

Report No.:

Test Time: 19.10.2018 10:12

## Luminaire Property

Luminaire Manufacturer: FAROS

Luminaire Description: FG 50 76W 0,46A Refond 32-34,5Lm

Lamp Description: LED

Luminous Width (mm): 55

Voltage: 221.0 V

Power: 75.77 W

Luminous Length (mm): 1500

Luminous Height (mm): 85

Current: 0.347 A

Power Factor: 0.986

## Photometric Results

CIE Class: Direct

Measurement Flux: 9644.8 lm

Downward Ratio: 99%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.4, 162.6, 161.2, 161.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 108.8, 109.7, 109.2, 109.3

Luminaire Efficacy Rating (LER): 127.34

Max. Intensity: 3447.79 cd

S/MH(C0/C180): 1.23

Total Rated Lamp Lumens: 9644.8 lm

Efficiency: 100%

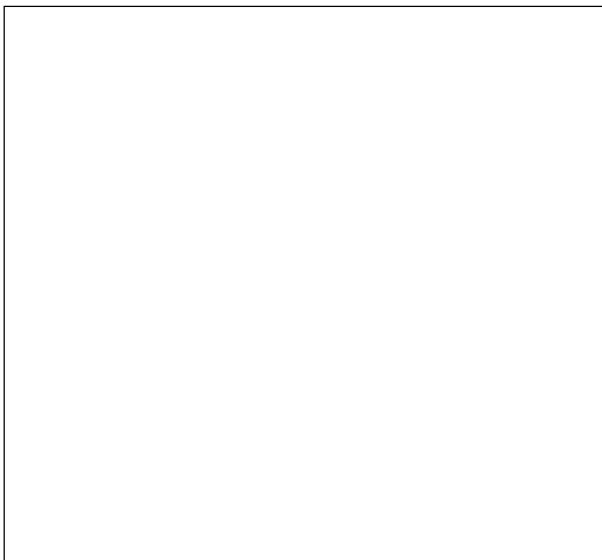
Upward Ratio: 1%

Central Intensity: 3427.66 cd

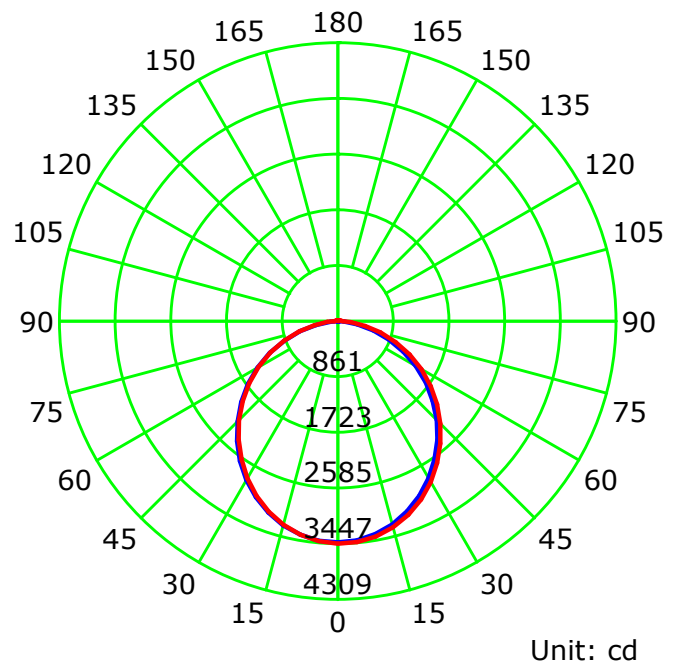
Pos of Max. Intensity: H135 V0

S/MH(C90/C270): 1.23

Picture Of Luminaire



Luminous Intensity Distribution Curve



— C0-C180    — C90-C270

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:5.0

Test Device: LSG-1800B

Distance: 12.654 m

Humidity:

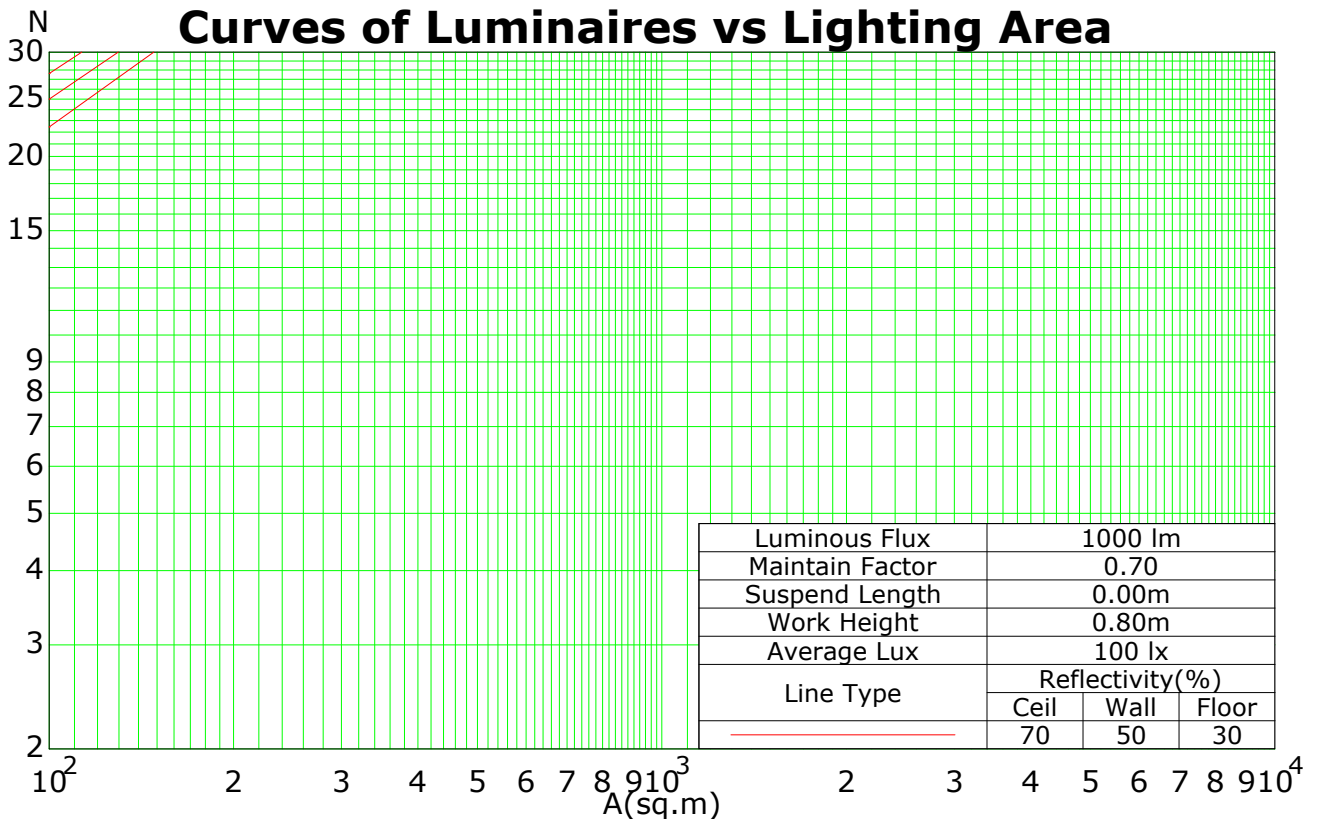
Inspector:

## 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	110	110	110	105	105	105	101	101	101	99
1	108	104	99	95	106	101	97	94	97	93	90	93	90	87	89	87	85	82
2	99	90	83	78	96	88	82	77	84	79	75	81	77	73	78	74	71	69
3	90	79	71	65	87	78	70	64	74	68	63	71	66	61	69	64	60	58
4	82	70	61	55	80	69	61	54	66	59	53	64	57	52	61	56	52	49
5	76	63	54	47	73	62	53	47	59	52	46	57	51	45	55	49	45	43
6	70	56	48	41	68	55	47	41	54	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	29
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

Spacing Criteria (0-180): 1.23  
 Spacing Criteria (90-270): 1.23  
 Spacing Criteria (Diagonal): 1.35

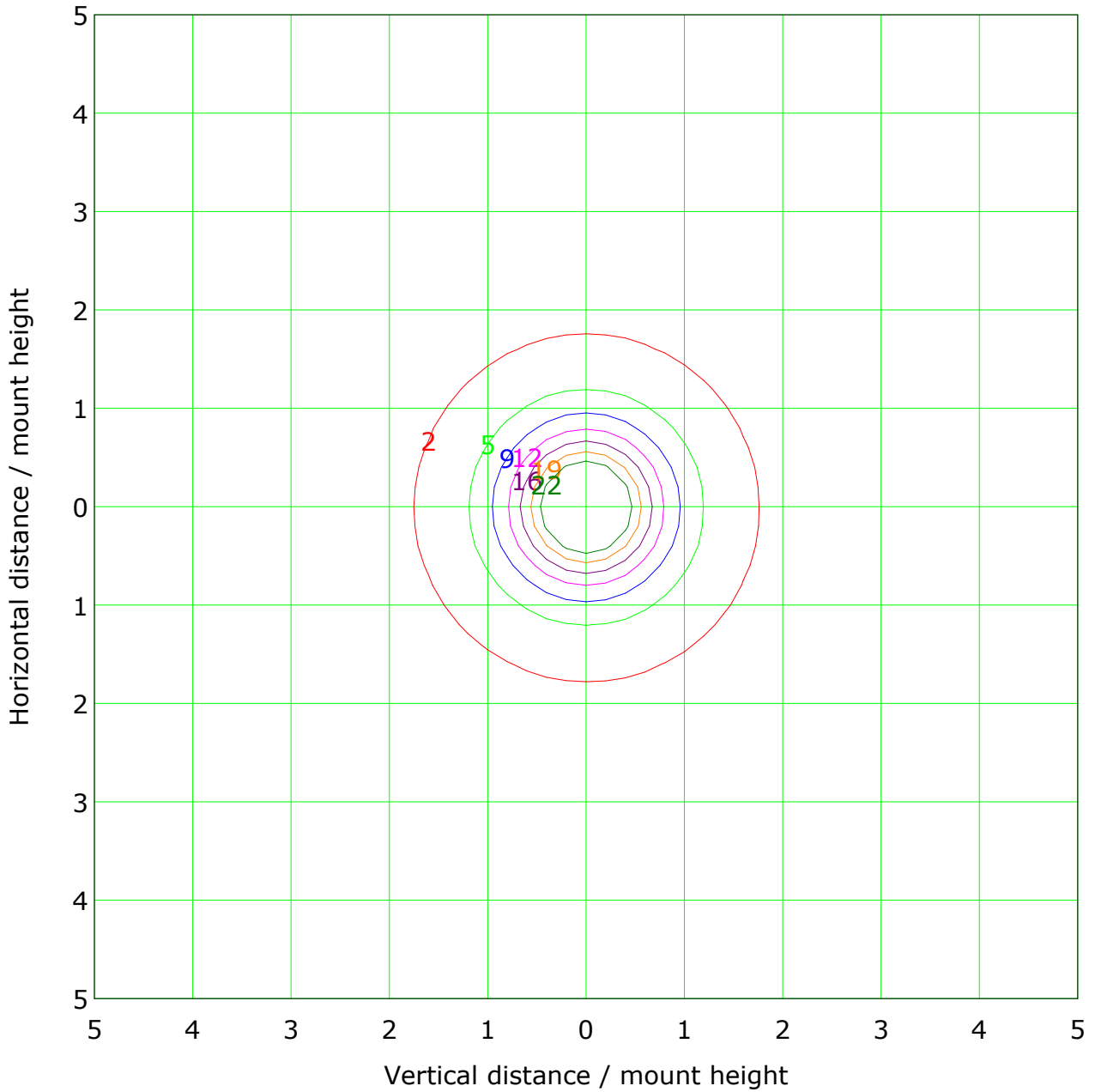
## Curves of Luminaires vs Lighting Area



C Plane (°):0.0-360.0: 22.5  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-180.0:5.0  
 Test Device: LSG-1800B  
 Distance: 12.654 m  
 Humidity:  
 Inspector:

# IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 34.5 lx	
— ( 5%):	1.7 lx	— ( 15%):	5.2 lx
— ( 25%):	8.6 lx	— ( 35%):	12.1 lx
— ( 45%):	15.5 lx	— ( 55%):	19.0 lx
— ( 65%):	22.4 lx		

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:5.0

Test Device: LSG-1800B

Distance: 12.654 m

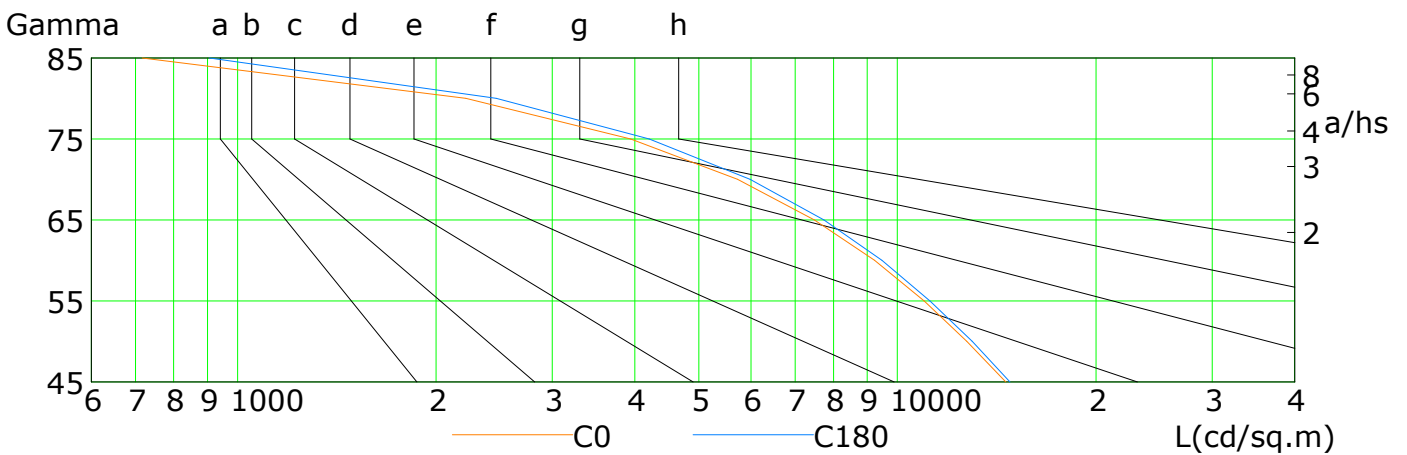
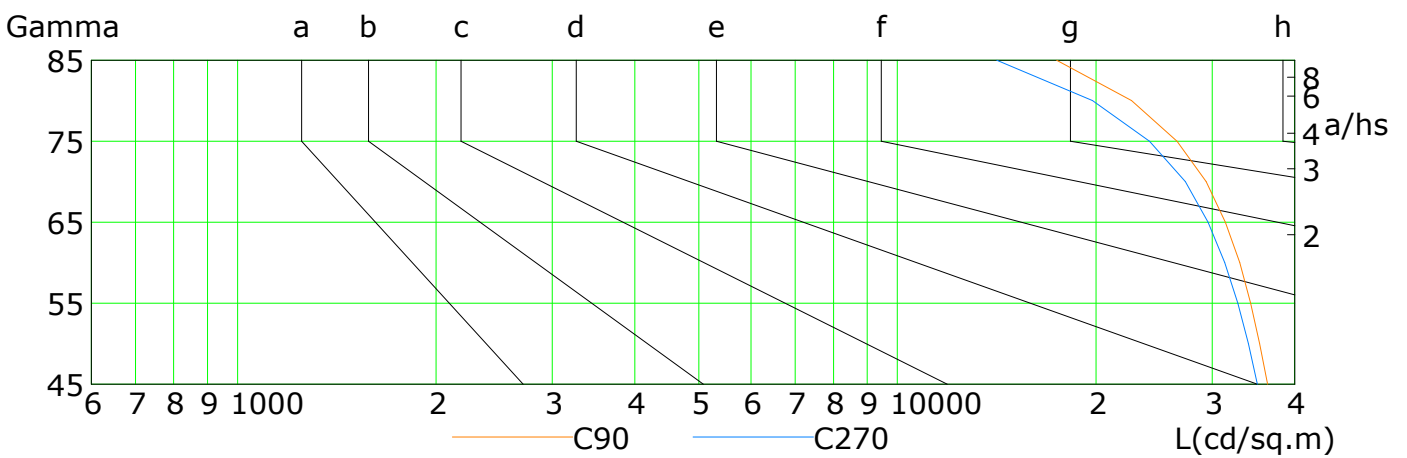
Humidity:

Inspector:

## Lum Limit Curve

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

a      b      c      d      e      f      g      h



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	14590	12741	10979	9235	7484	5726	3943	2218	717
C90	36407	35413	34295	33012	31406	29370	26524	22637	17441
C180	14805	12976	11206	9476	7742	5978	4207	2465	906
C270	35122	34022	32790	31335	29582	27317	24097	19766	14151

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:5.0

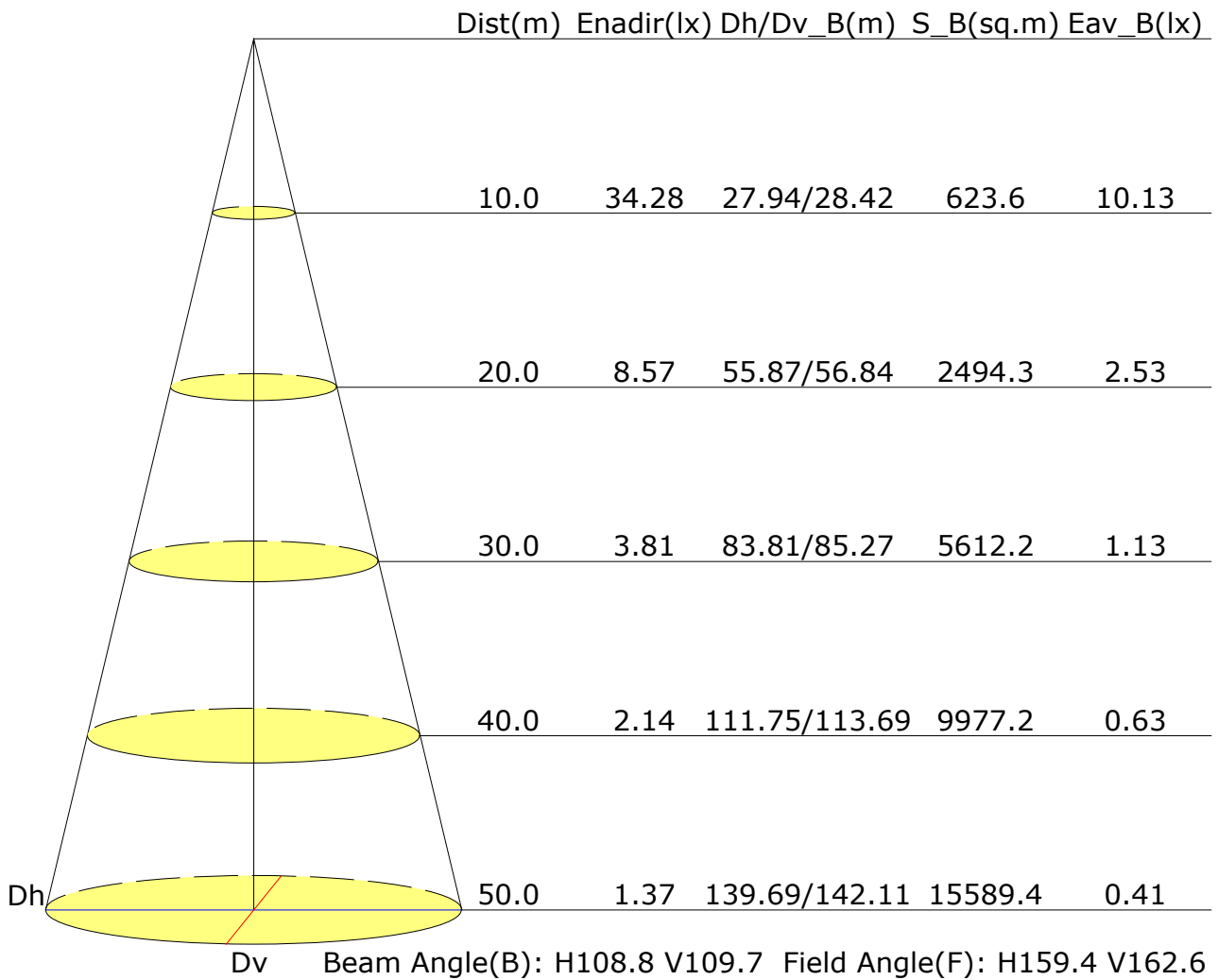
Test Device: LSG-1800B

Distance: 12.654 m

Humidity:

Inspector:

## Illuminance at a Distance



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:5.0

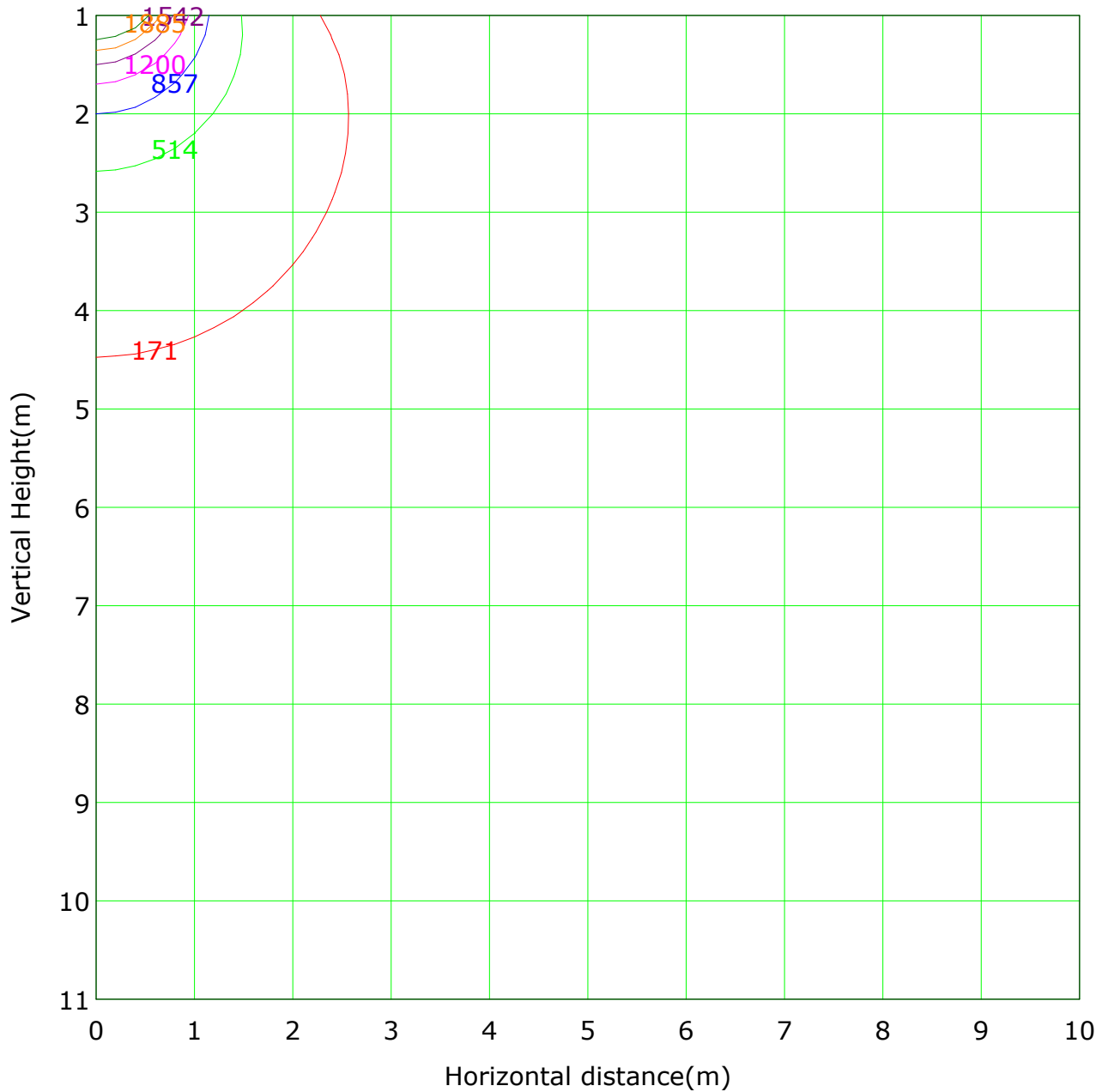
Test Device: LSG-1800B

Distance: 12.654 m

Humidity:

Inspector:

## Vertical IsoLux Plot

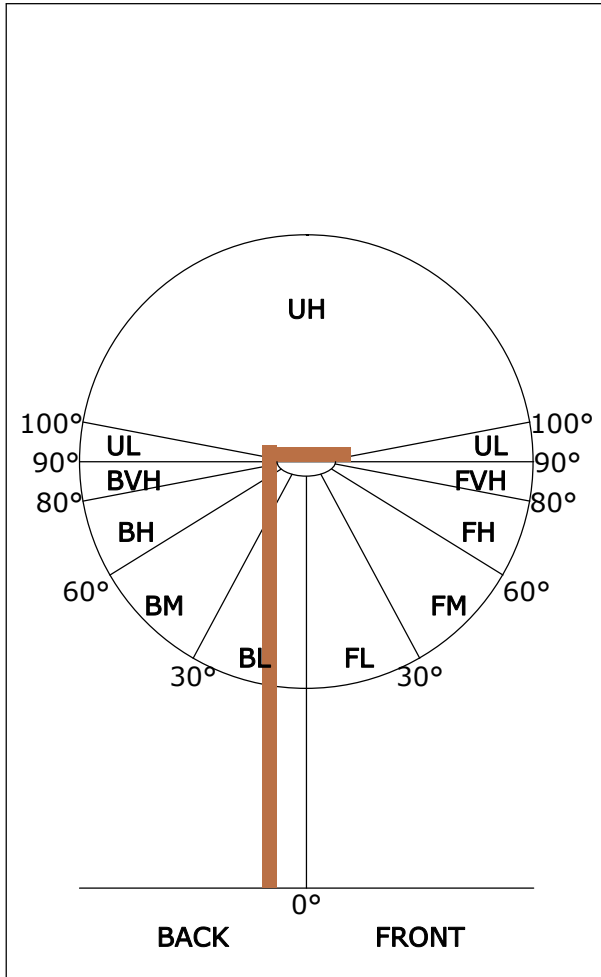


Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 3427.7 lx  
 — ( 5%): 171.4 lx                      — ( 15%): 514.1 lx  
 — ( 25%): 856.9 lx                      — ( 35%):1199.7 lx  
 — ( 45%):1542.4 lx                      — ( 55%):1885.2 lx  
 — ( 65%):2228.0 lx

C Plane (°):0.0-360.0: 22.5  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-180.0:5.0  
 Test Device: LSG-1800B  
 Distance: 12.654 m  
 Humidity:  
 Inspector:

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



ZONE	LUMENS	% LAMP LUMENS
FORWARD LIGHT	4824	50.0
FL ( 0°-30°)	1325	13.7
FM (30°-60°)	2462	25.5
FH (60°-80°)	933	9.7
FVH (80°-90°)	104	1.1
BACK LIGHT	4694	48.7
BL ( 0°-30°)	1311	13.6
BM (30°-60°)	2403	24.9
BH (60°-80°)	888	9.2
BVH (80°-90°)	91	0.9
UP LIGHT	127	1.3
UL (90°-100°)	38	0.4
UH (100°-180°)	89	0.9
TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B3 U2 G2
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B3 U2 G1

C Plane (°):0.0-360.0: 22.5  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-180.0:5.0  
 Test Device: LSG-1800B  
 Distance: 12.654 m  
 Humidity:  
 Inspector: