

Report No.: LG-4002

Test Time: 2015-09-21 08:46

## Luminaire Property

Luminaire Manufacturer: Light And Green LLC

Luminaire Description: LG-4002

Lamp Description: LED

Lumens per Lamp: 85.16 lm

Luminous Width (mm): 45

Voltage: 110 V

Power: 2.41 W

Lamp Catalog: CREE XB-D

Number of Lamps: 1

Luminous Length (mm): 165

Luminous Height (mm): 40

Current: 0.048 A

Power Factor: 0.459

## Photometric Results

CIE Class: Direct

Measurement Flux: 163.6 lm

Downward Ratio: 192.09%

Field Angle: H149.3 V158.9

Luminaire Efficacy Rating (LER): 68

Max. Intensity: 568.54 cd

Total Rated Lamp Lumens: 85.2 lm

Efficiency: 192.09%

Upward Ratio: 0.00%

Beam Angle: H112.9 V135.6

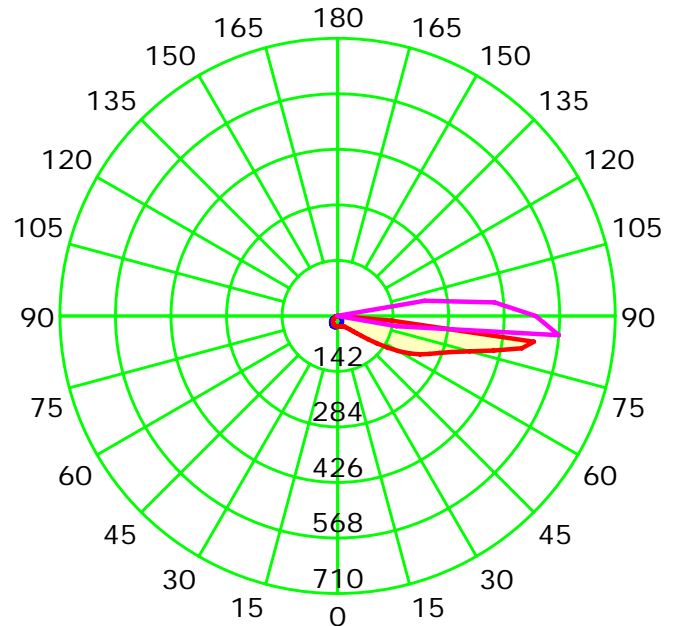
Central Intensity: 27.86 cd

Pos of Max. Intensity: H85 V82.5

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— C0-C180 — C90-C270 — G82.5

C Plane (°):0.0-360.0: 5.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator: 1

Gamma Plane (°):0.0-90.0:2.5

Test Device: GPM-1600L

Distance: 10.000 m

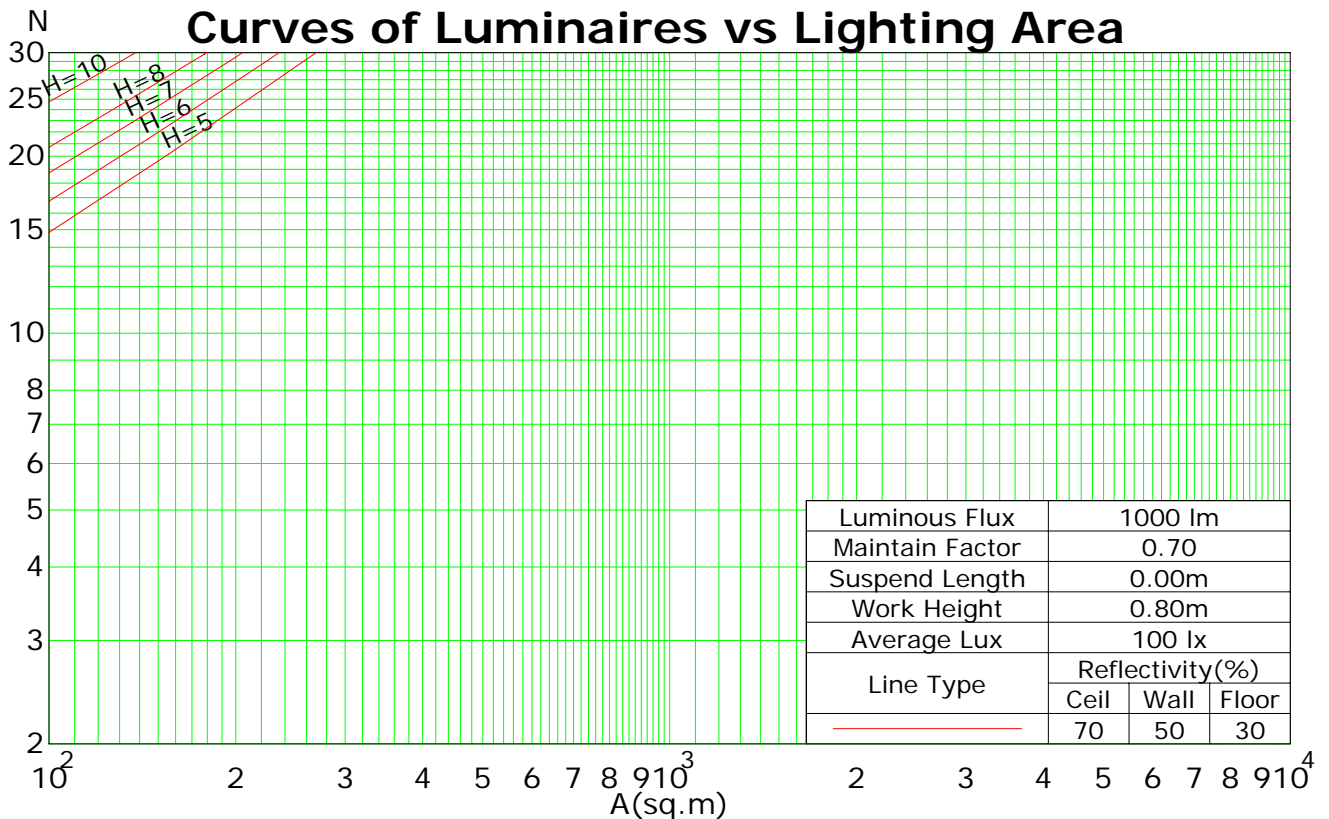
Humidity:

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	229	229	229	229	223	223	223	223	213	213	213	204	204	204	196	196	196	192
1	198	184	171	160	192	179	168	157	170	161	152	163	155	147	155	149	143	138
2	173	151	133	117	167	147	130	116	139	125	113	133	120	110	126	116	107	102
3	154	127	106	90	148	123	104	89	117	100	87	111	97	85	106	94	83	78
4	138	109	88	71	133	106	86	71	101	83	69	96	81	68	91	78	67	62
5	126	95	74	59	121	93	73	58	89	71	57	84	69	56	80	67	56	51
6	115	85	64	49	111	83	63	49	79	61	48	75	60	48	72	58	47	43
7	106	76	56	42	103	74	56	42	71	54	42	68	53	41	65	51	41	36
8	99	69	50	37	95	67	49	37	65	48	37	62	47	36	60	46	36	32
9	92	63	45	33	89	62	44	33	59	43	32	57	42	32	55	42	32	28
10	86	58	41	29	83	57	40	29	55	39	29	53	39	29	51	38	29	25

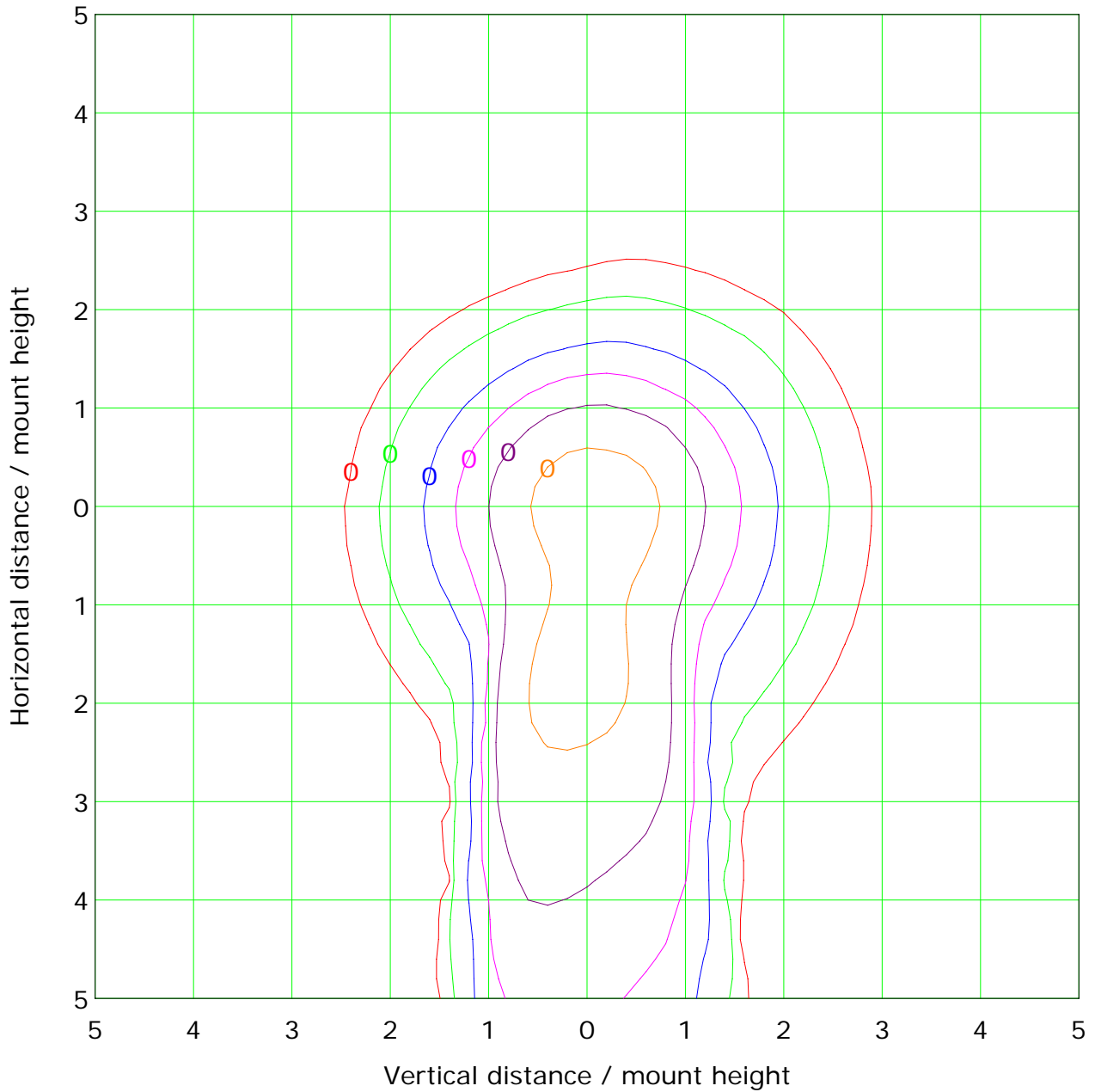
Spacing Criteria (0-180): 1.33  
 Spacing Criteria (90-270): 1.66  
 Spacing Criteria (Diagonal): 1.50



C Plane (°):0.0-360.0: 5.0  
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Gamma Plane (°):0.0-90.0:2.5  
 Test Device: GPM-1600L  
 Distance: 10.000 m  
 Humidity:  
 Inspector:

## IsoLux Plot



Mounting Height: 10.0m    Max Lux(100%): 0.3 lx

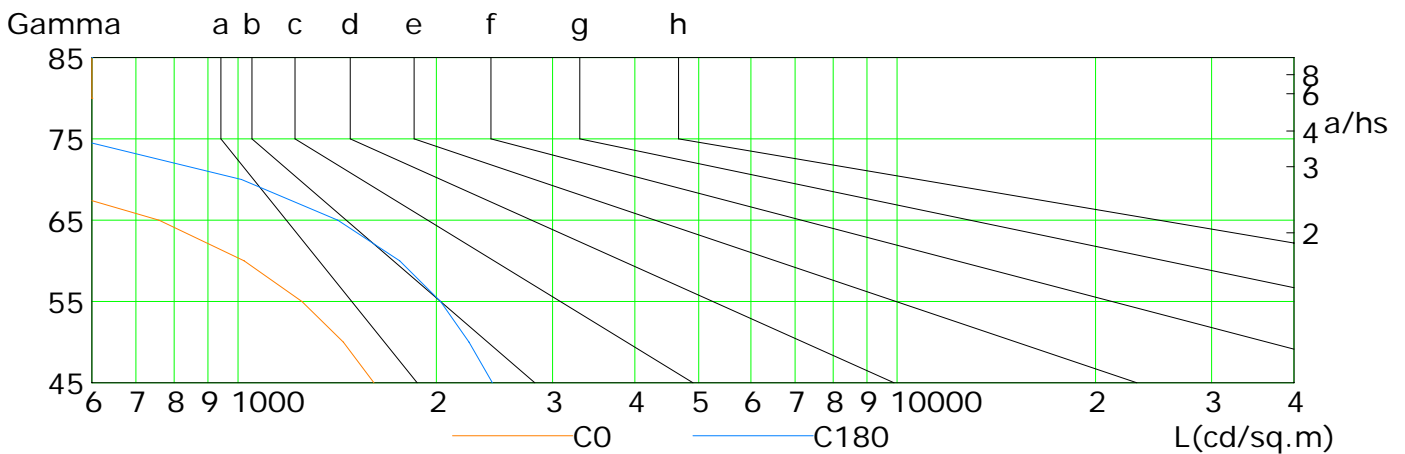
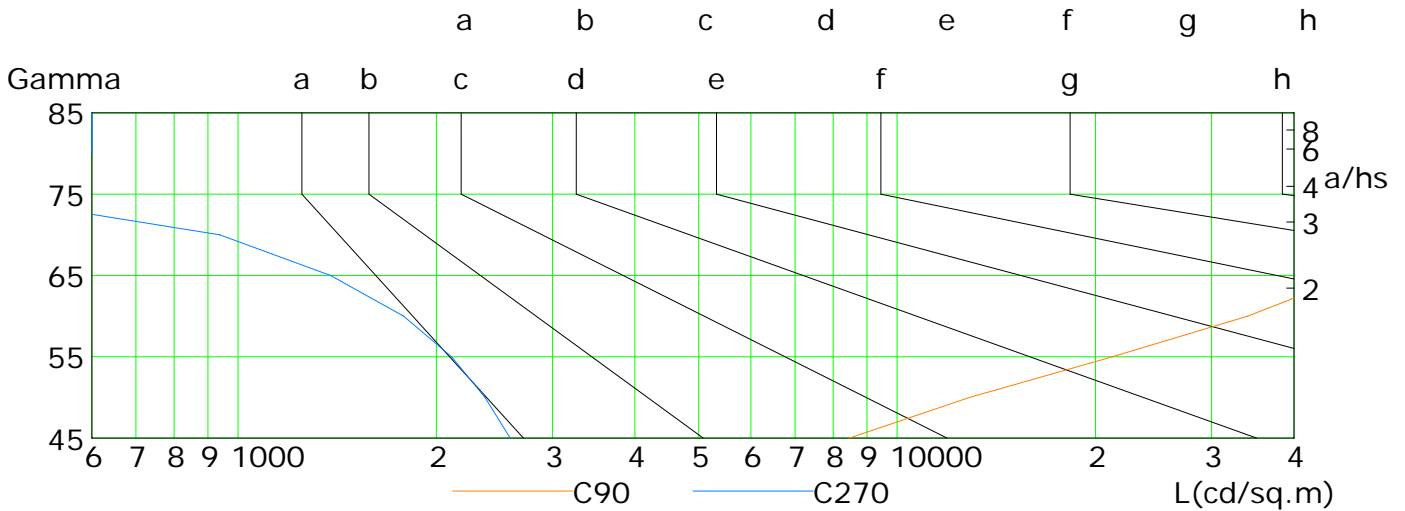
— ( 1%): 0.0 lx	— ( 2%): 0.0 lx
— ( 5%): 0.0 lx	— ( 10%): 0.0 lx
— ( 20%): 0.1 lx	— ( 50%): 0.1 lx
— (100%): 0.3 lx	

C Plane (°):0.0-360.0: 5.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator: 1

Gamma Plane (°):0.0-90.0:2.5  
 Test Device: GPM-1600L  
 Distance: 10.000 m  
 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

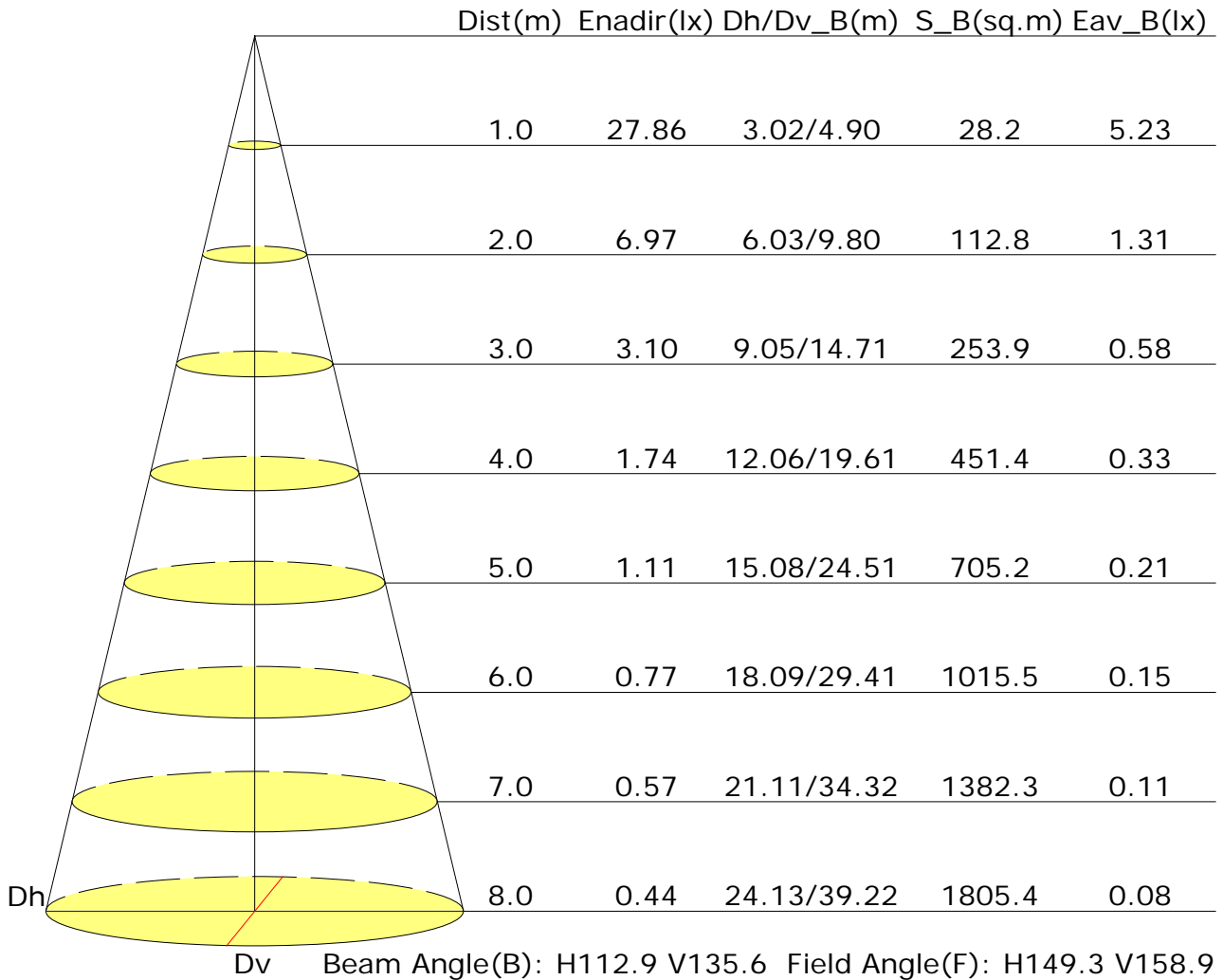


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	1607	1445	1250	1021	759	466	148	0	0
C90	8462	12883	21204	34048	48816	65586	95632	156222	56866
C180	2432	2241	2029	1760	1417	1012	565	83	0
C270	2588	2370	2109	1783	1382	938	388	0	0

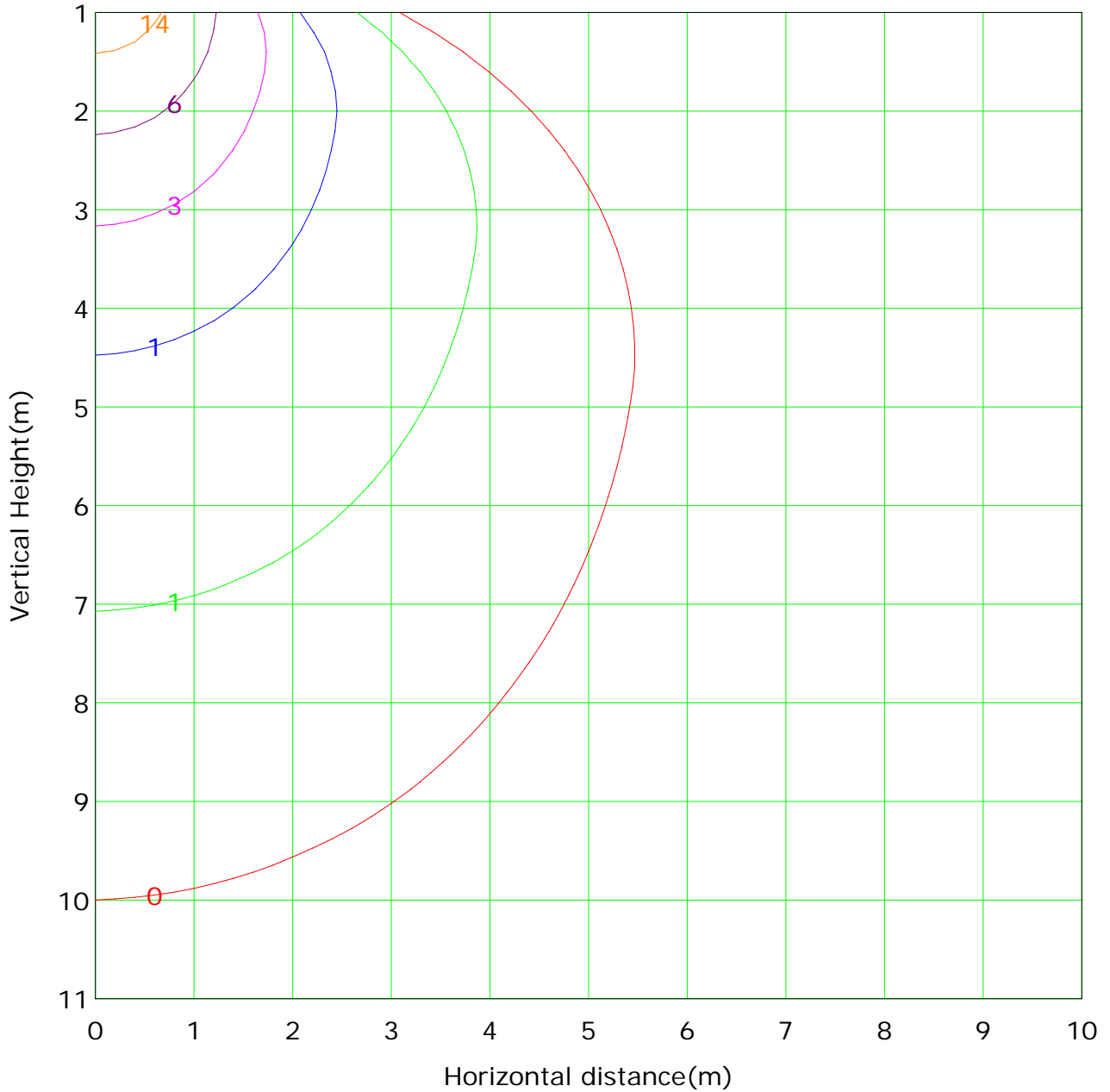
C Plane (°):0.0-360.0: 5.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator: 1

Gamma Plane (°):0.0-90.0:2.5  
 Test Device: GPM-1600L  
 Distance: 10.000 m  
 Humidity:  
 Inspector:

## Illuminance at a Distance



## Vertical IsoLux Plot

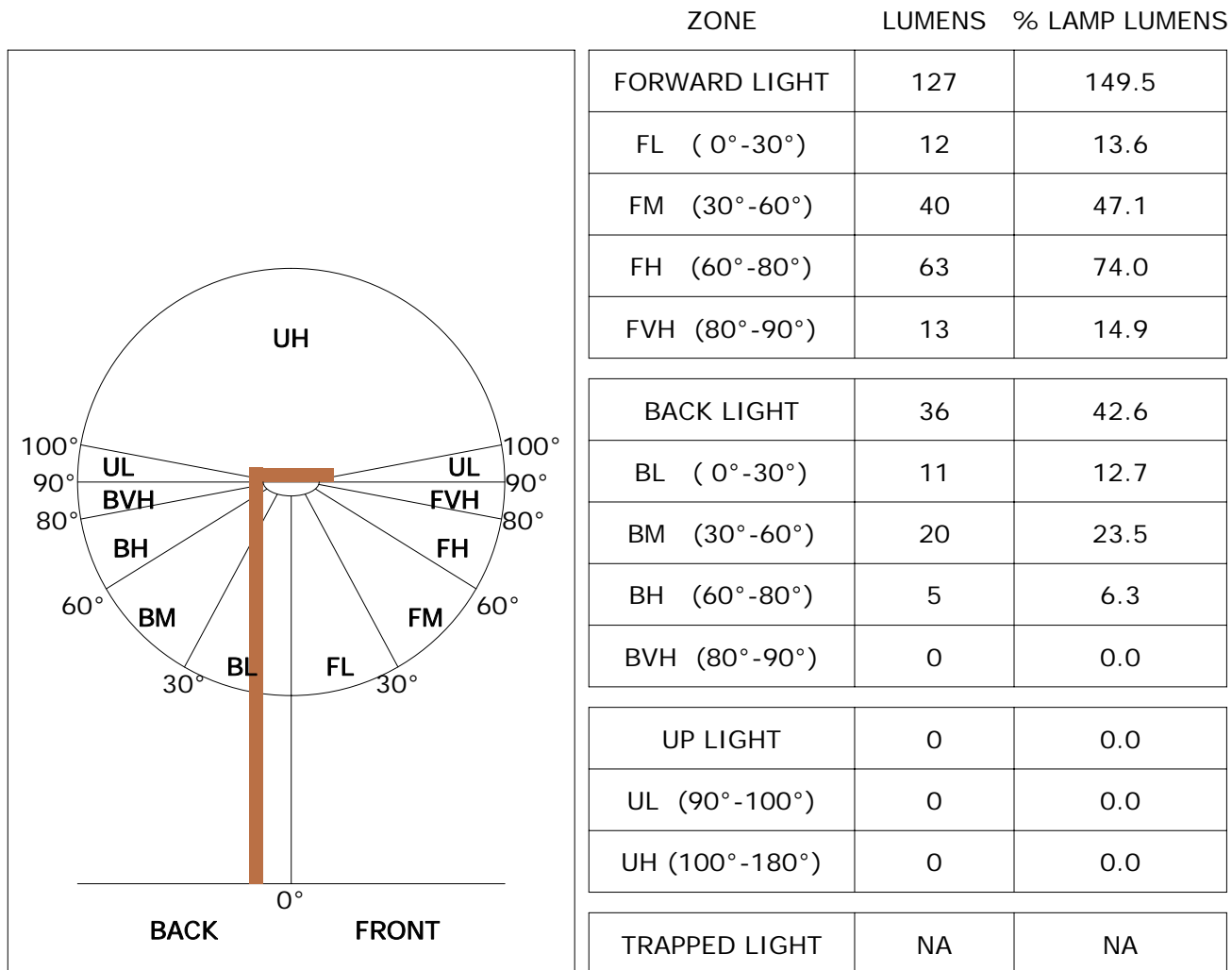


Lowest(m): 1.0m	Highest(m): 11.0m	Max Lux: 27.9 lx
— ( 1%): 0.3 lx	— ( 2%): 0.6 lx	
— ( 5%): 1.4 lx	— ( 10%): 2.8 lx	
— ( 20%): 5.6 lx	— ( 50%): 13.9 lx	
— (100%): 27.9 lx		

C Plane (°): 0.0-360.0: 5.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator: 1

Gamma Plane (°): 0.0-90.0: 2.5  
 Test Device: GPM-1600L  
 Distance: 10.000 m  
 Humidity:  
 Inspector:

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



BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B0 U1 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B0 U1 G1

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