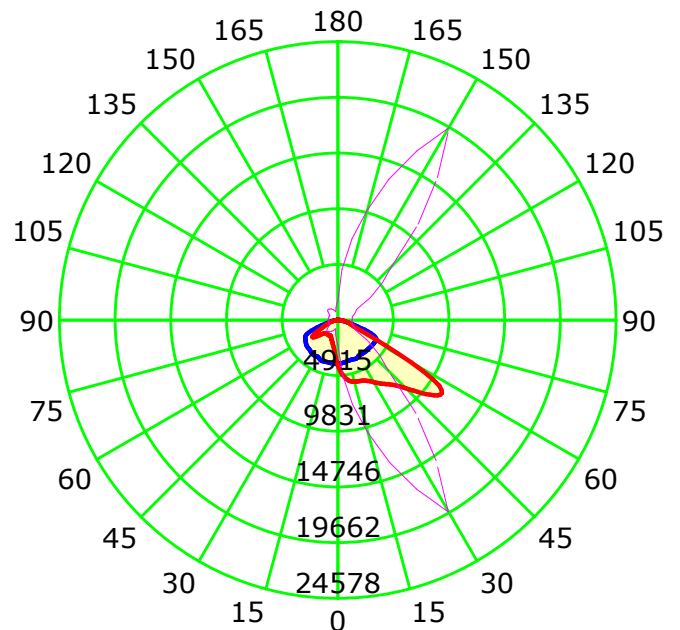
Luminaire Efficacy Rating (LER): 149.49

Max. Intensity: 19662.42 cd

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 108.9°

— C0-C180 — C90-C270 — G71

C Plane (°):0.0-360.0: 15.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

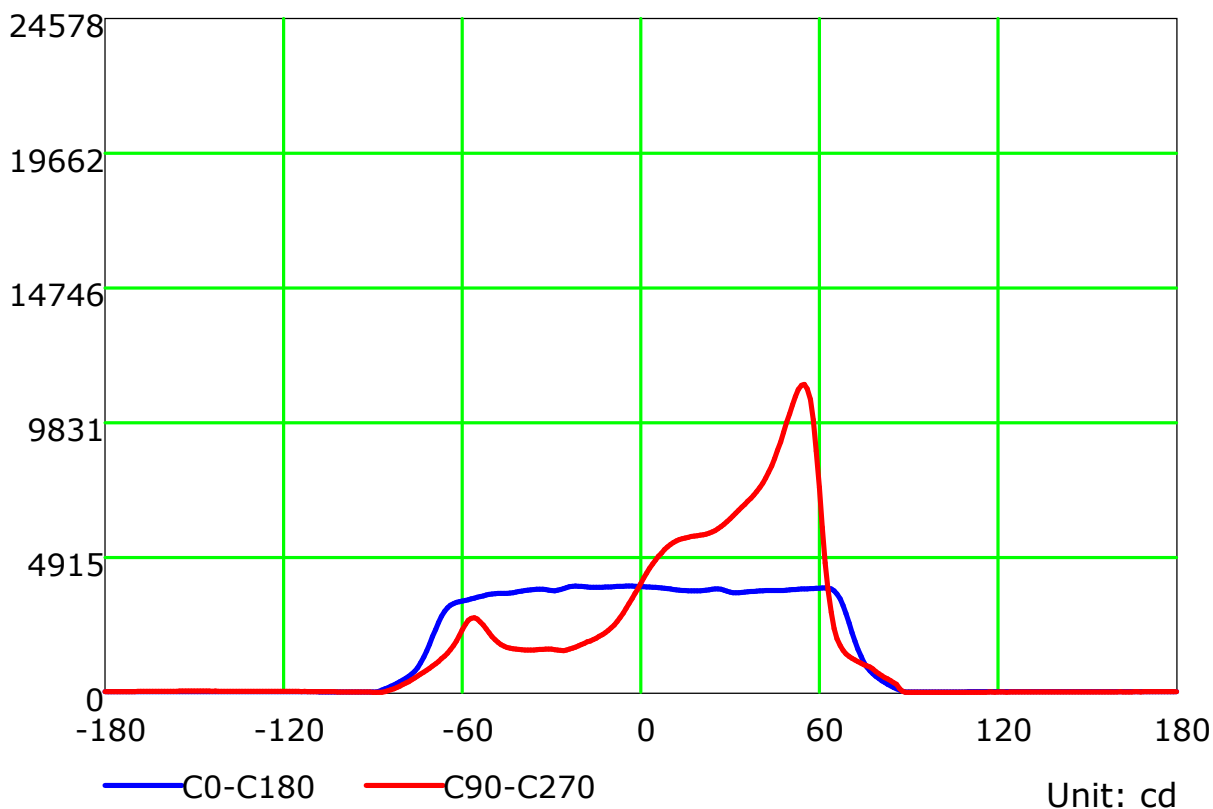
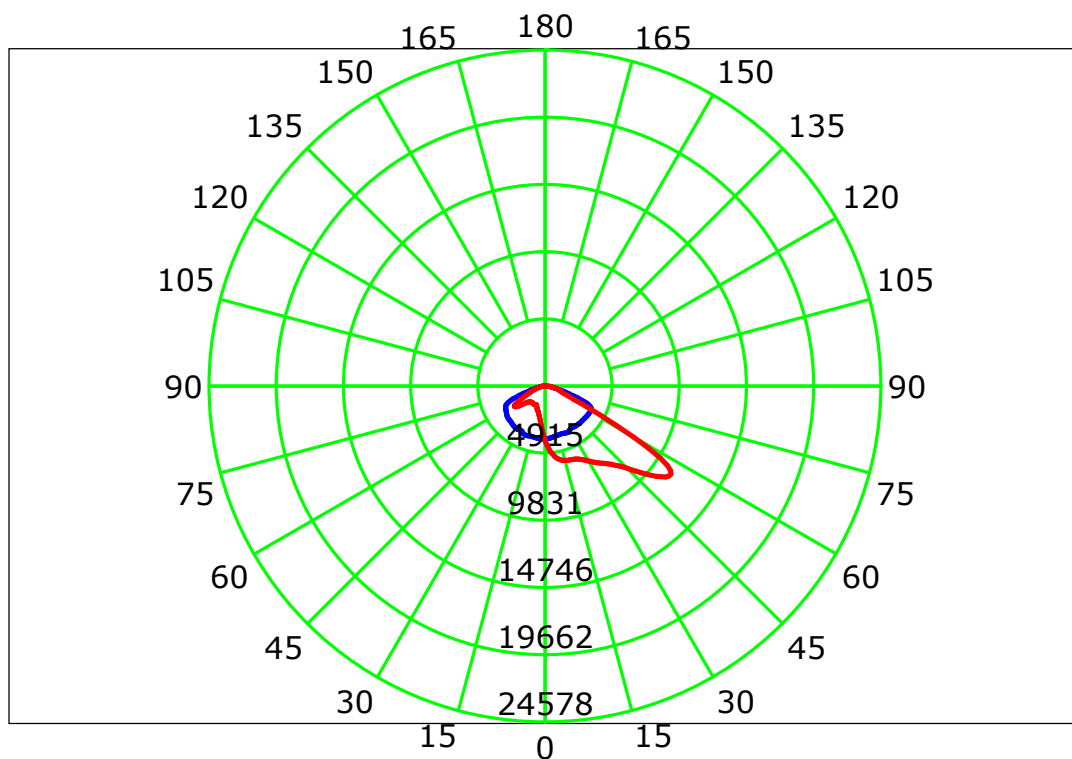
Test Device: GPM-1800B

Distance: 8.512 m

Humidity:

Inspector:

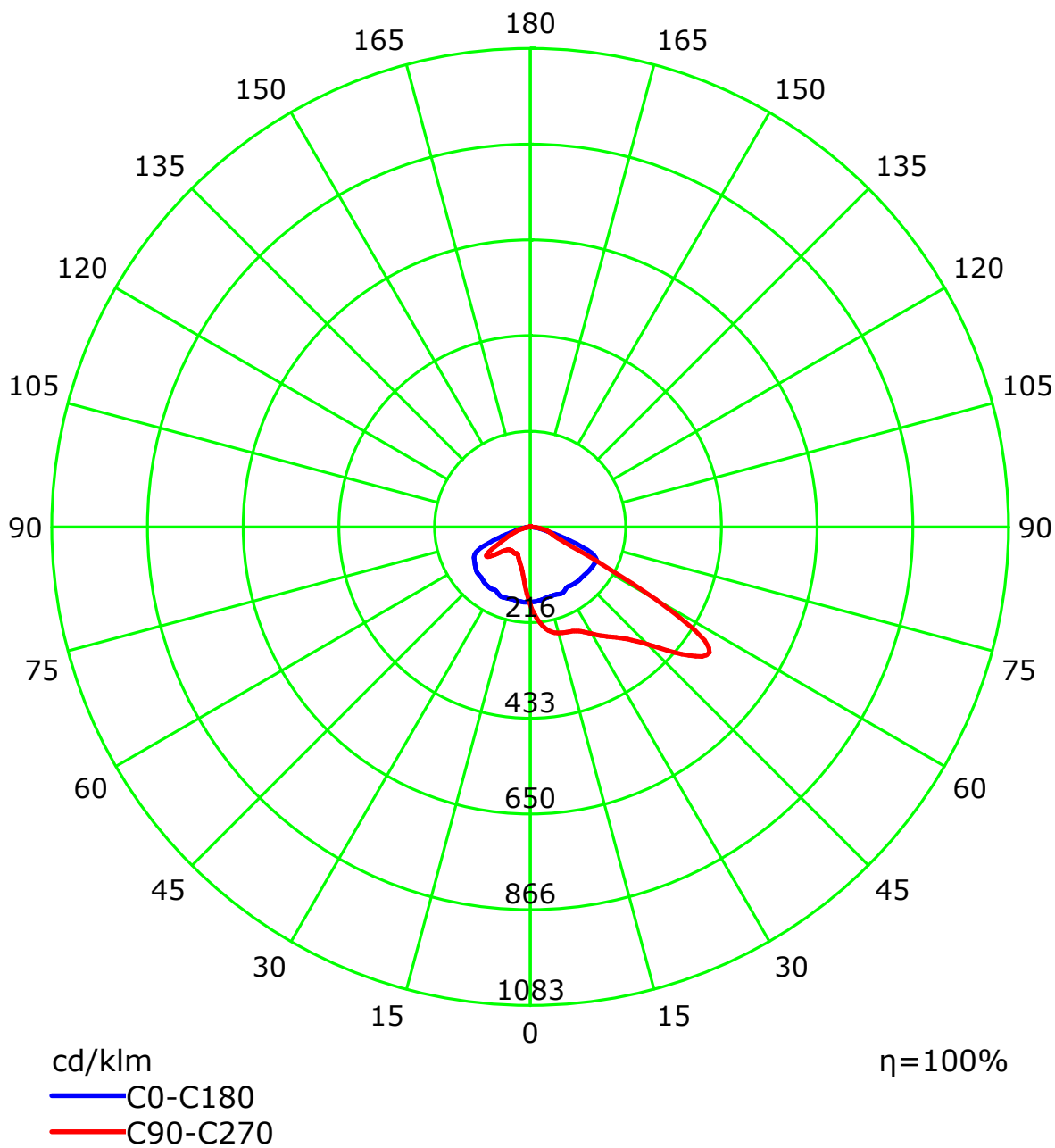
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 15.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.512 m
Humidity:
Inspector:

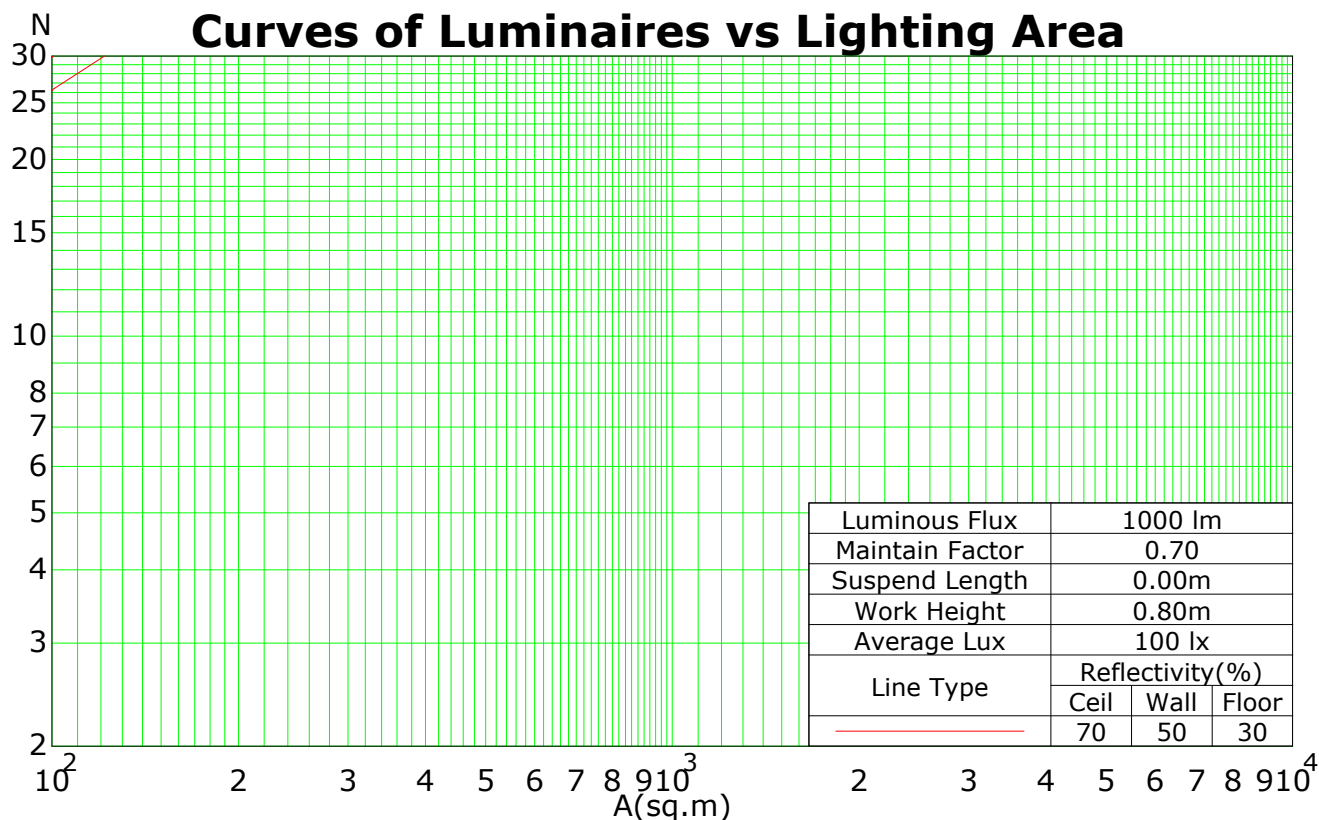
Luminous Intensity Distribution Curve(cd/klm)



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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	107	101	96	91	104	98	94	90	94	90	87	90	87	84	86	84	81	79
2	95	85	77	70	92	83	75	69	79	72	67	75	70	65	72	68	64	61
3	84	72	62	54	82	70	61	54	67	59	53	64	57	52	61	55	51	48
4	76	62	51	44	73	60	51	43	58	49	42	55	48	42	53	46	41	39
5	69	54	43	36	66	53	43	35	50	42	35	48	40	34	46	39	34	31
6	63	47	37	30	60	46	37	30	44	36	29	42	35	29	41	34	29	26
7	58	42	32	25	56	41	32	25	40	31	25	38	30	25	37	30	24	22
8	53	38	28	22	51	37	28	22	36	28	22	34	27	21	33	26	21	19
9	49	34	25	19	48	34	25	19	33	25	19	31	24	19	30	24	19	17
10	46	32	23	17	45	31	23	17	30	22	17	29	22	17	28	21	17	15

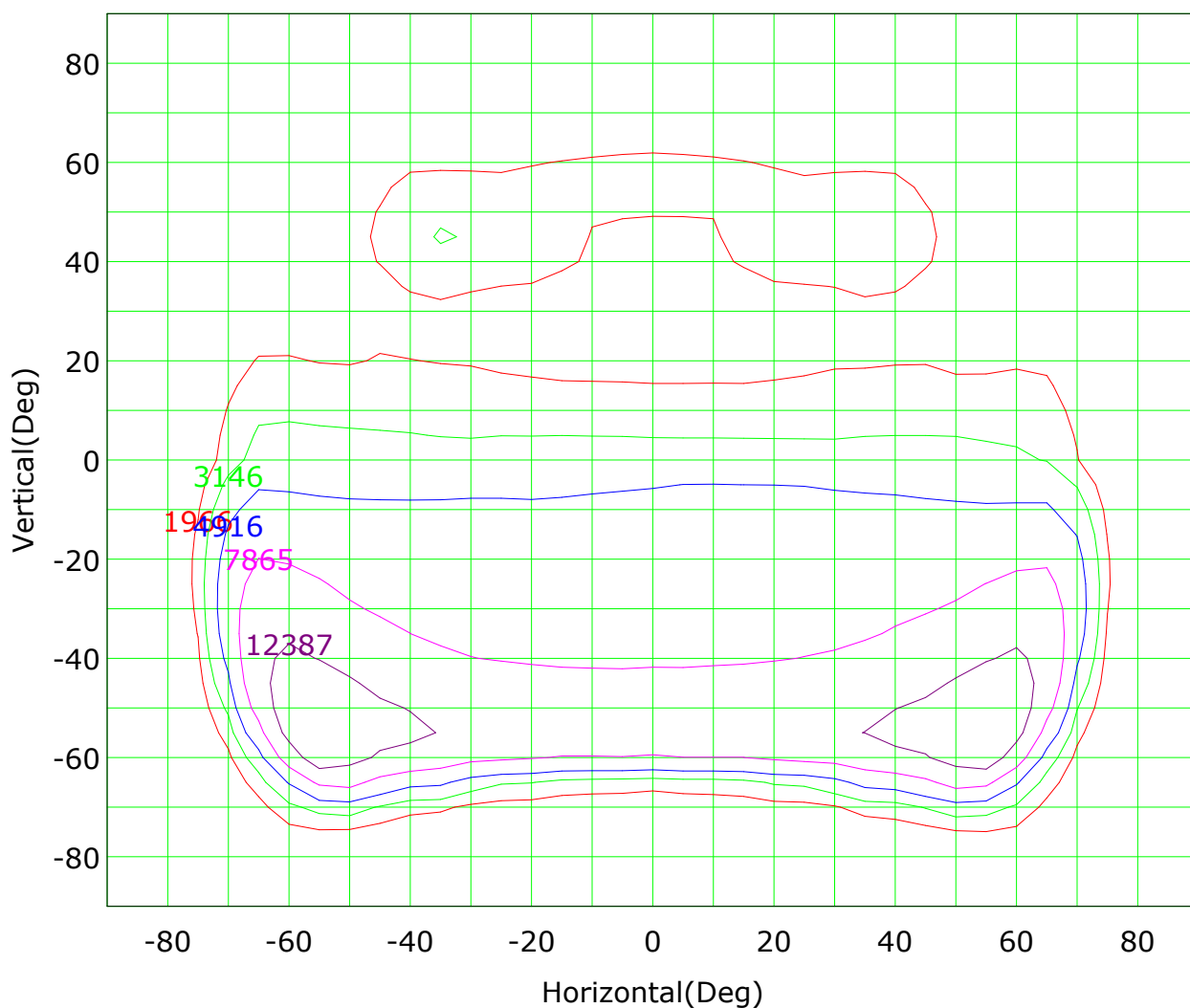
Spacing Criteria (0-180): 1.48
Spacing Criteria (90-270): 1.72
Spacing Criteria (Diagonal): 2.41



C Plane (°):0.0-360.0: 15.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.512 m
Humidity:
Inspector:

Isocandela (rectangle)



Imax (100%): 19662 cd

(10%): 1966 cd	(16%): 3146 cd
(25%): 4916 cd	(40%): 7865 cd
(63%): 12387 cd	(100%): 19662 cd

C Plane (°):0.0-360.0: 15.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

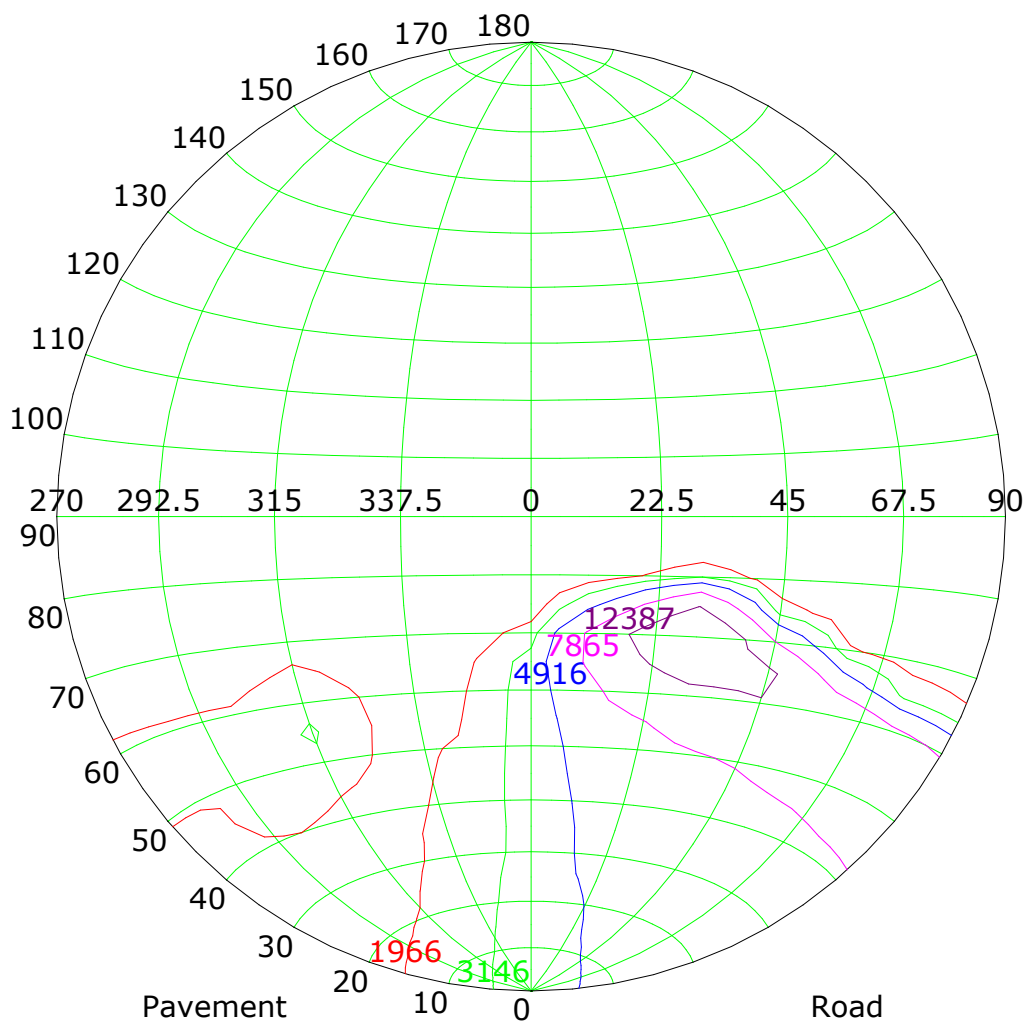
Test Device: GPM-1800B

Distance: 8.512 m

Humidity:

Inspector:

Isocandela (sphere)



Imax (100%): 19662 cd

(10%): 1966 cd	(16%): 3146 cd
(25%): 4916 cd	(40%): 7865 cd
(63%): 12387 cd	(100%): 19662 cd

C Plane (°):0.0-360.0: 15.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 8.512 m

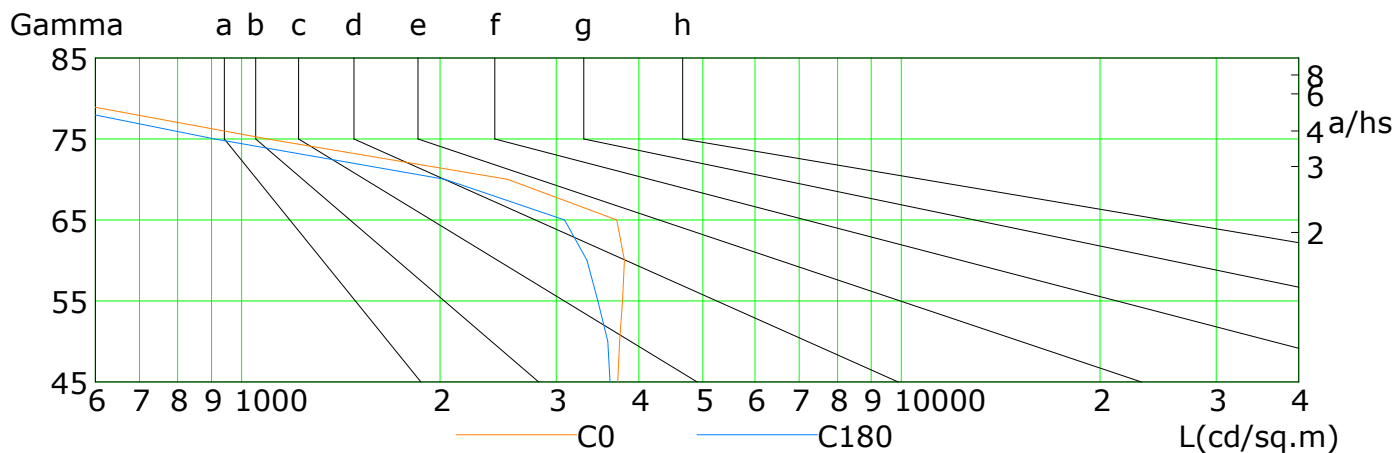
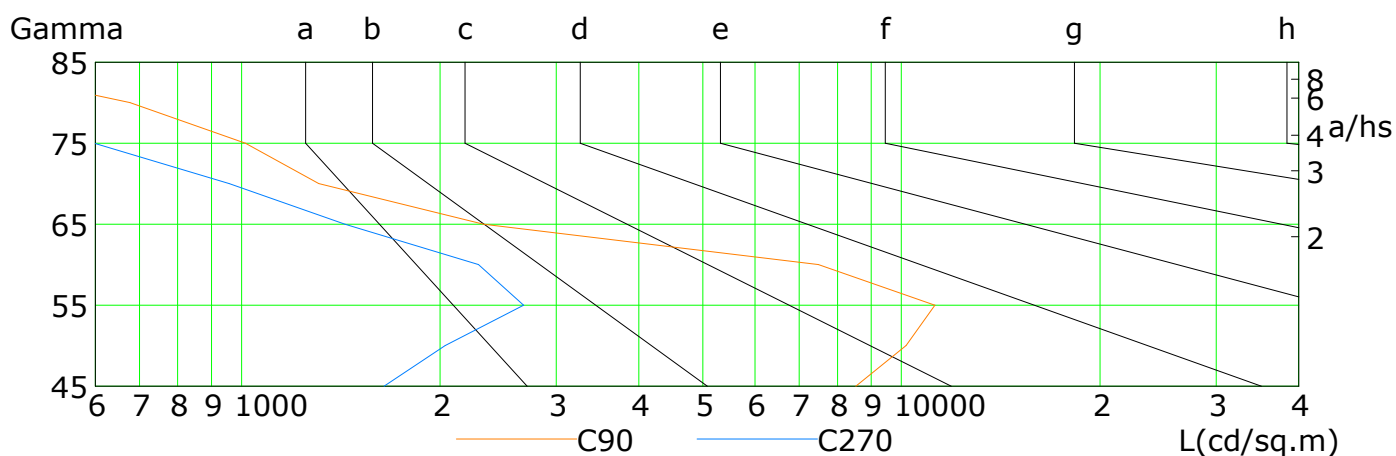
Humidity:

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	3714	3742	3778	3805	3703	2530	1095	507	185
C90	8529	10170	11237	7482	2327	1309	1014	677	352
C180	3617	3591	3468	3337	3088	2033	910	450	174
C270	1645	2034	2675	2286	1434	958	598	282	60

C Plane (°):0.0-360.0: 15.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

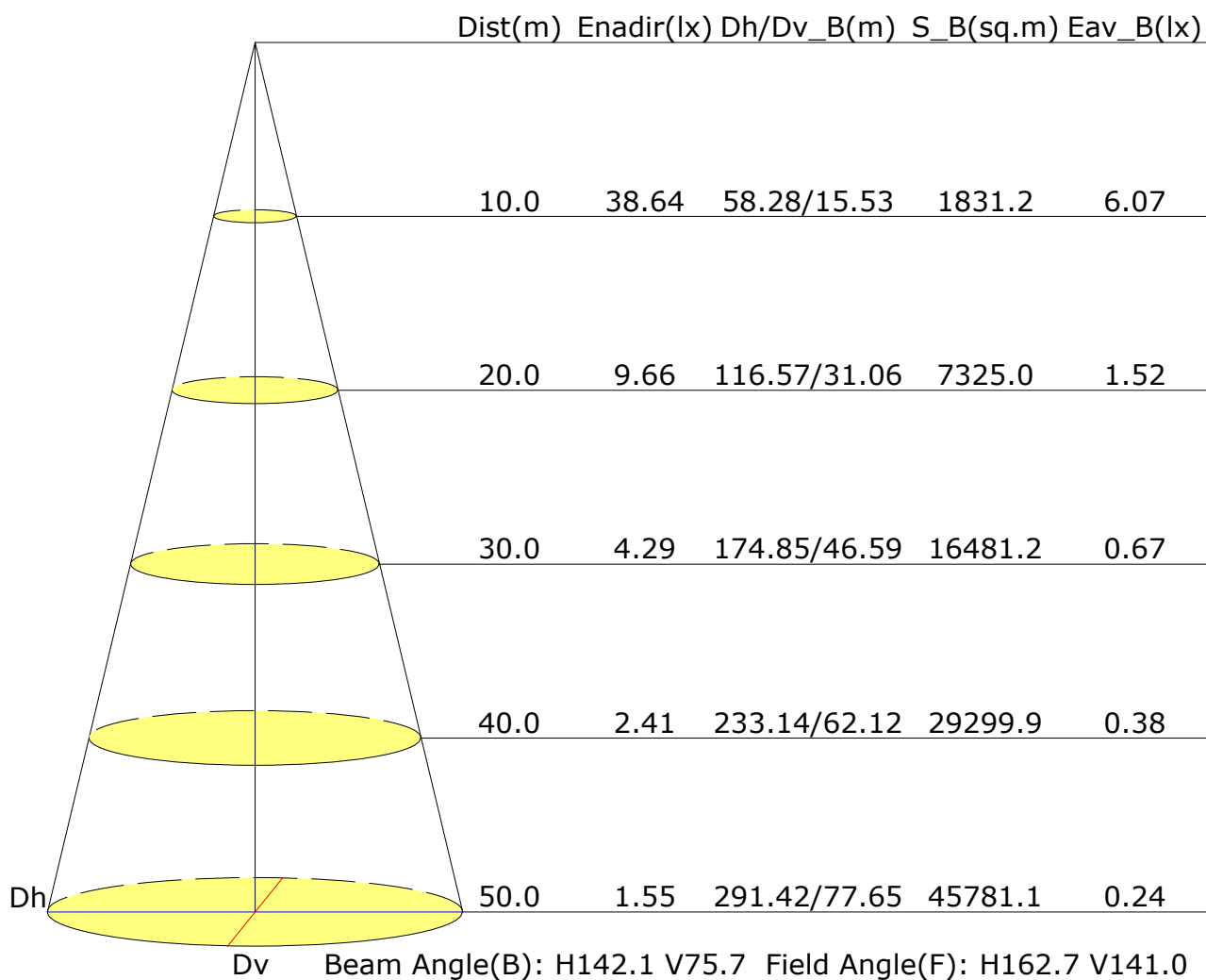
Test Device: GPM-1800B

Distance: 8.512 m

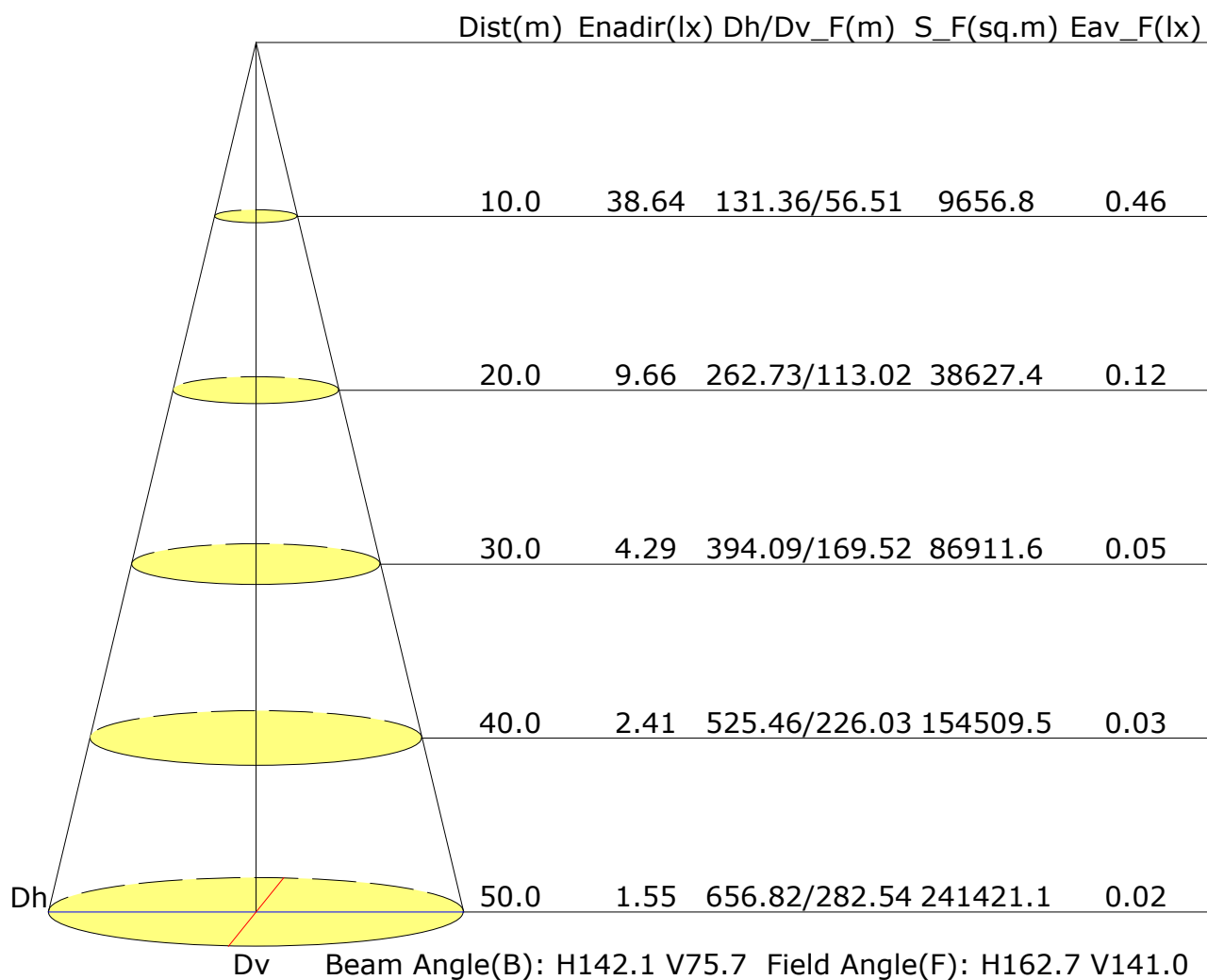
Humidity:

Inspector:

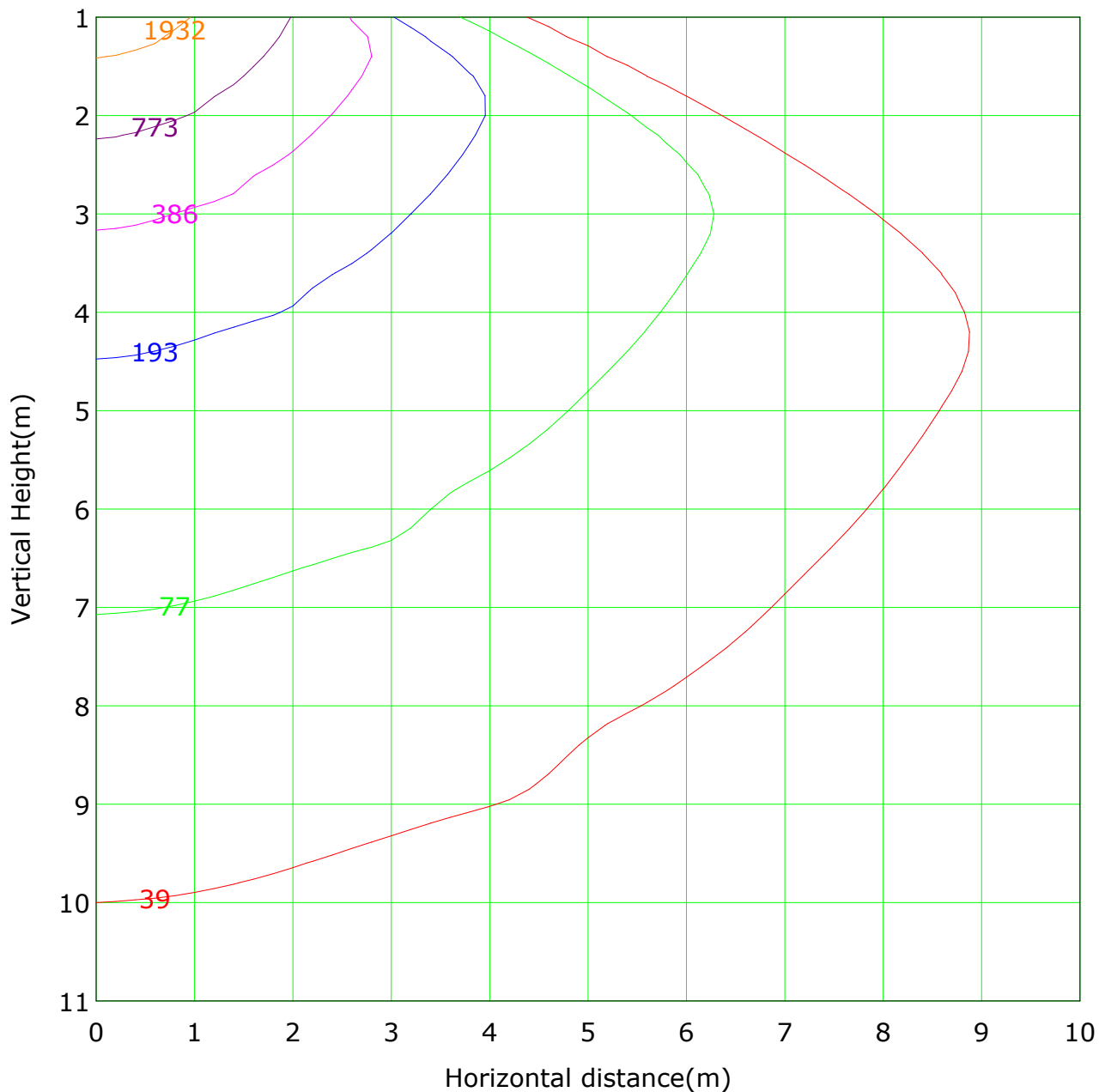
Illuminance at a Distance(Beam Angle)



Illuminance at a Distance(Field Angle)



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 3864.0 lx
— (1%): 38.6 lx — (2%): 77.3 lx
— (5%): 193.2 lx — (10%): 386.4 lx
— (20%): 772.8 lx — (50%): 1932.0 lx
— (100%): 3864.0 lx

UGR Table

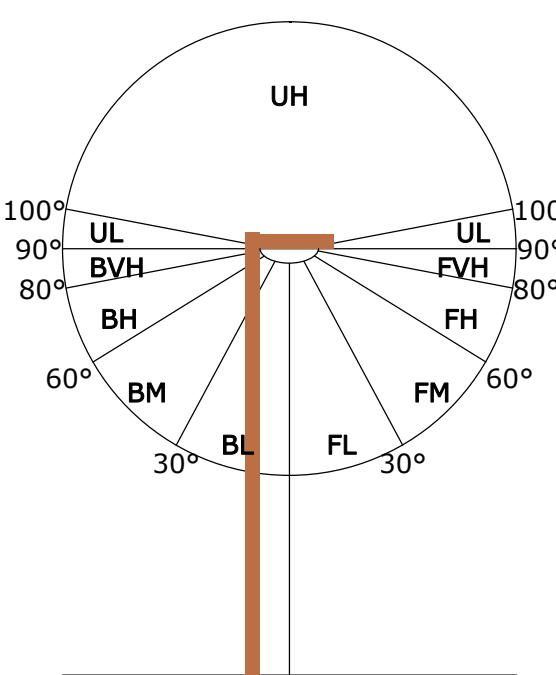
Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-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 22685lm ($8\log(F/F_0) = 10.8$).

C Plane (°):0.0-360.0: 15.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.512 m
Humidity:
Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	17661	77.9
	FL (0°-30°)	2254	9.9
	FM (30°-60°)	8802	38.8
	FH (60°-80°)	6352	28.0
	FVH (80°-90°)	254	1.1
	BACK LIGHT	4868	21.5
	BL (0°-30°)	1002	4.4
	BM (30°-60°)	2540	11.2
	BH (60°-80°)	1238	5.5
	BVH (80°-90°)	88	0.4
	UP LIGHT	155	0.7
	UL (90°-100°)	16	0.1
	UH (100°-180°)	139	0.6
	TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B3 U5 G3
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B3 U5 G3

C Plane (°):0.0-360.0: 15.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.512 m
Humidity:
Inspector:

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 2.00									
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	NA	0.58	0.65	0.72	0.81	0.87	0.91	0.97	1.00	
	0.30		NA	0.49	0.56	0.63	0.74	0.81	0.85	0.92	0.96	
	0.20		NA	0.43	0.50	0.57	0.68	0.75	0.80	0.88	0.93	
0.50	0.50	0.20	NA	0.56	0.63	0.69	0.78	0.84	0.87	0.93	0.96	
	0.30		NA	0.48	0.55	0.62	0.72	0.78	0.83	0.89	0.93	
	0.20		NA	0.42	0.49	0.56	0.66	0.73	0.78	0.85	0.90	
0.30	0.50	0.20	NA	0.54	0.60	0.66	0.75	0.80	0.84	0.89	0.92	
	0.30		NA	0.47	0.53	0.60	0.69	0.76	0.80	0.86	0.89	
	0.20		NA	0.41	0.48	0.55	0.65	0.72	0.76	0.83	0.87	
0.00	0.00	0.00	NA	0.39	0.45	0.51	0.61	0.68	0.72	0.78	0.82	
Rating:152W 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 = 2.00									
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	NA	0.95	0.83	0.72	0.57	0.47	0.40	0.31	0.25	
	0.30		NA	0.81	0.72	0.64	0.51	0.43	0.37	0.29	0.24	
	0.20		NA	0.71	0.64	0.57	0.47	0.40	0.35	0.27	0.23	
0.50	0.50	0.20	NA	0.91	0.80	0.69	0.54	0.48	0.38	0.30	0.24	
	0.30		NA	0.79	0.71	0.62	0.50	0.42	0.36	0.28	0.23	
	0.20		NA	0.70	0.63	0.56	0.46	0.39	0.34	0.27	0.22	
0.30	0.50	0.20	NA	0.88	0.77	0.67	0.52	0.43	0.37	0.28	0.23	
	0.30		NA	0.78	0.69	0.61	0.48	0.40	0.35	0.27	0.22	
	0.20		NA	0.69	0.62	0.55	0.45	0.38	0.33	0.26	0.21	
0.00	0.00	0.00	0.99	0.60	0.54	0.48	0.38	0.31	0.27	0.21	0.17	
Rating:152W 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 = 2.00									
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	NA	0.19	0.20	0.21	0.21	0.22	0.22	0.22	0.23	
	0.30		NA	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		NA	0.06	0.08	0.09	0.11	0.13	0.14	0.16	0.17	
0.50	0.50	0.20	NA	0.19	0.20	0.20	0.21	0.21	0.21	0.22	0.22	
	0.30		NA	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		NA	0.06	0.07	0.09	0.11	0.12	0.14	0.15	0.16	
0.30	0.50	0.20	NA	0.18	0.19	0.19	0.20	0.20	0.20	0.21	0.21	
	0.30		NA	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18	
	0.20		NA	0.06	0.07	0.09	0.11	0.12	0.13	0.15	0.16	
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Rating:152W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												