

Report No.:

Test Time: 2022/8/20 09:51

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 490688 LED-MF-20W-2700K-12V

Voltage: 11.7 V

Current: 1.925 A

Power: 19.21 W

Power Factor: 0.850

## Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 2254.6 lm

Measurement Flux: 2254.6 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

Horizontal Diffuse Angle(10%,50%,75%,100%): H140.1,H89.4,H65.9,H5

Vertical Diffuse Angle(10%,50%,75%,100%): V154.9,V101,V75.8,V4

Luminaire Efficacy Rating (LER): 117.41

Central Intensity: 981.33 cd

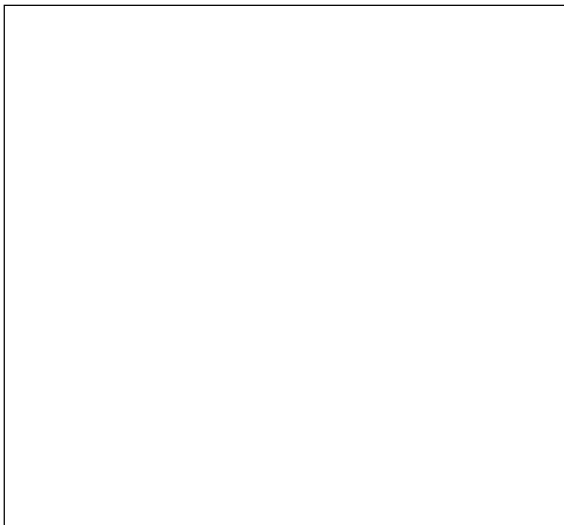
Max. Intensity: 982 cd

Pos of Max. Intensity: H180 V5

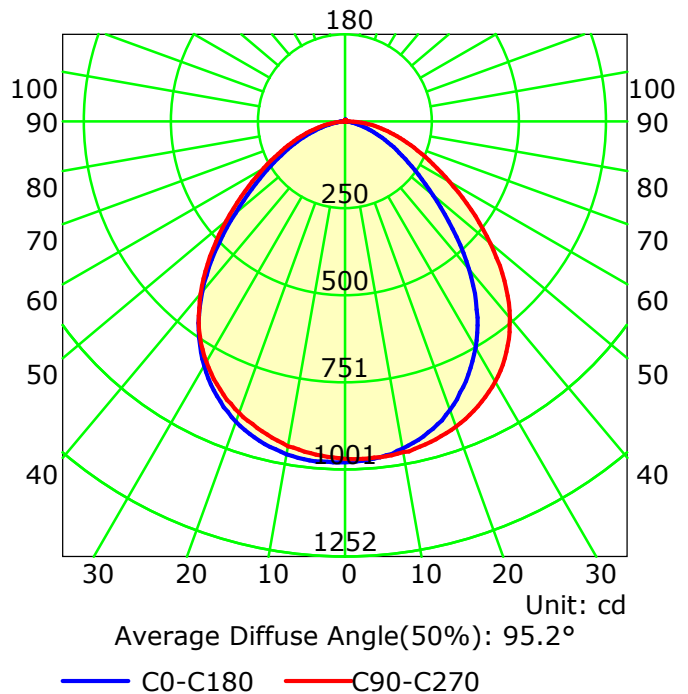
S/MH(C0/C180): 1.19

S/MH(C90/C270): 1.27

Picture Of Luminaire



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 30.0

Gamma Plane (°):0.0-180.0:1.0

Test Lab:

Test Device: GPM-1800B

Test Type: TYPE C

Distance: 11.655 m [K=1.0000]

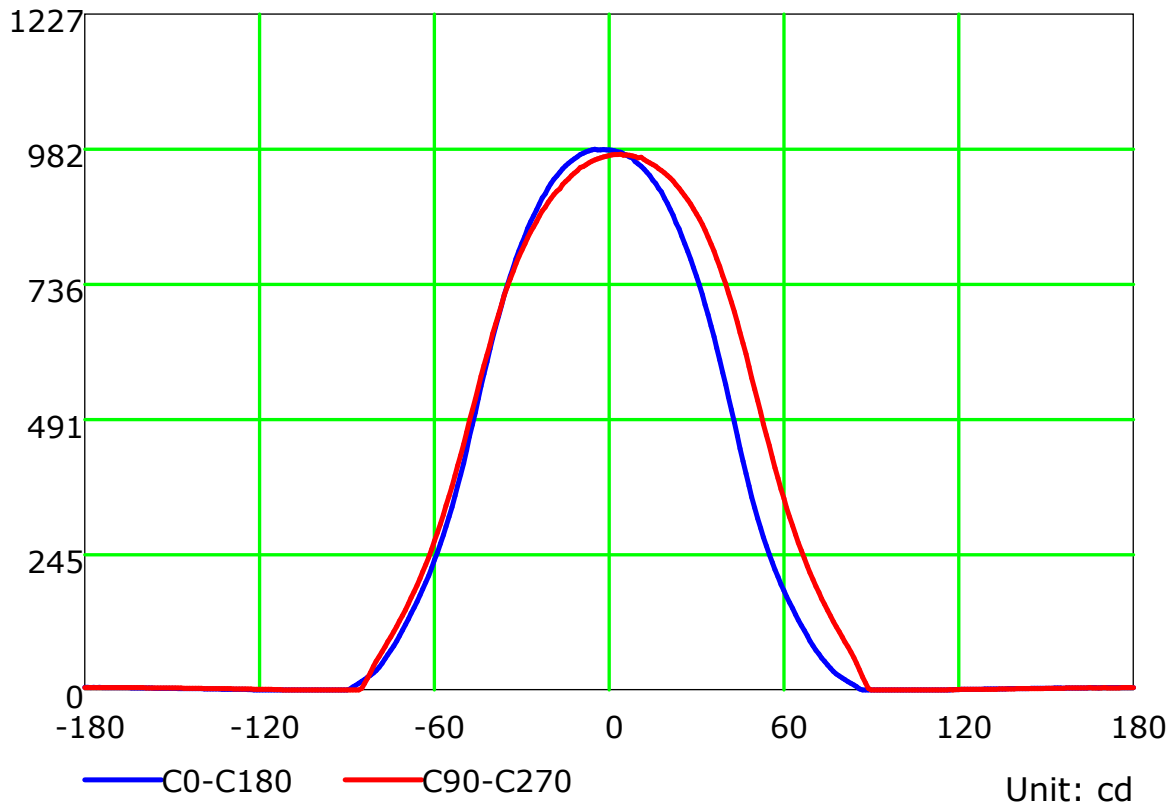
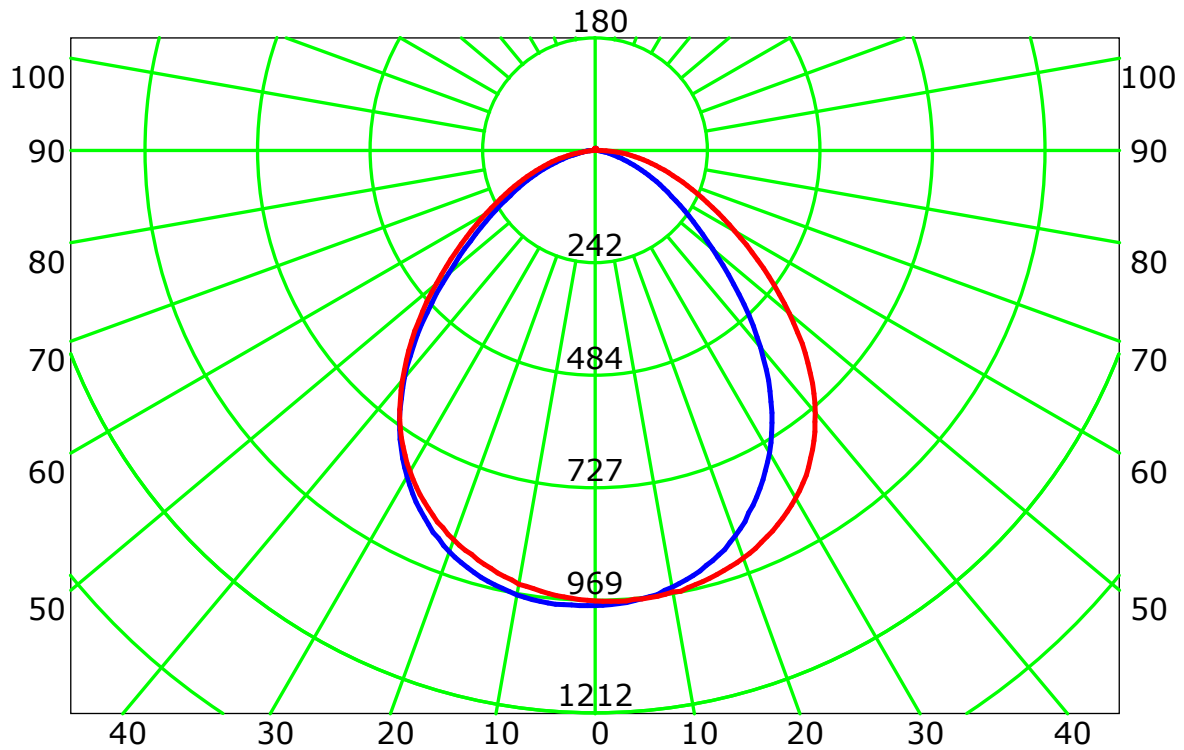
Temperature:

Humidity:

Operator:

Inspector:

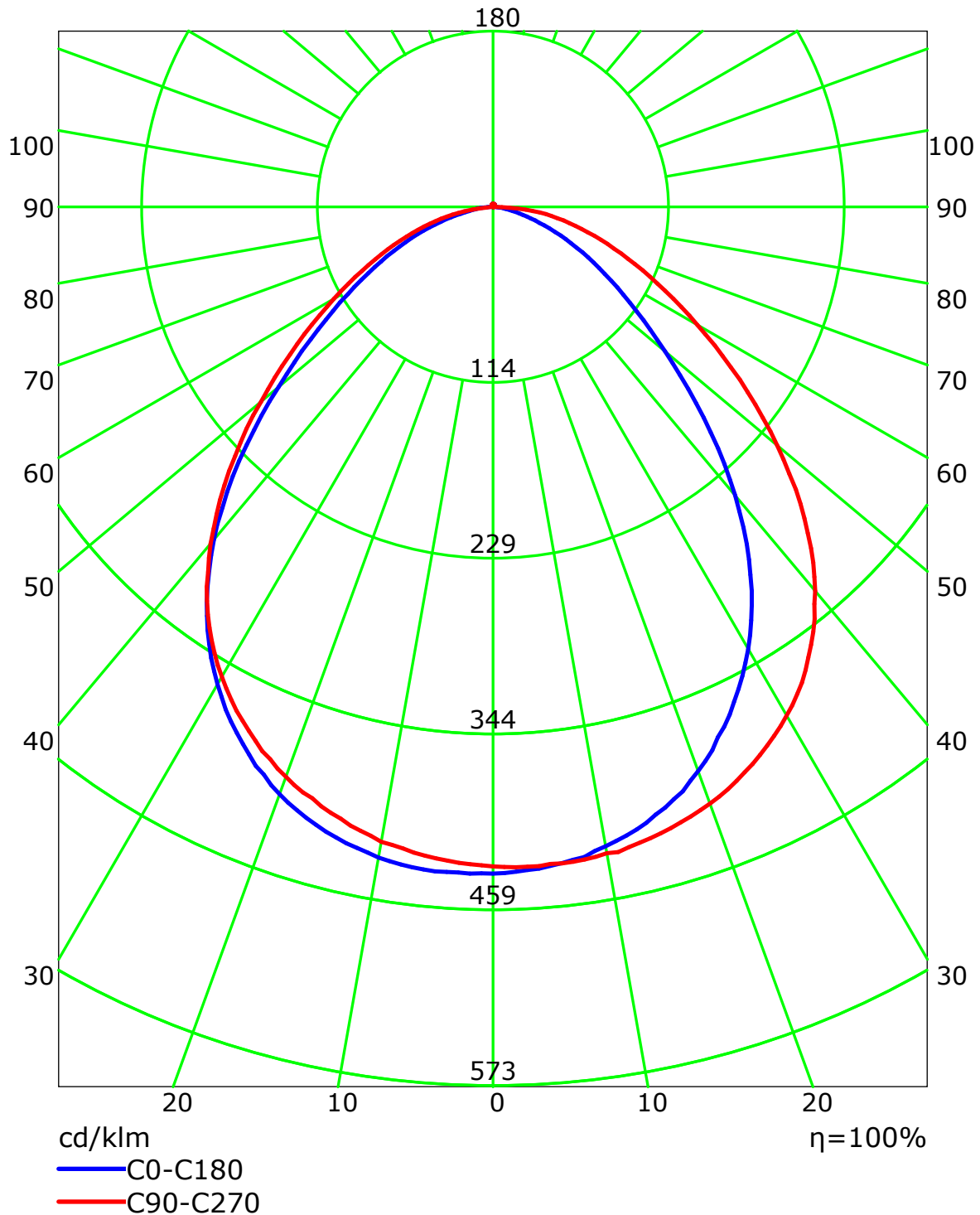
## Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Luminous Intensity Distribution Curve(cd/klm)



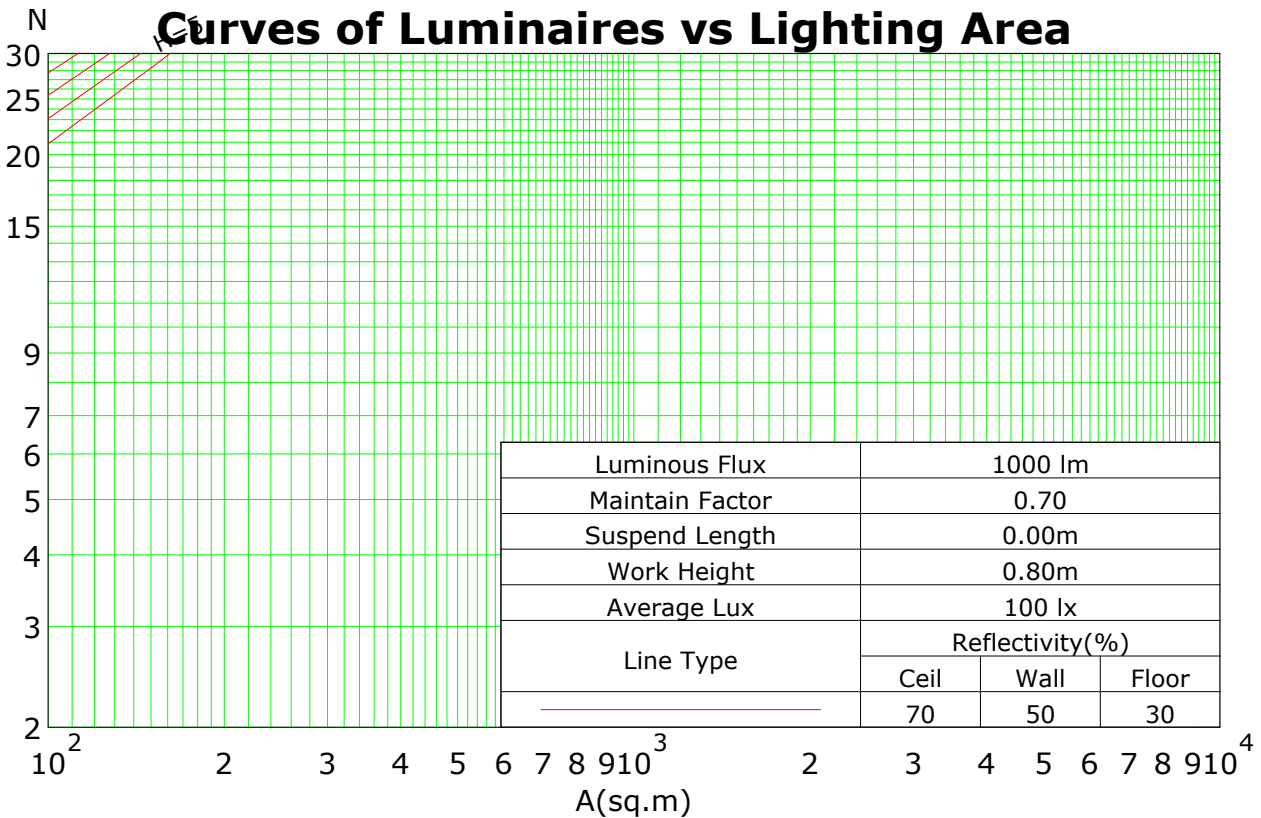
C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	107	104	100	97	99	97	94	95	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74
3	93	83	76	70	91	82	75	70	79	73	68	76	71	67	74	69	66	64
4	86	75	67	60	84	73	66	60	71	64	59	69	63	58	66	62	58	56
5	79	67	59	53	77	66	58	53	64	57	52	62	56	51	60	55	51	49
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	40	39
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29

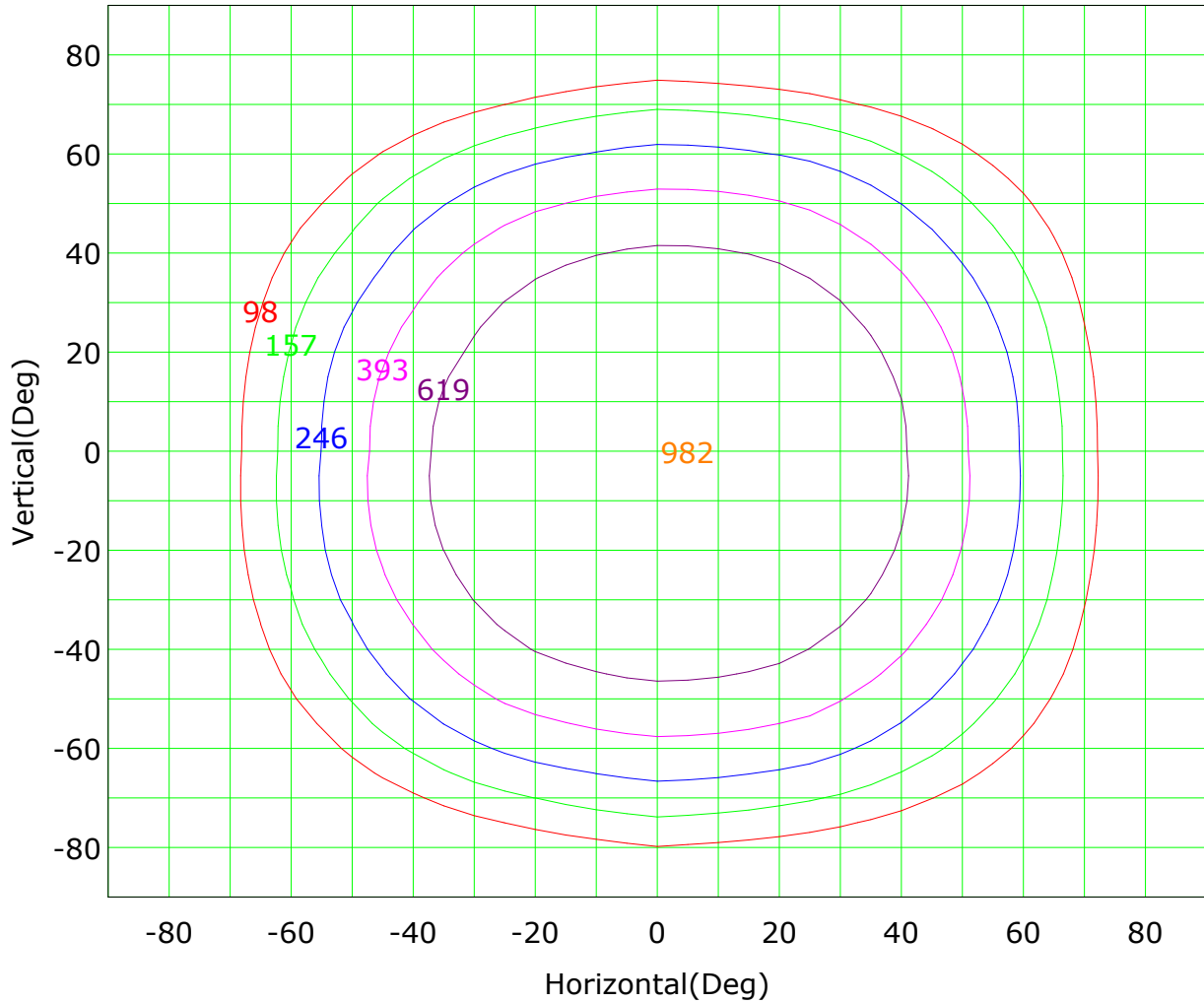
Spacing Criteria (0-180): 1.19  
 Spacing Criteria (90-270): 1.27  
 Spacing Criteria (Diagonal): 1.29



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-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Isocandela (rectangle)



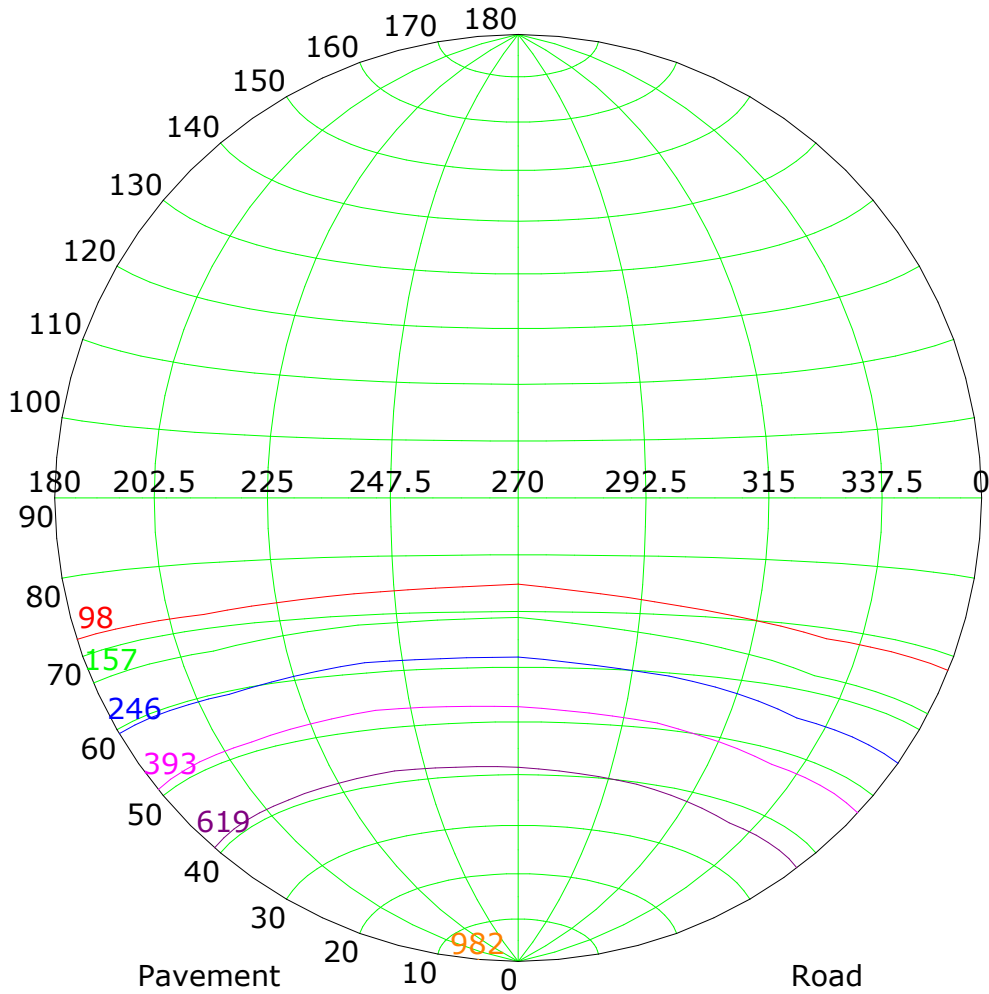
Imax (100%): 982 cd

— ( 10%): 98 cd	— ( 16%): 157 cd
— ( 25%): 246 cd	— ( 40%): 393 cd
— ( 63%): 619 cd	— (100%): 982 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-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Isocandela (sphere)



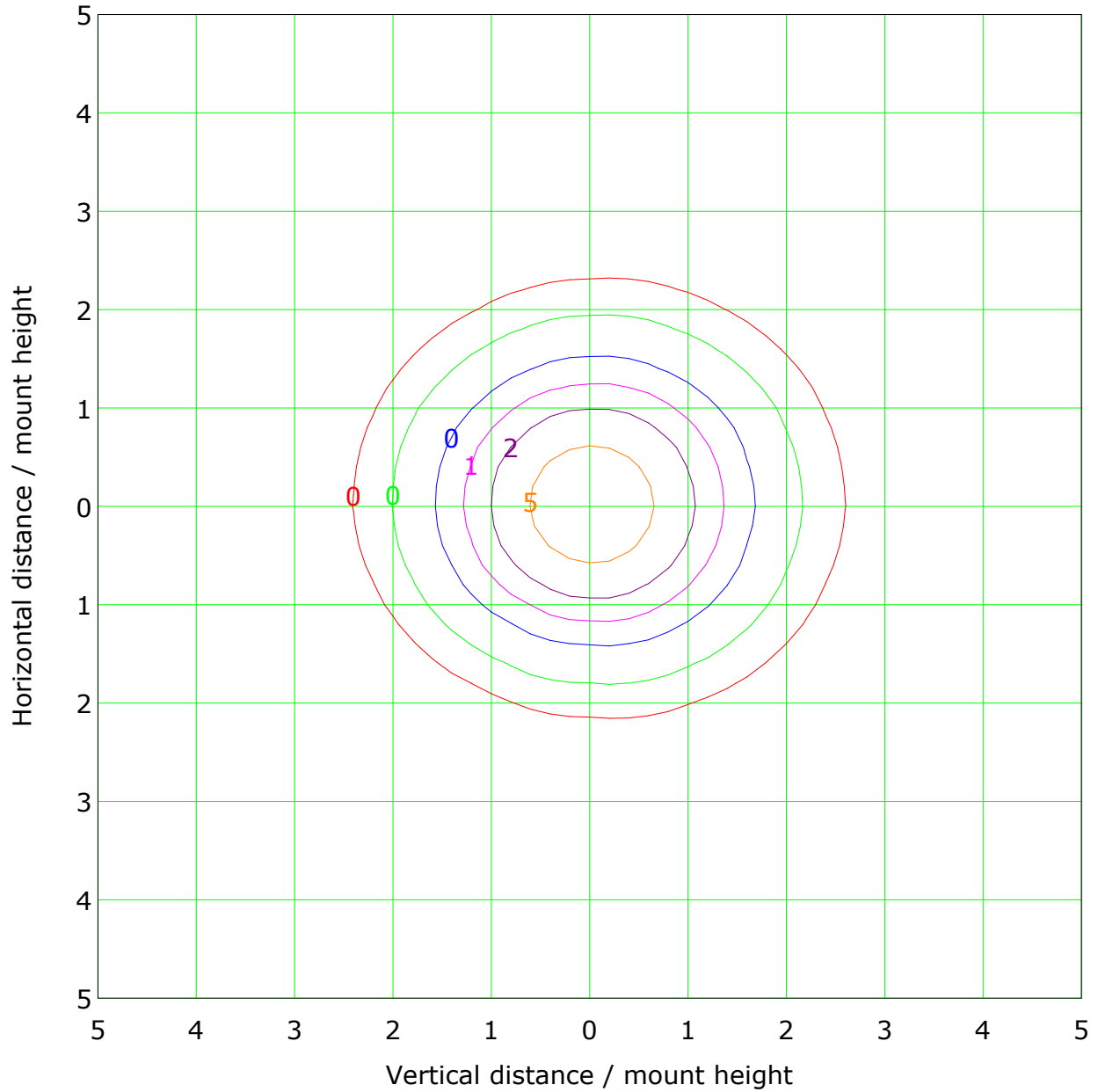
Imax (100%): 982 cd

— ( 10%): 98 cd	— ( 16%): 157 cd
— ( 25%): 246 cd	— ( 40%): 393 cd
— ( 63%): 619 cd	— (100%): 982 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-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

### IsoLux Plot



Mounting Height: 10.0m    Max Lux(100%): 9.8 lx

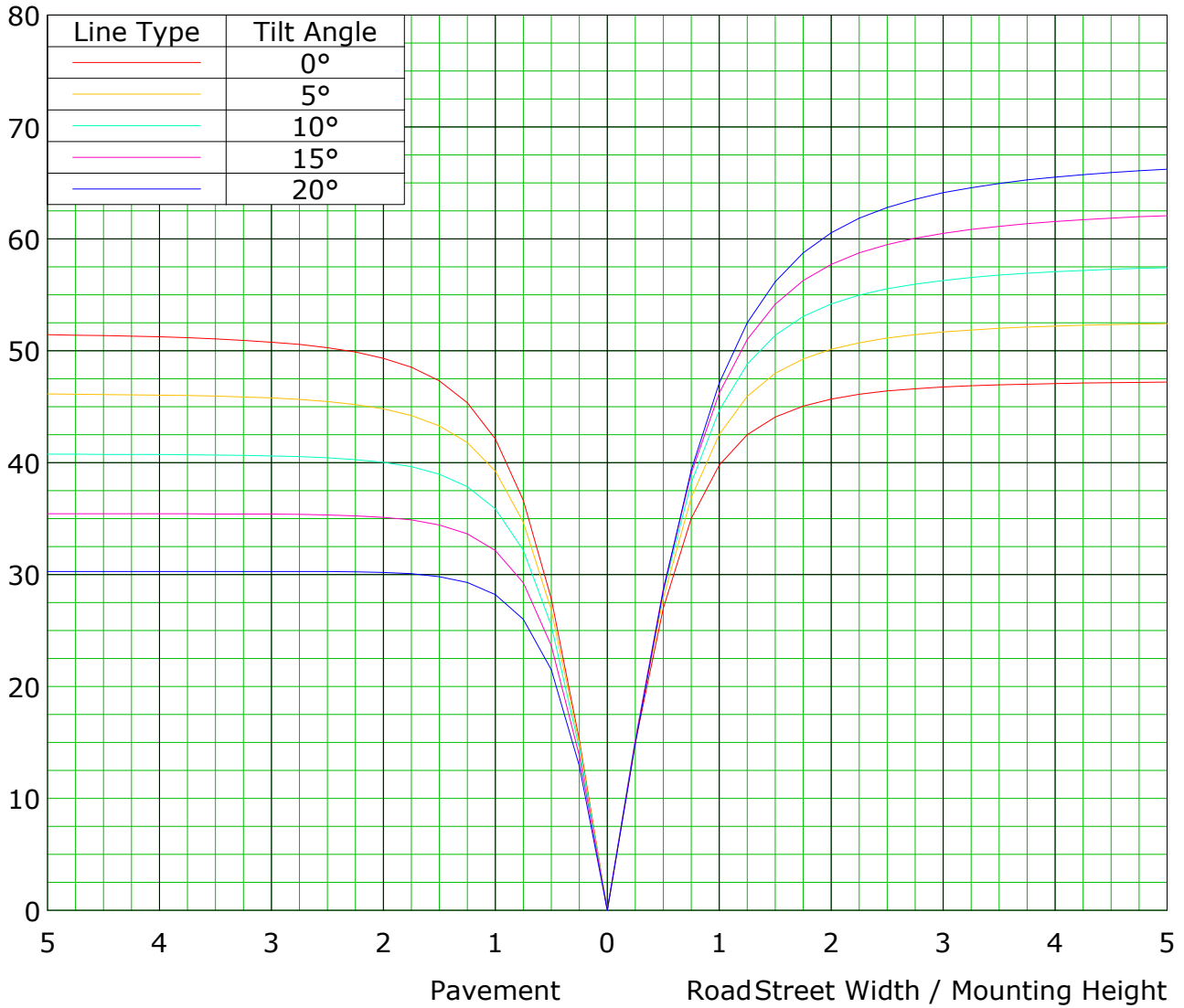
( 1%): 0.1 lx	( 2%): 0.2 lx
( 5%): 0.5 lx	( 10%): 1.0 lx
( 20%): 2.0 lx	( 50%): 4.9 lx
(100%): 9.8 lx	

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-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Roadway CU Curve

Efficiency(%)



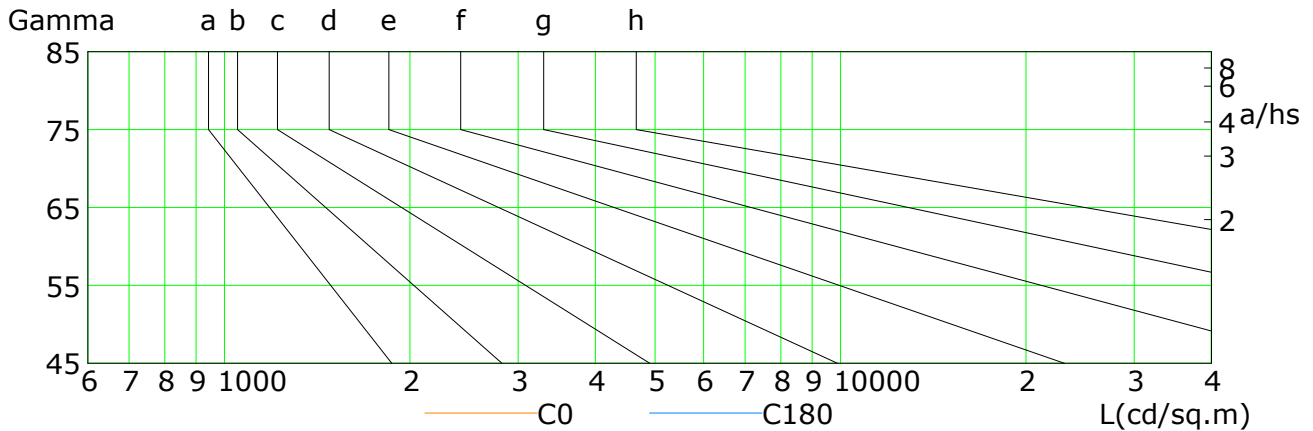
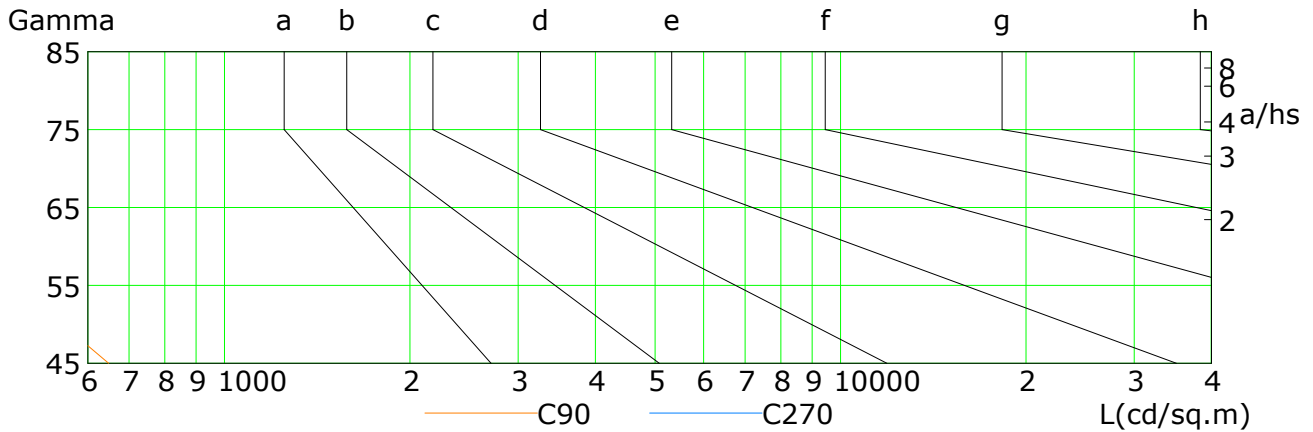
C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:



## Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
		a	b	c	d	e	f	g	h
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300

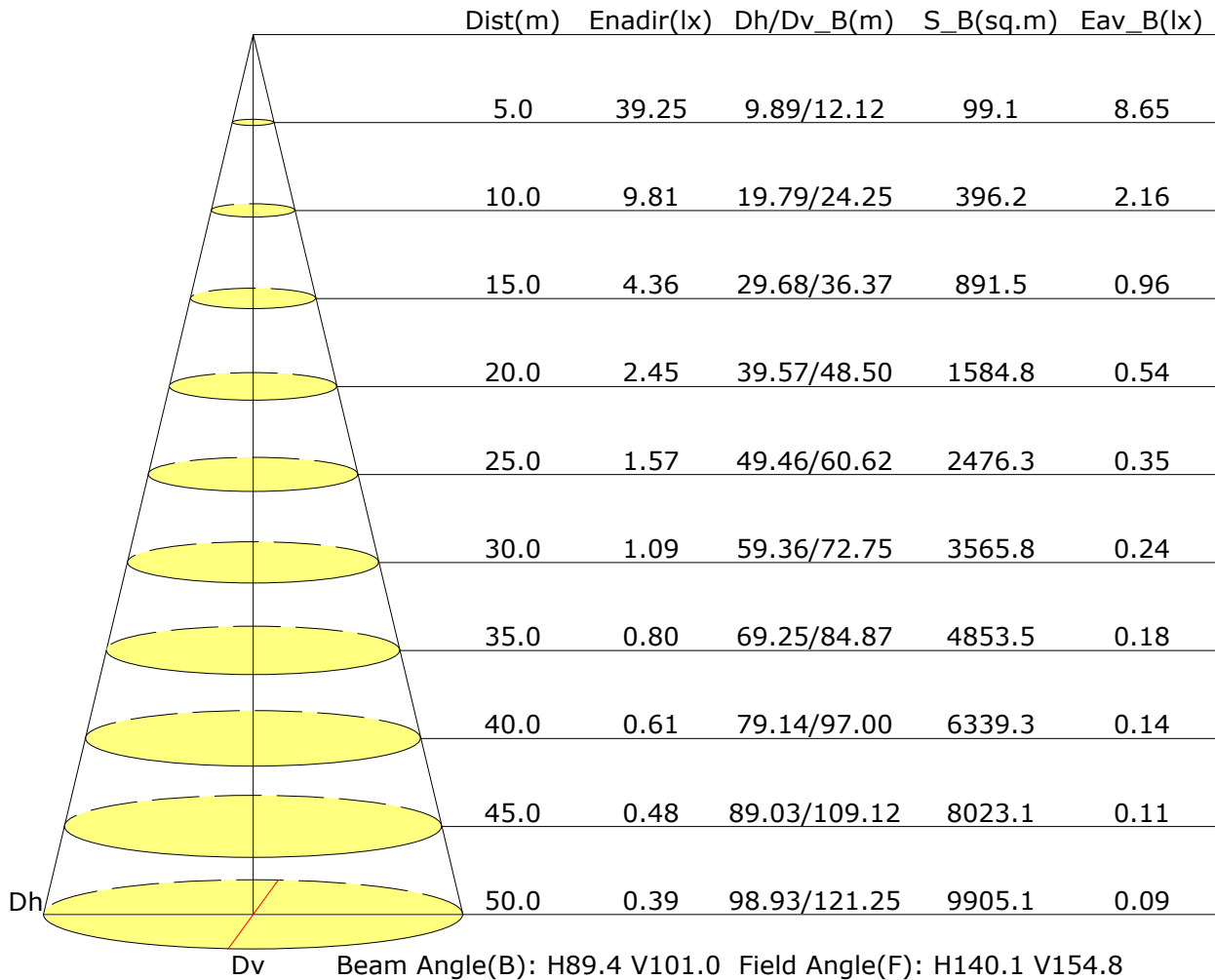


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	439	331	246	181	127	81	46	22	6
C90	649	546	444	348	268	201	145	96	49
C180	530	412	315	236	173	119	72	36	16
C270	550	446	352	271	203	145	97	52	3

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-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

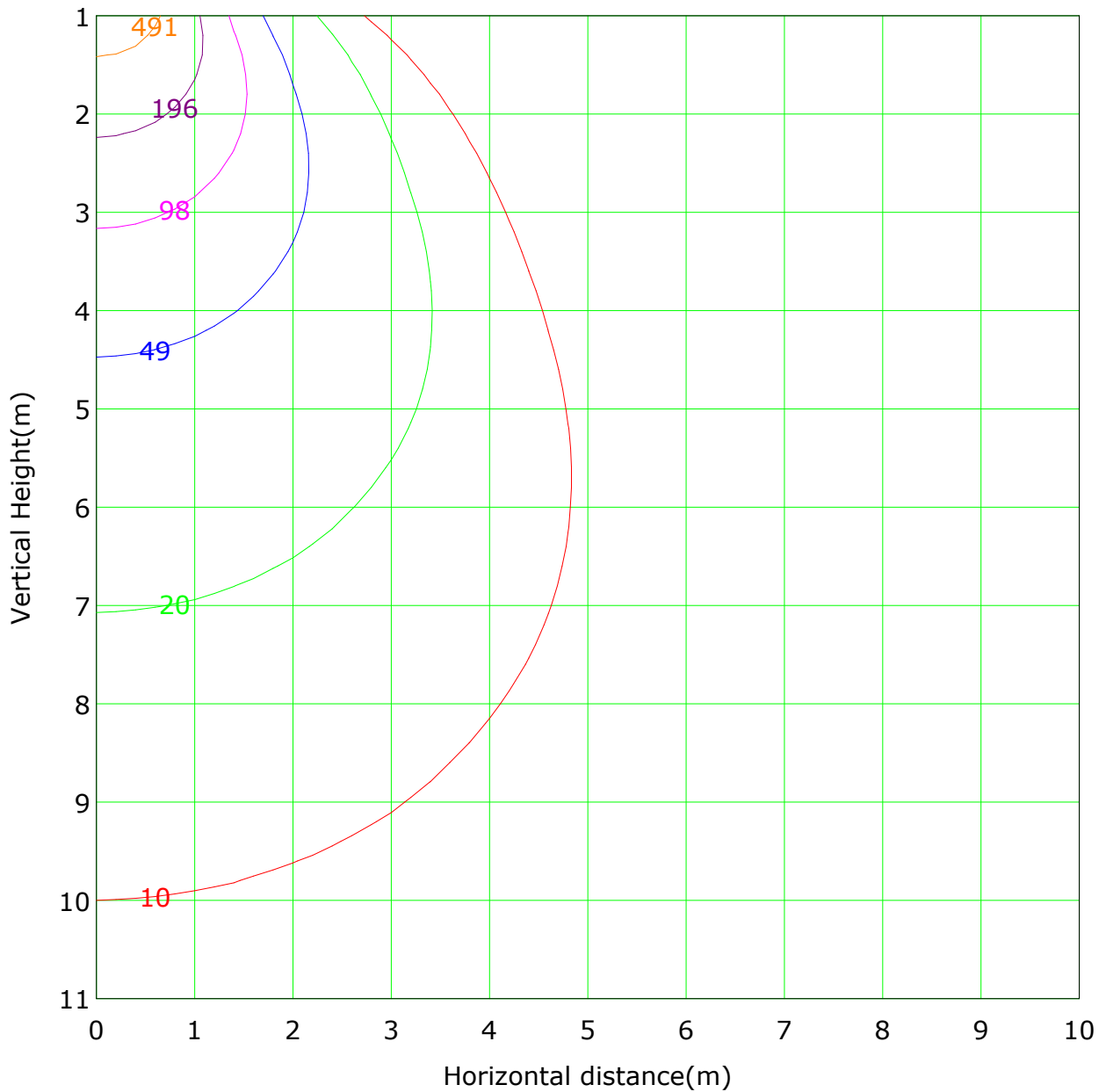
## Illuminance at a Distance



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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Vertical IsoLux Plot



Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 981.3 lx

— ( 1%): 9.8 lx	— ( 2%): 19.6 lx
— ( 5%): 49.1 lx	— ( 10%): 98.1 lx
— ( 20%): 196.3 lx	— ( 50%): 490.7 lx
— (100%): 981.3 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-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

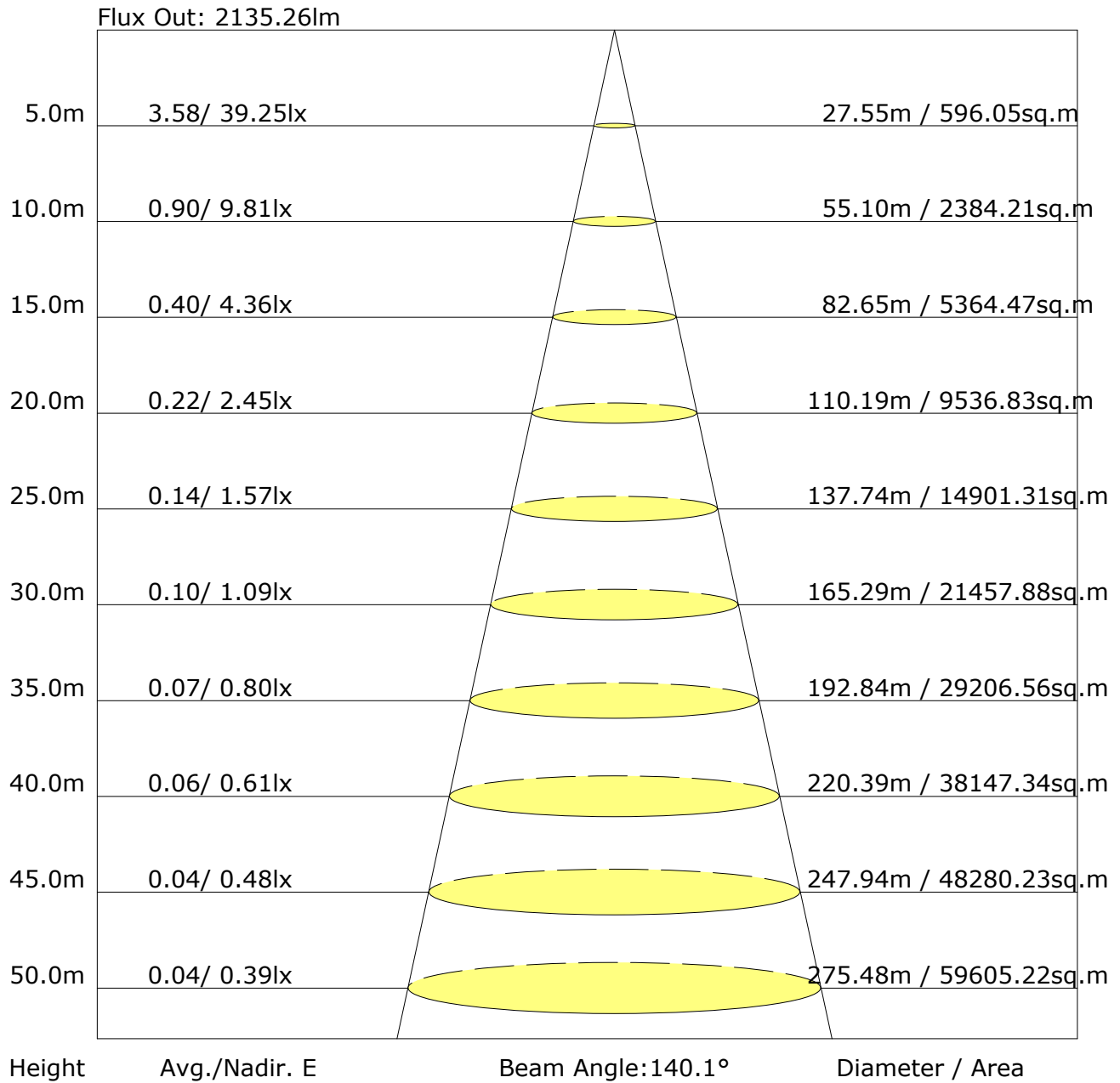
## Area Flux Table

		Vertical plane																										
		-90	-80	-70	-60	-50	-40	-30	-20	-10	00	10	20	30	40	50	60	70	80	90								
Flux(E)	Flux(T)	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Unit: lm							
		18.0	50.1	102.8	169.2	2230.6	2274.0	294.7	290.5	261.6	211.3	147.0	83.0	36.9	9.6	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0					
		-90	-80	-70	-60	-50	-40	-30	-20	-10	00	10	20	30	40	50	60	70	80	90	Flux(T)Flux(E)							
0.0	0.7	0.0	0.1	0.2	0.5	1.1	2.2	3.4	4.6	5.6	6.0	6.2	6.1	5.2	3.9	2.7	1.9	1.1	0.5	0.2	0.0	0.0	0.0	0.0	0.3	2246	2180	
0.0	6.3	0.0	0.1	0.4	0.8	1.5	2.4	3.2	3.9	4.3	4.2	3.6	2.7	1.9	1.1	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.8	20.4	0.0
0.0	0.1	0.0	0.1	0.4	0.8	1.5	2.4	3.2	3.9	4.3	4.2	3.6	2.7	1.9	1.1	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0
0.0	0.3	0.0	0.2	0.7	1.6	2.9	4.5	6.1	7.3	8.1	7.9	6.9	5.4	3.8	2.3	1.1	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.2	54.9	0.0
0.0	0.4	0.0	0.4	1.4	3.3	6.2	10.4	14.7	17.9	19.4	19.1	17.0	13.4	9.0	5.2	2.6	1.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	141.3	139.5	0.0
0.0	0.5	0.0	0.5	1.8	4.2	8.2	13.6	18.9	22.6	24.3	24.0	21.7	17.5	12.0	6.8	3.3	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	181.1	179.7	0.0
0.0	0.6	0.0	0.6	2.2	5.5	11.1	17.8	23.3	27.0	28.8	28.6	26.4	22.1	16.0	9.4	4.4	1.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	225.4	224.3	0.0
0.1	0.6	0.1	0.6	2.3	5.7	11.5	18.3	24.0	27.7	29.4	29.3	27.1	22.7	16.6	9.7	4.5	1.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	231.6	230.5	0.0
0.1	0.6	0.1	0.6	2.3	5.6	11.3	18.1	23.8	27.6	29.2	28.8	26.6	22.3	16.2	9.4	4.4	1.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	228.3	227.3	0.0
0.1	0.6	0.1	0.6	2.1	5.2	10.6	17.0	22.5	26.3	28.0	27.6	25.2	20.8	15.0	8.7	4.1	1.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	215.8	214.7	0.0
0.1	0.5	0.1	0.5	1.9	4.6	9.1	15.0	20.3	24.1	25.7	25.3	22.9	18.6	12.9	7.4	3.6	1.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	193.7	192.4	0.0
0.0	0.4	0.0	0.4	1.6	3.7	7.2	12.1	16.9	20.4	22.0	21.6	19.3	15.2	10.2	5.7	2.9	1.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	160.8	159.2	0.0
0.0	0.3	0.0	0.3	1.2	2.8	5.3	8.7	12.5	15.2	16.5	16.2	14.2	11.1	7.4	4.2	2.1	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	119.0	116.8	0.0
0.0	0.2	0.0	0.2	0.8	2.0	3.6	5.8	8.1	9.8	10.7	10.4	9.1	7.1	4.8	2.8	1.4	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.4	74.0	0.0
0.0	0.2	0.0	0.2	0.5	1.1	2.2	3.4	4.6	5.6	6.1	6.0	5.1	4.0	2.7	1.6	0.7	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.0	38.0	0.0
0.0	0.1	0.0	0.1	0.2	0.5	0.9	1.5	2.1	2.5	2.9	2.8	2.3	1.6	1.0	0.6	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.3	5.9	0.0
0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.4	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	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-1800B  
 Distance: 11.655 m [K=1.0000]  
 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-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## UGR Table

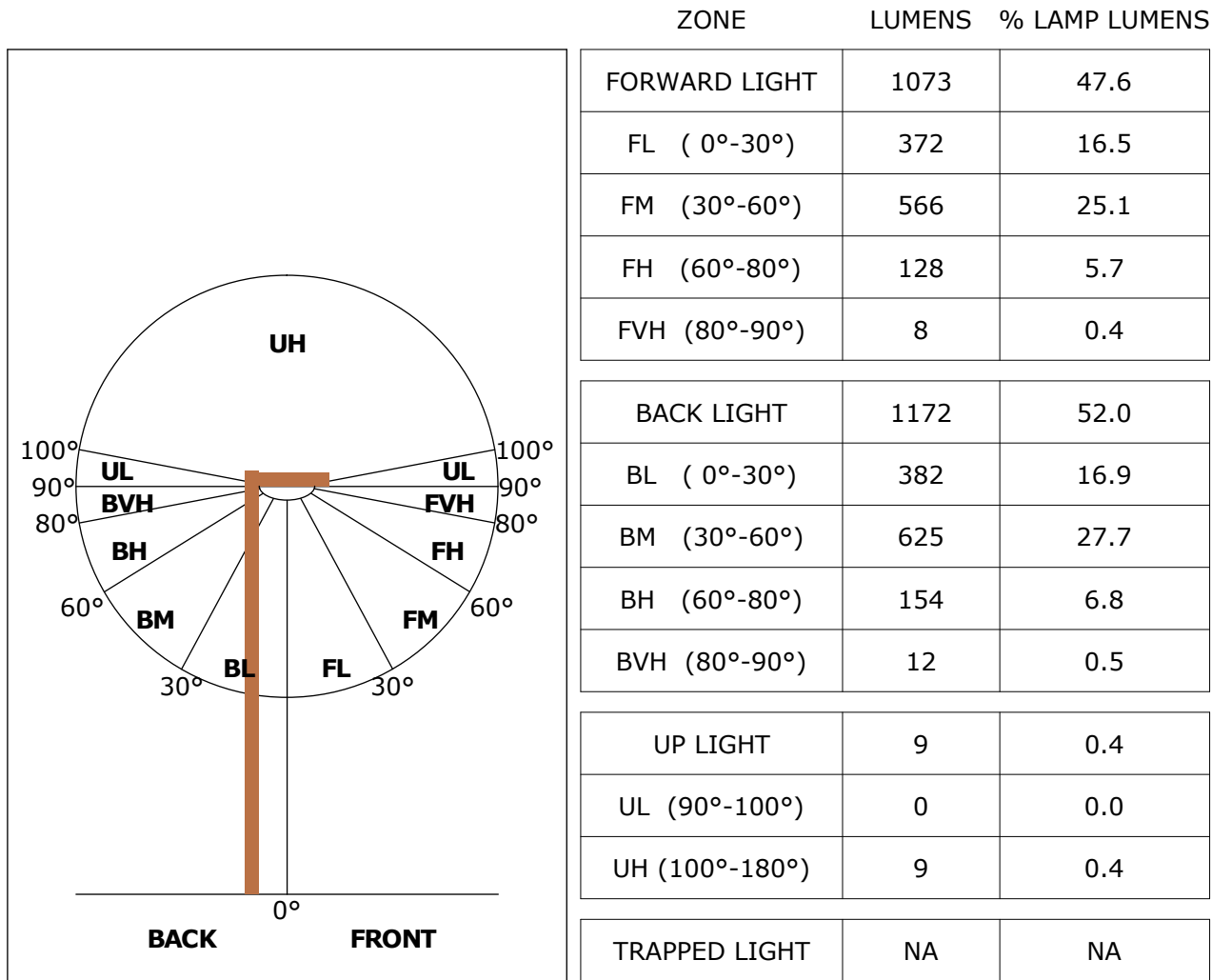
Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-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 2255lm ( $8\log(F/F_0) = 2.8$ ).

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-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

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

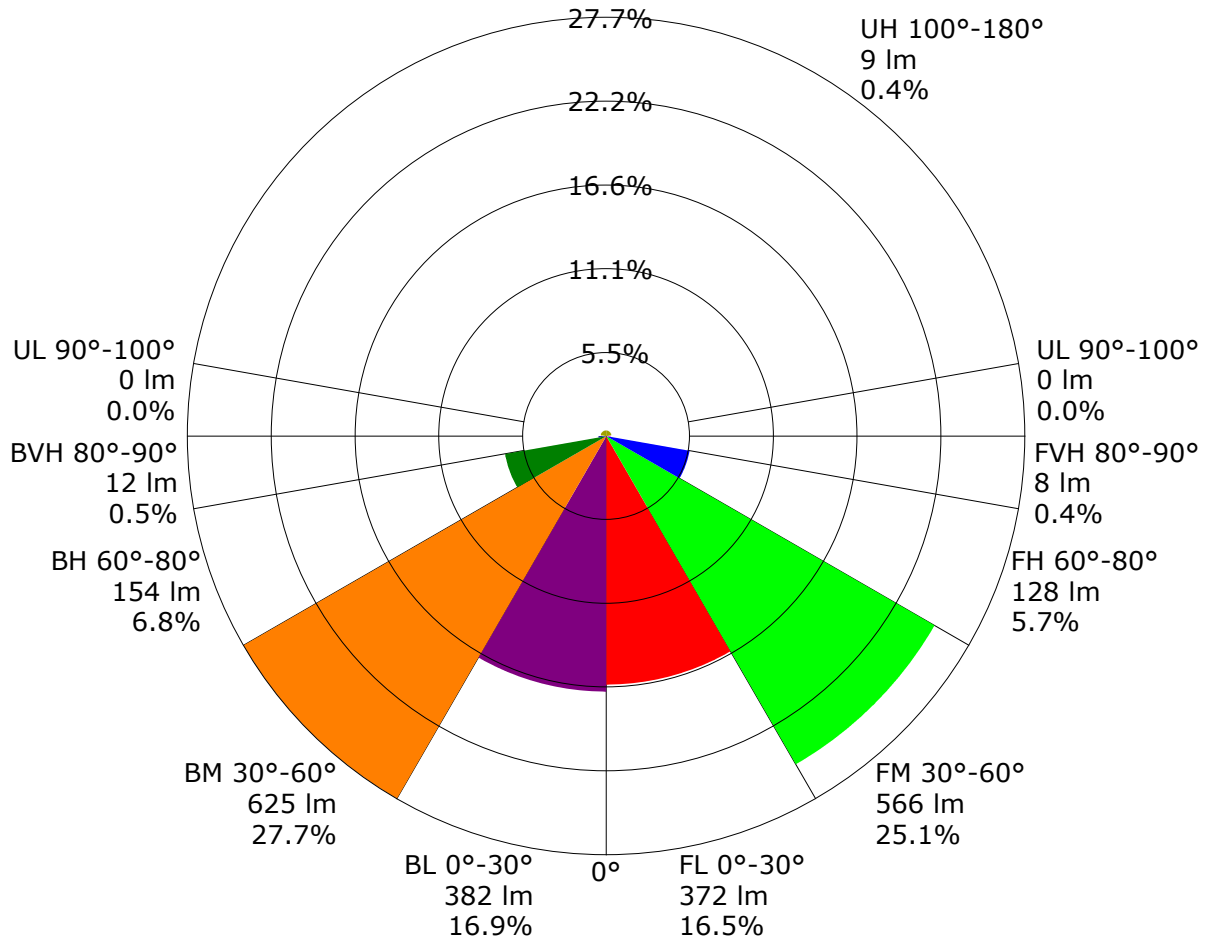


<b>BUG(Backlight, Uplight, Glare) Rating Base On TM-15-07</b>	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B1 U1 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B1 U1 G1

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-1800B  
 Distance: 11.655 m [K=1.0000]  
 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 (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

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	0.63	0.73	0.80	0.85	0.91	0.96	0.99	1.03	1.05	
	0.30		0.56	0.66	0.73	0.79	0.86	0.91	0.95	0.99	1.02	
	0.20		0.51	0.61	0.68	0.74	0.82	0.87	0.91	0.96	1.00	
0.50	0.50	0.20	0.61	0.71	0.78	0.82	0.88	0.92	0.95	0.99	1.01	
	0.30		0.55	0.65	0.72	0.77	0.84	0.88	0.92	0.96	0.99	
	0.20		0.50	0.60	0.68	0.73	0.80	0.85	0.89	0.94	0.97	
0.30	0.50	0.20	0.60	0.69	0.75	0.80	0.86	0.89	0.92	0.95	0.97	
	0.30		0.54	0.64	0.71	0.75	0.82	0.86	0.89	0.93	0.95	
	0.20		0.50	0.60	0.67	0.72	0.78	0.83	0.86	0.91	0.94	
0.00	0.00	0.00	0.48	0.57	0.64	0.69	0.75	0.79	0.82	0.86	0.89	
<p>Rating:19W 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-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	0.90	0.73	0.62	0.53	0.42	0.35	0.30	0.23	0.19	
	0.30		0.75	0.63	0.54	0.47	0.38	0.32	0.27	0.21	0.18	
	0.20		0.64	0.55	0.48	0.42	0.35	0.29	0.26	0.20	0.17	
0.50	0.50	0.20	0.87	0.70	0.59	0.51	0.40	0.36	0.28	0.21	0.17	
	0.30		0.73	0.61	0.52	0.46	0.37	0.30	0.26	0.20	0.17	
	0.20		0.64	0.54	0.47	0.41	0.34	0.28	0.25	0.19	0.16	
0.30	0.50	0.20	0.84	0.67	0.56	0.49	0.38	0.31	0.27	0.20	0.17	
	0.30		0.72	0.59	0.50	0.44	0.35	0.29	0.25	0.19	0.16	
	0.20		0.63	0.53	0.46	0.40	0.33	0.27	0.24	0.19	0.15	
0.00	0.00	0.00	0.52	0.42	0.36	0.31	0.25	0.20	0.17	0.13	0.11	
<p>Rating:19W 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-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.22	
	0.30		0.10	0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.20	
	0.20		0.05	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.18	
0.50	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21	
	0.30		0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.07	0.08	0.10	0.12	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.15	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.20	
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.16	0.18	0.18	
	0.20		0.05	0.07	0.08	0.10	0.11	0.13	0.14	0.16	0.17	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
<p>Rating:19W 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-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	973.0	0.9	0.9	0.04	0.04
1.0-2.0	972.6	2.8	3.7	0.12	0.17
2.0-3.0	972.1	4.6	8.4	0.21	0.37
3.0-4.0	971.1	6.5	14.9	0.29	0.66
4.0-5.0	969.9	8.3	23.2	0.37	1.03
5.0-6.0	968.3	10.2	33.4	0.45	1.48
6.0-7.0	966.5	12.0	45.4	0.53	2.01
7.0-8.0	964.4	13.8	59.2	0.61	2.63
8.0-9.0	961.9	15.6	74.8	0.69	3.32
9.0-10.0	959.2	17.4	92.2	0.77	4.09
10.0-11.0	956.2	19.1	111.3	0.85	4.93
11.0-12.0	952.5	20.8	132.1	0.92	5.86
12.0-13.0	948.4	22.5	154.6	1.00	6.86
13.0-14.0	944.1	24.2	178.8	1.07	7.93
14.0-15.0	939.3	25.8	204.6	1.14	9.07
15.0-16.0	934.1	27.4	231.9	1.21	10.29
16.0-17.0	928.4	28.9	260.8	1.28	11.57
17.0-18.0	922.6	30.4	291.3	1.35	12.92
18.0-19.0	916.3	31.9	323.2	1.41	14.33
19.0-20.0	909.3	33.3	356.4	1.48	15.81
20.0-21.0	902.0	34.6	391.1	1.54	17.35
21.0-22.0	894.4	35.9	427.0	1.59	18.94
22.0-23.0	886.1	37.2	464.2	1.65	20.59
23.0-24.0	877.1	38.4	502.6	1.70	22.29
24.0-25.0	867.8	39.5	542.0	1.75	24.04
25.0-26.0	857.8	40.5	582.5	1.80	25.84
26.0-27.0	847.3	41.5	624.0	1.84	27.68
27.0-28.0	836.5	42.4	666.3	1.88	29.55
28.0-29.0	825.1	43.2	709.5	1.91	31.47
29.0-30.0	813.3	43.9	753.4	1.95	33.42
30.0-31.0	800.9	44.6	798.0	1.98	35.39
31.0-32.0	788.0	45.2	843.2	2.00	37.40
32.0-33.0	774.5	45.6	888.8	2.02	39.42
33.0-34.0	760.1	46.0	934.8	2.04	41.46
34.0-35.0	744.8	46.3	981.1	2.05	43.51
35.0-36.0	729.2	46.4	1027.5	2.06	45.57

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-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	713.0	46.5	1074.0	2.06	47.64
37.0-38.0	696.0	46.5	1120.5	2.06	49.70
38.0-39.0	678.0	46.3	1166.7	2.05	51.75
39.0-40.0	659.6	46.0	1212.8	2.04	53.79
40.0-41.0	641.0	45.7	1258.4	2.02	55.82
41.0-42.0	621.5	45.2	1303.6	2.00	57.82
42.0-43.0	601.5	44.6	1348.1	1.98	59.80
43.0-44.0	581.0	43.9	1392.0	1.95	61.74
44.0-45.0	560.4	43.1	1435.1	1.91	63.65
45.0-46.0	539.1	42.2	1477.2	1.87	65.52
46.0-47.0	517.4	41.2	1518.4	1.83	67.35
47.0-48.0	496.1	40.1	1558.5	1.78	69.13
48.0-49.0	474.9	39.0	1597.5	1.73	70.86
49.0-50.0	453.6	37.8	1635.3	1.68	72.53
50.0-51.0	432.4	36.6	1671.9	1.62	74.16
51.0-52.0	411.8	35.3	1707.2	1.57	75.72
52.0-53.0	392.0	34.1	1741.3	1.51	77.24
53.0-54.0	372.6	32.8	1774.2	1.46	78.69
54.0-55.0	353.2	31.5	1805.7	1.40	80.09
55.0-56.0	334.4	30.2	1835.9	1.34	81.43
56.0-57.0	316.8	29.0	1864.9	1.29	82.72
57.0-58.0	299.8	27.7	1892.6	1.23	83.95
58.0-59.0	283.0	26.5	1919.1	1.17	85.12
59.0-60.0	267.0	25.2	1944.3	1.12	86.24
60.0-61.0	252.0	24.1	1968.4	1.07	87.31
61.0-62.0	237.5	22.9	1991.3	1.02	88.32
62.0-63.0	223.4	21.7	2013.0	0.96	89.29
63.0-64.0	209.7	20.6	2033.6	0.91	90.20
64.0-65.0	196.9	19.5	2053.1	0.86	91.06
65.0-66.0	184.6	18.4	2071.5	0.82	91.88
66.0-67.0	172.4	17.3	2088.8	0.77	92.65
67.0-68.0	160.6	16.3	2105.1	0.72	93.37
68.0-69.0	149.5	15.2	2120.3	0.68	94.05
69.0-70.0	138.7	14.2	2134.6	0.63	94.68
70.0-71.0	128.0	13.2	2147.8	0.59	95.27
71.0-72.0	117.6	12.2	2160.1	0.54	95.81

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-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	108.0	11.3	2171.3	0.50	96.31
73.0-74.0	98.6	10.4	2181.7	0.46	96.77
74.0-75.0	89.4	9.4	2191.2	0.42	97.19
75.0-76.0	80.6	8.6	2199.7	0.38	97.57
76.0-77.0	72.4	7.7	2207.4	0.34	97.91
77.0-78.0	64.4	6.9	2214.3	0.31	98.22
78.0-79.0	56.6	6.1	2220.4	0.27	98.49
79.0-80.0	49.3	5.3	2225.7	0.24	98.72
80.0-81.0	42.5	4.6	2230.3	0.20	98.93
81.0-82.0	36.1	3.9	2234.3	0.17	99.10
82.0-83.0	29.8	3.2	2237.5	0.14	99.24
83.0-84.0	24.0	2.6	2240.1	0.12	99.36
84.0-85.0	18.6	2.0	2242.1	0.09	99.45
85.0-86.0	13.6	1.5	2243.6	0.07	99.51
86.0-87.0	9.4	1.0	2244.6	0.05	99.56
87.0-88.0	5.9	0.6	2245.3	0.03	99.59
88.0-89.0	3.2	0.4	2245.6	0.02	99.60
89.0-90.0	1.4	0.2	2245.8	0.01	99.61
90.0-91.0	0.5	0.1	2245.9	0.00	99.61
91.0-92.0	0.1	0.0	2245.9	0.00	99.61
92.0-93.0	0.0	0.0	2245.9	0.00	99.61
93.0-94.0	0.0	0.0	2245.9	0.00	99.61
94.0-95.0	0.0	0.0	2245.9	0.00	99.61
95.0-96.0	0.0	0.0	2245.9	0.00	99.61
96.0-97.0	0.0	0.0	2245.9	0.00	99.61
97.0-98.0	0.0	0.0	2245.9	0.00	99.61
98.0-99.0	0.0	0.0	2245.9	0.00	99.61
99.0-100.0	0.0	0.0	2245.9	0.00	99.61
100.0-101.0	0.0	0.0	2245.9	0.00	99.61
101.0-102.0	0.0	0.0	2245.9	0.00	99.61
102.0-103.0	0.0	0.0	2245.9	0.00	99.61
103.0-104.0	0.0	0.0	2245.9	0.00	99.61
104.0-105.0	0.0	0.0	2245.9	0.00	99.61
105.0-106.0	0.0	0.0	2245.9	0.00	99.61
106.0-107.0	0.0	0.0	2245.9	0.00	99.61
107.0-108.0	0.0	0.0	2245.9	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-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	0.0	0.0	2245.9	0.00	99.61
109.0-110.0	0.0	0.0	2245.9	0.00	99.61
110.0-111.0	0.0	0.0	2245.9	0.00	99.61
111.0-112.0	0.0	0.0	2245.9	0.00	99.61
112.0-113.0	0.0	0.0	2245.9	0.00	99.61
113.0-114.0	0.1	0.0	2245.9	0.00	99.62
114.0-115.0	0.2	0.0	2245.9	0.00	99.62
115.0-116.0	0.3	0.0	2245.9	0.00	99.62
116.0-117.0	0.5	0.0	2246.0	0.00	99.62
117.0-118.0	0.6	0.1	2246.1	0.00	99.62
118.0-119.0	0.7	0.1	2246.1	0.00	99.63
119.0-120.0	0.9	0.1	2246.2	0.00	99.63
120.0-121.0	1.0	0.1	2246.3	0.00	99.63
121.0-122.0	1.1	0.1	2246.4	0.00	99.64
122.0-123.0	1.3	0.1	2246.5	0.01	99.64
123.0-124.0	1.4	0.1	2246.7	0.01	99.65
124.0-125.0	1.5	0.1	2246.8	0.01	99.66
125.0-126.0	1.6	0.1	2246.9	0.01	99.66
126.0-127.0	1.7	0.1	2247.1	0.01	99.67
127.0-128.0	1.8	0.2	2247.2	0.01	99.67
128.0-129.0	1.9	0.2	2247.4	0.01	99.68
129.0-130.0	1.9	0.2	2247.6	0.01	99.69
130.0-131.0	2.0	0.2	2247.7	0.01	99.70
131.0-132.0	2.1	0.2	2247.9	0.01	99.70
132.0-133.0	2.1	0.2	2248.1	0.01	99.71
133.0-134.0	2.2	0.2	2248.2	0.01	99.72
134.0-135.0	2.3	0.2	2248.4	0.01	99.73
135.0-136.0	2.4	0.2	2248.6	0.01	99.74
136.0-137.0	2.4	0.2	2248.8	0.01	99.74
137.0-138.0	2.5	0.2	2249.0	0.01	99.75
138.0-139.0	2.6	0.2	2249.2	0.01	99.76
139.0-140.0	2.6	0.2	2249.3	0.01	99.77
140.0-141.0	2.7	0.2	2249.5	0.01	99.78
141.0-142.0	2.8	0.2	2249.7	0.01	99.79
142.0-143.0	2.8	0.2	2249.9	0.01	99.79
143.0-144.0	2.9	0.2	2250.1	0.01	99.80

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-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	3.0	0.2	2250.3	0.01	99.81
145.0-146.0	3.1	0.2	2250.5	0.01	99.82
146.0-147.0	3.2	0.2	2250.7	0.01	99.83
147.0-148.0	3.2	0.2	2250.9	0.01	99.84
148.0-149.0	3.3	0.2	2251.1	0.01	99.84
149.0-150.0	3.3	0.2	2251.2	0.01	99.85
150.0-151.0	3.4	0.2	2251.4	0.01	99.86
151.0-152.0	3.5	0.2	2251.6	0.01	99.87
152.0-153.0	3.5	0.2	2251.8	0.01	99.88
153.0-154.0	3.6	0.2	2252.0	0.01	99.88
154.0-155.0	3.6	0.2	2252.1	0.01	99.89
155.0-156.0	3.7	0.2	2252.3	0.01	99.90
156.0-157.0	3.8	0.2	2252.5	0.01	99.91
157.0-158.0	3.9	0.2	2252.6	0.01	99.91
158.0-159.0	3.9	0.2	2252.8	0.01	99.92
159.0-160.0	4.0	0.2	2252.9	0.01	99.93
160.0-161.0	4.0	0.1	2253.1	0.01	99.93
161.0-162.0	4.1	0.1	2253.2	0.01	99.94
162.0-163.0	4.1	0.1	2253.4	0.01	99.95
163.0-164.0	4.2	0.1	2253.5	0.01	99.95
164.0-165.0	4.3	0.1	2253.6	0.01	99.96
165.0-166.0	4.3	0.1	2253.7	0.01	99.96
166.0-167.0	4.3	0.1	2253.9	0.00	99.97
167.0-168.0	4.3	0.1	2254.0	0.00	99.97
168.0-169.0	4.4	0.1	2254.0	0.00	99.98
169.0-170.0	4.4	0.1	2254.1	0.00	99.98
170.0-171.0	4.4	0.1	2254.2	0.00	99.98
171.0-172.0	4.5	0.1	2254.3	0.00	99.99
172.0-173.0	4.5	0.1	2254.4	0.00	99.99
173.0-174.0	4.5	0.1	2254.4	0.00	99.99
174.0-175.0	4.5	0.0	2254.5	0.00	100.00
175.0-176.0	4.6	0.0	2254.5	0.00	100.00
176.0-177.0	4.6	0.0	2254.5	0.00	100.00
177.0-178.0	4.6	0.0	2254.5	0.00	100.00
178.0-179.0	4.6	0.0	2254.6	0.00	100.00
179.0-180.0	4.6	0.0	2254.6	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-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	981.3	977.8	974.6	970.9	968.3	966.2	981.3	977.8	974.6	970.9
G1.0	980.6	977.5	974.9	971.9	969.5	967.1	981.4	977.3	973.2	969.5
G2.0	979.3	976.9	975.0	972.5	970.1	967.9	981.9	976.7	972.1	968.3
G3.0	977.7	976.2	972.5	972.7	972.7	967.7	981.1	978.0	973.3	966.9
G4.0	976.6	975.0	973.7	973.0	970.5	967.8	981.3	975.0	969.8	964.5
G5.0	973.9	973.5	973.0	971.1	970.4	967.7	982.0	974.8	968.8	963.0
G6.0	971.5	970.3	971.8	971.9	970.4	967.4	980.8	971.9	965.8	960.3
G7.0	968.5	968.2	970.4	971.2	969.7	966.6	979.3	970.3	964.3	957.6
G8.0	966.5	965.6	968.5	970.2	968.9	965.8	977.6	967.8	961.6	953.6
G9.0	960.1	963.8	966.7	968.8	969.6	964.2	975.3	965.3	959.0	950.8
G10.0	955.8	960.5	964.4	966.3	967.2	961.5	972.6	963.4	955.5	949.3
G11.0	951.2	956.6	961.9	967.6	965.1	960.6	968.4	960.0	952.1	943.2
G12.0	945.9	952.2	959.0	963.5	963.8	956.5	964.9	956.4	947.4	939.0
G13.0	940.8	946.5	956.1	960.8	959.8	955.4	961.3	954.1	943.4	934.7
G14.0	934.5	941.4	952.6	957.8	957.1	952.2	956.9	946.9	938.9	928.4
G15.0	925.9	935.9	948.5	954.5	956.2	948.8	952.1	943.0	934.0	923.4
G16.0	920.1	929.9	944.4	951.4	951.2	944.6	946.4	936.7	928.3	918.0
G17.0	911.8	923.6	939.6	947.4	947.8	939.8	940.7	930.9	923.0	910.5
G18.0	904.7	916.6	934.8	943.5	944.1	934.9	934.2	924.5	916.9	906.3
G19.0	893.5	907.7	927.7	939.3	940.2	929.7	927.7	917.1	910.9	900.0
G20.0	883.8	899.9	922.2	934.7	935.8	924.0	920.0	909.6	903.7	892.8
G21.0	873.6	891.5	914.6	930.0	931.1	917.7	912.2	902.0	896.9	886.1
G22.0	862.7	882.3	910.5	924.6	927.1	910.2	901.4	894.1	891.1	877.0
G23.0	848.2	872.5	903.5	917.9	919.4	902.9	894.3	884.8	881.5	870.5
G24.0	837.7	862.5	896.4	911.4	913.7	895.0	882.7	875.0	871.9	860.7
G25.0	824.6	852.0	888.6	905.2	907.2	886.0	872.3	864.9	863.7	851.3
G26.0	810.6	840.3	878.6	897.5	898.9	875.8	861.5	854.4	854.0	841.5
G27.0	796.8	827.2	869.8	890.1	891.3	868.1	850.5	843.7	844.9	832.6
G28.0	782.1	814.6	860.3	882.2	883.5	858.1	838.4	830.9	834.8	821.6
G29.0	767.4	801.8	850.3	873.8	875.1	847.3	824.7	818.4	823.5	810.5
G30.0	752.1	788.7	840.0	864.9	866.2	835.5	811.6	807.5	812.1	798.9
G31.0	735.5	774.6	828.9	855.9	855.1	822.9	797.8	792.9	800.3	787.3
G32.0	717.8	759.7	817.6	845.8	846.6	811.9	783.5	778.7	787.5	774.3
G33.0	700.2	745.2	805.6	835.2	836.0	798.3	767.4	763.8	774.3	761.1
G34.0	681.9	730.0	790.3	822.9	824.6	785.3	751.9	748.0	758.1	747.2
G35.0	661.2	712.8	777.5	809.8	810.2	771.6	735.0	733.5	744.4	732.8
G36.0	641.6	696.1	763.4	797.0	797.5	757.6	717.8	717.7	729.2	717.2

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-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	621.5	678.4	747.2	783.7	784.0	741.3	699.1	701.2	713.6	700.6
G38.0	599.3	660.8	733.2	769.8	770.2	726.0	679.3	681.9	697.1	682.1
G39.0	576.8	640.0	715.0	752.5	754.3	709.7	659.9	664.3	678.6	664.9
G40.0	555.1	620.9	698.3	738.2	738.7	692.1	639.8	644.9	661.2	647.1
G41.0	532.4	600.7	681.2	721.8	720.8	673.8	619.5	625.4	643.0	627.6
G42.0	509.4	580.6	663.5	704.7	705.2	652.5	595.9	603.7	624.0	608.6
G43.0	486.4	560.1	644.9	687.2	686.9	632.4	574.2	583.8	603.2	589.8
G44.0	461.7	536.8	625.5	667.7	668.5	613.2	552.0	562.0	583.5	569.8
G45.0	438.9	516.3	606.2	648.9	649.7	593.0	529.6	540.7	563.3	550.2
G46.0	415.8	494.4	582.6	629.7	628.1	570.4	504.2	516.5	543.3	528.4
G47.0	393.4	470.6	563.9	610.2	608.0	549.2	481.4	494.2	520.7	508.2
G48.0	370.7	448.9	543.6	587.3	588.4	527.1	459.6	472.6	500.4	488.6
G49.0	350.6	427.4	522.3	566.9	568.0	505.3	436.2	450.1	480.0	468.5
G50.0	331.3	405.6	503.1	546.5	547.2	479.8	412.2	425.6	460.3	446.3
G51.0	311.8	382.6	481.3	525.8	525.2	457.6	391.3	404.6	438.5	426.8
G52.0	294.2	361.2	460.8	504.3	504.2	435.2	371.5	383.1	418.6	407.8
G53.0	277.8	341.2	440.2	483.7	483.0	413.2	352.8	362.4	400.2	389.4
G54.0	262.0	322.9	420.4	463.7	462.9	391.3	332.0	341.8	380.1	370.0
G55.0	246.3	303.0	398.2	444.0	439.6	368.7	314.6	321.5	359.7	352.5
G56.0	231.9	286.1	378.8	422.4	419.8	348.2	297.4	303.5	341.1	335.2
G57.0	218.4	270.0	360.2	403.4	400.2	329.4	281.2	286.4	323.4	318.5
G58.0	205.8	252.7	340.5	385.1	378.8	309.5	265.8	270.1	306.2	301.1
G59.0	192.2	237.8	323.0	365.1	360.5	292.4	249.7	252.5	287.7	285.5
G60.0	180.7	223.7	305.7	347.7	341.5	275.7	236.1	237.6	271.7	270.8
G61.0	169.6	209.9	289.4	330.7	323.1	258.7	222.0	223.4	256.5	256.3
G62.0	158.7	197.1	273.0	314.3	306.3	243.5	208.0	209.0	241.6	241.1
G63.0	148.3	184.6	256.2	298.5	288.5	229.5	195.7	196.2	225.7	227.9
G64.0	137.2	172.2	241.2	282.3	272.3	215.6	183.8	183.8	211.4	215.0
G65.0	127.2	161.1	226.8	267.5	256.8	202.8	172.8	172.7	198.5	202.8
G66.0	117.7	150.7	213.0	253.4	241.8	190.6	160.3	160.4	185.3	190.1
G67.0	108.7	139.3	198.5	239.9	225.9	178.1	149.9	149.6	171.5	178.8
G68.0	98.9	129.4	185.6	225.2	212.0	167.1	139.1	139.3	159.3	167.5
G69.0	89.5	119.6	173.1	213.1	198.7	156.4	129.2	129.4	147.4	156.9
G70.0	80.7	110.6	161.4	201.1	185.8	145.0	118.7	119.5	136.3	145.3
G71.0	72.5	100.4	148.7	188.5	172.4	134.9	108.5	108.7	124.3	135.2
G72.0	65.4	91.2	137.6	177.2	160.2	125.1	98.4	99.3	113.8	125.5
G73.0	58.5	81.9	127.2	166.1	148.9	115.4	89.3	89.4	103.7	115.8

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-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	52.2	73.3	116.2	155.8	137.8	105.3	80.2	79.3	94.6	105.8
G75.0	45.6	64.5	106.2	144.6	126.2	95.9	72.1	70.6	84.8	96.6
G76.0	39.6	56.8	97.1	134.7	116.0	86.1	64.4	62.3	76.4	87.7
G77.0	34.1	50.0	88.5	124.8	105.9	77.4	57.0	54.6	68.0	79.1
G78.0	29.5	43.0	80.0	115.4	96.8	68.3	48.8	46.3	59.5	69.6
G79.0	26.0	36.0	71.1	106.3	87.4	60.2	41.7	39.2	50.1	61.0
G80.0	22.1	29.9	62.9	96.4	78.8	52.8	35.6	32.3	41.5	52.2
G81.0	18.8	25.3	54.9	87.5	70.6	45.4	31.1	27.2	33.4	43.0
G82.0	15.6	21.6	46.5	78.8	61.9	37.7	26.8	22.9	26.2	31.5
G83.0	12.4	17.9	37.7	69.5	52.5	31.7	23.0	18.9	18.4	21.4
G84.0	9.1	14.5	30.0	59.2	43.7	27.0	19.3	15.3	12.9	12.0
G85.0	6.2	11.3	23.2	48.6	34.9	23.2	15.9	11.9	9.0	3.4
G86.0	2.3	8.2	16.0	36.8	26.5	18.9	12.4	8.6	5.6	0.0
G87.0	0.0	4.9	10.8	24.2	18.5	15.2	8.8	5.0	2.1	0.0
G88.0	0.0	1.2	6.8	13.1	12.2	11.6	5.6	1.4	0.0	0.0
G89.0	0.0	0.0	3.4	3.6	8.0	8.3	1.9	0.0	0.0	0.0
G90.0	0.0	0.0	0.0	0.0	4.8	4.8	0.0	0.0	0.0	0.0
G91.0	0.0	0.0	0.0	0.0	2.2	0.9	0.0	0.0	0.0	0.0
G92.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G93.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G94.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G95.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G96.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G97.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G98.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G99.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G101.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G102.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G103.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G104.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G105.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G106.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G107.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G108.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G109.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G110.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G112.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G113.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
G114.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
G115.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.2
G116.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	1.0	1.3
G117.0	0.0	0.0	1.2	0.9	0.0	0.0	0.0	0.0	1.1	1.4
G118.0	1.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	1.2	1.6
G119.0	1.1	0.0	1.3	1.0	1.1	0.0	0.0	0.0	1.2	1.6
G120.0	1.2	0.9	1.3	1.1	1.0	0.0	0.0	0.0	1.4	1.6
G121.0	1.2	1.0	1.3	1.2	1.2	0.0	0.0	0.0	1.4	1.8
G122.0	1.4	1.1	1.4	1.3	1.2	0.9	0.0	0.0	1.4	1.8
G123.0	1.5	1.2	1.3	1.3	1.4	1.2	0.9	1.0	1.5	1.8
G124.0	1.5	1.2	1.6	1.4	1.5	1.2	1.0	1.2	1.5	2.0
G125.0	1.6	1.5	1.6	1.6	1.6	1.3	1.3	1.2	1.6	2.2
G126.0	1.7	1.5	1.6	1.6	1.7	1.2	1.4	1.3	1.7	2.2
G127.0	1.8	1.4	1.8	1.5	1.4	1.4	1.6	1.4	2.0	2.3
G128.0	1.8	1.7	1.7	1.6	1.5	1.6	1.5	1.5	2.0	2.3
G129.0	1.9	1.9	1.9	1.7	1.6	1.6	1.6	1.8	2.1	2.4
G130.0	2.1	1.9	1.9	1.7	1.6	1.6	1.6	1.8	2.0	2.5
G131.0	2.2	2.0	1.9	1.8	1.8	1.8	1.5	1.8	2.2	2.5
G132.0	2.1	2.0	2.1	1.8	1.8	1.9	1.6	1.9	2.2	2.6
G133.0	2.1	2.2	2.1	1.8	1.9	2.0	1.8	1.9	2.3	2.7
G134.0	2.1	2.3	2.2	1.9	1.9	2.0	2.0	2.0	2.5	2.8
G135.0	2.3	2.3	2.2	2.0	2.1	2.0	2.0	2.1	2.5	2.9
G136.0	2.3	2.4	2.3	2.2	2.1	2.1	2.1	2.3	2.6	2.9
G137.0	2.5	2.4	2.4	2.2	2.2	1.9	2.2	2.3	2.6	3.0
G138.0	2.7	2.5	2.6	2.3	2.3	2.1	2.3	2.3	2.7	3.0
G139.0	2.7	2.6	2.7	2.3	2.4	2.2	2.4	2.4	2.7	3.0
G140.0	2.7	2.4	2.6	2.5	2.4	2.2	2.5	2.4	2.9	3.1
G141.0	2.7	2.5	2.7	2.4	2.6	2.2	2.4	2.5	3.0	3.3
G142.0	2.9	2.7	2.8	2.5	2.6	2.3	2.6	2.7	2.9	3.3
G143.0	2.9	2.9	2.7	2.5	2.7	2.5	2.8	2.8	2.9	3.4
G144.0	3.0	3.0	2.9	2.8	2.8	2.7	2.7	2.9	3.2	3.4
G145.0	3.1	3.0	3.0	3.0	3.0	2.5	2.8	3.0	3.2	3.5
G146.0	3.2	3.0	3.0	2.9	3.1	2.7	2.8	3.0	3.1	3.6
G147.0	3.2	3.0	3.1	2.9	3.2	2.7	3.0	2.9	3.3	3.7

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-1800B

Distance: 11.655 m [K=1.0000]

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	3.3	3.3	3.1	2.9	3.2	2.8	3.0	3.0	3.3	3.8
G149.0	3.4	3.2	3.2	3.0	3.3	2.8	3.1	3.1	3.2	3.8
G150.0	3.3	3.2	3.1	3.2	3.3	2.8	3.1	3.3	3.3	3.7
G151.0	3.3	3.4	3.2	3.2	3.3	3.1	3.3	3.3	3.3	3.8
G152.0	3.5	3.3	3.3	3.4	3.5	3.3	3.2	3.5	3.4	4.0
G153.0	3.7	3.5	3.5	3.3	3.5	3.4	3.3	3.5	3.5	4.0
G154.0	3.7	3.5	3.5	3.3	3.4	3.4	3.4	3.6	3.6	3.9
G155.0	3.7	3.4	3.5	3.4	3.4	3.5	3.5	3.7	3.8	4.1
G156.0	3.6	3.5	3.8	3.5	3.4	3.6	3.6	3.7	3.7	4.2
G157.0	3.7	3.5	3.8	3.8	3.5	3.7	3.7	3.8	3.7	4.2
G158.0	3.9	3.7	3.8	3.8	3.5	3.7	3.9	3.9	3.8	4.2
G159.0	3.9	3.8	4.0	3.8	3.5	3.9	3.8	3.9	3.8	4.2
G160.0	3.9	3.8	4.1	3.9	3.6	3.8	4.0	3.9	4.0	4.3
G161.0	4.0	3.8	4.1	3.9	3.9	4.2	4.0	3.9	4.0	4.3
G162.0	4.1	3.9	4.2	4.0	3.9	4.2	4.1	4.1	4.1	4.3
G163.0	4.2	4.0	4.2	4.1	3.9	4.2	4.1	4.0	4.0	4.5
G164.0	4.1	4.1	4.2	4.1	4.0	4.4	4.2	4.1	4.2	4.5
G165.0	4.3	4.0	4.3	4.3	4.1	4.3	4.3	4.2	4.2	4.5
G166.0	4.3	4.0	4.3	4.2	4.1	4.3	4.3	4.3	4.2	4.5
G167.0	4.3	4.2	4.4	4.2	4.1	4.4	4.3	4.3	4.4	4.4
G168.0	4.2	4.1	4.3	4.2	4.1	4.3	4.4	4.3	4.4	4.4
G169.0	4.3	4.1	4.4	4.2	4.3	4.3	4.4	4.5	4.3	4.4
G170.0	4.3	4.3	4.5	4.3	4.3	4.4	4.4	4.4	4.3	4.4
G171.0	4.4	4.4	4.4	4.2	4.3	4.5	4.6	4.4	4.3	4.5
G172.0	4.4	4.4	4.5	4.1	4.4	4.5	4.5	4.7	4.3	4.4
G173.0	4.4	4.4	4.6	4.2	4.4	4.6	4.7	4.5	4.5	4.5
G174.0	4.3	4.3	4.6	4.1	4.5	4.7	4.6	4.6	4.5	4.4
G175.0	4.5	4.5	4.6	4.2	4.4	4.7	4.9	4.6	4.4	4.4
G176.0	4.4	4.5	4.6	4.3	4.5	4.7	4.8	4.7	4.4	4.4
G177.0	4.3	4.6	4.5	4.3	4.4	4.7	4.9	4.6	4.4	4.4
G178.0	4.4	4.4	4.5	4.3	4.4	4.8	4.7	4.7	4.3	4.4
G179.0	4.4	4.6	4.5	4.4	4.4	4.9	4.9	4.6	4.3	4.5
G180.0	4.5	4.5	4.7	4.5	4.7	4.9	4.9	4.8	4.5	4.6

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-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Candlepower Table (Continue 5)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G0.0	968.3	966.2	981.3							
G1.0	966.5	964.8	980.6							
G2.0	966.2	961.8	979.3							
G3.0	963.0	960.0	977.7							
G4.0	960.7	957.5	976.6							
G5.0	958.0	954.7	973.9							
G6.0	954.3	951.3	971.5							
G7.0	952.2	948.8	968.5							
G8.0	947.2	945.1	966.5							
G9.0	943.6	941.2	960.1							
G10.0	940.8	936.3	955.8							
G11.0	936.4	931.4	951.2							
G12.0	931.7	924.3	945.9							
G13.0	926.6	918.3	940.8							
G14.0	921.4	912.0	934.5							
G15.0	915.5	905.3	925.9							
G16.0	907.5	897.8	920.1							
G17.0	900.9	890.4	911.8							
G18.0	894.1	881.8	904.7							
G19.0	888.3	872.9	893.5							
G20.0	879.1	863.6	883.8							
G21.0	871.2	853.0	873.6							
G22.0	862.5	842.5	862.7							
G23.0	853.3	831.5	848.2							
G24.0	842.6	819.8	837.7							
G25.0	833.5	807.7	824.6							
G26.0	821.9	794.7	810.6							
G27.0	810.5	779.1	796.8							
G28.0	797.9	766.7	782.1							
G29.0	785.7	752.6	767.4							
G30.0	773.1	737.2	752.1							
G31.0	760.2	722.6	735.5							
G32.0	747.7	707.2	717.8							
G33.0	731.9	691.3	700.2							
G34.0	716.7	674.7	681.9							
G35.0	701.0	654.3	661.2							
G36.0	684.9	636.4	641.6							

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-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Candlepower Table (Continue 6)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G37.0	666.7	617.7	621.5						
G38.0	649.9	598.6	599.3						
G39.0	630.4	578.0	576.8						
G40.0	612.4	557.9	555.1						
G41.0	593.8	538.5	532.4						
G42.0	573.8	516.8	509.4						
G43.0	554.3	493.5	486.4						
G44.0	534.6	472.0	461.7						
G45.0	514.7	450.7	438.9						
G46.0	493.4	429.1	415.8						
G47.0	472.6	408.1	393.4						
G48.0	453.0	384.9	370.7						
G49.0	432.9	364.1	350.6						
G50.0	412.0	343.9	331.3						
G51.0	394.1	324.7	311.8						
G52.0	373.5	305.0	294.2						
G53.0	355.9	288.2	277.8						
G54.0	337.0	271.5	262.0						
G55.0	318.0	254.2	246.3						
G56.0	300.9	239.0	231.9						
G57.0	284.5	224.5	218.4						
G58.0	268.5	211.3	205.8						
G59.0	251.2	198.2	192.2						
G60.0	236.8	184.6	180.7						
G61.0	223.0	173.1	169.6						
G62.0	208.9	162.3	158.7						
G63.0	194.4	151.9	148.3						
G64.0	181.1	140.5	137.2						
G65.0	168.9	130.6	127.2						
G66.0	157.1	120.7	117.7						
G67.0	144.8	110.5	108.7						
G68.0	134.0	101.2	98.9						
G69.0	123.1	92.2	89.5						
G70.0	113.0	83.1	80.7						
G71.0	102.3	74.2	72.5						
G72.0	93.4	65.4	65.4						
G73.0	84.7	57.8	58.5						

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-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Candlepower Table (Continue 7)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G74.0	76.3	50.9	52.2						
G75.0	67.2	43.3	45.6						
G76.0	59.0	37.0	39.6						
G77.0	50.5	30.7	34.1						
G78.0	41.4	26.0	29.5						
G79.0	33.5	21.9	26.0						
G80.0	26.6	18.3	22.1						
G81.0	19.5	14.9	18.8						
G82.0	13.5	11.9	15.6						
G83.0	9.2	8.7	12.4						
G84.0	5.8	5.2	9.1						
G85.0	2.7	1.7	6.2						
G86.0	0.0	0.0	2.3						
G87.0	0.0	0.0	0.0						
G88.0	0.0	0.0	0.0						
G89.0	0.0	0.0	0.0						
G90.0	0.0	0.0	0.0						
G91.0	0.0	0.0	0.0						
G92.0	0.0	0.0	0.0						
G93.0	0.0	0.0	0.0						
G94.0	0.0	0.0	0.0						
G95.0	0.0	0.0	0.0						
G96.0	0.0	0.0	0.0						
G97.0	0.0	0.0	0.0						
G98.0	0.0	0.0	0.0						
G99.0	0.0	0.0	0.0						
G100.0	0.0	0.0	0.0						
G101.0	0.0	0.0	0.0						
G102.0	0.0	0.0	0.0						
G103.0	0.0	0.0	0.0						
G104.0	0.0	0.0	0.0						
G105.0	0.0	0.0	0.0						
G106.0	0.0	0.0	0.0						
G107.0	0.0	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-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:



## Candlepower Table (Continue 8)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G111.0	0.0	0.0	0.0						
G112.0	0.0	0.0	0.0						
G113.0	0.0	0.0	0.0						
G114.0	1.0	0.0	0.0						
G115.0	0.9	0.0	0.0						
G116.0	1.0	0.0	0.0						
G117.0	1.2	1.1	0.0						
G118.0	1.3	1.1	1.0						
G119.0	1.5	1.2	1.1						
G120.0	1.5	1.4	1.2						
G121.0	1.7	1.4	1.2						
G122.0	1.7	1.5	1.4						
G123.0	1.7	1.7	1.5						
G124.0	1.8	1.9	1.5						
G125.0	1.9	1.8	1.6						
G126.0	2.0	1.8	1.7						
G127.0	2.1	2.0	1.8						
G128.0	2.1	2.1	1.8						
G129.0	2.3	2.2	1.9						
G130.0	2.5	2.4	2.1						
G131.0	2.6	2.3	2.2						
G132.0	2.6	2.6	2.1						
G133.0	2.8	2.6	2.1						
G134.0	2.8	2.8	2.1						
G135.0	2.8	2.7	2.3						
G136.0	2.9	2.7	2.3						
G137.0	3.0	2.9	2.5						
G138.0	3.0	2.8	2.7						
G139.0	3.1	3.1	2.7						
G140.0	3.1	3.1	2.7						
G141.0	3.3	3.1	2.7						
G142.0	3.3	3.3	2.9						
G143.0	3.2	3.3	2.9						
G144.0	3.4	3.4	3.0						
G145.0	3.4	3.5	3.1						
G146.0	3.5	3.6	3.2						
G147.0	3.6	3.6	3.2						

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-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Candlepower Table (Continue 9)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G148.0	3.6	3.7	3.3						
G149.0	3.7	3.7	3.4						
G150.0	3.8	3.8	3.3						
G151.0	3.8	3.8	3.3						
G152.0	3.9	3.8	3.5						
G153.0	4.0	4.0	3.7						
G154.0	4.0	4.0	3.7						
G155.0	4.0	4.1	3.7						
G156.0	4.1	4.2	3.6						
G157.0	4.2	4.1	3.7						
G158.0	4.3	4.2	3.9						
G159.0	4.3	4.3	3.9						
G160.0	4.3	4.3	3.9						
G161.0	4.4	4.3	4.0						
G162.0	4.5	4.3	4.1						
G163.0	4.6	4.4	4.2						
G164.0	4.5	4.5	4.1						
G165.0	4.6	4.5	4.3						
G166.0	4.6	4.6	4.3						
G167.0	4.6	4.6	4.3						
G168.0	4.7	4.6	4.2						
G169.0	4.7	4.6	4.3						
G170.0	4.7	4.7	4.3						
G171.0	4.9	4.8	4.4						
G172.0	4.8	4.8	4.4						
G173.0	4.8	4.9	4.4						
G174.0	4.8	4.7	4.3						
G175.0	4.9	4.8	4.5						
G176.0	4.8	4.8	4.4						
G177.0	4.8	4.9	4.3						
G178.0	5.0	4.9	4.4						
G179.0	4.9	4.7	4.4						
G180.0	4.5	4.8	4.5						

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-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector: