

Report No.:

Test Time: 2020-09-15 14:27

## Luminaire Property

Luminaire Manufacturer: ASD Lighting Corp

Luminaire Description: ASD-LMPJBR-4D12CC-WH-5K

Voltage: 120.3 V

Current: 0.094 A

Power: 11.43 W

Power Factor: 0.976

## Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 865.8 lm

Measurement Flux: 865.8 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 162.4, 163.7, 163.9, 160.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 115.5, 116.0, 116.0, 115.7

Luminaire Efficacy Rating (LER): 75.80

Central Intensity: 291.98 cd

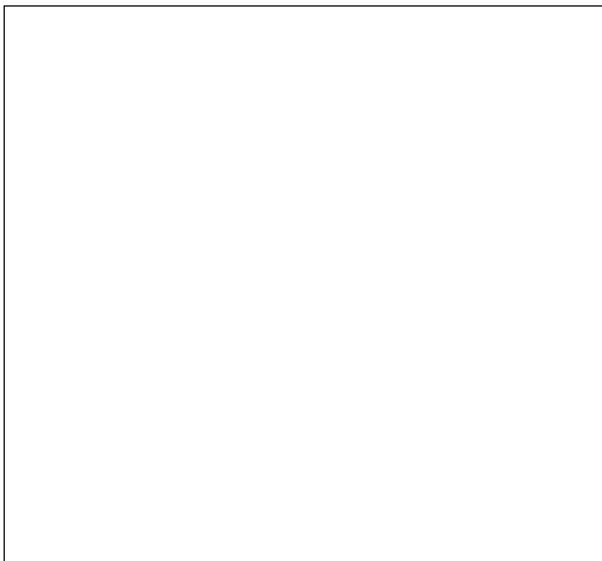
Max. Intensity: 294.21 cd

Pos of Max. Intensity: H0 V5

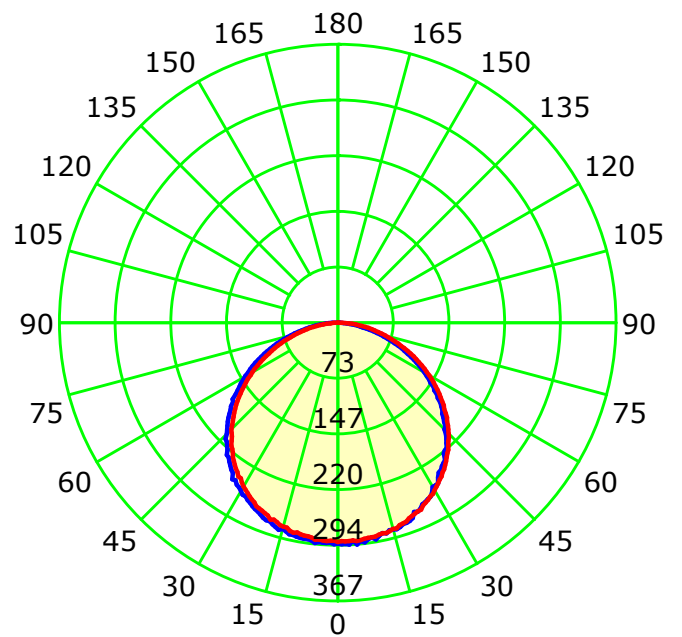
S/MH(C0/C180): 1.29

S/MH(C90/C270): 1.29

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Gamma Plane (°):0.0-90.0:1.0

Test Lab:

Test Device: GPM-1600L

Test Type: TYPE C

Distance: 6.935 m

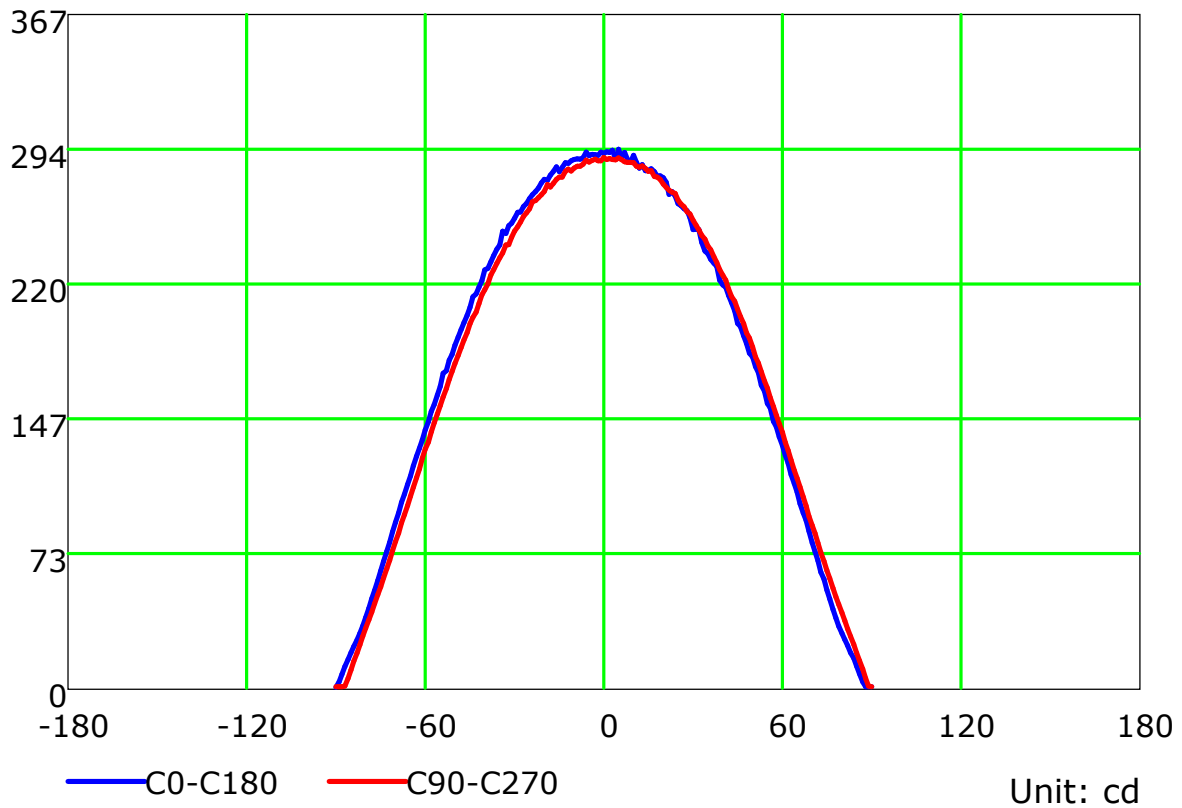
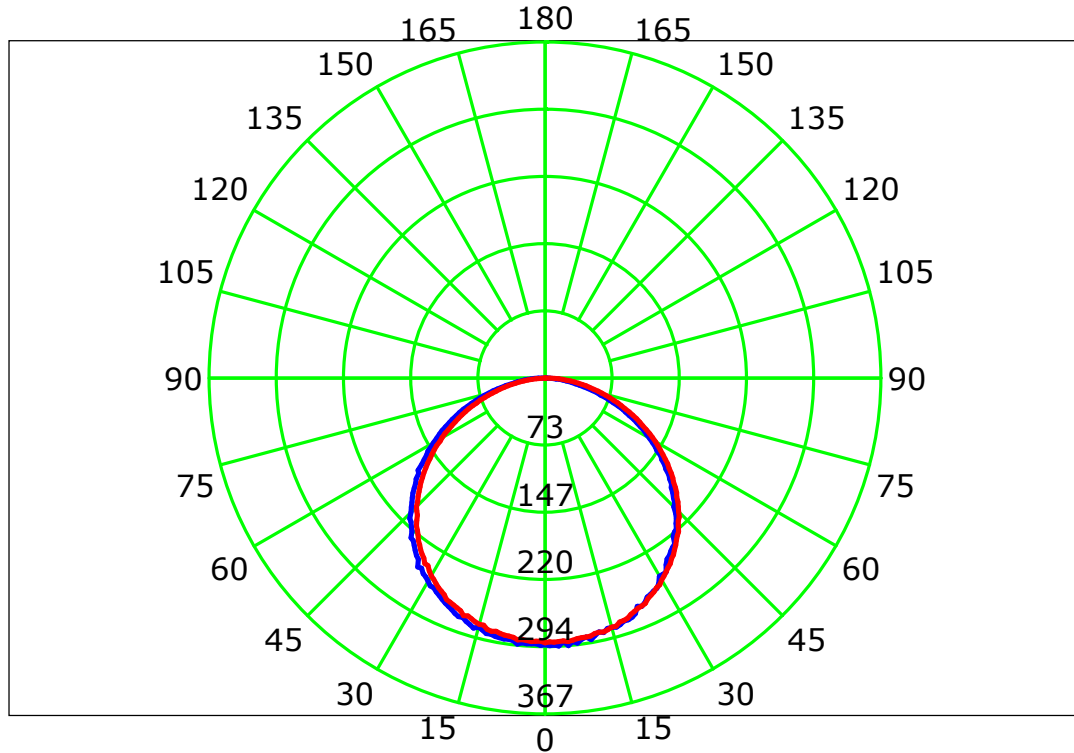
Temperature:

Humidity:

Operator:

Inspector:

## Luminous Intensity Distribution Curve

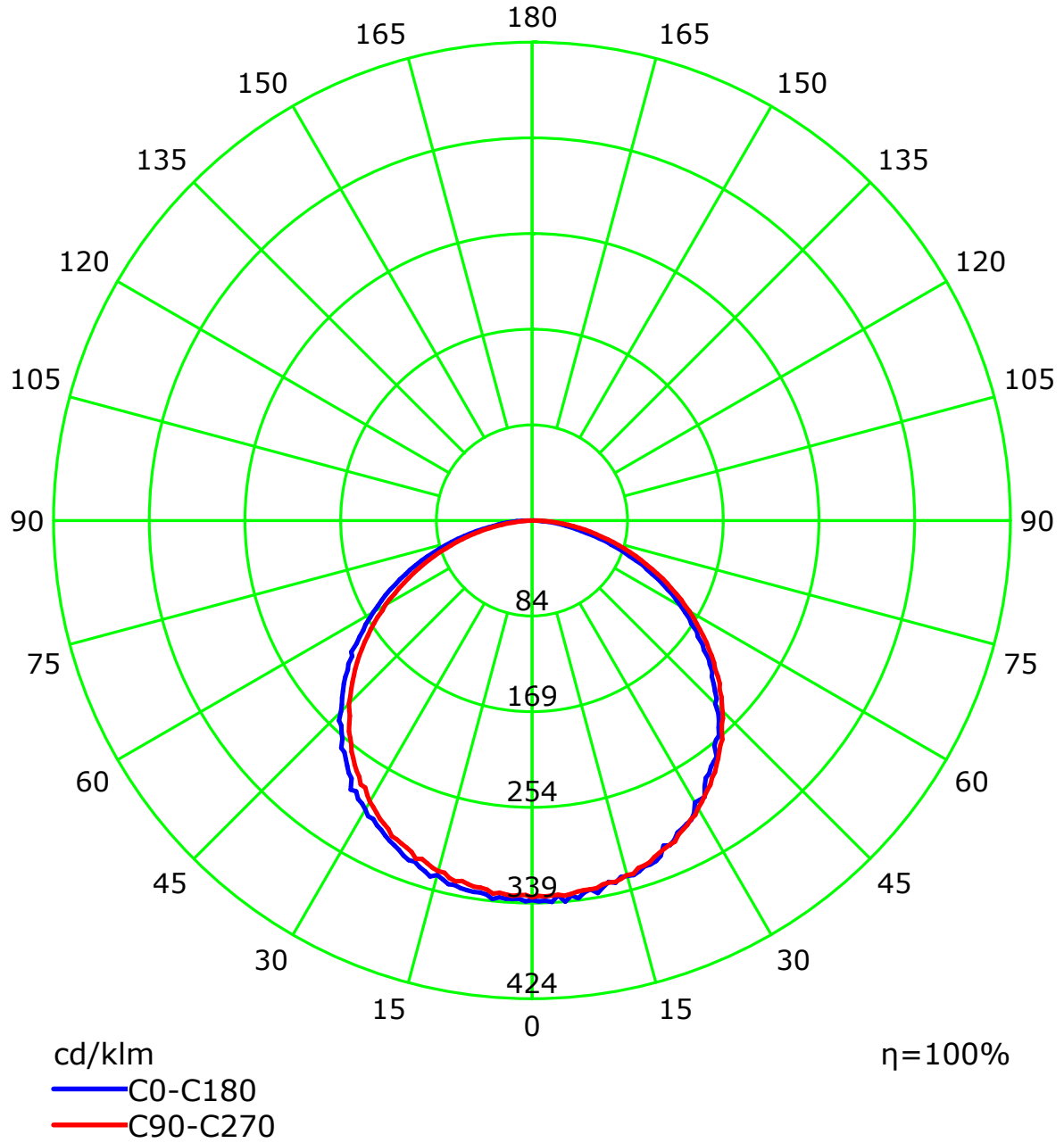


C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

Unit: cd

## Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

Distance: 6.935 m

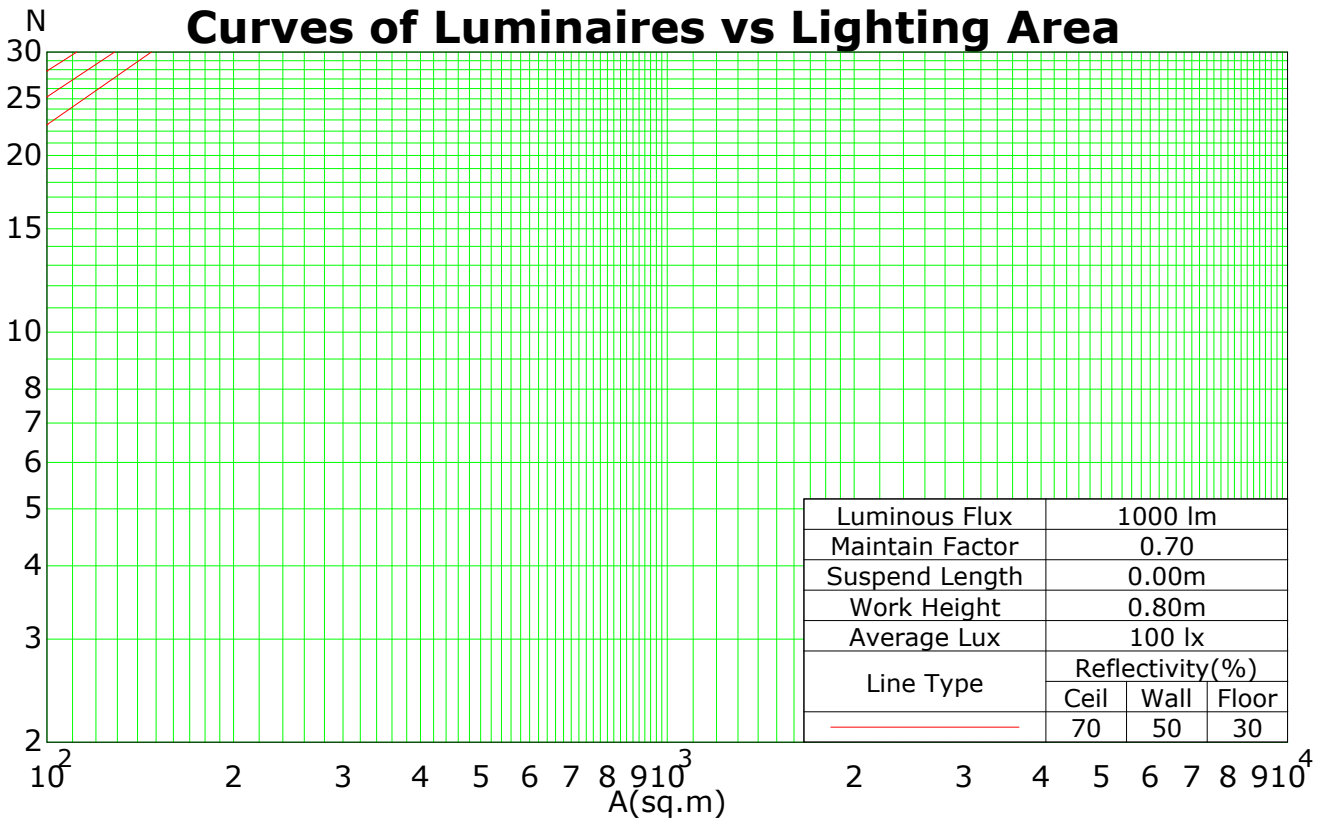
Humidity:

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	41	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	55	42	34	28	41	33	28	40	33	28	39	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

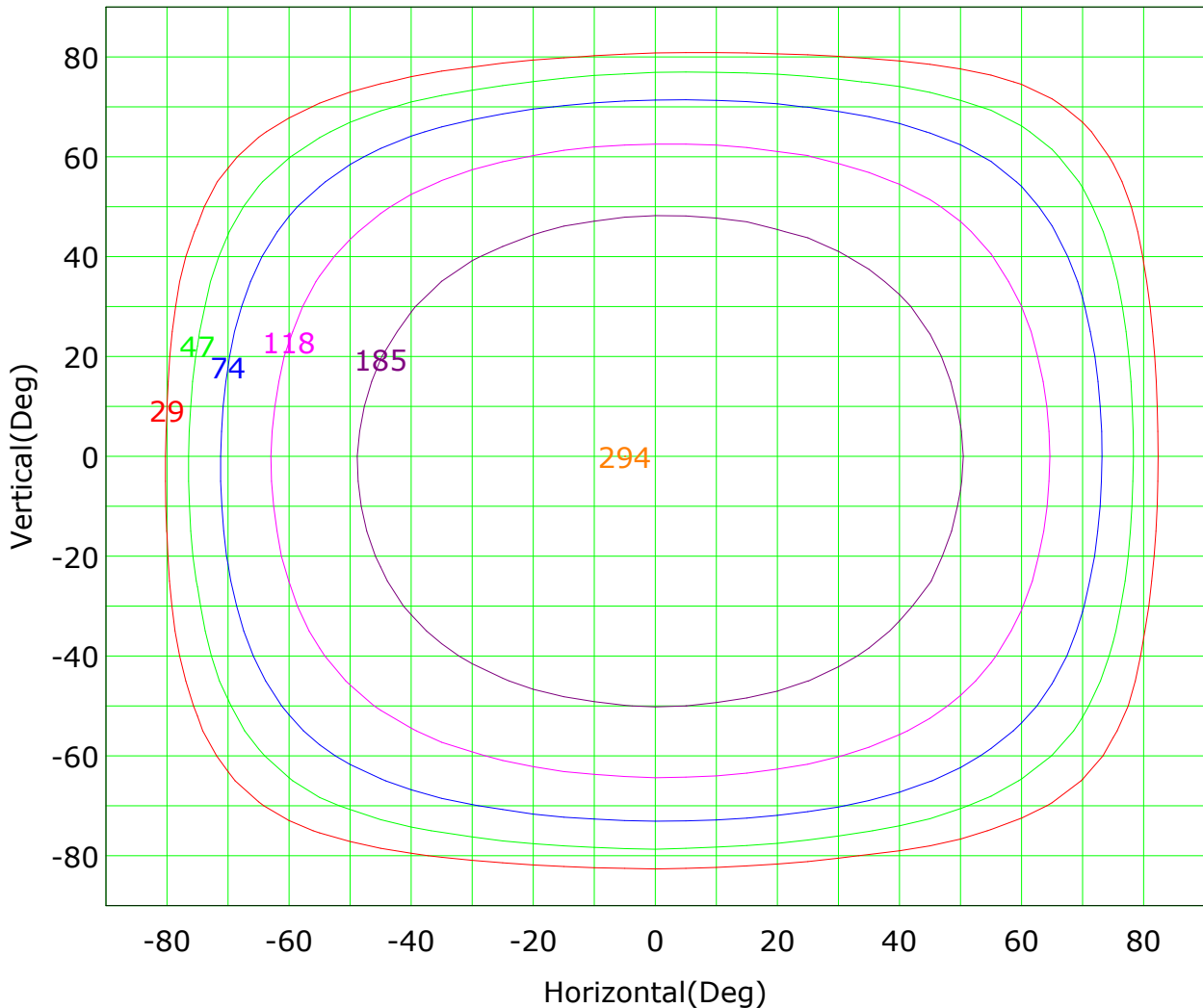
Spacing Criteria (0-180): 1.29  
 Spacing Criteria (90-270): 1.29  
 Spacing Criteria (Diagonal): 1.40



C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

## Isocandela (rectangle)



Imax (100%): 294 cd

— ( 10%):	29 cd	— ( 16%):	47 cd
— ( 25%):	74 cd	— ( 40%):	118 cd
— ( 63%):	185 cd	— (100%):	294 cd

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

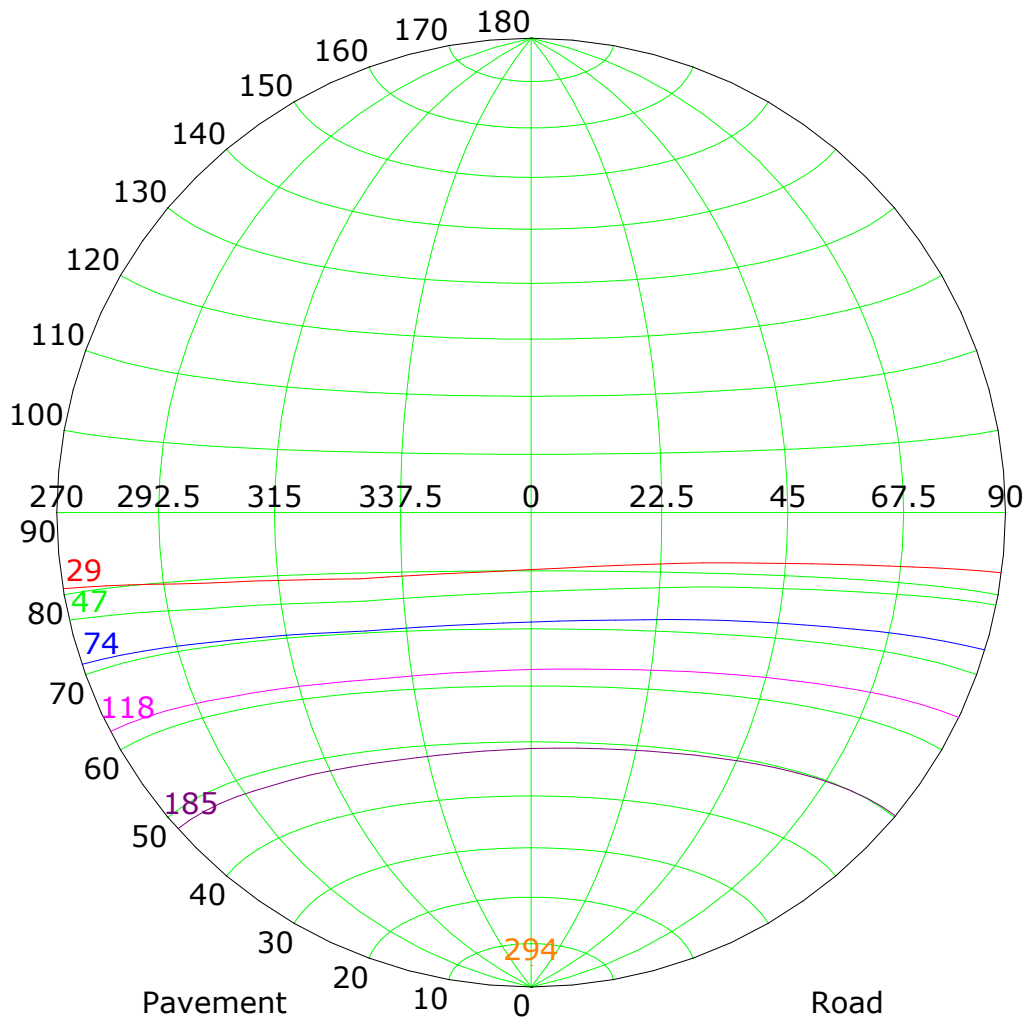
Test Device: GPM-1600L

Distance: 6.935 m

Humidity:

Inspector:

## Isocandela (sphere)



Imax (100%): 294 cd

— ( 10%):	29 cd	— ( 16%):	47 cd
— ( 25%):	74 cd	— ( 40%):	118 cd
— ( 63%):	185 cd	— (100%):	294 cd

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

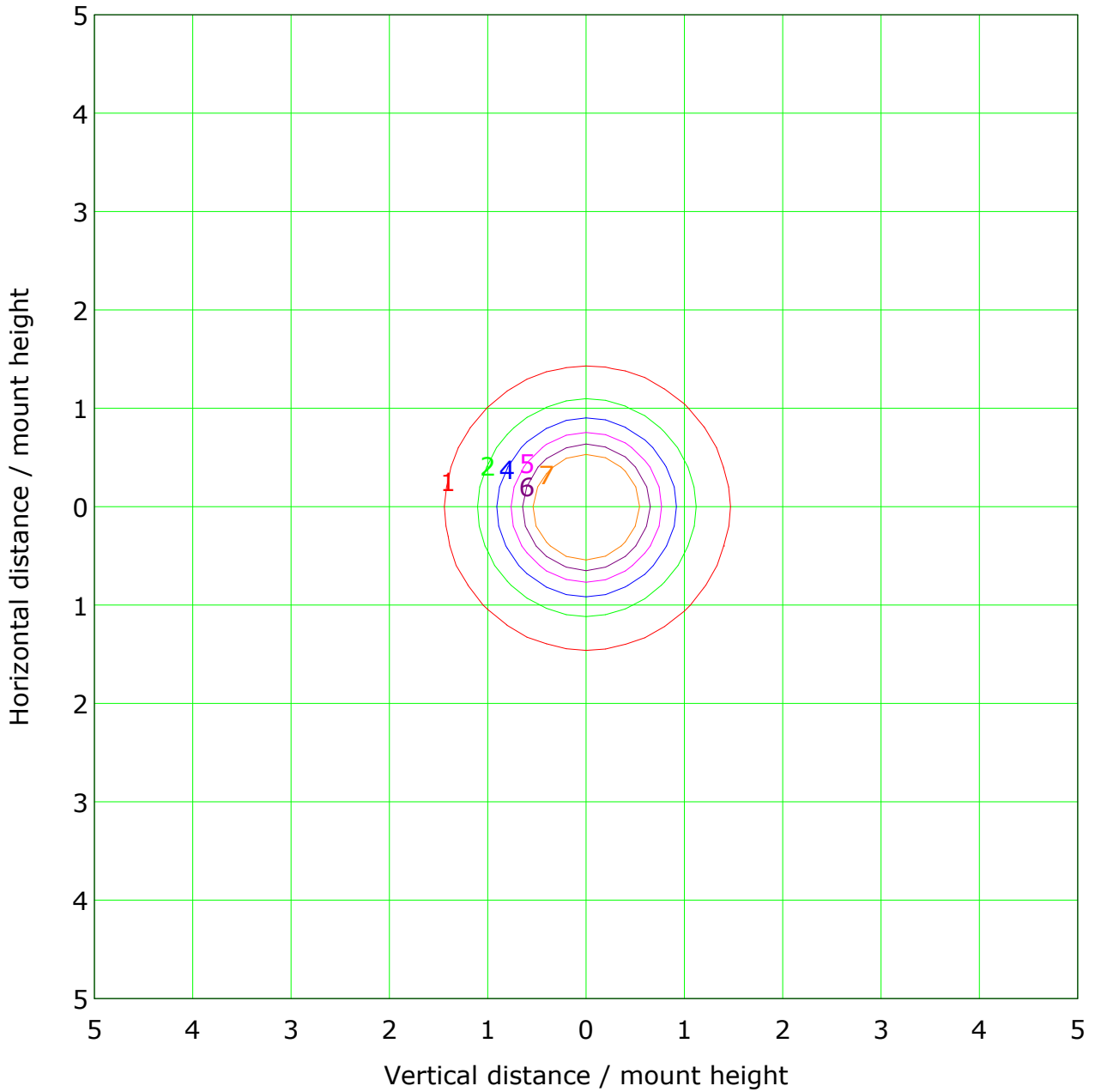
Test Device: GPM-1600L

Distance: 6.935 m

Humidity:

Inspector:

## IsoLux Plot



Mounting Height: 5.0m		Max Lux(100%): 11.7 lx	
<ul style="list-style-type: none"> <li><span style="color: red;">—</span> ( 10%): 1.2 lx</li> <li><span style="color: blue;">—</span> ( 30%): 3.5 lx</li> <li><span style="color: purple;">—</span> ( 50%): 5.9 lx</li> <li><span style="color: green;">—</span> (100%): 11.7 lx</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: green;">—</span> ( 20%): 2.3 lx</li> <li><span style="color: magenta;">—</span> ( 40%): 4.7 lx</li> <li><span style="color: orange;">—</span> ( 60%): 7.0 lx</li> </ul>		

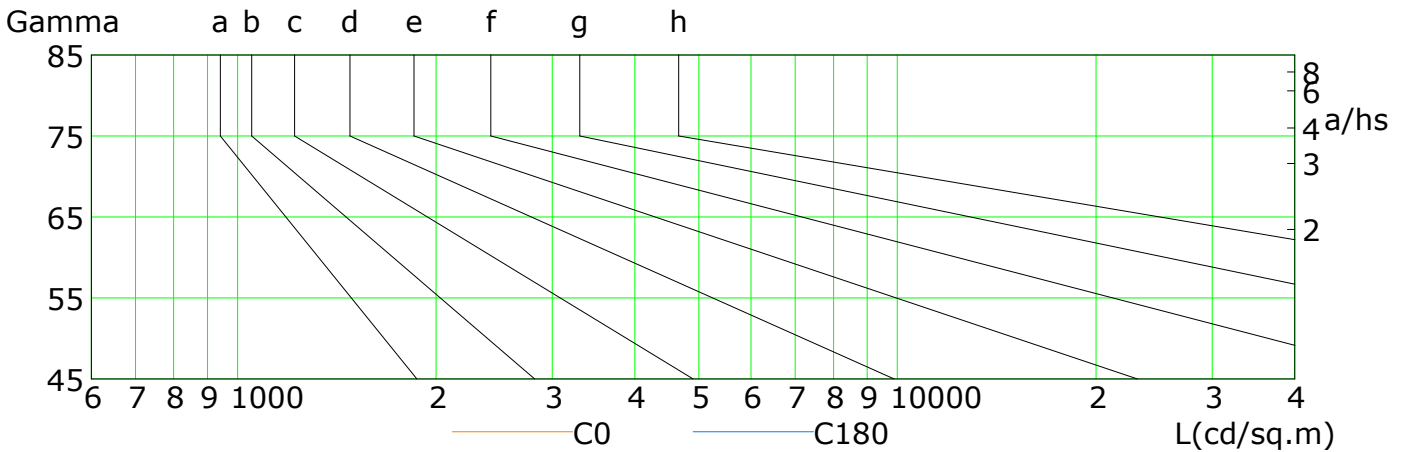
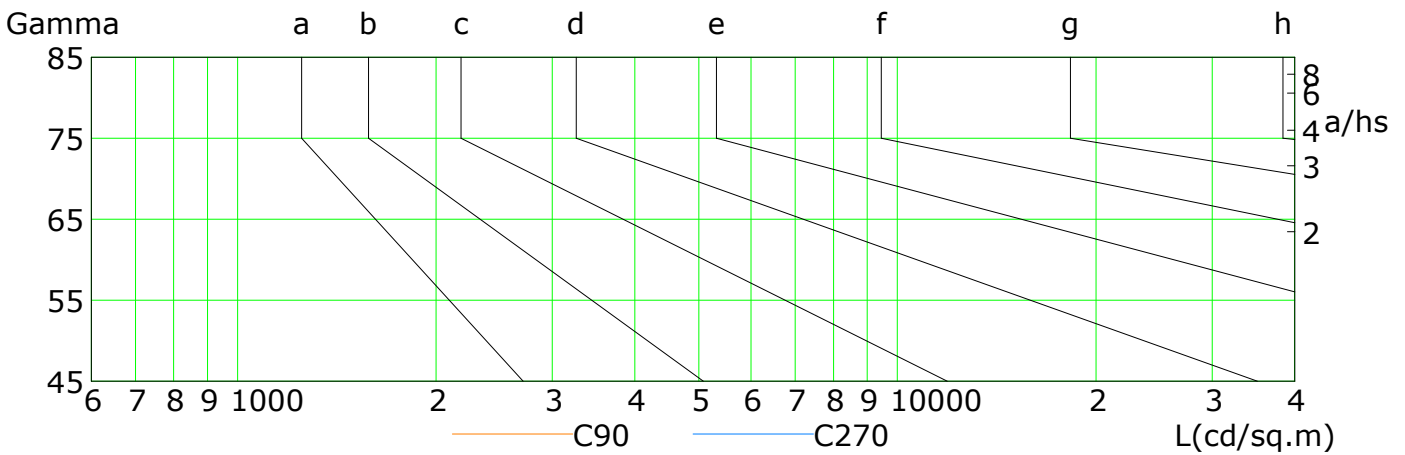
C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

## Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
		2000	1000	500	<=300				
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	199	181	156	133	107	80	54	30	12
C90	207	186	164	140	115	89	64	41	19
C180	208	187	165	141	116	91	64	39	19
C270	199	177	154	131	105	80	56	33	10

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

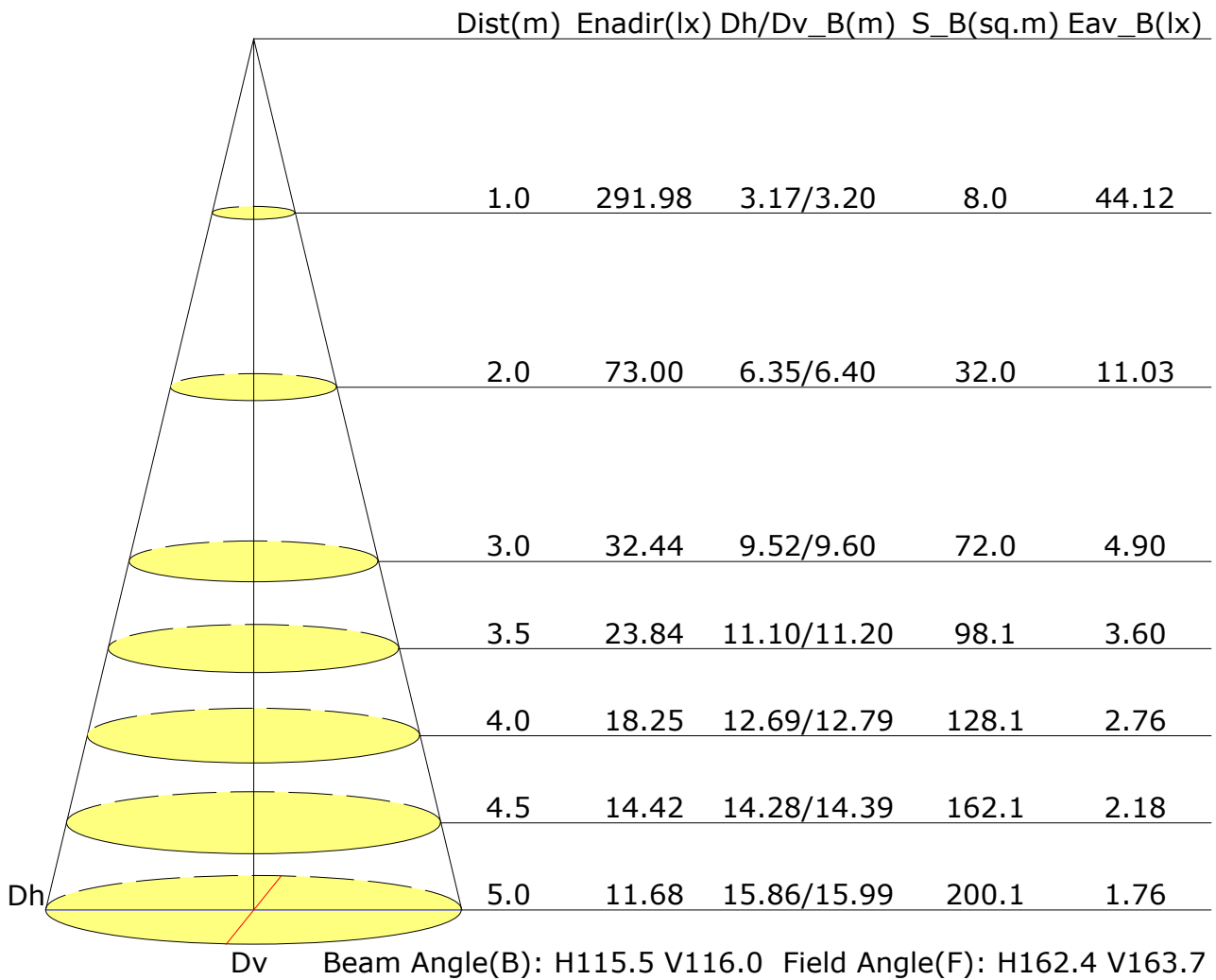
Distance: 6.935 m

Humidity:

Inspector:



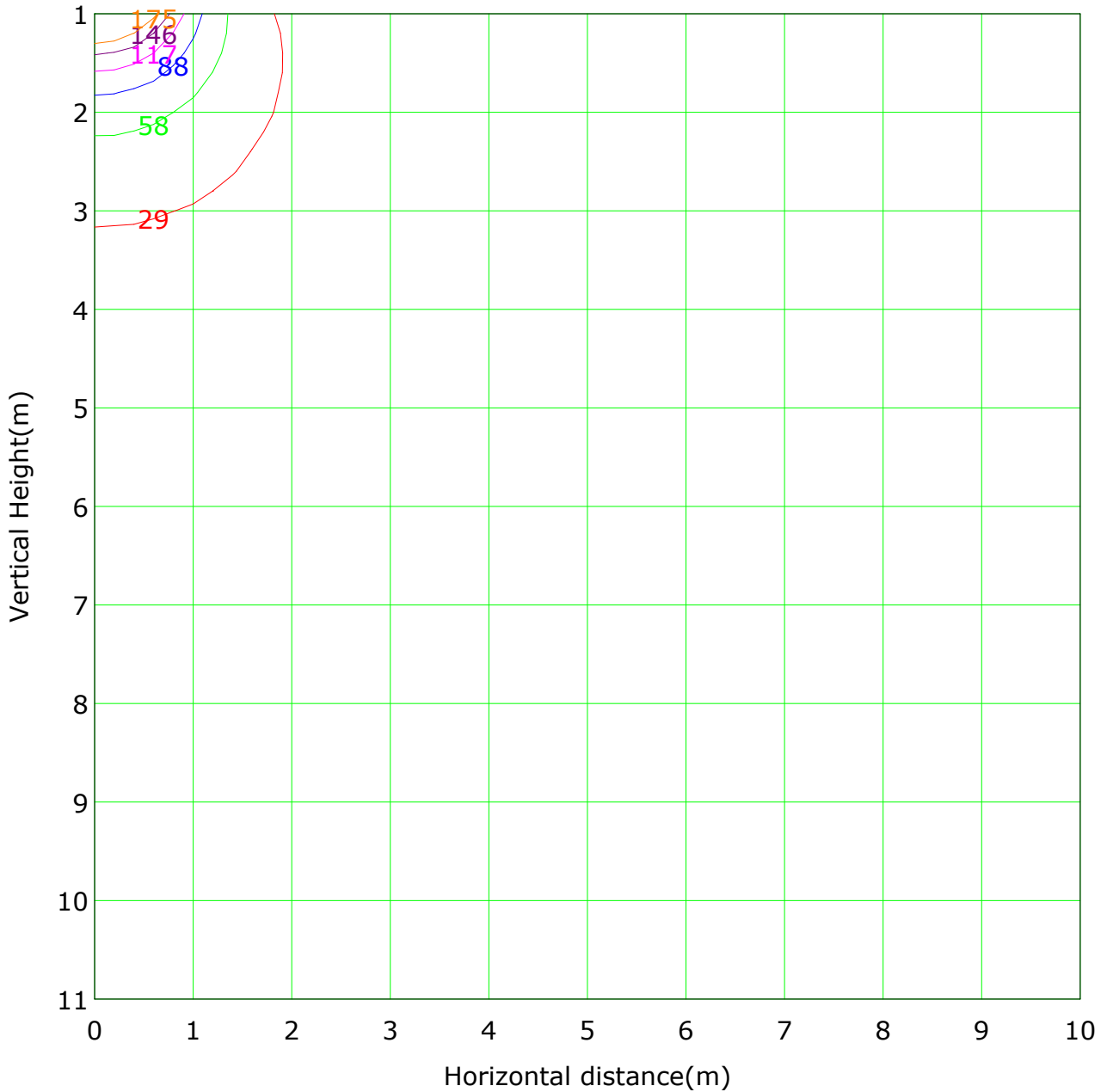
## Illuminance at a Distance



C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

## Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 11.0m	Max Lux: 292.0 lx
— ( 10%): 29.2 lx	— ( 20%): 58.4 lx	
— ( 30%): 87.6 lx	— ( 40%): 116.8 lx	
— ( 50%): 146.0 lx	— ( 60%): 175.2 lx	
— (100%): 292.0 lx		

C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

# Area Flux Table

Unit: lm

-90	0.0	0.0	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	3.3	0.3		
-80	0.0	0.1	0.3	0.6	0.9	1.2	1.4	1.6	1.7	1.7	1.5	1.2	0.9	0.6	0.4	0.2	0.1	0.0	14.3	12.5		
-70	0.0	0.2	0.5	1.0	1.6	2.1	2.6	3.0	3.2	3.2	2.9	2.5	1.9	1.3	0.8	0.4	0.1	0.0	27.4	26.8		
-60	0.0	0.3	0.8	1.5	2.3	3.1	3.8	4.4	4.7	4.6	4.3	3.7	2.9	2.1	1.2	0.6	0.2	0.0	40.6	40.3		
-50	0.0	0.3	1.0	1.9	2.9	4.0	5.0	5.7	6.0	6.0	5.5	4.8	3.8	2.8	1.7	0.8	0.3	0.0	52.6	52.4		
-40	0.1	0.4	1.2	2.3	3.5	4.8	5.9	6.7	7.1	7.1	6.6	5.7	4.6	3.3	2.1	1.0	0.3	0.0	62.7	62.6		
-30	0.1	0.5	1.3	2.6	4.0	5.4	6.6	7.5	7.9	7.9	7.4	6.4	5.2	3.8	2.4	1.2	0.4	0.0	70.4	70.4		
-20	0.1	0.5	1.4	2.8	4.3	5.8	7.1	8.0	8.4	8.4	7.9	6.9	5.6	4.1	2.6	1.3	0.4	0.0	75.7	75.6		
-10	0.1	0.5	1.5	2.9	4.4	6.0	7.3	8.3	8.7	8.7	8.2	7.2	5.9	4.3	2.7	1.4	0.4	0.0	78.6	78.6		
0	0.1	0.5	1.5	2.9	4.4	6.0	7.3	8.2	8.7	8.8	8.3	7.3	5.9	4.3	2.7	1.4	0.4	0.0	78.9	78.8		
10	0.1	0.5	1.4	2.8	4.3	5.8	7.1	8.0	8.5	8.5	8.1	7.1	5.7	4.2	2.6	1.3	0.4	0.0	76.5	76.4		
20	0.1	0.5	1.3	2.6	4.0	5.4	6.7	7.6	8.0	8.0	7.6	6.6	5.4	3.9	2.5	1.2	0.4	0.0	71.7	71.6		
30	0.1	0.4	1.2	2.3	3.6	4.9	6.0	6.8	7.3	7.3	6.8	6.0	4.8	3.5	2.2	1.1	0.4	0.0	64.4	64.3		
40	0.0	0.3	1.0	1.9	3.0	4.1	5.1	5.8	6.2	6.2	5.8	5.1	4.0	2.9	1.8	0.9	0.3	0.0	54.7	54.5		
50	0.0	0.3	0.7	1.5	2.4	3.2	4.0	4.6	4.9	4.9	4.6	4.0	3.1	2.3	1.4	0.7	0.2	0.0	42.8	42.6		
60	0.0	0.2	0.5	1.0	1.6	2.3	2.8	3.2	3.5	3.4	3.2	2.7	2.2	1.6	1.0	0.5	0.2	0.0	29.7	29.3		
70	0.0	0.1	0.3	0.5	0.8	1.2	1.5	1.8	1.9	1.9	1.8	1.5	1.2	0.9	0.5	0.3	0.1	0.0	16.4	15.1		
80	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.5	0.6	0.6	0.5	0.4	0.3	0.2	0.1	0.1	0.0	0.0	4.9	1.2		
90	Flux(T)	0.8	5.7	16.2	31.1	48.5	66.0	81.1	92.2	97.7	97.4	91.2	79.5	63.9	46.2	28.9	14.4	4.6	0.5	866		
	Flux(E)	0.2	4.9	15.4	30.3	47.8	65.3	80.5	91.6	97.2	96.8	90.5	78.9	63.2	45.5	28.2	13.6	3.7	0.0		853	
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

Distance: 6.935 m

Humidity:

Inspector:

C Plane (°):0.0-360.0: 30.0

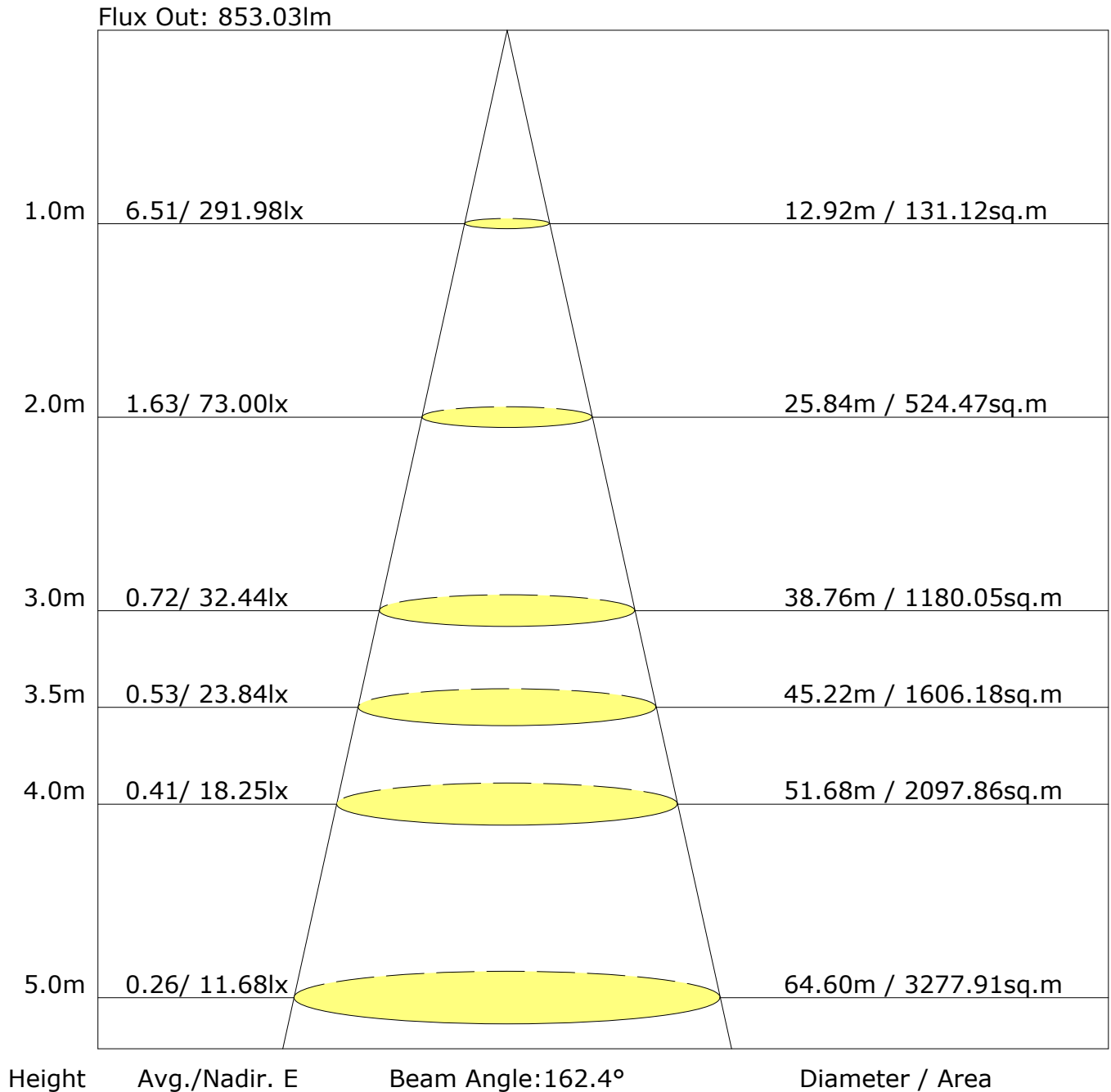
Test Lab:

Test Type: TYPE C

Temperature:

Operator:

## The Average Illuminance Effective Figure



C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 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	-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.\$
S=1.5H										-1.\$/-1.\$
S=2.0H										-1.\$/-1.\$

Calculate in accordance with CIE Pub.117. The table is revised with 866lm ( $8\log(F/F_0) = -0.5$ ).

C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

**FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM**

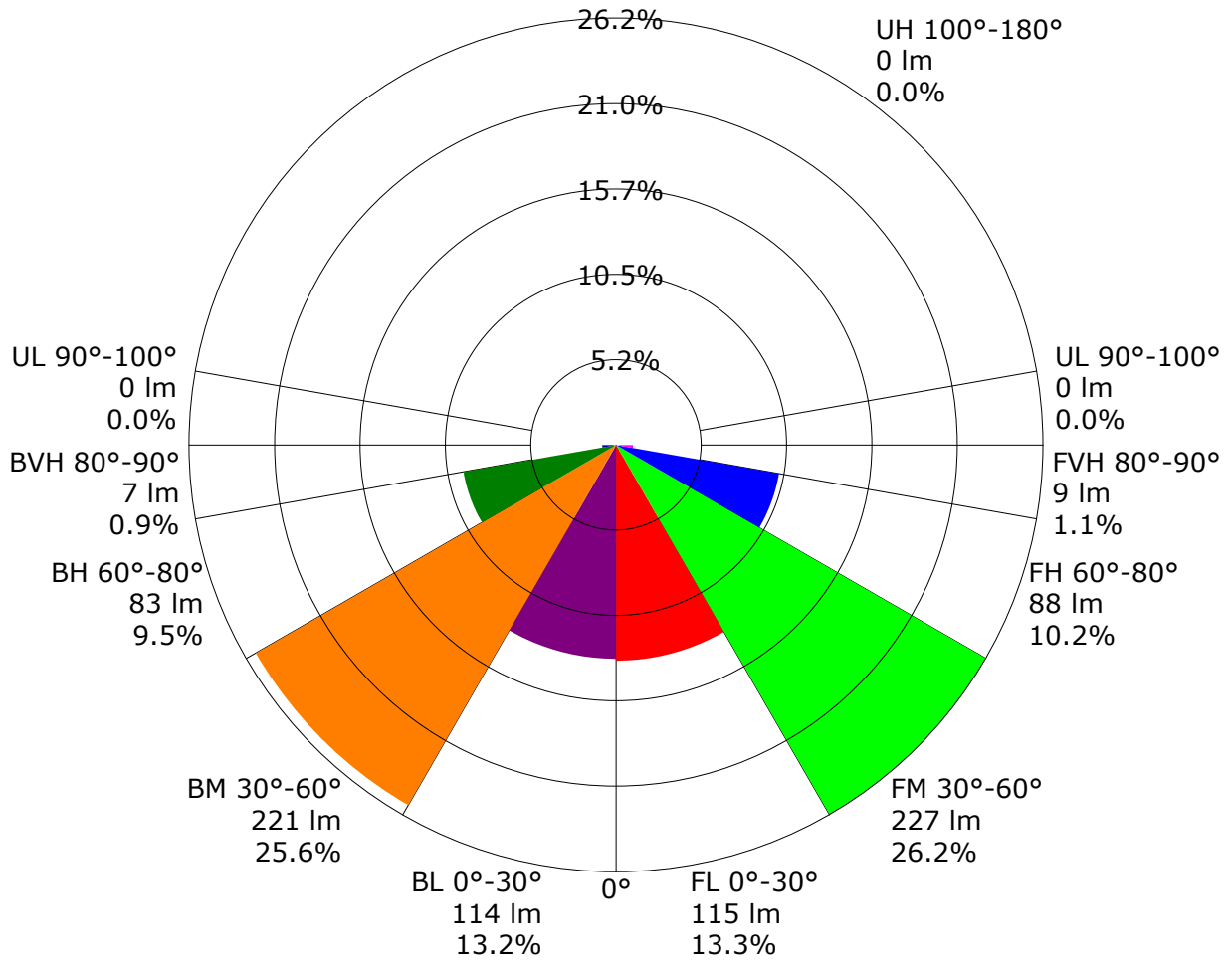
	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	440	50.8
	FL ( 0°-30°)	115	13.3
	FM (30°-60°)	227	26.2
	FH (60°-80°)	88	10.2
	FVH (80°-90°)	9	1.1
	BACK LIGHT	426	49.2
	BL ( 0°-30°)	114	13.2
	BM (30°-60°)	221	25.6
	BH (60°-80°)	83	9.5
	BVH (80°-90°)	7	0.9
	UP LIGHT	0	0.0
	UL (90°-100°)	0	0.0
	UH (100°-180°)	0	0.0
	TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B1 U0 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B1 U0 G0

C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

### LCS Graph



**Back Light**

**Forward Light**

Scale= MAX LCS%

Trapped Light:NA,NA

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

Distance: 6.935 m

Humidity:

Inspector:

## 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	0.56	0.66	0.74	0.79	0.87	0.92	0.95	1.00	1.03	
	0.30		0.48	0.58	0.66	0.72	0.80	0.86	0.90	0.96	0.99	
	0.20		0.42	0.52	0.60	0.66	0.75	0.81	0.86	0.92	0.96	
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.88	0.92	0.96	0.99	
	0.30		0.47	0.57	0.65	0.70	0.78	0.83	0.87	0.93	0.96	
	0.20		0.42	0.52	0.60	0.65	0.74	0.79	0.84	0.89	0.93	
0.30	0.50	0.20	0.53	0.62	0.69	0.74	0.81	0.85	0.88	0.92	0.95	
	0.30		0.46	0.56	0.63	0.69	0.76	0.81	0.85	0.89	0.93	
	0.20		0.41	0.51	0.59	0.64	0.72	0.78	0.82	0.87	0.90	
0.00	0.00	0.00	0.39	0.49	0.56	0.61	0.69	0.74	0.77	0.82	0.86	
<p>Rating:11W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:



## 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	1.01	0.84	0.71	0.62	0.50	0.41	0.35	0.27	0.22	
	0.30		0.85	0.72	0.62	0.55	0.45	0.38	0.33	0.26	0.21	
	0.20		0.73	0.63	0.55	0.49	0.41	0.35	0.30	0.24	0.20	
0.50	0.50	0.20	0.98	0.81	0.69	0.60	0.48	0.43	0.34	0.26	0.21	
	0.30		0.83	0.70	0.61	0.53	0.43	0.36	0.32	0.25	0.20	
	0.20		0.72	0.62	0.54	0.48	0.40	0.34	0.30	0.24	0.20	
0.30	0.50	0.20	0.95	0.78	0.66	0.57	0.46	0.38	0.32	0.25	0.20	
	0.30		0.81	0.68	0.59	0.52	0.42	0.35	0.30	0.24	0.20	
	0.20		0.71	0.61	0.53	0.48	0.39	0.33	0.29	0.23	0.19	
0.00	0.00	0.00	0.61	0.51	0.44	0.39	0.32	0.26	0.23	0.18	0.15	
<p>Rating:11W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

## 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		0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19
	0.20		0.05	0.06	0.08	0.09	0.11	0.13	0.14	0.16	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	0.08	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	0.19	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	0.11	0.12	0.13	0.15	0.16
0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA
<p>Rating:11W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											

C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

## Zonal Lumen

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	290.4	0.3	0.3	0.03	0.03
1.0-2.0	290.1	0.8	1.1	0.10	0.13
2.0-3.0	289.9	1.4	2.5	0.16	0.29
3.0-4.0	289.5	1.9	4.4	0.22	0.51
4.0-5.0	289.4	2.5	6.9	0.29	0.80
5.0-6.0	289.2	3.0	10.0	0.35	1.15
6.0-7.0	288.6	3.6	13.5	0.41	1.56
7.0-8.0	287.9	4.1	17.7	0.48	2.04
8.0-9.0	287.4	4.7	22.3	0.54	2.58
9.0-10.0	286.9	5.2	27.5	0.60	3.18
10.0-11.0	286.0	5.7	33.2	0.66	3.84
11.0-12.0	285.0	6.2	39.5	0.72	4.56
12.0-13.0	284.5	6.8	46.2	0.78	5.34
13.0-14.0	283.1	7.2	53.5	0.84	6.18
14.0-15.0	281.8	7.7	61.2	0.89	7.07
15.0-16.0	281.2	8.2	69.4	0.95	8.02
16.0-17.0	279.8	8.7	78.2	1.01	9.03
17.0-18.0	278.3	9.2	87.3	1.06	10.09
18.0-19.0	277.2	9.6	97.0	1.11	11.20
19.0-20.0	275.5	10.1	107.1	1.16	12.37
20.0-21.0	273.7	10.5	117.6	1.21	13.58
21.0-22.0	271.9	10.9	128.5	1.26	14.84
22.0-23.0	270.0	11.3	139.8	1.31	16.15
23.0-24.0	268.2	11.7	151.6	1.35	17.51
24.0-25.0	266.2	12.1	163.7	1.40	18.90
25.0-26.0	263.9	12.5	176.1	1.44	20.34
26.0-27.0	261.6	12.8	188.9	1.48	21.82
27.0-28.0	259.2	13.1	202.1	1.52	23.34
28.0-29.0	257.1	13.5	215.5	1.55	24.89
29.0-30.0	254.5	13.7	229.2	1.59	26.48
30.0-31.0	251.7	14.0	243.3	1.62	28.10
31.0-32.0	249.1	14.3	257.5	1.65	29.75
32.0-33.0	246.5	14.5	272.1	1.68	31.42
33.0-34.0	243.8	14.8	286.8	1.70	33.13
34.0-35.0	240.7	14.9	301.8	1.73	34.85
35.0-36.0	237.5	15.1	316.9	1.75	36.60

C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

### Zonal Lumen (Continue 1)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	234.3	15.3	332.2	1.77	38.37
37.0-38.0	231.1	15.4	347.6	1.78	40.15
38.0-39.0	227.5	15.5	363.1	1.79	41.94
39.0-40.0	223.9	15.6	378.7	1.80	43.75
40.0-41.0	220.7	15.7	394.5	1.82	45.56
41.0-42.0	217.1	15.8	410.2	1.82	47.38
42.0-43.0	213.1	15.8	426.0	1.82	49.21
43.0-44.0	209.3	15.8	441.8	1.82	51.03
44.0-45.0	205.5	15.8	457.6	1.82	52.85
45.0-46.0	201.2	15.7	473.4	1.82	54.67
46.0-47.0	197.2	15.7	489.0	1.81	56.48
47.0-48.0	193.0	15.6	504.6	1.80	58.29
48.0-49.0	188.6	15.5	520.1	1.79	60.08
49.0-50.0	184.4	15.4	535.5	1.78	61.85
50.0-51.0	180.0	15.2	550.7	1.76	63.61
51.0-52.0	175.5	15.1	565.8	1.74	65.35
52.0-53.0	171.1	14.9	580.7	1.72	67.07
53.0-54.0	166.6	14.7	595.4	1.70	68.77
54.0-55.0	161.9	14.5	609.8	1.67	70.44
55.0-56.0	157.1	14.2	624.0	1.64	72.08
56.0-57.0	152.2	13.9	637.9	1.61	73.68
57.0-58.0	147.5	13.6	651.6	1.58	75.26
58.0-59.0	142.6	13.3	664.9	1.54	76.80
59.0-60.0	137.7	13.0	677.9	1.50	78.30
60.0-61.0	132.9	12.7	690.6	1.46	79.77
61.0-62.0	127.8	12.3	702.9	1.42	81.19
62.0-63.0	122.8	11.9	714.9	1.38	82.57
63.0-64.0	117.7	11.6	726.4	1.33	83.90
64.0-65.0	112.5	11.1	737.6	1.29	85.19
65.0-66.0	107.6	10.7	748.3	1.24	86.43
66.0-67.0	102.4	10.3	758.6	1.19	87.62
67.0-68.0	97.2	9.8	768.5	1.14	88.76
68.0-69.0	92.0	9.4	777.8	1.08	89.84
69.0-70.0	86.7	8.9	786.7	1.03	90.87
70.0-71.0	81.7	8.4	795.2	0.98	91.85
71.0-72.0	76.5	8.0	803.1	0.92	92.76

C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

### Zonal Lumen (Continue 2)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	71.2	7.4	810.6	0.86	93.62
73.0-74.0	66.2	7.0	817.6	0.80	94.43
74.0-75.0	61.1	6.5	824.0	0.75	95.17
75.0-76.0	56.2	6.0	830.0	0.69	95.86
76.0-77.0	51.1	5.5	835.4	0.63	96.49
77.0-78.0	46.2	4.9	840.4	0.57	97.06
78.0-79.0	41.6	4.5	844.9	0.52	97.58
79.0-80.0	37.1	4.0	848.8	0.46	98.04
80.0-81.0	32.6	3.5	852.4	0.41	98.45
81.0-82.0	28.5	3.1	855.5	0.36	98.81
82.0-83.0	24.5	2.7	858.1	0.31	99.11
83.0-84.0	20.8	2.3	860.4	0.26	99.38
84.0-85.0	17.0	1.9	862.3	0.21	99.59
85.0-86.0	13.1	1.4	863.7	0.17	99.76
86.0-87.0	9.3	1.0	864.7	0.12	99.87
87.0-88.0	5.7	0.6	865.3	0.07	99.94
88.0-89.0	2.9	0.3	865.6	0.04	99.98
89.0-90.0	1.4	0.2	865.8	0.02	100.00

C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1600L  
Distance: 6.935 m  
Humidity:  
Inspector:

## Candlepower Table

Unit: cd

G\C	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0
G0.0	292.0	292.9	291.5	289.7	289.2	288.9	292.0	292.9	291.5	289.7
G1.0	292.9	293.4	290.0	288.7	287.5	288.0	292.7	292.3	290.4	288.0
G2.0	292.5	292.1	290.9	289.2	288.4	288.6	290.9	293.0	291.1	288.1
G3.0	293.7	291.9	287.1	288.7	288.4	288.2	291.4	292.7	290.9	288.9
G4.0	289.0	292.4	290.5	288.5	288.1	288.0	291.5	291.8	290.2	288.1
G5.0	294.2	291.5	290.2	289.5	289.7	287.6	290.9	290.8	290.2	287.3
G6.0	290.0	291.5	291.0	288.7	285.8	286.1	292.7	291.3	288.8	288.4
G7.0	292.5	290.0	289.4	287.5	287.2	286.3	289.6	290.7	287.6	286.0
G8.0	288.7	290.5	288.6	287.0	288.6	286.3	288.8	289.6	288.5	285.1
G9.0	287.2	289.9	287.9	287.1	285.9	286.8	289.1	289.9	286.6	285.0
G10.0	290.9	288.7	288.2	287.0	286.3	284.2	288.7	287.9	286.3	284.0
G11.0	287.1	287.6	286.2	285.1	285.6	284.3	288.0	288.3	284.4	282.5
G12.0	284.0	287.6	287.2	284.5	284.5	283.2	286.6	287.4	284.6	283.5
G13.0	285.8	286.1	285.2	285.2	284.8	282.1	286.9	287.0	283.5	282.2
G14.0	282.5	284.8	283.7	283.9	282.2	280.8	284.4	283.4	282.5	279.0
G15.0	282.8	285.2	283.6	282.2	281.5	281.1	282.1	283.7	281.9	279.1
G16.0	283.6	282.4	281.7	282.6	281.0	280.2	284.7	282.8	280.6	277.9
G17.0	282.1	281.7	280.3	279.4	279.3	277.6	282.1	281.0	277.3	275.6
G18.0	279.7	280.6	280.1	279.0	278.1	276.6	280.2	281.2	276.6	273.7
G19.0	279.7	278.7	276.9	277.9	276.7	277.3	277.4	277.8	276.6	275.0
G20.0	278.7	277.9	276.3	275.3	275.3	274.6	277.8	275.0	273.2	271.2
G21.0	276.3	274.6	274.5	273.6	274.3	272.8	276.0	274.5	271.6	269.4
G22.0	269.6	274.4	272.7	272.0	273.2	271.0	273.2	273.8	268.9	267.9
G23.0	271.3	270.5	270.2	270.9	270.2	268.5	271.3	272.0	268.0	266.4
G24.0	268.9	270.3	269.3	270.2	268.0	266.6	269.5	268.7	267.1	265.6
G25.0	264.5	267.3	266.3	266.5	265.8	265.3	267.4	266.9	263.7	261.8
G26.0	263.5	265.3	266.0	264.5	265.3	263.2	264.8	264.3	261.8	259.6
G27.0	261.8	262.3	262.2	262.8	261.8	260.3	263.0	262.3	259.0	257.5
G28.0	260.7	259.9	261.1	260.2	259.6	259.4	260.1	260.4	256.9	254.7
G29.0	257.1	257.7	257.9	259.0	257.6	256.9	260.0	257.8	255.2	252.0
G30.0	250.4	254.5	255.4	255.4	256.2	253.5	256.5	256.4	252.7	249.6
G31.0	250.5	253.2	252.3	253.0	252.3	251.8	253.9	252.0	248.8	246.3
G32.0	250.4	249.9	249.9	250.2	250.3	247.9	252.5	249.2	246.0	242.3
G33.0	243.5	246.9	247.7	247.3	247.2	247.6	248.4	247.8	244.9	242.0
G34.0	238.8	243.6	244.5	245.2	245.6	243.5	249.5	244.9	240.6	237.7
G35.0	237.4	240.8	241.0	241.4	241.7	240.5	242.1	242.1	238.2	235.1
G36.0	234.2	237.4	238.5	239.4	238.7	238.5	239.9	236.9	235.8	232.1

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

Distance: 6.935 m

Humidity:

Inspector:

## Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0
G37.0	232.1	231.6	234.5	235.6	235.9	235.5	236.3	235.4	232.4	228.7
G38.0	230.4	229.9	231.1	232.4	232.9	232.2	232.8	231.2	228.7	225.6
G39.0	222.8	227.4	227.3	228.6	229.1	227.5	229.4	228.3	225.1	221.0
G40.0	220.2	223.8	224.9	225.4	225.2	224.6	228.4	224.4	220.4	217.7
G41.0	219.1	220.1	221.7	222.9	221.5	221.4	222.4	221.3	218.1	214.8
G42.0	214.4	217.1	218.1	217.9	217.9	218.6	219.0	217.8	213.6	210.1
G43.0	210.6	212.7	213.3	214.0	215.3	212.9	215.3	212.8	209.3	205.4
G44.0	206.1	208.8	210.2	211.3	210.8	209.9	213.8	211.0	205.5	202.5
G45.0	199.3	204.3	205.7	206.9	207.9	207.0	208.0	205.8	201.8	199.1
G46.0	197.5	199.4	200.8	202.9	203.4	202.5	203.6	201.9	197.8	194.2
G47.0	192.4	196.0	197.4	199.1	199.9	198.7	199.7	197.4	194.4	190.1
G48.0	188.2	191.8	193.2	194.0	195.3	193.8	195.8	193.3	188.5	185.9
G49.0	183.0	186.6	188.9	191.2	190.3	189.9	191.7	189.4	184.7	181.8
G50.0	180.9	182.2	184.4	186.4	186.2	186.8	187.4	184.4	181.2	177.4
G51.0	175.7	177.6	180.7	180.8	181.5	181.5	182.2	179.8	176.2	173.0
G52.0	172.4	173.7	175.3	177.6	176.7	177.0	179.2	176.0	172.1	168.8
G53.0	165.5	169.7	172.5	172.9	173.5	173.0	173.4	171.2	166.6	163.6
G54.0	162.2	164.2	166.4	167.8	168.7	168.2	171.9	166.5	162.2	159.1
G55.0	155.6	158.9	161.8	163.9	164.7	163.7	164.8	162.1	157.6	154.3
G56.0	153.0	155.1	156.5	158.7	158.8	159.0	160.1	157.1	152.7	149.7
G57.0	145.8	149.9	152.1	153.9	154.1	154.3	154.8	152.5	148.5	144.9
G58.0	142.8	145.7	146.6	149.1	149.3	149.3	151.2	148.1	143.7	140.1
G59.0	137.4	139.8	142.0	144.6	144.6	144.6	145.5	142.7	138.5	134.4
G60.0	132.6	134.9	137.2	139.9	140.1	140.0	141.1	137.5	133.5	130.6
G61.0	127.3	129.9	132.6	134.3	135.1	134.9	135.7	133.1	127.9	125.7
G62.0	123.0	124.9	127.2	129.8	130.1	129.5	131.2	126.9	122.8	119.8
G63.0	116.8	119.6	122.0	124.6	125.6	125.4	126.8	123.0	119.1	115.1
G64.0	112.0	114.8	116.3	119.1	120.2	120.2	121.5	117.8	112.9	109.8
G65.0	107.3	109.7	111.2	114.7	115.3	114.8	115.9	112.8	108.1	104.8
G66.0	100.9	105.1	107.4	109.9	110.5	110.1	111.3	108.1	103.6	99.9
G67.0	95.8	99.1	101.9	104.6	105.2	104.0	105.9	102.4	98.3	94.8
G68.0	91.9	94.2	96.8	99.7	100.1	98.5	101.6	97.3	92.9	90.3
G69.0	85.8	89.6	92.0	93.9	94.8	92.0	95.8	92.2	87.7	84.9
G70.0	79.7	84.7	86.3	89.0	90.2	87.4	90.5	87.5	83.1	80.0
G71.0	74.7	79.6	81.9	84.6	84.5	82.4	85.4	82.5	78.5	75.3
G72.0	69.9	74.1	76.3	79.3	78.9	76.3	79.8	77.1	73.1	69.9
G73.0	63.6	69.6	71.6	74.2	73.7	71.2	74.8	72.7	68.4	65.3

C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

### Candlepower Table (Continue 2)

Unit: cd

G\C	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0
G74.0	59.7	64.4	67.1	69.5	68.0	65.8	69.5	68.4	63.2	60.4
G75.0	53.8	59.6	62.0	64.3	62.6	60.2	64.1	63.0	58.7	55.5
G76.0	48.8	55.3	57.2	60.1	57.8	55.2	58.9	58.4	54.0	51.3
G77.0	43.2	50.1	52.2	54.8	51.7	49.6	53.6	53.2	49.1	46.3
G78.0	38.5	45.5	47.8	50.1	46.8	45.0	49.0	48.7	44.5	41.7
G79.0	34.0	41.2	43.5	45.8	41.7	40.2	43.7	44.3	40.4	37.5
G80.0	30.2	36.4	38.7	41.3	36.8	35.5	38.7	39.3	35.2	32.9
G81.0	26.7	32.2	34.4	37.0	32.5	30.6	34.1	34.9	31.2	28.5
G82.0	23.4	27.8	30.3	32.4	28.2	26.1	30.1	31.0	26.7	23.9
G83.0	19.5	23.6	26.0	28.3	24.5	21.8	26.4	26.3	22.5	19.4
G84.0	16.4	19.7	21.9	24.1	21.4	18.7	23.0	22.5	18.3	14.9
G85.0	12.2	15.7	17.5	19.4	18.1	16.1	19.4	18.2	13.5	10.1
G86.0	7.9	11.8	13.0	15.1	15.0	13.9	15.9	14.6	9.3	5.6
G87.0	3.5	7.5	8.8	10.6	11.4	11.3	12.0	10.5	5.2	1.4
G88.0	0.9	3.1	4.4	5.5	6.9	8.0	7.7	6.3	2.1	0.9
G89.0	0.9	1.1	2.1	1.2	3.1	4.2	3.6	2.7	1.2	0.9
G90.0	1.0	0.9	1.0	0.9	1.3	1.3	0.7	1.2	1.0	0.9

C Plane (°):0.0-360.0: 30.0	Gamma Plane (°):0.0-90.0:1.0
Test Lab:	Test Device: GPM-1600L
Test Type: TYPE C	Distance: 6.935 m
Temperature:	Humidity:
Operator:	Inspector:



### Candlepower Table (Continue 3)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G0.0	289.2	288.9	292.0						
G1.0	289.2	288.1	292.9						
G2.0	289.8	287.4	292.5						
G3.0	287.8	287.1	293.7						
G4.0	286.3	286.6	289.0						
G5.0	286.8	285.1	294.2						
G6.0	286.9	286.8	290.0						
G7.0	285.9	284.9	292.5						
G8.0	284.6	285.8	288.7						
G9.0	286.2	283.9	287.2						
G10.0	285.5	283.7	290.9						
G11.0	281.8	280.9	287.1						
G12.0	282.3	282.6	284.0						
G13.0	280.0	280.6	285.8						
G14.0	279.9	278.3	282.5						
G15.0	278.3	277.0	282.8						
G16.0	276.0	277.0	283.6						
G17.0	273.2	274.8	282.1						
G18.0	275.6	273.2	279.7						
G19.0	270.5	272.7	279.7						
G20.0	270.4	268.8	278.7						
G21.0	268.0	268.8	276.3						
G22.0	267.4	268.1	269.6						
G23.0	263.4	265.2	271.3						
G24.0	262.8	262.7	268.9						
G25.0	261.6	261.0	264.5						
G26.0	258.9	257.4	263.5						
G27.0	255.6	255.5	261.8						
G28.0	252.1	252.9	260.7						
G29.0	250.7	250.2	257.1						
G30.0	247.4	248.4	250.4						
G31.0	246.3	245.2	250.5						
G32.0	242.1	241.9	250.4						
G33.0	239.5	239.5	243.5						
G34.0	237.3	236.8	238.8						
G35.0	233.3	234.5	237.4						
G36.0	230.2	230.7	234.2						

C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

## Candlepower Table (Continue 4)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G37.0	226.6	226.6	232.1						
G38.0	223.2	224.5	230.4						
G39.0	220.6	219.3	222.8						
G40.0	216.7	216.3	220.2						
G41.0	212.5	212.3	219.1						
G42.0	208.9	208.3	214.4						
G43.0	204.8	205.4	210.6						
G44.0	200.3	201.2	206.1						
G45.0	196.4	198.2	199.3						
G46.0	192.6	192.4	197.5						
G47.0	189.4	188.9	192.4						
G48.0	184.3	185.1	188.2						
G49.0	180.1	180.7	183.0						
G50.0	175.4	175.8	180.9						
G51.0	170.4	170.9	175.7						
G52.0	166.5	166.1	172.4						
G53.0	161.9	162.3	165.5						
G54.0	157.8	156.9	162.2						
G55.0	152.7	153.1	155.6						
G56.0	147.0	148.8	153.0						
G57.0	142.8	143.3	145.8						
G58.0	138.0	138.3	142.8						
G59.0	132.7	133.7	137.4						
G60.0	128.4	129.1	132.6						
G61.0	123.4	124.6	127.3						
G62.0	118.1	118.8	123.0						
G63.0	113.4	113.1	116.8						
G64.0	108.6	108.0	112.0						
G65.0	103.1	102.1	107.3						
G66.0	98.4	97.1	100.9						
G67.0	92.8	91.0	95.8						
G68.0	87.6	86.3	91.9						
G69.0	81.9	80.4	85.8						
G70.0	76.9	75.2	79.7						
G71.0	71.5	69.7	74.7						
G72.0	66.0	63.9	69.9						
G73.0	60.5	58.6	63.6						

C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

**Candlepower Table (Continue 5)**

Unit: cd

G\C	C300.0	C330.0	C360.0						
G74.0	55.3	53.8	59.7						
G75.0	50.1	48.4	53.8						
G76.0	44.9	43.6	48.8						
G77.0	39.7	38.4	43.2						
G78.0	35.2	34.1	38.5						
G79.0	31.1	29.4	34.0						
G80.0	27.0	24.9	30.2						
G81.0	23.7	20.5	26.7						
G82.0	20.1	18.0	23.4						
G83.0	16.7	15.4	19.5						
G84.0	13.3	13.1	16.4						
G85.0	9.3	10.5	12.2						
G86.0	5.6	6.9	7.9						
G87.0	2.9	3.2	3.5						
G88.0	1.3	0.9	0.9						
G89.0	0.9	0.7	0.9						
G90.0	1.0	0.7	1.0						

C Plane (°):0.0-360.0: 30.0	Gamma Plane (°):0.0-90.0:1.0
Test Lab:	Test Device: GPM-1600L
Test Type: TYPE C	Distance: 6.935 m
Temperature:	Humidity:
Operator:	Inspector: