Report No.: 001 Test Time: 2022-12-09 12:30

Luminaire Property

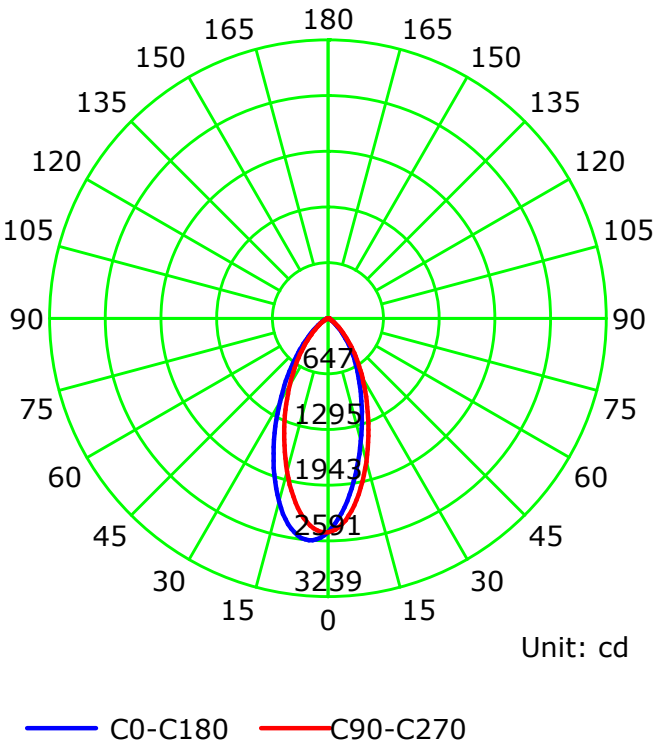
Luminaire Manufacturer:
Luminaire Category: Outdoor lighting
Luminaire Description: HCP-247245-45
Lamp Catalog: SMD
Luminous Length (mm): 45
Luminous Width (mm): 950
Luminous Height (mm): 0
Voltage: 24V
Current: 0.984A
Power: 23.616W
Power Factor: 0.000

Photometric Results

CIE Class: Direct
Total Rated Lamp Lumens: 2010.1 lm
Measurement Flux: 2010.1 lm
Efficiency: 100%
Downward Ratio: 100%
Upward Ratio: 0%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 92.3, 92.6, 92.5, 92.4
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 45.2, 46.0, 45.6, 45.6
Luminaire Efficacy Rating (LER): 85.17
Central Intensity: 2488.27 cd
Max. Intensity: 2591.47 cd
Pos of Max. Intensity: H180 V5
S/MH(C0/C180): 0.73
S/MH(C90/C270): 0.70

Picture Of Luminaire

Luminous Intensity Distribution Curve



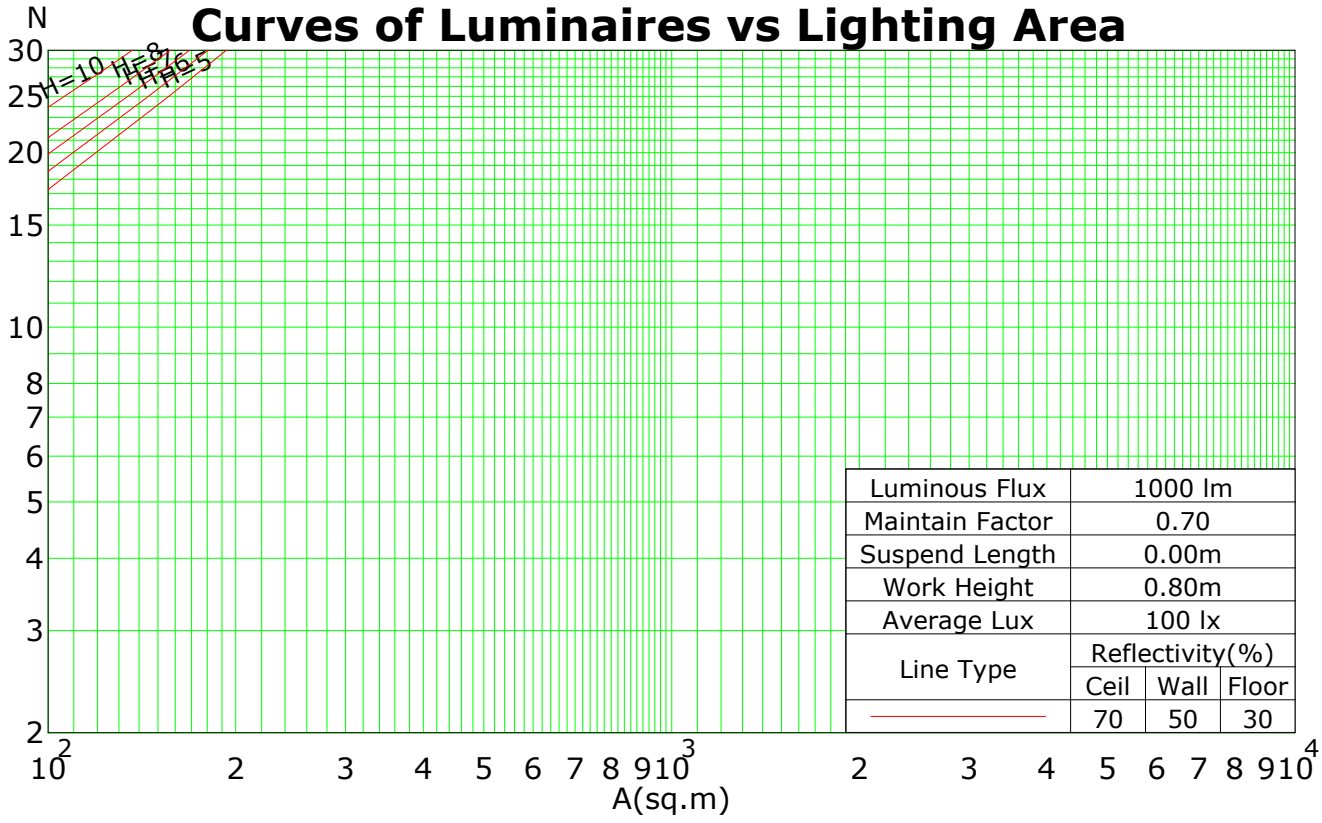
C Plane (°):0.0-360.0: 30.0
Gamma Plane (°):0.0-90.0:1.0
Test Lab: HAVIT LIGHTING
Test Device: GPM-1600L
Test Type: TYPE C
Distance: 6.583 m
Temperature: 25°C
Humidity:
Operator: DING LI
Inspector:

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	113	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92
2	107	101	97	93	105	100	96	92	96	93	90	93	91	88	91	88	87	85
3	101	94	88	84	99	92	87	83	90	86	82	87	84	81	85	82	80	78
4	95	87	81	76	93	86	80	76	84	79	75	82	77	74	80	76	73	72
5	90	81	75	70	88	80	74	70	78	73	69	76	72	68	75	71	68	66
6	85	75	69	64	84	75	69	64	73	68	64	72	67	63	70	66	63	61
7	81	71	64	60	79	70	64	60	69	63	59	67	63	59	66	62	59	57
8	76	66	60	56	75	66	60	55	65	59	55	64	59	55	63	58	55	53
9	73	62	56	52	72	62	56	52	61	55	52	60	55	51	59	55	51	50
10	69	59	53	49	68	58	53	49	58	52	49	57	52	48	56	52	48	47

Spacing Criteria (0-180): 0.73
Spacing Criteria (90-270): 0.70
Spacing Criteria (Diagonal): 0.78

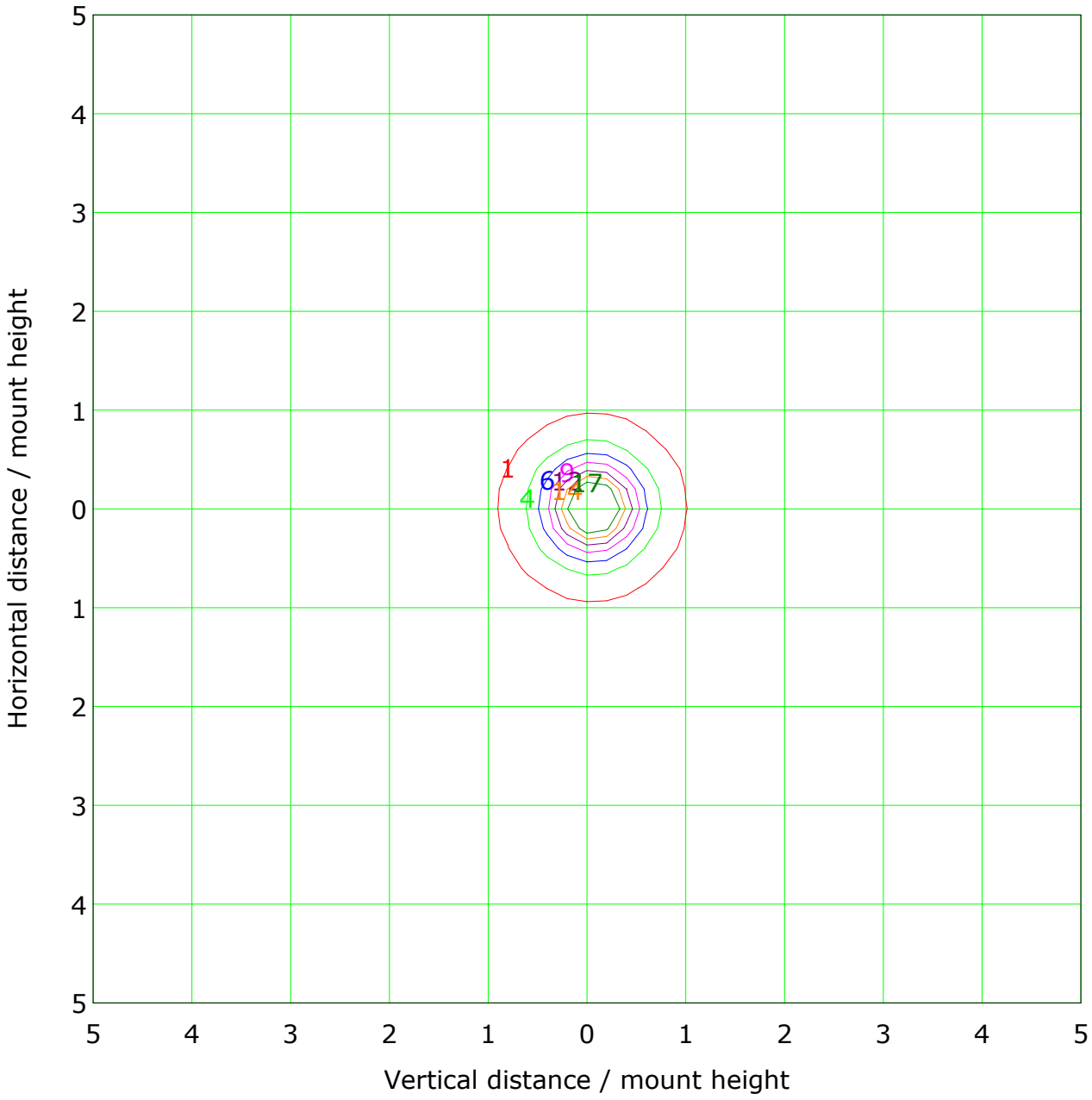
Curves of Luminaires vs Lighting Area



C Plane (°):0.0-360.0: 30.0
Test Lab: HAVIT LIGHTING
Test Type: TYPE C
Temperature: 25°C
Operator: DING LI

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 6.583 m
Humidity:
Inspector:

IsoLux Plot



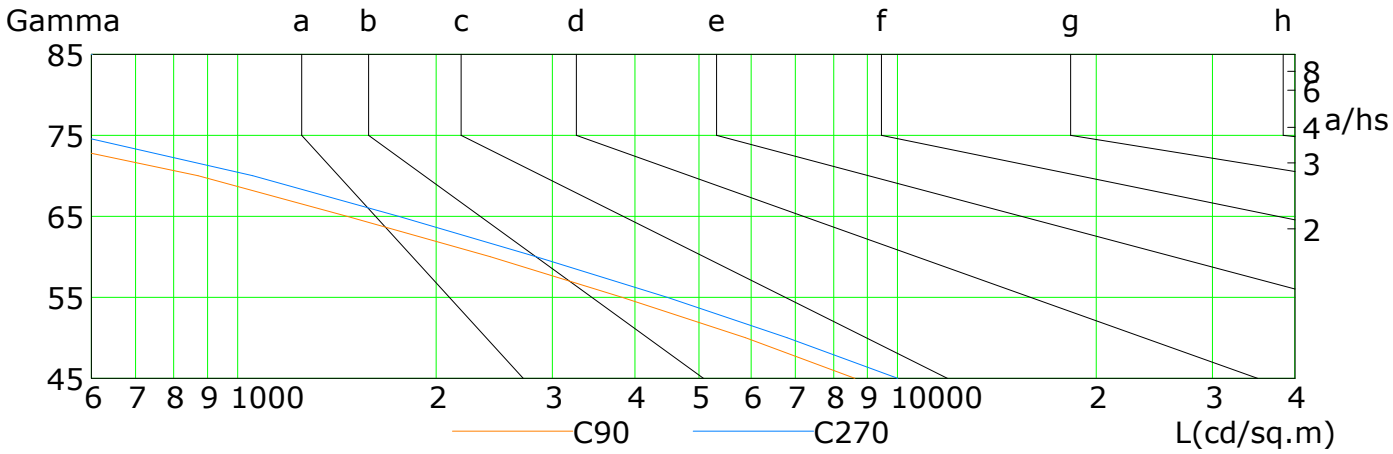
Mounting Height: 10.0m Max Lux(100%): 25.7 lx

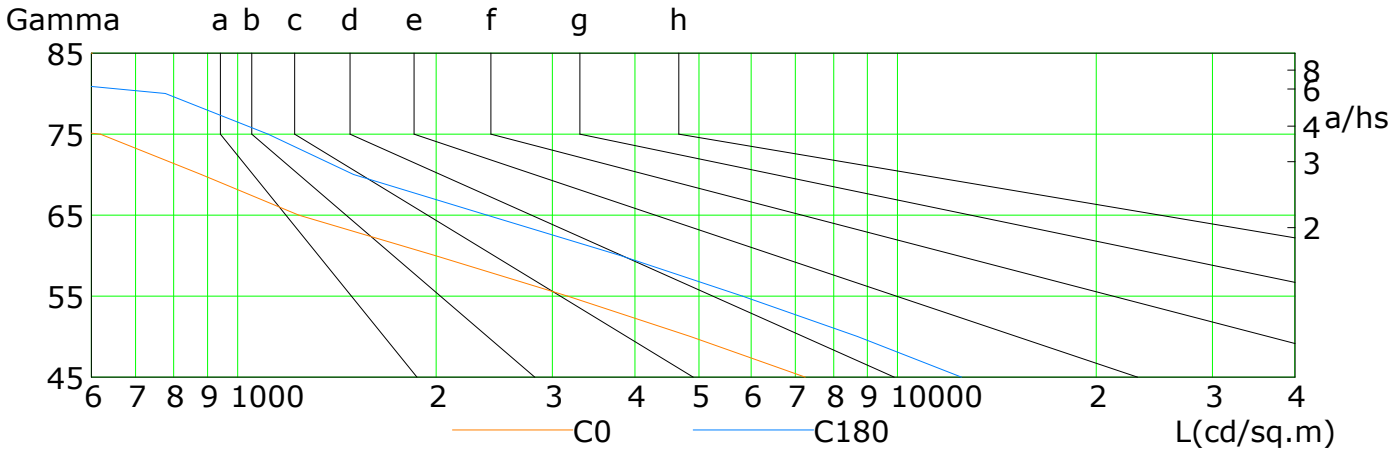
(5%): 1.3 lx
(15%): 3.9 lx
(25%): 6.4 lx
(35%): 9.0 lx
(45%): 11.6 lx
(55%): 14.1 lx
(65%): 16.7 lx

C Plane (°):0.0-360.0: 30.0
Gamma Plane (°):0.0-90.0:1.0
Test Lab: HAVIT LIGHTING
Test Device: GPM-1600L
Test Type: TYPE C
Distance: 6.583 m
Temperature: 25°C
Humidity:
Operator: DING LI
Inspector:

Lum Limit Curve

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



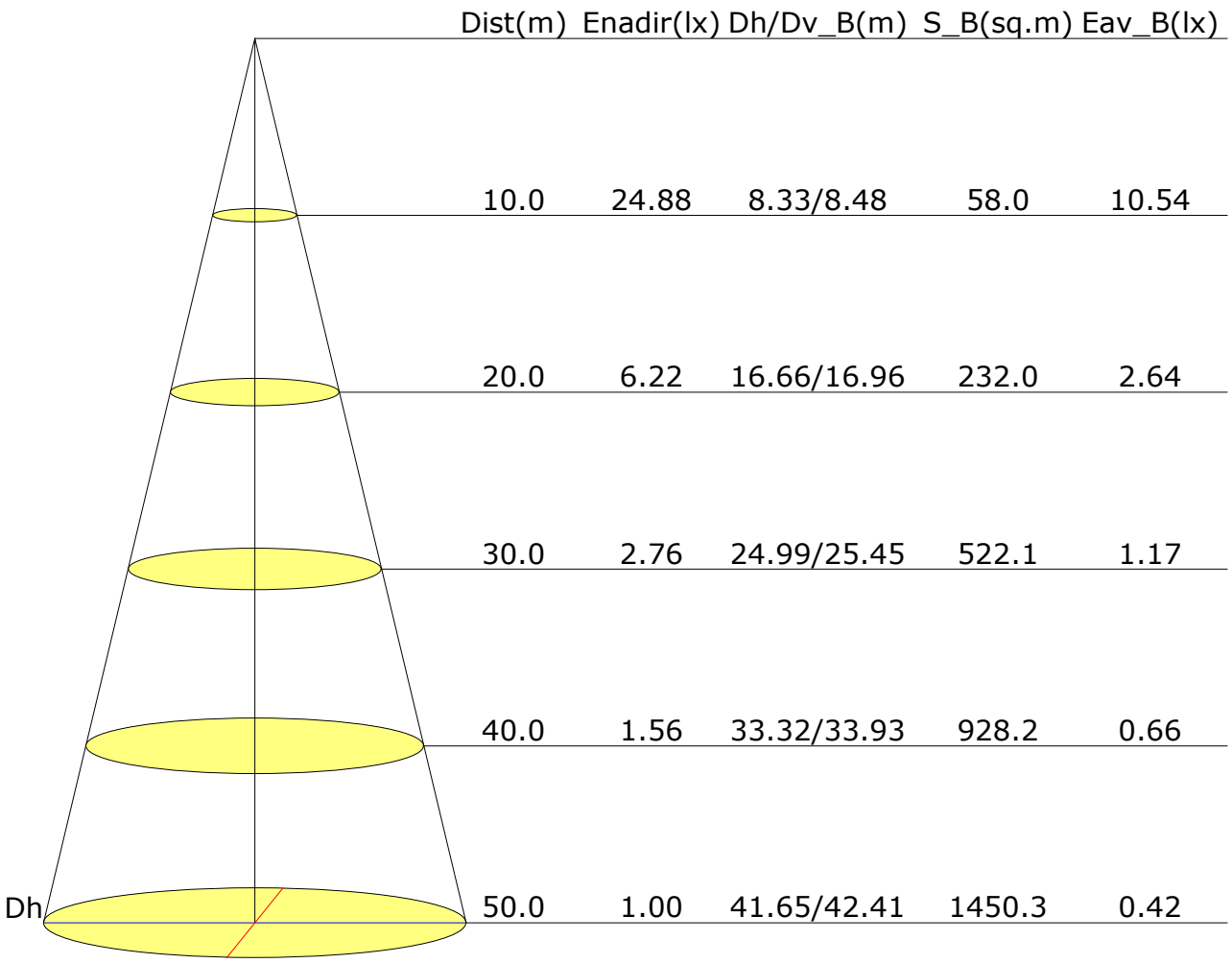


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	7244	4854	3164	1991	1238	881	619	209	0
C90	8621	5882	3824	2415	1466	871	447	7	0
C180	12494	8691	5820	3801	2387	1498	1113	777	180
C270	10003	6803	4478	2832	1754	1054	568	119	0

C Plane (°):0.0-360.0: 30.0
Test Lab: HAVIT LIGHTING
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Temperature: 25°C
Operator: DING LI

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 6.583 m
Humidity:
Inspector:

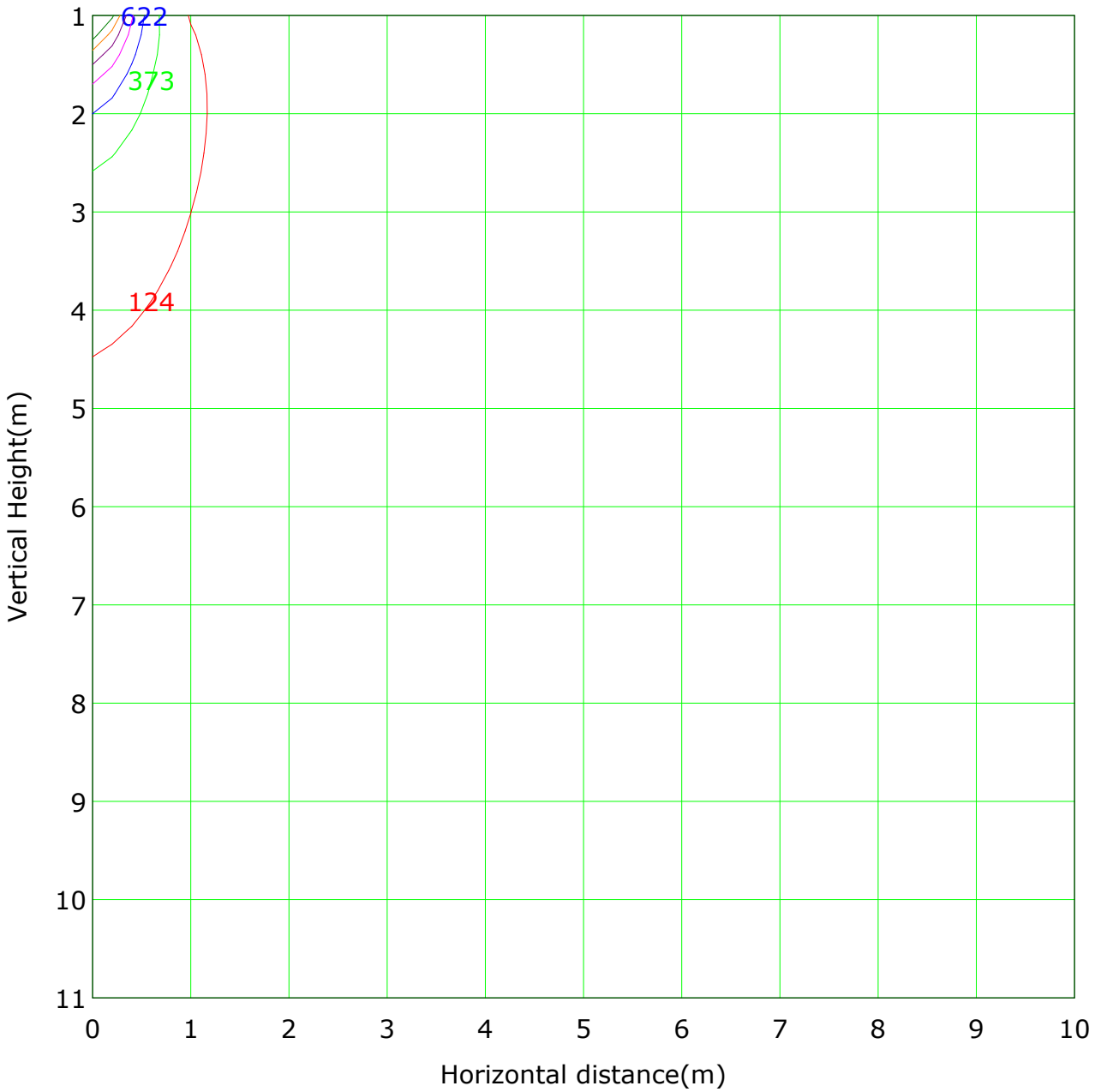
Illuminance at a Distance



C Plane (°):0.0-360.0: 30.0
Test Lab: HAVIT LIGHTING
Test Type: TYPE C
Temperature: 25°C
Operator: DING LI

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 6.583 m
Humidity:
Inspector:

Vertical IsoLux Plot

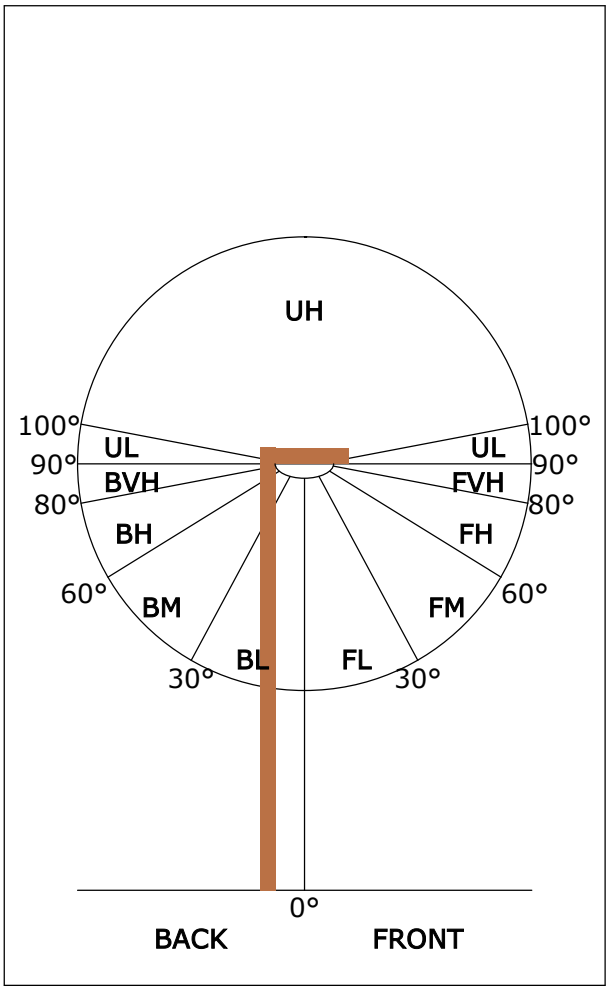


Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 2488.3 lx

(5%): 124.4 lx
(15%): 373.2 lx
(25%): 622.1 lx
(35%): 870.9 lx
(45%):1119.7 lx
(55%):1368.5 lx
(65%):1617.4 lx

C Plane (°):0.0-360.0: 30.0
Gamma Plane (°):0.0-90.0:1.0
Test Lab: HAVIT LIGHTING
Test Device: GPM-1600L
Test Type: TYPE C
Distance: 6.583 m
Temperature: 25°C
Humidity:
Operator: DING LI
Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM



ZONE	LUMENS	% LAMP LUMENS
FORWARD LIGHT	971	48.3
FL (0°-30°)	609	30.3
FM (30°-60°)	344	17.1
FH (60°-80°)	18	0.9
FVH (80°-90°)	0	0.0
BACK LIGHT	1040	51.7
BL (0°-30°)	641	31.9
BM (30°-60°)	377	18.8
BH (60°-80°)	21	1.0
BVH (80°-90°)	0	0.0
UP LIGHT	0	0.0
UL (90°-100°)	0	0.0
UH (100°-180°)	0	0.0
TRAPPED LIGHT	NA	NA

BUG(**B**acklight,**U**plight,**G**lare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B2 U0 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B2 U0 G0

C Plane (°):0.0-360.0: 30.0
Test Lab: HAVIT LIGHTING
Test Type: TYPE C
Temperature: 25°C
Operator: DING LI

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 6.583 m
Humidity:
Inspector: