

Report No.:

Test Time: 2016-09-26 10:14

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FD15W27V50KBDB77

Lamp Catalog: 3030-5070-Q3DH

Current: 0.125 A

Power Factor: 0.990

Voltage: 120.2 V

Power: 14.90 W

Volt Amps: 15.05 VA

## Photometric Results

CIE Class: Direct

Measurement Flux: 1493.6 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(10%,50%,75%,100%): H156.8,H90.1,H57.9,H1

Vertical Diffuse Angle(10%,50%,75%,100%): V159.7,V119.6,V95,V8

Luminaire Efficacy Rating (LER): 100.29

Max. Intensity: 553.46 cd

S/MH(C0/C180): 1.11

Total Rated Lamp Lumens: 1493.6 lm

Efficiency: 100%

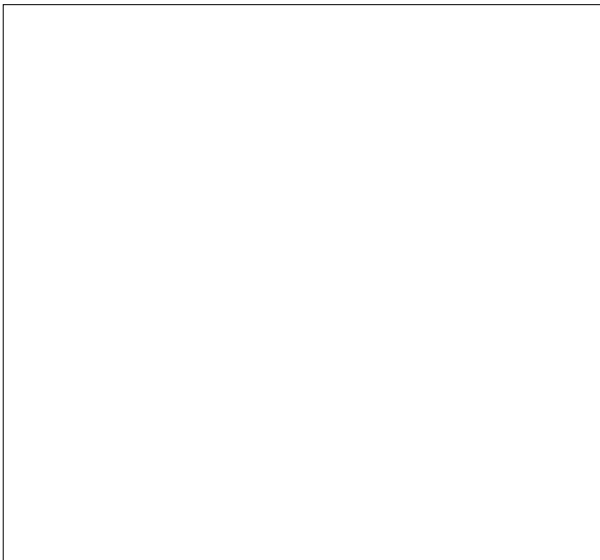
Upward Ratio: 1%

Central Intensity: 553.41 cd

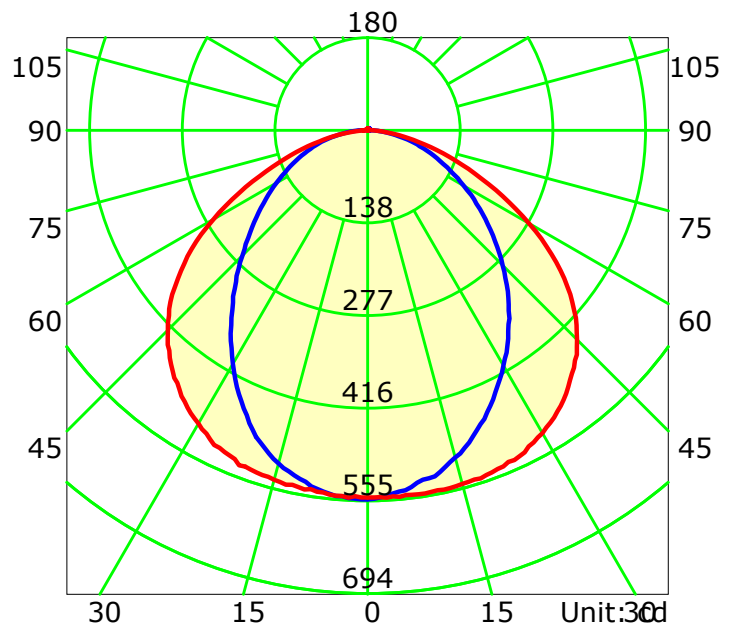
Pos of Max. Intensity: H180 V1

S/MH(C90/C270): 1.39

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 104.8°

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

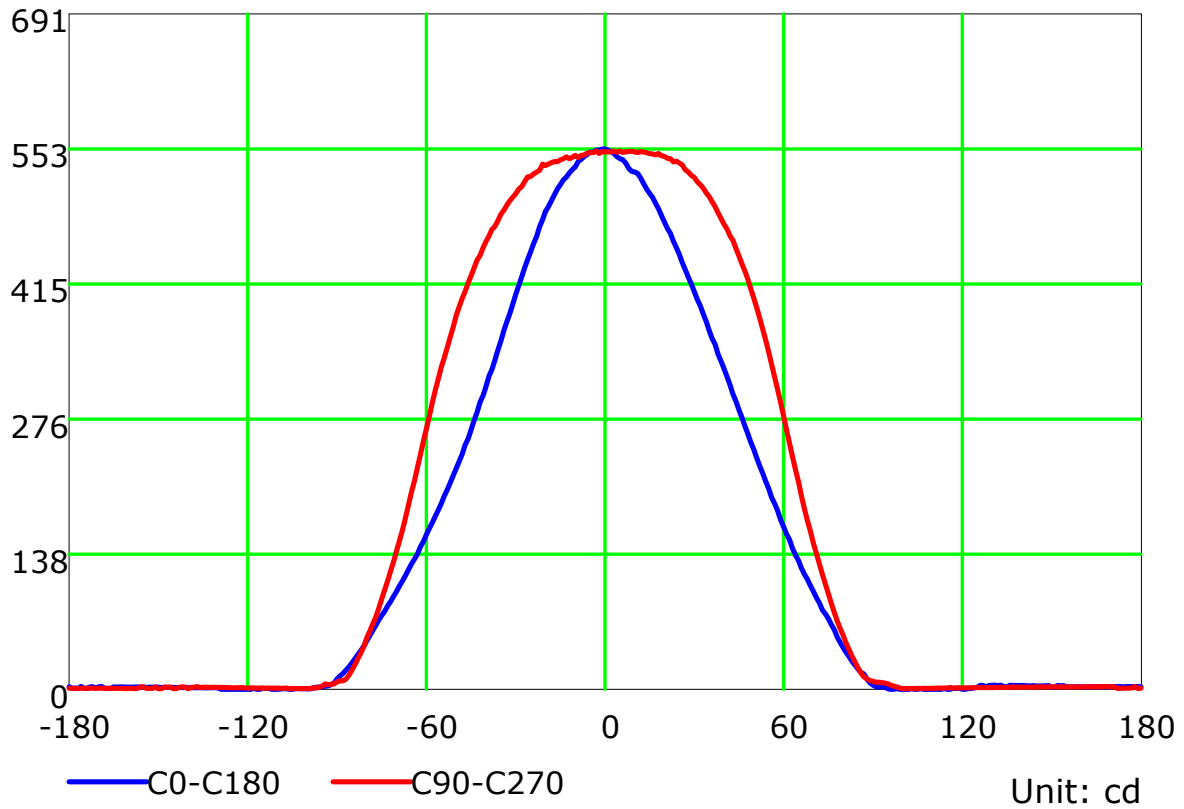
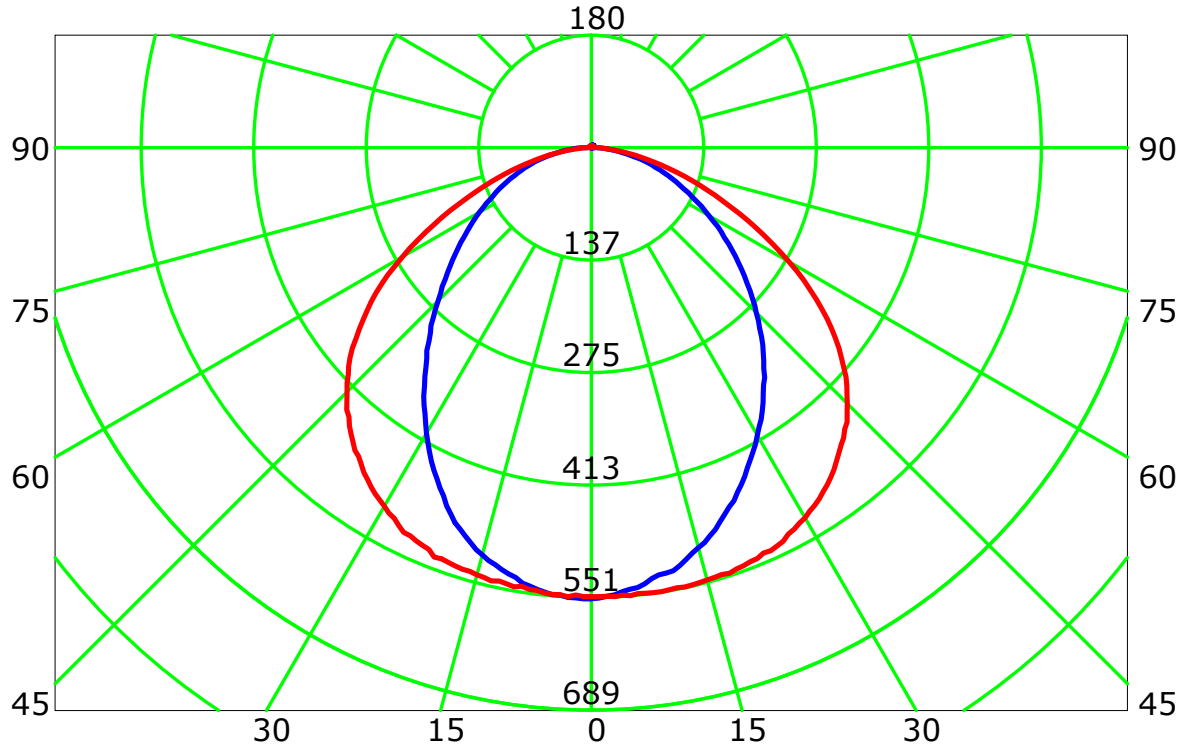
Test Device: GPM-1600

Distance: 8.567 m

Humidity:

Inspector:

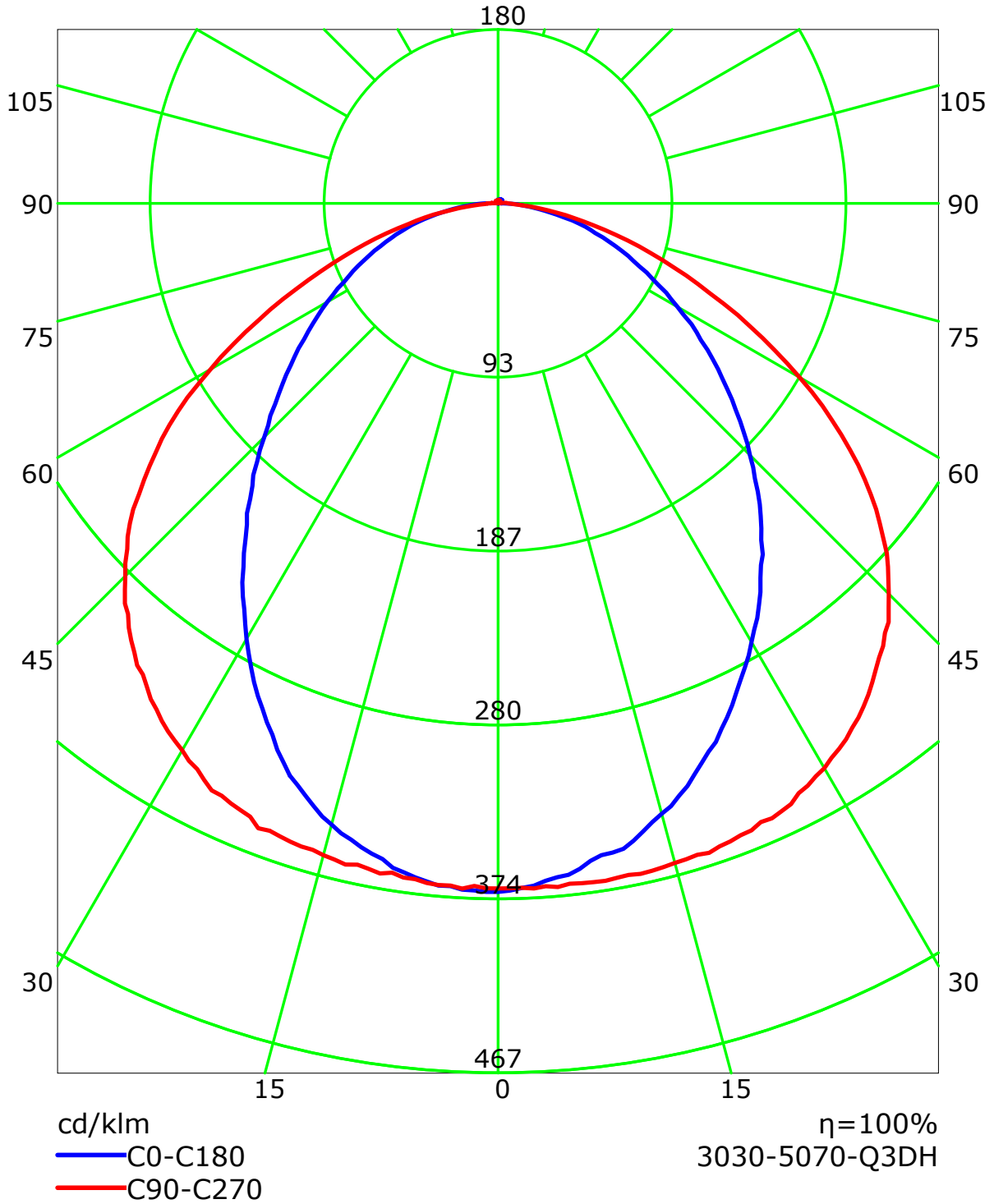
## Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 m  
 Humidity:  
 Inspector:

## Luminous Intensity Distribution Curve(cd/klm)



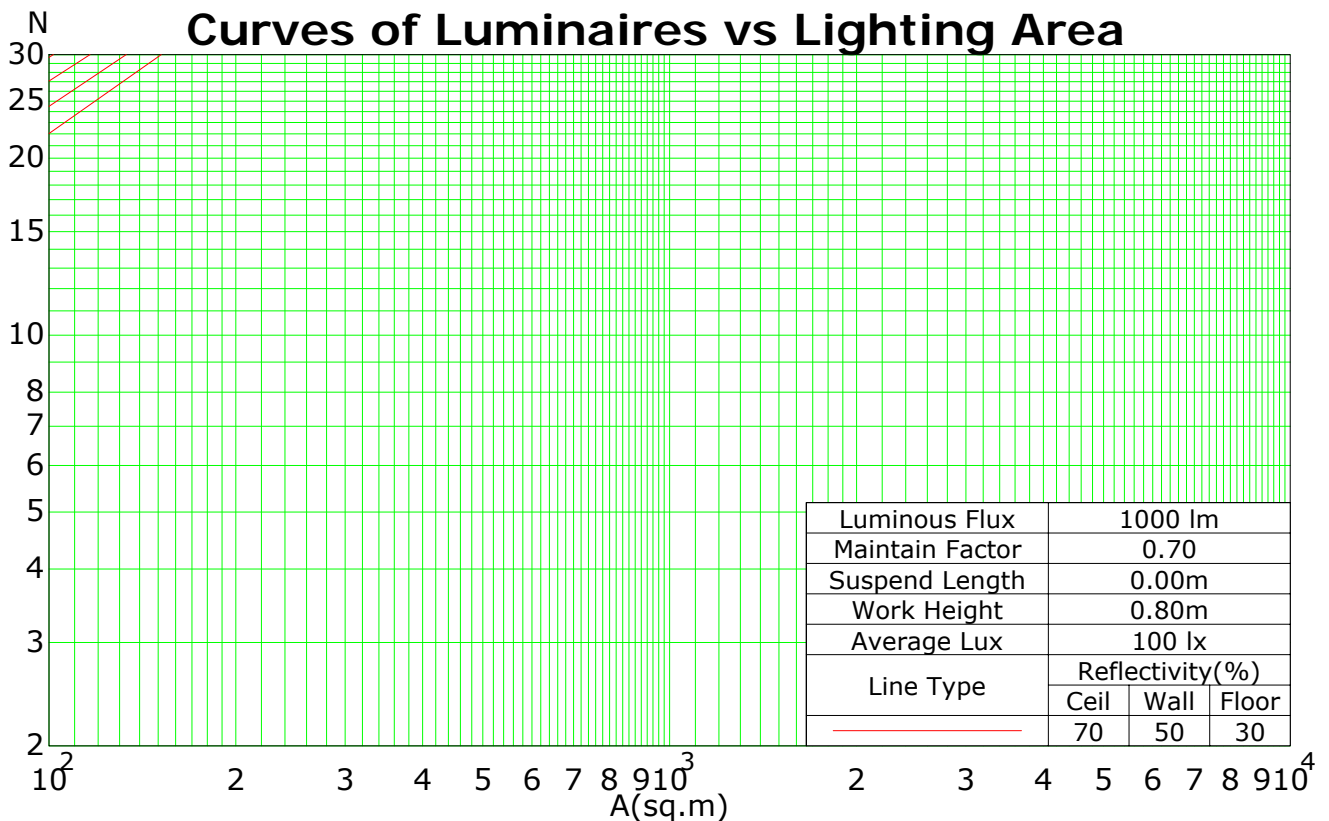
C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 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	101	101	101	99
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	60	53	48	58	52	47	57	51	46	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	51	45	41	39
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	54	40	33	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

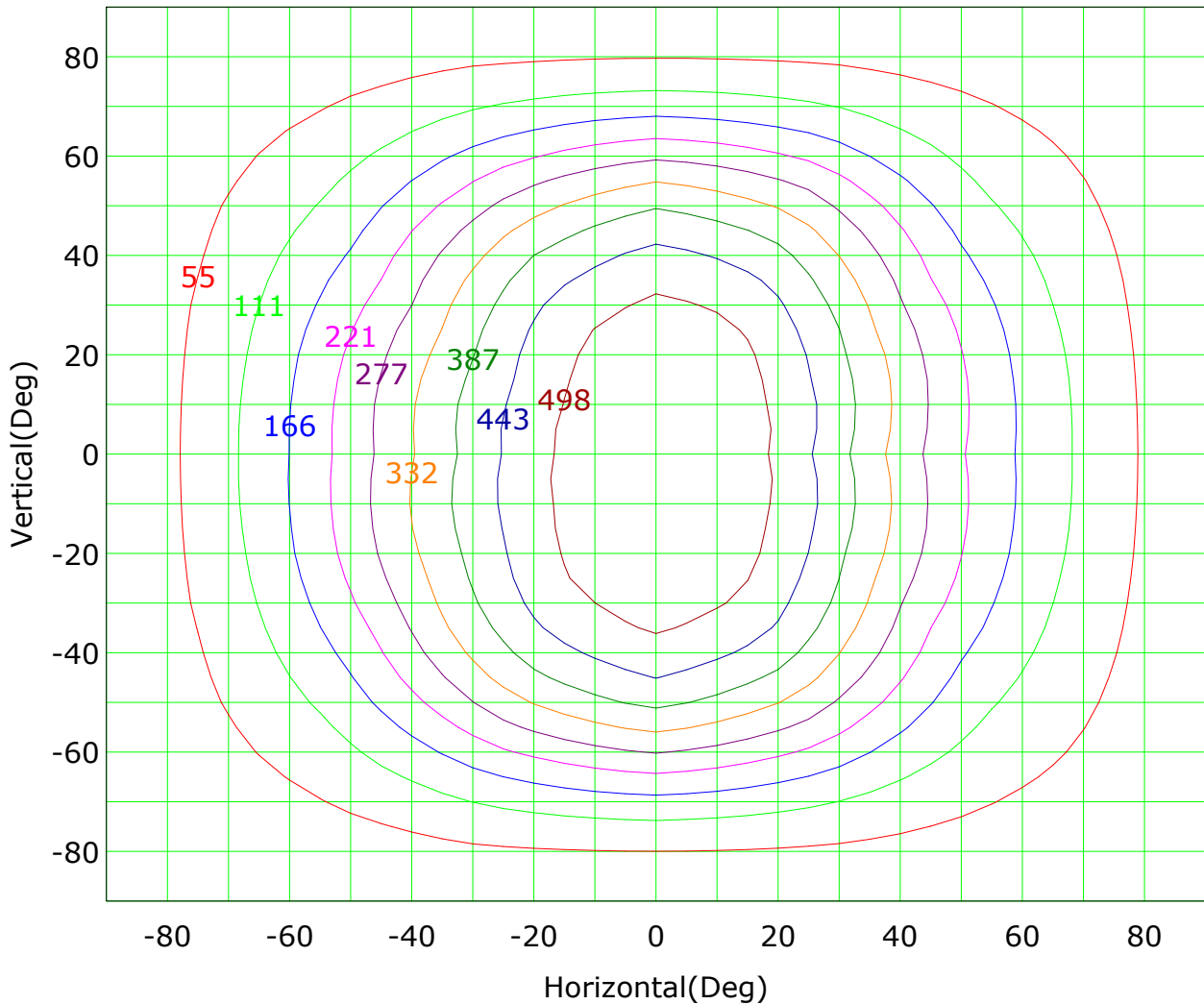
Spacing Criteria (0-180): 1.11  
 Spacing Criteria (90-270): 1.39  
 Spacing Criteria (Diagonal): 1.35



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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 m  
 Humidity:  
 Inspector:

## Isocandela (rectangle)



Imax (100%): 553 cd

— ( 10%):	55 cd	— ( 20%):	111 cd
— ( 30%):	166 cd	— ( 40%):	221 cd
— ( 50%):	277 cd	— ( 60%):	332 cd
— ( 70%):	387 cd	— ( 80%):	443 cd
— ( 90%):	498 cd	— (100%):	553 cd

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

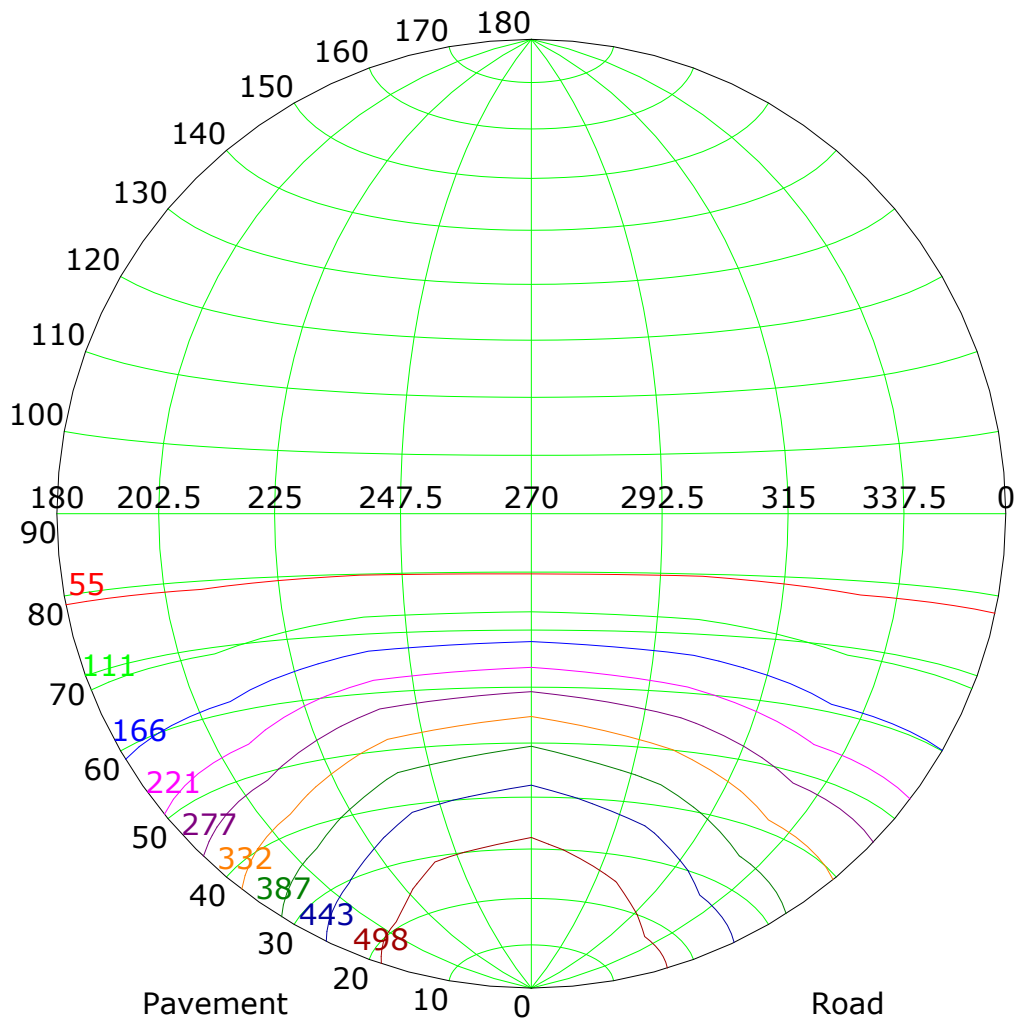
Test Device: GPM-1600

Distance: 8.567 m

Humidity:

Inspector:

## Isocandela (sphere)



Imax (100%): 553 cd

— ( 10%):	55 cd	— ( 20%):	111 cd
— ( 30%):	166 cd	— ( 40%):	221 cd
— ( 50%):	277 cd	— ( 60%):	332 cd
— ( 70%):	387 cd	— ( 80%):	443 cd
— ( 90%):	498 cd	— (100%):	553 cd

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

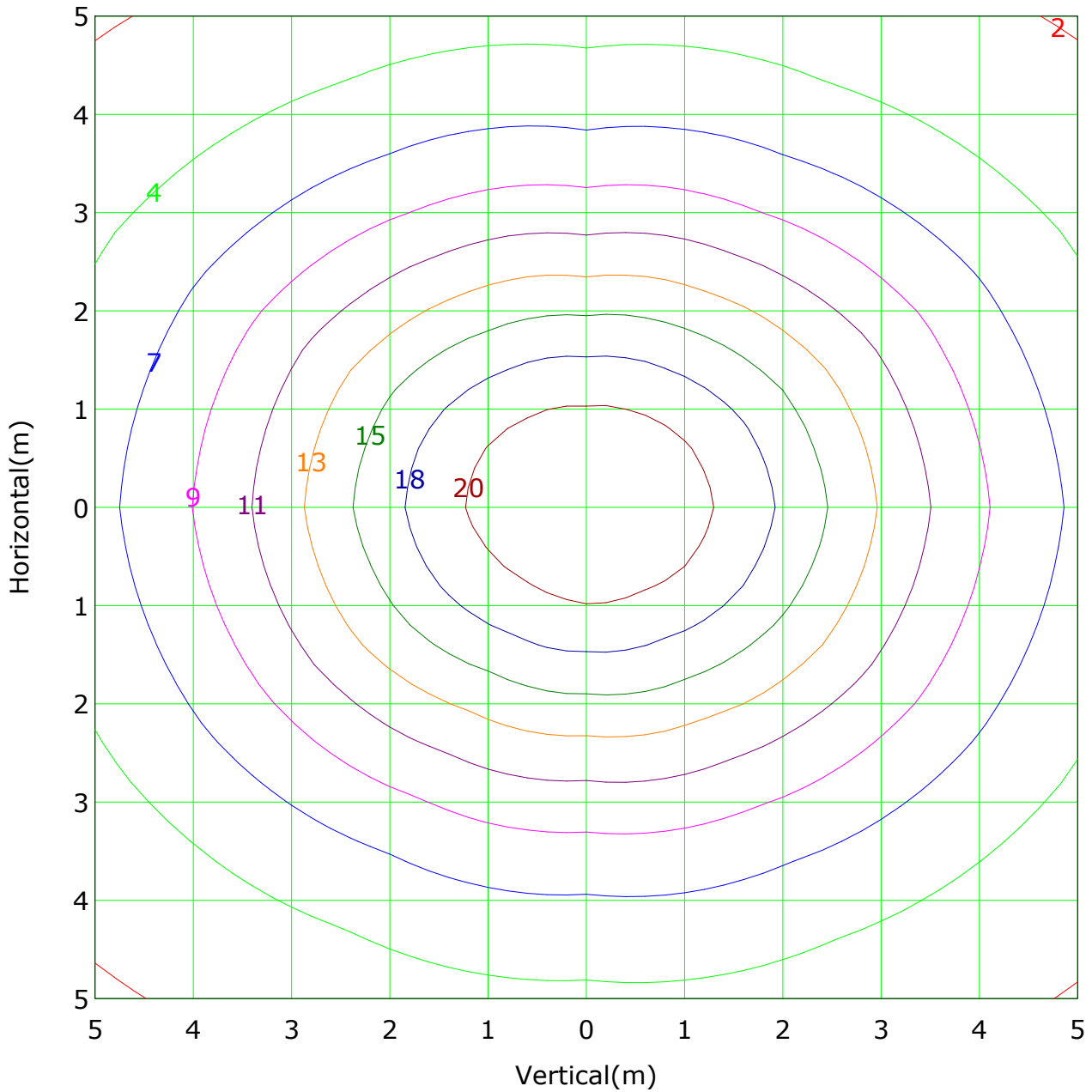
Test Device: GPM-1600

Distance: 8.567 m

Humidity:

Inspector:

## IsoLux Plot



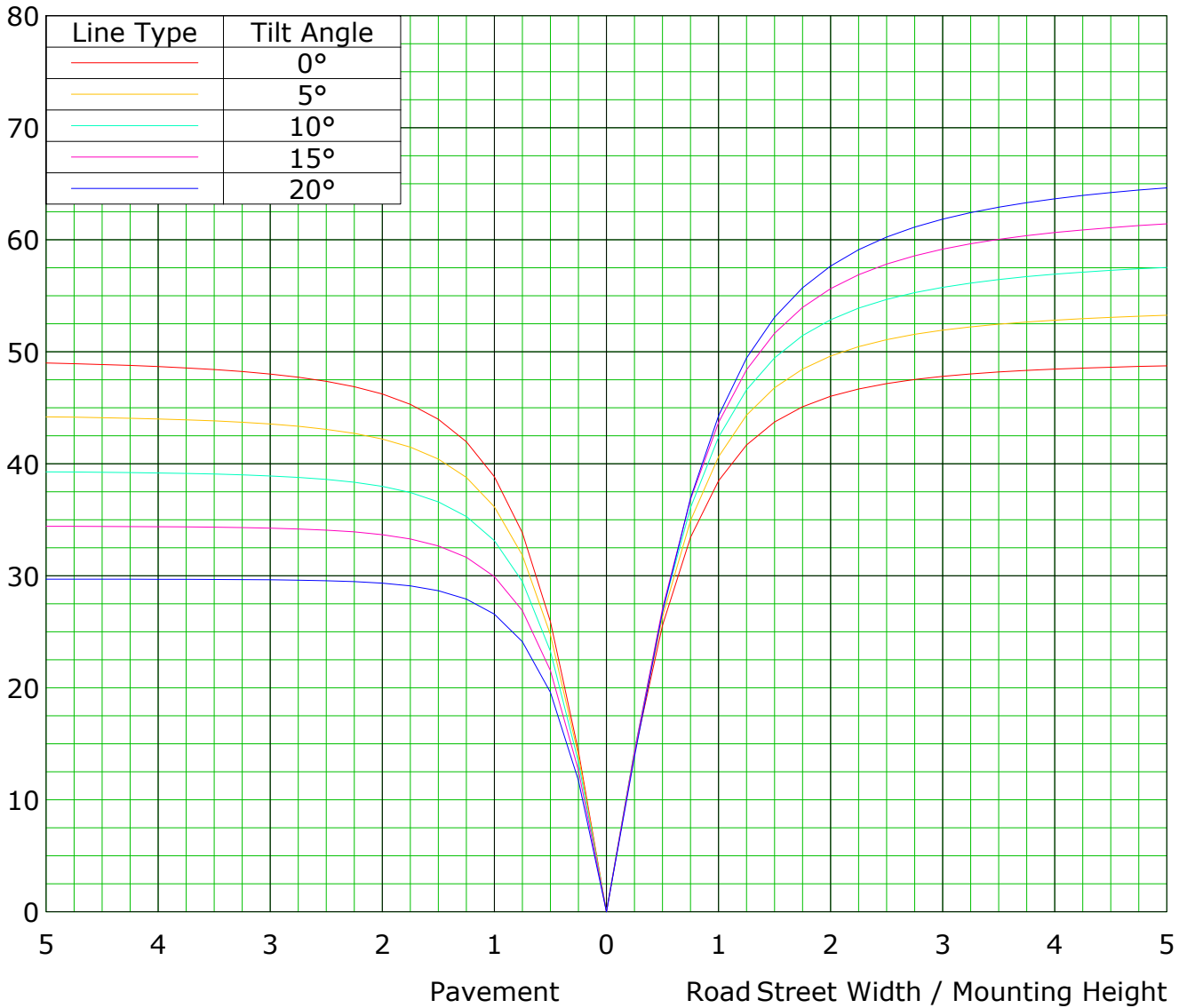
Mounting Height: 5.0m		Max Lux(100%): 22.1 lx
— ( 10%): 2.2 lx	— ( 20%): 4.4 lx	
— ( 30%): 6.6 lx	— ( 40%): 8.9 lx	
— ( 50%): 11.1 lx	— ( 60%): 13.3 lx	
— ( 70%): 15.5 lx	— ( 80%): 17.7 lx	
— ( 90%): 19.9 lx	— (100%): 22.1 lx	

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 m  
 Humidity:  
 Inspector:

## Roadway CU Curve

Efficiency(%)



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

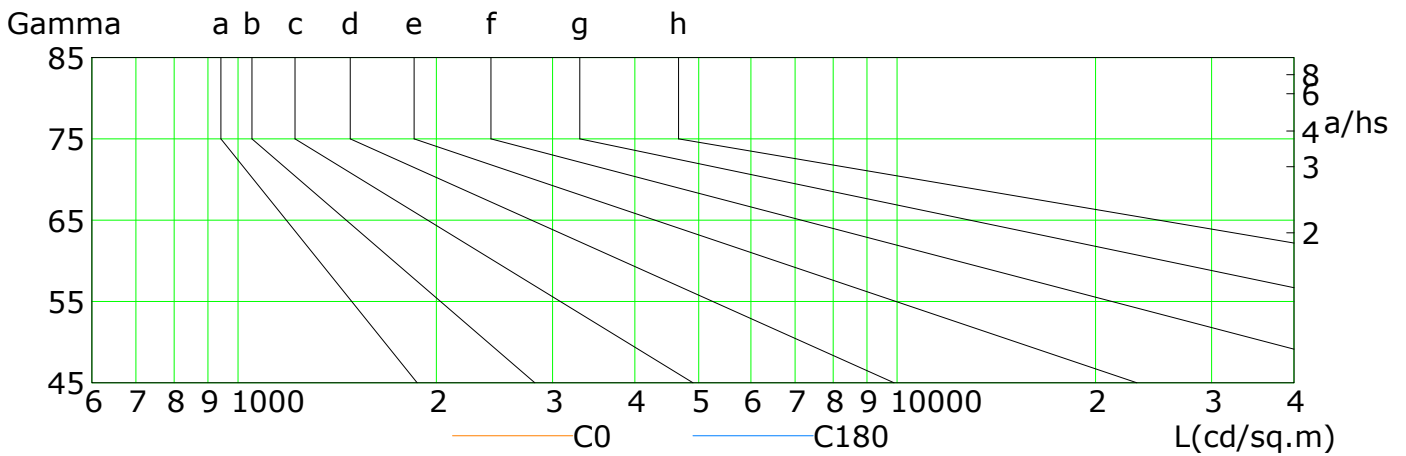
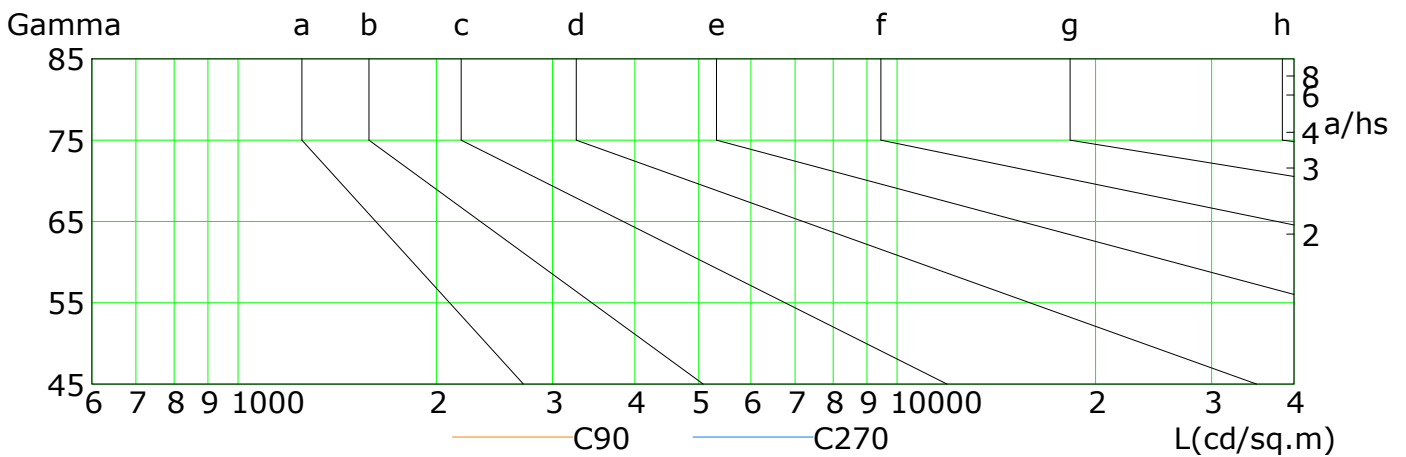
Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 m  
 Humidity:  
 Inspector:



## Lum Limit Curve

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

a b c d e f g h



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	286	245	205	166	132	100	73	43	21
C90	444	400	345	280	212	150	98	55	22
C180	266	226	190	158	128	100	76	50	27
C270	424	383	330	267	202	142	93	53	20

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

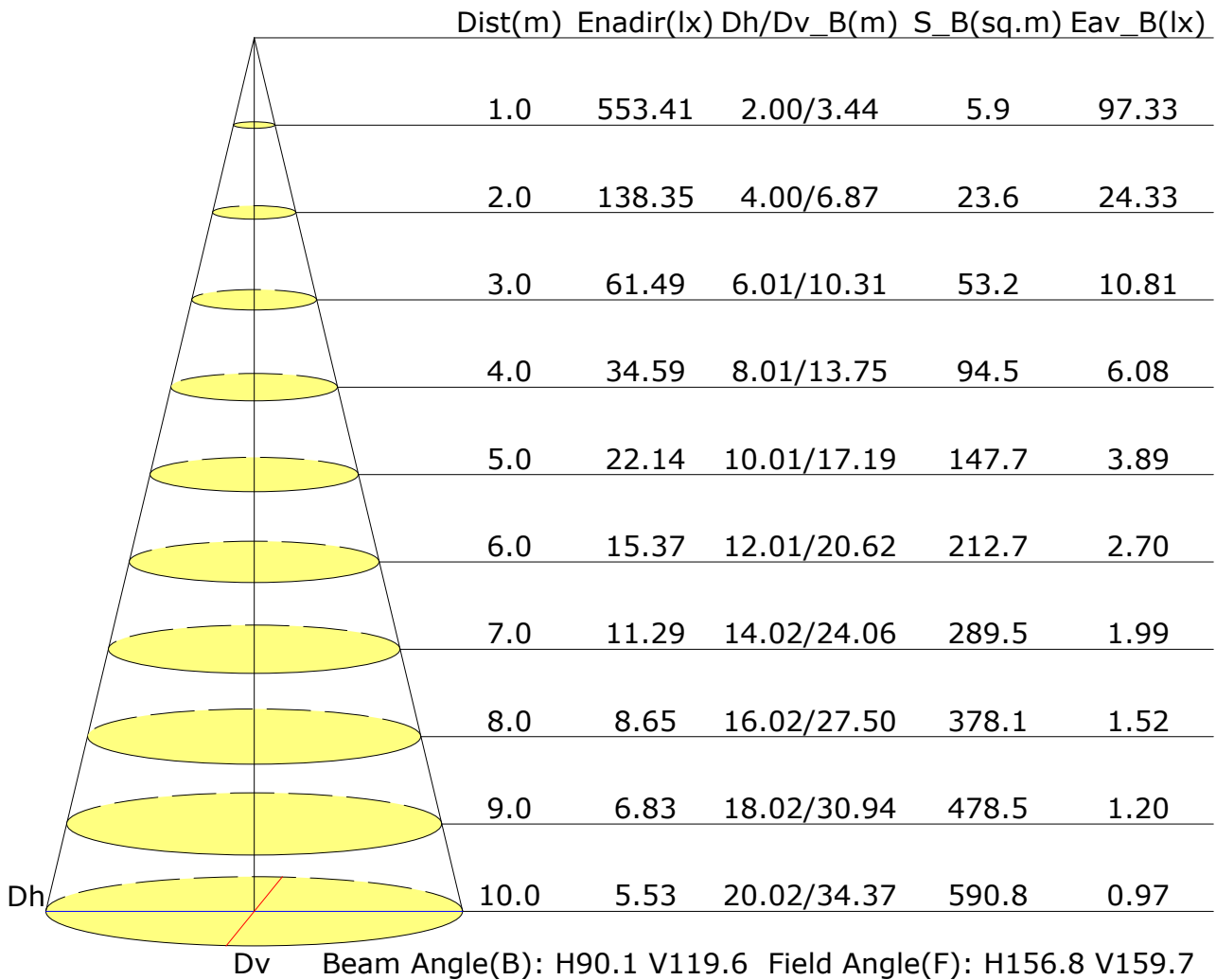
Test Device: GPM-1600

Distance: 8.567 m

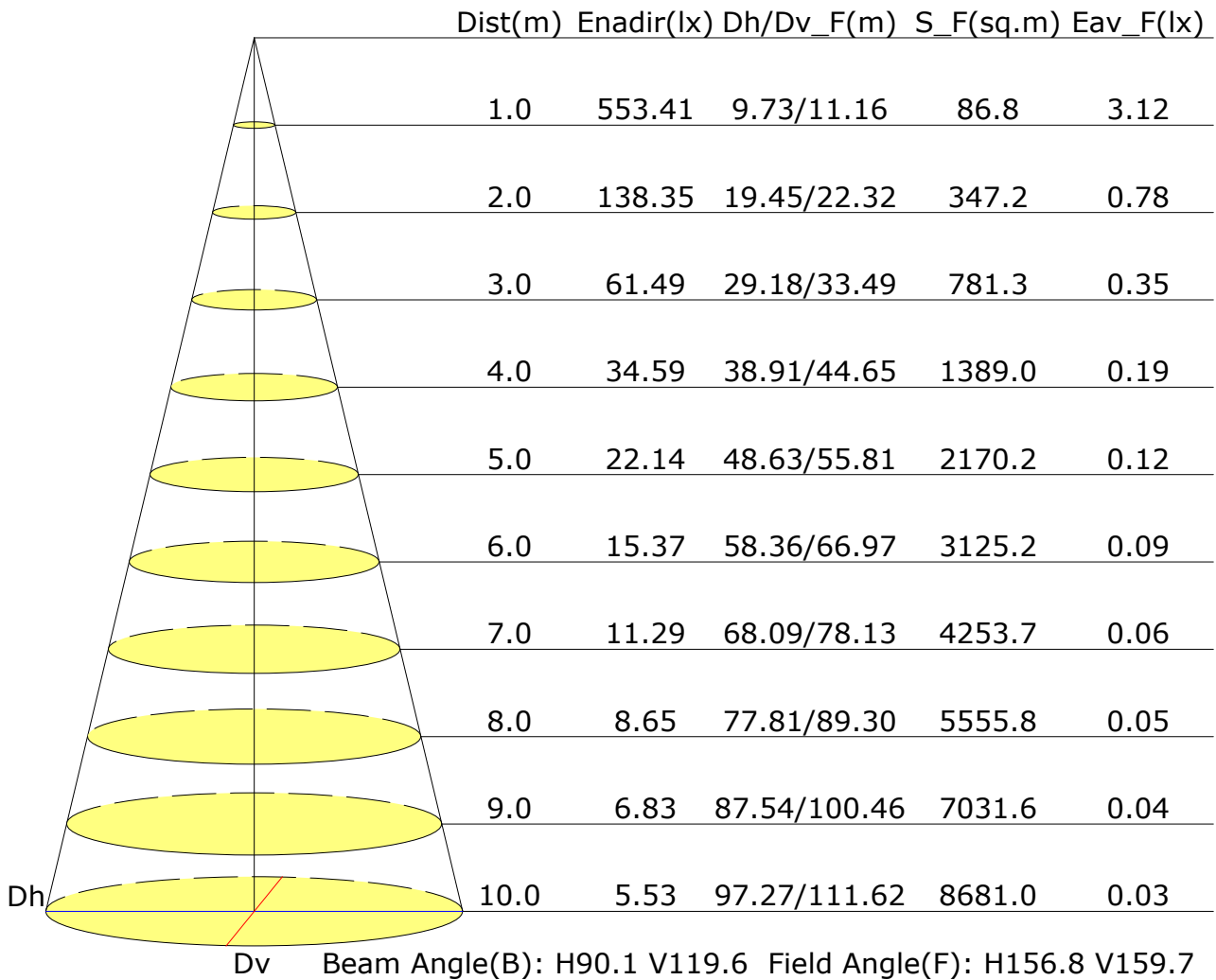
Humidity:

Inspector:

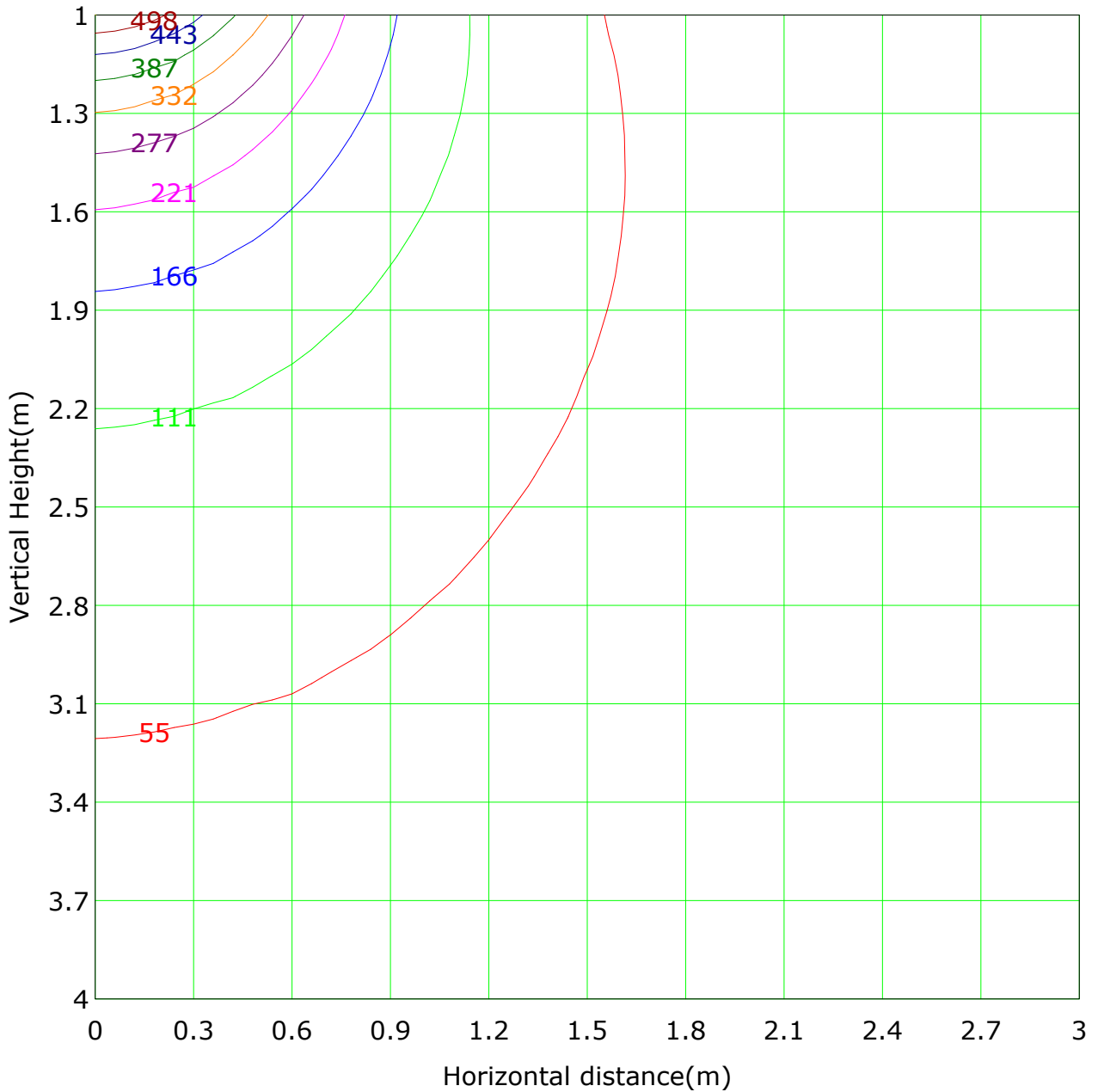
## Illuminance at a Distance(Beam Angle)



## Illuminance at a Distance(Field Angle)



## Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 4.0m	Max Lux: 553.4 lx
— ( 10%): 55.3 lx	— ( 20%): 110.7 lx	
— ( 30%): 166.0 lx	— ( 40%): 221.4 lx	
— ( 50%): 276.7 lx	— ( 60%): 332.0 lx	
— ( 70%): 387.4 lx	— ( 80%): 442.7 lx	
— ( 90%): 498.1 lx	— (100%): 553.4 lx	

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 m  
 Humidity:  
 Inspector:

## Area Flux Table

Unit: lm

Flux(T)	Vertical plane																		Flux(E)	Flux(T)Flux(E)	
	90	80	70	60	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60	-70	-80			-90
1.2	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.3	0.3	0.2	0.1	38.1	1484
7.2	0.1	0.2	0.4	0.7	1.2	2.1	3.3	5.1	7.2	9.4	11.7	13.5	14.9	14.9	14.8	12.2	9.2	6.2	3.6	19.1	1451
19.1	0.1	0.3	0.7	1.3	2.3	4.1	6.6	9.4	11.7	13.5	14.9	14.9	14.4	14.5	11.9	9.0	6.0	3.5	1.7	36.1	
38.1	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	64.3	
66.2	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	101.5	
103.3	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	141.5	
143.1	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	173.0	
174.7	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	190.5	
192.0	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	189.0	
190.5	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	169.7	
189.0	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	138.9	
189.0	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	101.8	
169.7	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	66.0	
169.7	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	37.0	
140.6	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	16.7	
140.6	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	3.9	
103.6	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	0.0	
67.9	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	0.0	
39.0	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	0.0	
18.8	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	0.0	
6.5	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	0.0	
0.9	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	0.0	
1.2	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	0.0	
0.0	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	0.0	
0.0	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	0.0	
0.0	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	0.0	
0.0	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	0.0	
0.0	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	0.0	
0.0	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	0.0	
0.0	0.1	0.3	0.9	1.8	3.2	5.1	7.2	8.9	10.1	11.6	11.6	9.5	8.0	5.1	2.9	1.4	0.5	0.1	0.1	0.0	

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

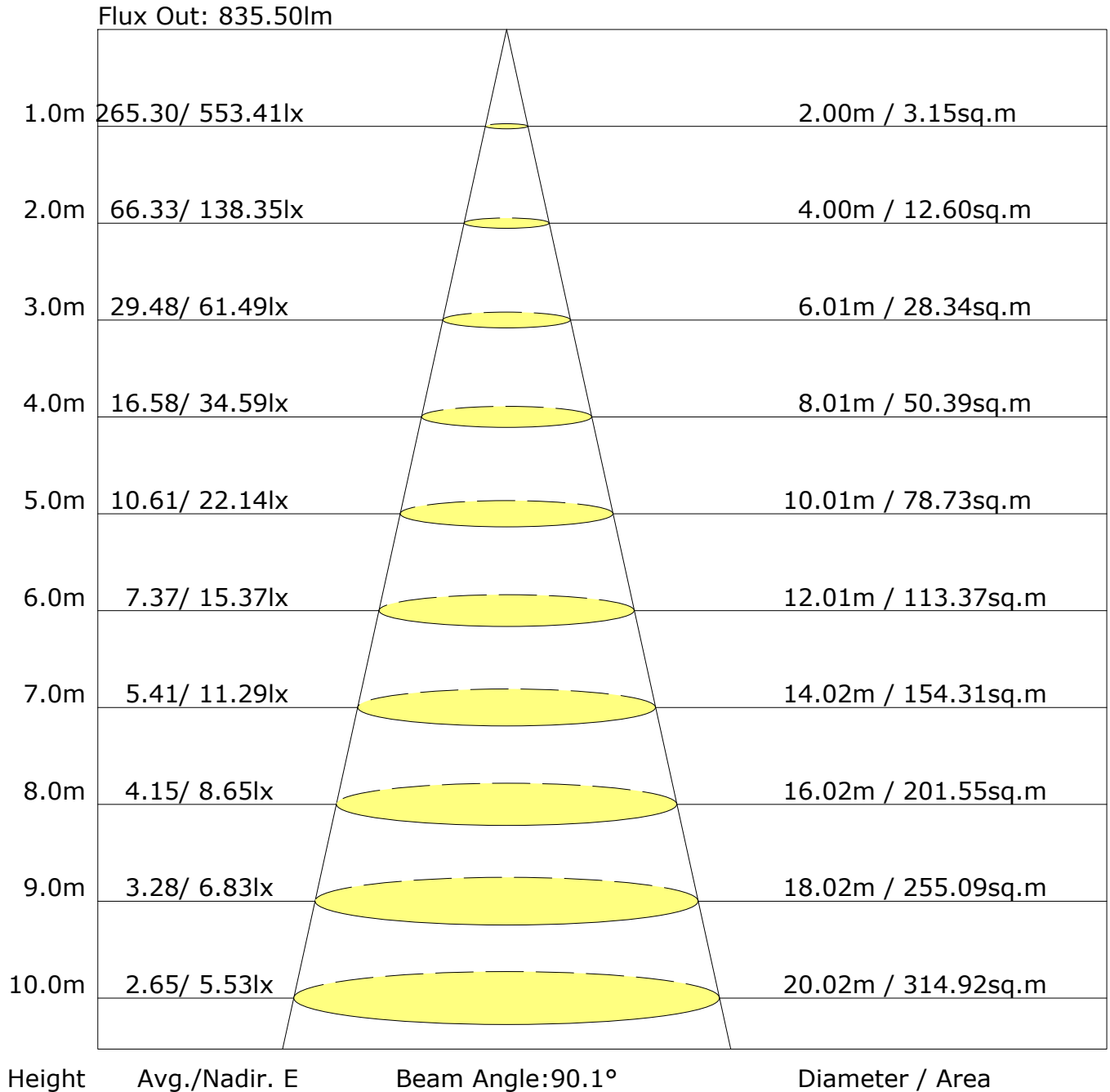
Test Device: GPM-1600

Distance: 8.567 m

Humidity:

Inspector:

## The Average Illuminance Effective Figure



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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 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.\$					-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  $1494lm$  ( $8\log(F/F_0) = 1.4$ ).

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 m  
 Humidity:  
 Inspector:

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

	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	739	49.5
	FL ( 0°-30°)	212	14.2
	FM (30°-60°)	388	26.0
	FH (60°-80°)	126	8.4
	FVH (80°-90°)	13	0.9
	BACK LIGHT	745	49.9
	BL ( 0°-30°)	215	14.4
	BM (30°-60°)	388	26.0
	BH (60°-80°)	127	8.5
	BVH (80°-90°)	15	1.0
	UP LIGHT	9	0.6
	UL (90°-100°)	3	0.2
	UH (100°-180°)	6	0.4
	TRAPPED LIGHT	NA	NA

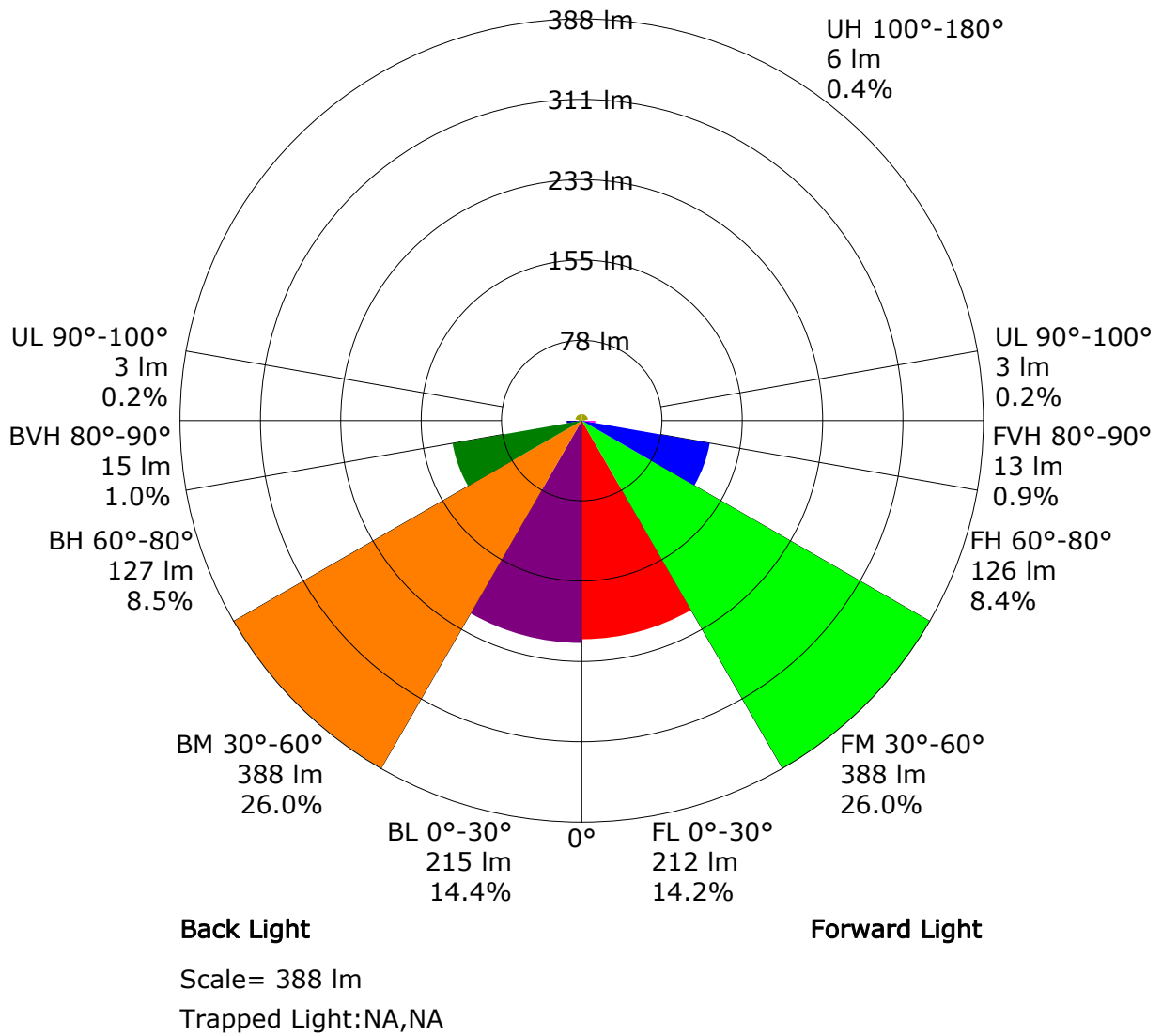
BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B1 U1 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B1 U1 G1

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 m  
 Humidity:  
 Inspector:



### LCS Graph



## 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	0.58	0.68	0.76	0.81	0.88	0.93	0.96	1.01	1.04	
	0.30		0.50	0.61	0.68	0.74	0.82	0.87	0.91	0.97	1.00	
	0.20		0.45	0.55	0.63	0.69	0.77	0.83	0.87	0.93	0.97	
0.50	0.50	0.20	0.56	0.66	0.73	0.78	0.85	0.89	0.92	0.97	0.99	
	0.30		0.49	0.60	0.67	0.72	0.80	0.85	0.88	0.93	0.96	
	0.20		0.44	0.54	0.62	0.67	0.75	0.81	0.85	0.90	0.94	
0.30	0.50	0.20	0.55	0.64	0.71	0.75	0.82	0.86	0.89	0.93	0.95	
	0.30		0.49	0.58	0.65	0.70	0.77	0.82	0.86	0.90	0.93	
	0.20		0.44	0.54	0.61	0.66	0.74	0.79	0.83	0.88	0.91	
0.00	0.00	0.00	0.42	0.51	0.58	0.63	0.70	0.75	0.79	0.83	0.86	
<p>Rating:15W Photometrically tested without ceiling board.            Multiply UF values by service correction factors            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 (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 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	0.98	0.80	0.68	0.59	0.47	0.39	0.33	0.26	0.21
	0.30		0.81	0.69	0.59	0.52	0.43	0.36	0.31	0.24	0.20
	0.20		0.70	0.60	0.53	0.47	0.39	0.33	0.29	0.23	0.19
0.50	0.50	0.20	0.94	0.77	0.65	0.57	0.45	0.41	0.32	0.25	0.20
	0.30		0.80	0.67	0.58	0.51	0.41	0.35	0.30	0.23	0.19
	0.20		0.69	0.59	0.52	0.46	0.38	0.32	0.28	0.22	0.19
0.30	0.50	0.20	0.91	0.74	0.63	0.54	0.43	0.36	0.30	0.23	0.19
	0.30		0.78	0.65	0.56	0.49	0.40	0.33	0.29	0.22	0.18
	0.20		0.68	0.58	0.51	0.45	0.37	0.31	0.27	0.21	0.18
0.00	0.00	0.00	0.58	0.48	0.41	0.36	0.29	0.24	0.21	0.16	0.14
<p>Rating:15W Photometrically tested without ceiling board.            Multiply UF values by service correction factors            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 (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 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	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.05	0.07	0.08	0.10	0.12	0.13	0.14	0.16	0.17	
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.20	0.20	0.21	0.21	
	0.30		0.10	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.07	0.08	0.10	0.11	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.20	0.20	
	0.30		0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18	
	0.20		0.05	0.07	0.08	0.09	0.11	0.13	0.14	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	
<p>Rating:15W Photometrically tested without ceiling board.            Multiply UF values by service correction factors            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 (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 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	550.8	0.5	0.5	0.04	0.04
1.0-2.0	550.6	1.6	2.1	0.11	0.14
2.0-3.0	550.3	2.6	4.7	0.18	0.32
3.0-4.0	549.4	3.7	8.4	0.25	0.56
4.0-5.0	548.2	4.7	13.1	0.32	0.88
5.0-6.0	547.1	5.8	18.9	0.39	1.26
6.0-7.0	545.6	6.8	25.7	0.45	1.72
7.0-8.0	544.2	7.8	33.4	0.52	2.24
8.0-9.0	542.7	8.8	42.2	0.59	2.83
9.0-10.0	541.0	9.8	52.0	0.66	3.48
10.0-11.0	539.0	10.8	62.8	0.72	4.21
11.0-12.0	536.7	11.7	74.5	0.79	4.99
12.0-13.0	534.6	12.7	87.2	0.85	5.84
13.0-14.0	532.4	13.6	100.9	0.91	6.75
14.0-15.0	529.7	14.5	115.4	0.97	7.73
15.0-16.0	526.9	15.4	130.8	1.03	8.76
16.0-17.0	524.1	16.3	147.2	1.09	9.85
17.0-18.0	521.3	17.2	164.4	1.15	11.00
18.0-19.0	517.9	18.0	182.4	1.21	12.21
19.0-20.0	514.0	18.8	201.2	1.26	13.47
20.0-21.0	510.3	19.6	220.8	1.31	14.78
21.0-22.0	506.2	20.3	241.1	1.36	16.14
22.0-23.0	501.7	21.1	262.2	1.41	17.55
23.0-24.0	497.3	21.7	283.9	1.46	19.01
24.0-25.0	492.6	22.4	306.3	1.50	20.51
25.0-26.0	487.4	23.0	329.4	1.54	22.05
26.0-27.0	482.5	23.6	353.0	1.58	23.63
27.0-28.0	477.1	24.2	377.1	1.62	25.25
28.0-29.0	471.3	24.7	401.8	1.65	26.90
29.0-30.0	465.6	25.1	426.9	1.68	28.58
30.0-31.0	459.8	25.6	452.5	1.71	30.30
31.0-32.0	453.5	26.0	478.5	1.74	32.04
32.0-33.0	447.0	26.3	504.8	1.76	33.80
33.0-34.0	440.6	26.7	531.5	1.79	35.58
34.0-35.0	434.0	27.0	558.5	1.80	37.39
35.0-36.0	427.1	27.2	585.7	1.82	39.21

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 8.567 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	420.1	27.4	613.1	1.83	41.05
37.0-38.0	412.7	27.5	640.6	1.84	42.89
38.0-39.0	405.3	27.7	668.3	1.85	44.74
39.0-40.0	397.9	27.8	696.0	1.86	46.60
40.0-41.0	390.2	27.8	723.8	1.86	48.46
41.0-42.0	382.5	27.8	751.6	1.86	50.32
42.0-43.0	374.6	27.8	779.4	1.86	52.18
43.0-44.0	366.5	27.7	807.0	1.85	54.03
44.0-45.0	358.1	27.5	834.6	1.84	55.87
45.0-46.0	349.5	27.3	861.9	1.83	57.70
46.0-47.0	340.9	27.1	889.0	1.82	59.52
47.0-48.0	332.3	26.9	915.9	1.80	61.32
48.0-49.0	323.5	26.6	942.4	1.78	63.10
49.0-50.0	314.5	26.2	968.7	1.76	64.85
50.0-51.0	305.4	25.8	994.5	1.73	66.58
51.0-52.0	296.2	25.4	1019.9	1.70	68.29
52.0-53.0	286.9	25.0	1044.9	1.67	69.96
53.0-54.0	277.2	24.4	1069.3	1.64	71.59
54.0-55.0	267.5	23.9	1093.2	1.60	73.19
55.0-56.0	257.7	23.3	1116.5	1.56	74.75
56.0-57.0	248.0	22.7	1139.2	1.52	76.27
57.0-58.0	238.4	22.1	1161.2	1.48	77.75
58.0-59.0	228.6	21.4	1182.6	1.43	79.18
59.0-60.0	218.6	20.7	1203.3	1.38	80.56
60.0-61.0	208.6	19.9	1223.2	1.33	81.89
61.0-62.0	198.7	19.1	1242.3	1.28	83.17
62.0-63.0	189.0	18.4	1260.7	1.23	84.41
63.0-64.0	179.3	17.6	1278.3	1.18	85.58
64.0-65.0	169.9	16.8	1295.1	1.13	86.71
65.0-66.0	160.7	16.0	1311.1	1.07	87.78
66.0-67.0	151.3	15.2	1326.4	1.02	88.80
67.0-68.0	142.3	14.4	1340.8	0.97	89.77
68.0-69.0	133.7	13.6	1354.4	0.91	90.68
69.0-70.0	125.2	12.9	1367.3	0.86	91.54
70.0-71.0	117.0	12.1	1379.4	0.81	92.35
71.0-72.0	109.3	11.4	1390.7	0.76	93.11

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 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	101.8	10.6	1401.4	0.71	93.83
73.0-74.0	94.2	9.9	1411.3	0.66	94.49
74.0-75.0	87.1	9.2	1420.5	0.62	95.10
75.0-76.0	80.2	8.5	1429.0	0.57	95.67
76.0-77.0	73.3	7.8	1436.8	0.52	96.20
77.0-78.0	66.6	7.1	1444.0	0.48	96.68
78.0-79.0	59.8	6.4	1450.4	0.43	97.11
79.0-80.0	53.3	5.8	1456.1	0.39	97.49
80.0-81.0	47.2	5.1	1461.2	0.34	97.83
81.0-82.0	41.4	4.5	1465.7	0.30	98.13
82.0-83.0	35.9	3.9	1469.6	0.26	98.39
83.0-84.0	30.9	3.4	1473.0	0.23	98.62
84.0-85.0	26.3	2.9	1475.9	0.19	98.81
85.0-86.0	22.0	2.4	1478.3	0.16	98.97
86.0-87.0	18.2	2.0	1480.3	0.13	99.11
87.0-88.0	14.9	1.6	1481.9	0.11	99.22
88.0-89.0	12.1	1.3	1483.2	0.09	99.30
89.0-90.0	9.5	1.0	1484.3	0.07	99.37
90.0-91.0	7.1	0.8	1485.0	0.05	99.43
91.0-92.0	5.3	0.6	1485.6	0.04	99.46
92.0-93.0	4.3	0.5	1486.1	0.03	99.50
93.0-94.0	3.6	0.4	1486.5	0.03	99.52
94.0-95.0	2.6	0.3	1486.8	0.02	99.54
95.0-96.0	1.7	0.2	1487.0	0.01	99.55
96.0-97.0	1.2	0.1	1487.1	0.01	99.56
97.0-98.0	0.9	0.1	1487.2	0.01	99.57
98.0-99.0	0.7	0.1	1487.3	0.01	99.57
99.0-100.0	0.5	0.1	1487.3	0.00	99.58
100.0-101.0	0.5	0.1	1487.4	0.00	99.58
101.0-102.0	0.6	0.1	1487.4	0.00	99.59
102.0-103.0	0.6	0.1	1487.5	0.00	99.59
103.0-104.0	0.5	0.1	1487.6	0.00	99.59
104.0-105.0	0.4	0.0	1487.6	0.00	99.60
105.0-106.0	0.5	0.0	1487.6	0.00	99.60
106.0-107.0	0.6	0.1	1487.7	0.00	99.60
107.0-108.0	0.6	0.1	1487.8	0.00	99.61

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 8.567 m

Humidity:

Inspector:

### Zonal Lumen (Continue 3)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	0.5	0.1	1487.8	0.00	99.61
109.0-110.0	0.5	0.1	1487.9	0.00	99.62
110.0-111.0	0.6	0.1	1487.9	0.00	99.62
111.0-112.0	0.7	0.1	1488.0	0.00	99.62
112.0-113.0	0.7	0.1	1488.1	0.00	99.63
113.0-114.0	0.7	0.1	1488.1	0.00	99.63
114.0-115.0	0.7	0.1	1488.2	0.00	99.64
115.0-116.0	0.7	0.1	1488.3	0.00	99.64
116.0-117.0	0.7	0.1	1488.4	0.00	99.65
117.0-118.0	0.8	0.1	1488.4	0.00	99.65
118.0-119.0	0.8	0.1	1488.5	0.01	99.66
119.0-120.0	0.7	0.1	1488.6	0.00	99.66
120.0-121.0	0.6	0.1	1488.7	0.00	99.67
121.0-122.0	0.7	0.1	1488.7	0.00	99.67
122.0-123.0	0.8	0.1	1488.8	0.00	99.68
123.0-124.0	0.8	0.1	1488.9	0.01	99.68
124.0-125.0	1.0	0.1	1489.0	0.01	99.69
125.0-126.0	1.2	0.1	1489.1	0.01	99.69
126.0-127.0	1.3	0.1	1489.2	0.01	99.70
127.0-128.0	1.3	0.1	1489.3	0.01	99.71
128.0-129.0	1.3	0.1	1489.4	0.01	99.72
129.0-130.0	1.5	0.1	1489.5	0.01	99.73
130.0-131.0	1.6	0.1	1489.7	0.01	99.73
131.0-132.0	1.7	0.1	1489.8	0.01	99.74
132.0-133.0	1.7	0.1	1489.9	0.01	99.75
133.0-134.0	1.7	0.1	1490.1	0.01	99.76
134.0-135.0	1.7	0.1	1490.2	0.01	99.77
135.0-136.0	1.7	0.1	1490.3	0.01	99.78
136.0-137.0	1.8	0.1	1490.5	0.01	99.79
137.0-138.0	1.9	0.1	1490.6	0.01	99.80
138.0-139.0	2.0	0.1	1490.8	0.01	99.81
139.0-140.0	2.1	0.1	1490.9	0.01	99.82
140.0-141.0	2.1	0.1	1491.0	0.01	99.83
141.0-142.0	2.0	0.1	1491.2	0.01	99.84
142.0-143.0	1.9	0.1	1491.3	0.01	99.85
143.0-144.0	1.8	0.1	1491.4	0.01	99.85

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 m  
 Humidity:  
 Inspector:



## Zonal Lumen (Continue 4)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	1.8	0.1	1491.5	0.01	99.86
145.0-146.0	1.8	0.1	1491.7	0.01	99.87
146.0-147.0	1.9	0.1	1491.8	0.01	99.88
147.0-148.0	2.0	0.1	1491.9	0.01	99.88
148.0-149.0	1.9	0.1	1492.0	0.01	99.89
149.0-150.0	1.8	0.1	1492.1	0.01	99.90
150.0-151.0	1.8	0.1	1492.2	0.01	99.90
151.0-152.0	1.9	0.1	1492.3	0.01	99.91
152.0-153.0	1.8	0.1	1492.4	0.01	99.92
153.0-154.0	1.8	0.1	1492.5	0.01	99.92
154.0-155.0	1.8	0.1	1492.6	0.01	99.93
155.0-156.0	1.8	0.1	1492.6	0.01	99.93
156.0-157.0	1.7	0.1	1492.7	0.01	99.94
157.0-158.0	1.7	0.1	1492.8	0.00	99.94
158.0-159.0	1.8	0.1	1492.9	0.00	99.95
159.0-160.0	1.8	0.1	1492.9	0.00	99.95
160.0-161.0	1.8	0.1	1493.0	0.00	99.96
161.0-162.0	1.8	0.1	1493.1	0.00	99.96
162.0-163.0	1.8	0.1	1493.1	0.00	99.97
163.0-164.0	1.8	0.1	1493.2	0.00	99.97
164.0-165.0	1.9	0.1	1493.2	0.00	99.97
165.0-166.0	1.8	0.1	1493.3	0.00	99.98
166.0-167.0	1.7	0.0	1493.3	0.00	99.98
167.0-168.0	1.8	0.0	1493.4	0.00	99.98
168.0-169.0	1.9	0.0	1493.4	0.00	99.99
169.0-170.0	1.9	0.0	1493.4	0.00	99.99
170.0-171.0	1.9	0.0	1493.5	0.00	99.99
171.0-172.0	1.9	0.0	1493.5	0.00	99.99
172.0-173.0	1.8	0.0	1493.5	0.00	99.99
173.0-174.0	1.7	0.0	1493.6	0.00	100.00
174.0-175.0	1.6	0.0	1493.6	0.00	100.00
175.0-176.0	1.7	0.0	1493.6	0.00	100.00
176.0-177.0	1.8	0.0	1493.6	0.00	100.00
177.0-178.0	1.7	0.0	1493.6	0.00	100.00
178.0-179.0	1.8	0.0	1493.6	0.00	100.00
179.0-180.0	1.9	0.0	1493.6	0.00	100.00

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 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	553.4	550.8	549.8	550.7	551.2	548.8	553.4	550.8	549.8	550.7
G1.0	552.5	551.6	550.5	550.6	551.0	549.7	553.5	552.6	551.2	550.7
G2.0	550.6	549.5	551.9	550.5	549.6	549.5	552.5	552.3	551.8	549.0
G3.0	549.2	548.1	551.9	551.4	550.6	551.0	552.3	551.9	552.9	551.5
G4.0	545.8	547.0	548.7	550.2	550.7	550.4	550.0	550.1	551.2	549.7
G5.0	543.8	544.7	547.7	551.6	550.7	551.0	550.4	550.1	549.1	550.0
G6.0	542.6	541.4	545.8	549.8	549.9	549.6	548.0	548.9	550.3	549.3
G7.0	538.9	540.4	544.5	550.5	550.3	547.6	545.8	545.0	548.6	547.3
G8.0	533.7	539.4	545.9	551.0	548.3	545.7	543.0	544.4	549.5	547.2
G9.0	530.5	537.9	544.5	551.3	549.6	544.2	540.7	543.0	547.8	544.7
G10.0	529.9	533.7	541.7	550.5	548.3	541.8	535.2	539.7	549.3	546.9
G11.0	528.5	529.2	541.5	549.9	547.7	539.4	532.5	536.9	546.3	544.9
G12.0	523.7	527.9	539.9	550.9	545.4	535.0	529.0	534.8	544.7	543.5
G13.0	518.1	525.7	540.1	550.5	545.7	533.8	524.9	530.7	541.6	545.4
G14.0	512.6	520.7	539.0	549.8	543.0	530.7	521.8	527.8	540.6	543.5
G15.0	508.0	517.2	536.4	548.8	541.9	527.1	517.0	525.1	538.7	542.4
G16.0	504.0	512.3	531.6	548.4	542.7	521.8	512.7	522.8	536.5	540.6
G17.0	497.9	509.1	531.7	547.5	540.7	520.4	506.7	518.0	535.9	540.6
G18.0	492.5	504.9	531.3	548.9	538.8	514.8	500.7	513.3	534.9	539.6
G19.0	485.2	502.1	528.5	546.6	534.8	510.5	494.7	509.1	531.8	538.2
G20.0	478.5	495.3	527.4	545.8	533.9	507.6	489.5	503.5	528.2	536.7
G21.0	472.1	492.1	524.5	544.0	531.8	501.1	481.3	498.6	527.7	538.0
G22.0	467.0	485.1	520.3	543.6	530.0	496.3	473.8	491.9	524.8	531.6
G23.0	459.1	480.5	517.1	540.2	526.9	490.5	464.0	487.4	522.0	529.8
G24.0	452.4	475.3	514.5	541.1	523.7	484.5	456.6	482.9	519.0	528.0
G25.0	445.1	468.2	512.6	539.0	521.1	476.7	448.1	474.6	515.3	525.4
G26.0	436.9	460.9	510.9	537.1	515.6	469.3	440.5	469.4	510.7	525.0
G27.0	429.5	456.8	508.6	532.0	513.0	464.9	431.9	462.5	506.4	520.2
G28.0	422.4	450.1	501.5	530.1	508.8	458.0	422.7	454.7	501.4	515.0
G29.0	415.4	444.5	498.4	526.5	503.0	450.0	413.5	446.6	497.1	512.3
G30.0	407.3	437.8	493.5	524.3	500.7	442.3	404.4	440.4	493.7	507.6
G31.0	399.6	430.8	489.0	520.0	496.3	434.6	394.6	433.4	490.2	504.1
G32.0	393.0	422.9	484.1	517.0	491.4	425.1	384.9	423.9	483.7	500.4
G33.0	384.9	417.0	478.8	513.5	487.3	416.7	376.7	415.9	477.6	496.0
G34.0	376.9	409.9	474.7	508.6	480.7	407.4	367.5	407.9	473.2	490.8
G35.0	367.5	403.6	470.4	504.7	474.7	399.1	356.7	400.2	466.1	486.5
G36.0	359.4	397.7	463.6	499.7	468.3	390.5	347.6	393.1	460.4	480.1

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 8.567 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	353.4	389.3	458.5	494.4	462.2	382.4	337.1	384.9	453.5	474.2
G38.0	343.4	380.6	452.1	488.4	454.7	372.7	327.9	376.0	447.6	471.2
G39.0	336.2	372.7	445.5	482.3	449.7	365.0	320.7	366.8	440.2	464.4
G40.0	328.2	364.6	438.7	476.4	441.9	356.2	309.9	357.8	433.6	458.5
G41.0	320.4	357.1	430.6	471.5	434.2	348.0	300.8	348.4	426.5	452.2
G42.0	311.9	349.1	423.6	464.6	427.8	338.0	294.0	338.6	418.3	444.3
G43.0	302.6	341.0	415.7	460.1	419.4	329.0	283.8	329.4	410.4	439.7
G44.0	295.1	331.7	408.3	451.8	411.3	319.8	275.5	321.4	402.2	431.6
G45.0	286.1	324.1	401.0	443.9	402.3	309.1	265.7	311.9	395.7	423.6
G46.0	278.7	315.3	391.2	435.9	392.6	299.8	256.8	302.4	386.7	416.4
G47.0	269.8	307.1	383.8	428.4	383.7	290.1	250.3	293.5	378.8	407.4
G48.0	261.8	298.4	375.3	420.3	374.6	281.0	241.1	284.0	370.3	400.5
G49.0	253.0	289.3	366.4	410.1	365.2	272.1	233.6	273.9	359.7	391.9
G50.0	245.4	279.7	357.2	400.4	355.7	262.9	226.2	265.6	351.1	382.7
G51.0	236.9	270.0	347.0	390.9	346.3	252.9	219.2	255.8	341.2	371.2
G52.0	228.7	262.0	338.1	380.0	335.3	245.1	211.5	247.4	332.4	361.0
G53.0	221.4	251.3	327.0	369.0	325.6	236.1	204.7	237.8	322.1	350.4
G54.0	213.1	242.0	315.0	357.6	314.0	227.1	198.1	228.8	311.3	339.8
G55.0	205.4	232.0	304.7	345.1	302.8	218.6	190.3	219.3	300.7	329.9
G56.0	196.6	222.8	294.0	332.6	292.0	208.9	183.9	210.7	289.9	318.5
G57.0	190.3	214.8	283.0	319.8	280.8	201.1	177.4	201.9	278.8	306.5
G58.0	183.3	204.6	271.6	307.4	269.8	192.7	171.0	194.4	268.3	294.3
G59.0	173.7	196.1	259.7	294.0	258.8	184.6	164.9	186.6	257.9	280.2
G60.0	166.4	187.0	248.8	279.8	247.8	175.9	158.4	178.6	246.6	266.9
G61.0	159.0	178.1	236.5	265.8	236.0	168.6	151.6	169.5	234.7	254.6
G62.0	153.1	169.3	225.6	251.9	224.2	160.9	146.2	161.6	222.9	240.6
G63.0	144.6	161.9	214.6	238.4	212.9	153.2	138.9	154.7	211.2	227.9
G64.0	137.6	152.0	203.3	224.9	202.1	145.6	133.5	146.6	199.8	213.9
G65.0	131.9	144.0	192.0	212.4	190.9	138.0	128.4	139.4	188.5	202.1
G66.0	124.2	135.8	180.4	198.3	179.7	131.2	122.9	132.1	177.7	189.4
G67.0	117.8	128.0	169.6	184.7	168.6	123.9	116.8	125.4	167.6	175.9
G68.0	112.8	121.1	159.1	173.1	157.8	117.2	111.3	117.1	156.7	164.1
G69.0	106.3	113.9	148.6	162.0	147.1	111.2	106.4	110.6	145.4	152.9
G70.0	100.2	106.2	138.1	149.7	137.2	104.6	100.4	103.7	135.5	141.9
G71.0	94.1	99.0	128.9	139.5	127.4	98.8	95.6	97.6	126.2	131.2
G72.0	88.6	94.2	119.9	128.6	118.2	93.0	90.1	93.2	116.9	121.4
G73.0	81.5	87.5	110.7	118.4	109.3	86.7	85.8	87.6	108.5	111.5

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 8.567 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	77.4	79.8	101.7	108.3	100.8	80.9	80.0	80.1	99.9	102.2
G75.0	72.5	73.7	93.7	98.1	92.6	75.7	75.6	74.4	91.8	92.7
G76.0	66.7	67.9	85.2	88.4	84.9	70.2	71.3	70.6	84.1	83.1
G77.0	61.3	62.0	77.7	79.0	76.8	65.0	65.6	65.1	76.3	73.9
G78.0	53.9	56.1	69.6	70.4	69.8	59.7	60.5	60.0	68.4	67.4
G79.0	48.1	49.9	61.9	62.3	62.1	54.0	55.1	54.6	60.9	59.8
G80.0	42.8	44.3	54.8	55.3	55.0	48.8	49.8	49.0	54.1	52.8
G81.0	37.9	39.0	48.7	47.4	48.0	43.3	44.5	43.8	47.5	44.3
G82.0	33.5	34.7	41.7	40.5	41.7	38.6	40.0	38.5	41.1	37.3
G83.0	28.8	30.4	35.3	34.0	35.4	34.4	35.8	34.7	35.1	31.6
G84.0	24.8	26.0	30.4	27.9	30.1	30.3	31.4	31.0	29.5	25.4
G85.0	20.7	22.0	25.6	22.0	25.1	26.4	27.1	26.8	24.9	19.8
G86.0	17.4	18.5	21.4	16.8	20.7	23.0	23.2	23.0	20.4	14.7
G87.0	15.6	15.3	17.4	12.7	17.1	19.5	19.7	20.0	16.6	10.6
G88.0	10.6	12.0	14.1	10.9	13.8	16.7	16.5	17.0	13.4	8.7
G89.0	6.6	8.4	11.0	9.1	11.1	13.9	13.6	14.3	10.7	8.8
G90.0	4.4	5.5	8.5	8.3	8.6	10.4	10.7	11.0	8.4	7.7
G91.0	2.8	3.3	6.2	7.5	6.4	7.4	6.4	8.2	6.4	5.7
G92.0	2.1	1.8	5.1	7.3	4.9	5.2	4.8	5.7	4.8	5.3
G93.0	3.3	1.1	4.2	6.9	3.8	4.2	3.7	4.0	5.3	4.7
G94.0	2.7	0.0	3.4	6.4	3.0	3.3	3.2	3.3	4.4	5.6
G95.0	0.6	0.0	2.7	5.7	2.1	1.5	2.5	1.7	2.0	3.3
G96.0	0.1	0.0	2.0	4.4	1.5	1.4	2.3	1.4	1.2	2.3
G97.0	0.0	0.0	0.6	3.4	0.0	0.9	2.2	1.0	0.3	1.3
G98.0	0.9	0.0	0.7	2.6	0.0	0.6	1.3	0.6	0.0	1.8
G99.0	0.0	0.0	0.8	1.4	0.0	0.6	0.6	0.6	0.7	0.9
G100.0	0.0	0.0	0.7	0.8	0.0	0.5	0.6	0.4	0.8	0.7
G101.0	0.0	0.0	0.8	0.8	0.0	1.2	0.7	0.6	1.3	0.8
G102.0	0.0	0.0	1.3	0.8	0.0	0.7	0.7	0.6	0.8	0.8
G103.0	0.7	0.0	1.0	0.8	0.0	0.8	0.7	0.7	0.4	0.9
G104.0	0.0	0.0	0.7	0.7	0.0	0.7	0.7	0.5	0.0	1.0
G105.0	0.0	0.0	0.9	1.0	0.0	0.6	0.0	0.6	0.0	0.9
G106.0	0.8	0.0	1.1	0.9	0.0	0.8	0.0	0.9	0.0	0.7
G107.0	0.0	0.0	0.8	1.0	0.0	1.4	0.8	0.8	0.9	1.4
G108.0	0.0	0.0	1.0	1.1	0.0	0.9	0.8	0.5	1.2	1.0
G109.0	0.0	0.0	0.9	1.0	0.0	0.9	0.4	0.9	1.0	1.0
G110.0	0.0	0.0	1.1	1.0	0.0	0.7	0.0	1.1	1.1	1.2

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 8.567 m

Humidity:

Inspector:

## Candlepower Table (Continue 3)

Unit: cd

G/C	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0
G111.0	0.0	0.0	1.4	1.2	0.0	1.2	0.0	0.9	1.2	1.2
G112.0	0.0	0.0	1.2	1.4	0.0	1.1	0.0	0.9	1.2	1.3
G113.0	0.0	0.0	1.3	1.3	0.0	1.0	1.0	0.8	1.0	1.3
G114.0	0.9	0.0	1.2	1.4	0.0	1.5	0.9	1.2	1.2	1.1
G115.0	0.0	0.0	1.3	1.4	0.0	1.1	1.1	1.0	1.3	1.3
G116.0	0.0	0.0	1.3	2.1	0.0	0.9	0.0	1.1	1.1	1.4
G117.0	1.1	0.0	1.2	1.3	0.0	1.2	0.0	1.1	1.3	1.2
G118.0	0.9	0.0	1.4	1.6	0.0	1.1	1.1	1.0	1.4	1.5
G119.0	1.4	0.0	1.5	1.6	0.0	1.2	0.0	1.2	1.5	1.5
G120.0	0.1	0.0	1.5	1.6	0.0	1.2	0.0	1.3	0.0	1.2
G121.0	0.2	0.0	1.6	1.6	0.0	1.3	0.0	1.3	0.0	1.6
G122.0	0.8	0.1	1.3	1.5	0.0	1.3	0.0	1.4	0.0	1.8
G123.0	1.1	0.0	1.7	1.8	0.0	1.1	0.0	1.2	0.0	1.7
G124.0	1.5	0.2	1.7	1.8	0.1	1.4	0.0	1.4	0.1	1.7
G125.0	2.1	0.2	1.7	1.8	0.1	1.8	0.0	1.5	0.1	1.5
G126.0	4.0	0.1	1.8	1.9	0.1	1.5	0.0	1.5	0.1	1.8
G127.0	4.1	0.2	1.8	1.9	0.2	1.5	0.0	1.5	0.0	1.8
G128.0	2.6	0.3	1.9	1.9	0.2	1.5	0.0	1.4	0.2	1.9
G129.0	4.0	0.3	1.8	1.9	0.2	1.6	0.0	1.6	0.2	2.0
G130.0	4.2	0.3	1.7	1.8	0.0	0.0	1.5	1.8	0.0	2.1
G131.0	4.3	0.5	1.9	2.0	0.3	1.5	1.7	1.8	0.3	2.3
G132.0	3.8	0.5	2.0	2.1	0.3	1.7	1.8	1.8	0.3	2.0
G133.0	4.3	0.5	2.1	2.1	0.0	1.8	1.6	1.5	0.0	2.0
G134.0	2.8	0.6	2.0	2.2	0.3	1.7	1.6	1.7	0.4	2.2
G135.0	2.7	0.6	1.7	1.9	0.4	1.8	1.7	1.8	0.4	2.2
G136.0	4.2	0.6	2.1	2.2	0.4	0.1	1.7	2.0	0.3	1.9
G137.0	4.0	0.4	2.3	2.6	0.4	0.2	1.7	1.8	0.5	2.8
G138.0	4.1	0.7	2.1	2.3	0.4	1.9	1.8	1.4	2.0	2.3
G139.0	4.0	0.8	2.2	2.2	0.5	1.7	1.7	2.0	2.0	2.0
G140.0	4.0	0.8	2.3	2.2	2.4	1.9	1.7	2.0	2.0	0.6
G141.0	3.8	0.9	2.3	2.3	2.1	0.4	1.9	1.8	1.9	2.3
G142.0	3.7	1.0	2.3	2.2	2.1	0.4	1.9	0.4	2.3	2.5
G143.0	3.5	0.8	2.1	2.2	0.6	0.4	1.9	0.4	2.3	2.3
G144.0	3.8	1.2	2.4	2.4	2.0	2.1	1.8	0.4	2.1	0.7
G145.0	3.4	1.2	2.2	2.5	2.3	2.1	2.0	0.5	0.6	0.7
G146.0	3.5	1.0	2.3	2.5	2.3	0.5	2.0	0.5	0.7	2.4
G147.0	3.6	1.4	2.4	2.5	2.5	0.2	2.1	0.5	2.2	2.2

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 8.567 m

Humidity:

Inspector:

## Candlepower Table (Continue 4)

Unit: cd

G\C	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0
G148.0	3.7	1.4	2.2	2.5	2.3	0.6	2.1	0.6	2.4	2.4
G149.0	3.9	1.4	2.5	2.5	2.3	0.6	1.9	0.6	2.3	0.8
G150.0	2.2	1.4	2.4	2.5	2.4	0.3	2.2	0.6	2.3	0.6
G151.0	2.3	1.4	2.3	2.7	2.3	0.7	2.4	0.7	2.5	2.6
G152.0	4.0	1.3	0.9	2.6	2.1	0.8	2.3	0.7	2.3	0.9
G153.0	3.7	1.1	2.6	2.7	2.5	0.7	2.2	0.7	2.2	1.0
G154.0	3.8	1.0	2.5	2.5	2.5	0.8	2.1	0.7	0.9	0.9
G155.0	2.6	1.0	0.9	2.6	2.5	0.8	2.3	0.7	2.4	2.5
G156.0	2.6	0.9	1.0	2.4	2.5	0.8	2.4	0.7	2.5	2.6
G157.0	2.6	0.9	0.9	2.6	2.3	0.8	2.4	0.8	2.0	1.0
G158.0	2.5	0.9	3.3	2.6	2.5	0.8	2.4	0.5	2.3	0.7
G159.0	2.8	0.9	2.4	2.6	2.5	0.9	2.2	0.9	2.9	1.1
G160.0	2.6	0.7	2.7	2.3	2.8	0.9	2.4	0.9	2.3	1.0
G161.0	2.6	1.0	1.0	2.7	2.6	0.6	2.4	0.7	2.5	0.8
G162.0	2.5	1.0	1.2	2.6	2.6	0.9	2.6	1.0	2.5	1.0
G163.0	2.8	0.7	1.1	2.6	2.7	0.9	2.5	0.9	2.6	1.1
G164.0	2.6	1.0	1.0	2.5	2.6	2.4	2.3	1.0	2.5	1.0
G165.0	2.6	1.0	1.1	2.7	2.4	2.6	2.6	1.0	2.4	1.1
G166.0	2.5	1.1	1.1	2.8	2.7	1.0	1.0	1.0	2.6	1.1
G167.0	2.7	1.1	1.2	2.7	2.6	1.0	1.1	1.0	2.5	1.1
G168.0	2.7	1.1	1.1	3.0	2.7	1.0	1.0	1.1	3.1	1.1
G169.0	2.7	1.1	1.1	2.7	2.7	1.1	2.9	1.1	2.6	1.2
G170.0	2.7	1.1	1.2	2.7	2.7	1.1	2.7	1.1	2.7	1.2
G171.0	2.8	2.8	1.2	2.8	2.7	1.1	1.1	1.2	2.7	1.1
G172.0	2.8	2.8	1.1	1.1	2.7	1.2	2.7	1.1	2.7	1.2
G173.0	2.8	1.2	0.9	1.1	2.5	1.1	2.6	1.2	2.6	1.2
G174.0	2.5	1.0	1.2	1.2	2.8	1.1	1.0	0.8	2.8	0.9
G175.0	2.8	1.2	1.2	1.2	2.8	0.9	1.1	1.2	1.2	1.2
G176.0	2.8	1.2	1.3	1.2	2.5	1.1	3.0	1.2	2.8	1.2
G177.0	2.8	2.8	1.2	1.5	2.5	1.2	0.9	0.8	2.8	0.9
G178.0	2.8	2.5	1.2	2.8	1.2	1.2	1.2	1.2	1.2	1.2
G179.0	2.8	2.9	1.2	0.9	2.6	0.9	1.2	2.7	2.8	1.0
G180.0	2.8	2.7	1.2	1.2	2.7	1.2	2.8	1.3	2.6	1.2

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 m  
 Humidity:  
 Inspector:

## Candlepower Table (Continue 5)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G0.0	551.2	548.8	553.4							
G1.0	548.9	548.0	552.5							
G2.0	548.8	547.1	550.6							
G3.0	547.3	544.7	549.2							
G4.0	546.0	543.1	545.8							
G5.0	544.3	540.6	543.8							
G6.0	544.0	537.7	542.6							
G7.0	542.6	536.3	538.9							
G8.0	541.8	533.4	533.7							
G9.0	537.6	529.2	530.5							
G10.0	537.3	529.2	529.9							
G11.0	533.0	523.8	528.5							
G12.0	531.4	520.7	523.7							
G13.0	531.0	515.8	518.1							
G14.0	529.9	514.6	512.6							
G15.0	528.1	509.2	508.0							
G16.0	525.6	506.3	504.0							
G17.0	523.8	501.6	497.9							
G18.0	521.8	496.6	492.5							
G19.0	518.8	490.7	485.2							
G20.0	515.5	483.9	478.5							
G21.0	512.2	477.6	472.1							
G22.0	509.8	473.8	467.0							
G23.0	507.0	468.6	459.1							
G24.0	502.1	462.3	452.4							
G25.0	497.5	455.4	445.1							
G26.0	494.3	449.3	436.9							
G27.0	491.9	442.2	429.5							
G28.0	487.7	436.8	422.4							
G29.0	482.7	431.3	415.4							
G30.0	477.4	424.1	407.3							
G31.0	472.1	417.4	399.6							
G32.0	465.5	408.9	393.0							
G33.0	461.3	400.7	384.9							
G34.0	455.8	395.1	376.9							
G35.0	449.8	388.0	367.5							
G36.0	443.0	380.8	359.4							

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 m  
 Humidity:  
 Inspector:

## Candlepower Table (Continue 6)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G37.0	436.2	372.1	353.4						
G38.0	428.3	363.2	343.4						
G39.0	422.6	355.1	336.2						
G40.0	416.1	346.7	328.2						
G41.0	408.2	338.4	320.4						
G42.0	401.7	331.0	311.9						
G43.0	393.4	322.4	302.6						
G44.0	386.4	313.7	295.1						
G45.0	377.5	305.8	286.1						
G46.0	368.2	297.4	278.7						
G47.0	359.4	287.6	269.8						
G48.0	350.2	278.5	261.8						
G49.0	342.5	269.4	253.0						
G50.0	332.9	261.5	245.4						
G51.0	324.7	252.9	236.9						
G52.0	313.9	243.9	228.7						
G53.0	305.1	235.0	221.4						
G54.0	294.7	226.3	213.1						
G55.0	284.0	219.0	205.4						
G56.0	273.6	209.5	196.6						
G57.0	263.8	201.6	190.3						
G58.0	253.5	192.0	183.3						
G59.0	242.6	184.2	173.7						
G60.0	231.8	175.0	166.4						
G61.0	221.3	166.9	159.0						
G62.0	210.3	158.6	153.1						
G63.0	200.1	151.9	144.6						
G64.0	189.6	144.3	137.6						
G65.0	180.0	137.3	131.9						
G66.0	169.6	130.3	124.2						
G67.0	159.2	123.1	117.8						
G68.0	148.8	116.2	112.8						
G69.0	139.8	108.9	106.3						
G70.0	131.0	102.5	100.2						
G71.0	121.9	96.4	94.1						
G72.0	113.4	90.0	88.6						
G73.0	105.1	82.7	81.5						

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 m  
 Humidity:  
 Inspector:



### Candlepower Table (Continue 7)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G74.0	96.8	78.4	77.4							
G75.0	89.6	72.8	72.5							
G76.0	82.0	67.0	66.7							
G77.0	74.5	61.7	61.3							
G78.0	66.9	55.9	53.9							
G79.0	60.3	48.8	48.1							
G80.0	52.8	43.0	42.8							
G81.0	46.2	39.4	37.9							
G82.0	40.1	35.0	33.5							
G83.0	34.3	29.5	28.8							
G84.0	29.3	26.8	24.8							
G85.0	24.6	23.5	20.7							
G86.0	20.6	19.6	17.4							
G87.0	17.0	16.4	15.6							
G88.0	13.8	13.4	10.6							
G89.0	10.7	10.0	6.6							
G90.0	8.1	7.2	4.4							
G91.0	6.0	4.9	2.8							
G92.0	4.6	3.6	2.1							
G93.0	3.5	2.9	3.3							
G94.0	2.6	1.4	2.7							
G95.0	0.7	0.9	0.6							
G96.0	0.1	0.9	0.1							
G97.0	1.3	0.6	0.0							
G98.0	0.6	0.6	0.9							
G99.0	0.9	0.6	0.0							
G100.0	0.0	0.6	0.0							
G101.0	0.0	0.9	0.0							
G102.0	0.8	0.4	0.0							
G103.0	0.9	0.0	0.7							
G104.0	0.6	0.0	0.0							
G105.0	0.9	0.0	0.0							
G106.0	1.0	0.0	0.8							
G107.0	1.0	0.0	0.0							
G108.0	0.0	0.0	0.0							
G109.0	0.0	0.0	0.0							
G110.0	0.0	0.0	0.0							

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 m  
 Humidity:  
 Inspector:

### Candlepower Table (Continue 8)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G111.0	1.2	0.0	0.0							
G112.0	1.0	0.0	0.0							
G113.0	0.0	0.0	0.0							
G114.0	0.0	0.0	0.9							
G115.0	0.0	0.0	0.0							
G116.0	1.4	0.0	0.0							
G117.0	0.0	0.0	1.1							
G118.0	0.0	0.0	0.9							
G119.0	0.0	0.0	1.4							
G120.0	0.0	0.2	0.1							
G121.0	0.0	0.5	0.2							
G122.0	0.0	0.6	0.8							
G123.0	0.0	0.7	1.1							
G124.0	0.0	0.8	1.5							
G125.0	1.7	0.9	2.1							
G126.0	1.5	0.9	4.0							
G127.0	1.8	1.0	4.1							
G128.0	1.8	1.1	2.6							
G129.0	1.8	1.1	4.0							
G130.0	1.9	3.1	4.2							
G131.0	2.0	2.7	4.3							
G132.0	2.0	1.3	3.8							
G133.0	2.0	3.1	4.3							
G134.0	1.9	2.9	2.8							
G135.0	2.0	3.2	2.7							
G136.0	2.2	3.2	4.2							
G137.0	2.2	3.3	4.0							
G138.0	2.1	1.7	4.1							
G139.0	2.0	3.2	4.0							
G140.0	2.2	3.1	4.0							
G141.0	2.4	3.2	3.8							
G142.0	2.3	2.8	3.7							
G143.0	2.4	2.7	3.5							
G144.0	2.2	1.4	3.8							
G145.0	2.4	1.3	3.4							
G146.0	2.5	1.3	3.5							
G147.0	2.4	1.2	3.6							

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 m  
 Humidity:  
 Inspector:

## Candlepower Table (Continue 9)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G148.0	2.4	1.2	3.7							
G149.0	2.2	1.3	3.9							
G150.0	2.4	1.3	2.2							
G151.0	2.4	1.3	2.3							
G152.0	2.4	1.3	4.0							
G153.0	2.3	1.1	3.7							
G154.0	2.3	0.9	3.8							
G155.0	2.5	0.9	2.6							
G156.0	2.6	0.6	2.6							
G157.0	2.5	0.9	2.6							
G158.0	2.6	0.9	2.5							
G159.0	2.4	0.6	2.8							
G160.0	2.6	0.9	2.6							
G161.0	2.4	2.4	2.6							
G162.0	1.0	2.8	2.5							
G163.0	1.1	1.0	2.8							
G164.0	0.8	2.6	2.6							
G165.0	1.1	2.6	2.6							
G166.0	1.1	2.7	2.5							
G167.0	1.0	2.6	2.7							
G168.0	1.1	2.6	2.7							
G169.0	1.1	2.5	2.7							
G170.0	0.9	2.7	2.7							
G171.0	1.2	2.9	2.8							
G172.0	1.2	2.5	2.8							
G173.0	1.3	2.7	2.8							
G174.0	1.2	2.8	2.5							
G175.0	1.2	2.8	2.8							
G176.0	1.2	2.6	2.8							
G177.0	1.2	2.6	2.8							
G178.0	1.2	2.2	2.8							
G179.0	1.2	2.7	2.8							
G180.0	1.2	2.8	2.8							

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600  
 Distance: 8.567 m  
 Humidity:  
 Inspector: