

Report No.: 1

Test Time: 16.10.2018 12:03

## Luminaire Property

Luminaire Manufacturer: FAROS

Luminaire Description: FG 50 0,345A 42W Refond 32-34,5Lm

Lamp Description: LED

Luminous Width (mm): 55

Voltage: 221.7 V

Power: 42.23 W

Luminous Length (mm): 900

Luminous Height (mm): 85

Current: 0.199 A

Power Factor: 0.954

## Photometric Results

CIE Class: Direct

Measurement Flux: 5070.3 lm

Downward Ratio: 99%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.8, 162.2, 161.1, 161.0

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 108.3, 109.3, 108.9, 108.8

Luminaire Efficacy Rating (LER): 120.11

Max. Intensity: 1819.22 cd

S/MH(C0/C180): 1.22

Total Rated Lamp Lumens: 5070.3 lm

Efficiency: 100%

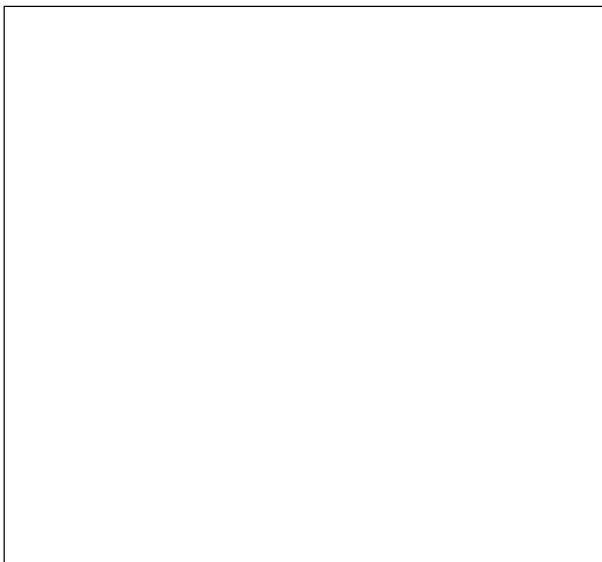
Upward Ratio: 1%

Central Intensity: 1819.22 cd

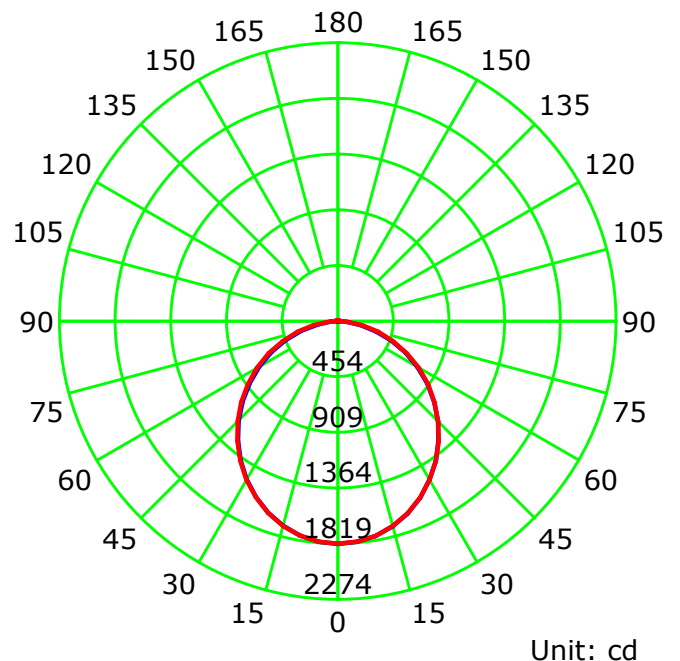
Pos of Max. Intensity: H0 V0

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:

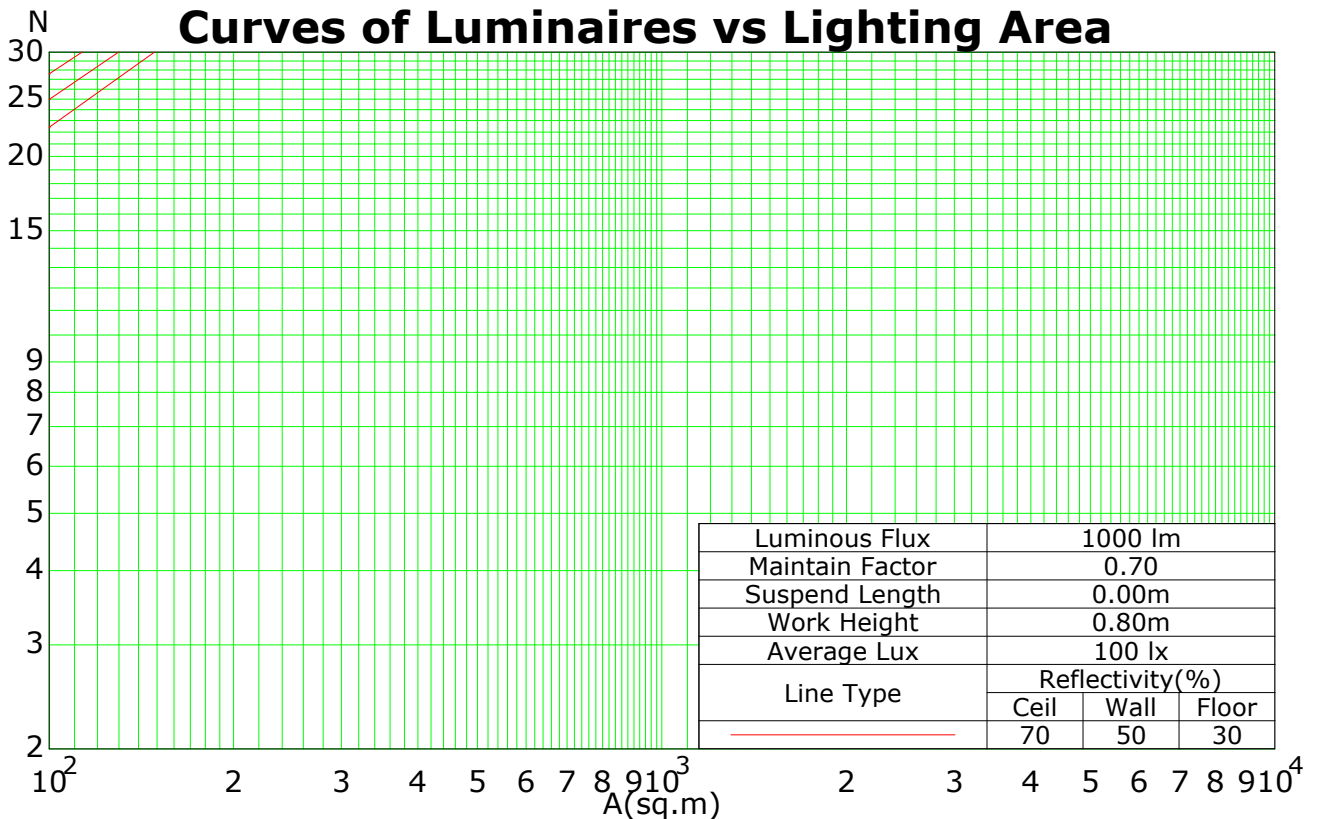
Inspector:

## 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	106	106	106	101	101	101	99
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	78	96	88	82	77	85	79	75	81	77	73	78	74	71	69
3	90	79	71	65	87	78	70	64	74	68	63	72	66	61	69	64	60	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	61	56	52	50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	55	50	45	43
6	70	57	48	41	68	56	47	41	54	46	40	52	45	40	50	44	40	37
7	65	51	43	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

Spacing Criteria (0-180): 1.22  
 Spacing Criteria (90-270): 1.23  
 Spacing Criteria (Diagonal): 1.34

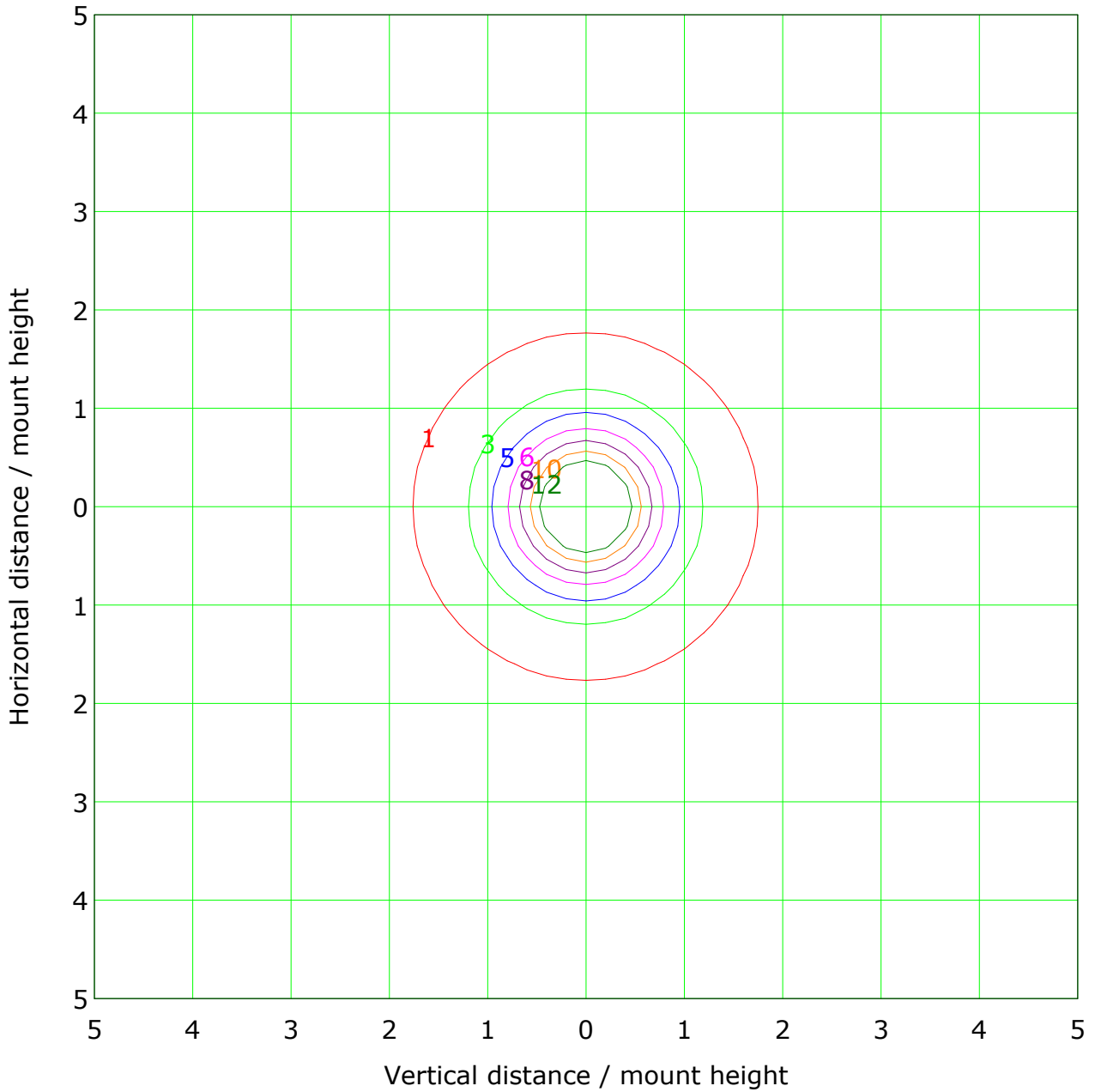
## Curves of Luminaires vs Lighting Area



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%): 18.2 lx	
— ( 5%):	0.9 lx	— ( 15%):	2.7 lx
— ( 25%):	4.5 lx	— ( 35%):	6.4 lx
— ( 45%):	8.2 lx	— ( 55%):	10.0 lx
— ( 65%):	11.8 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

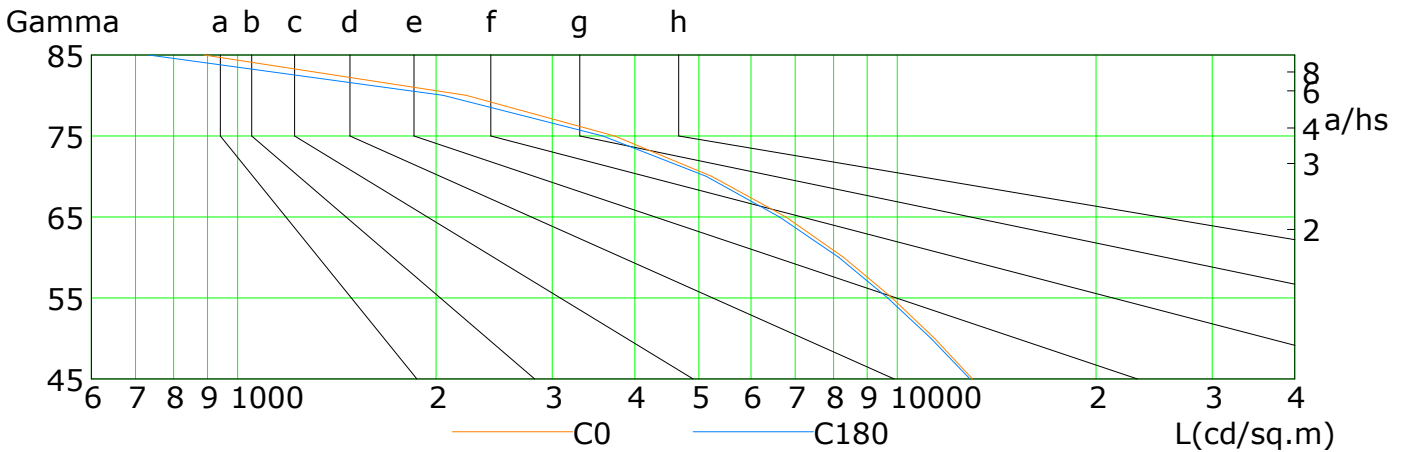
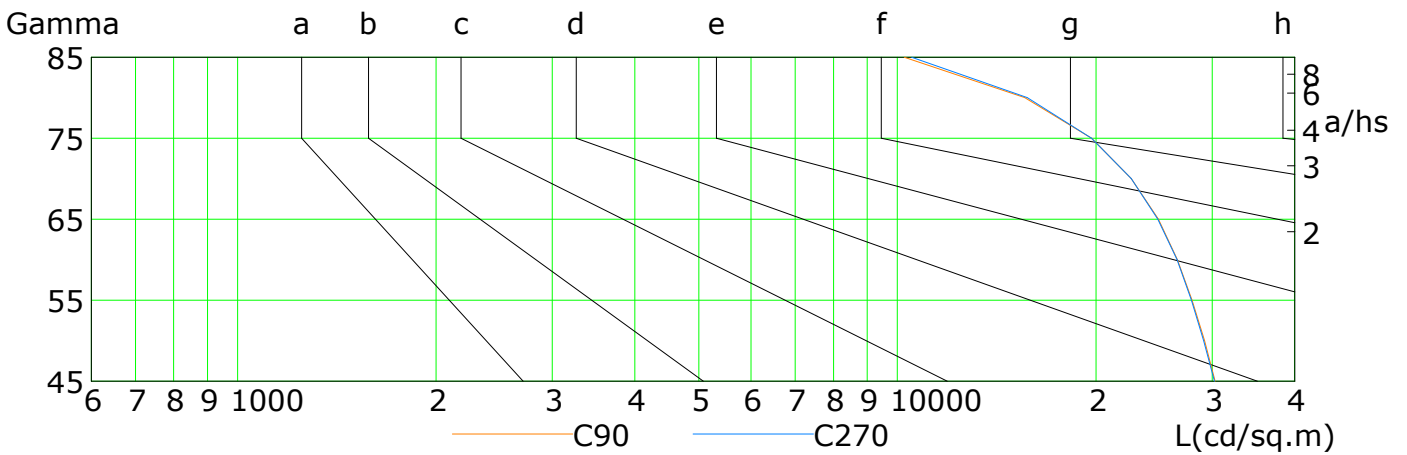
Humidity:

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	12993	11378	9814	8286	6773	5230	3729	2221	890
C90	30293	29203	27967	26555	24866	22618	19696	15597	10240
C180	12874	11237	9672	8145	6629	5133	3575	2048	733
C270	30231	29112	27892	26519	24818	22607	19699	15729	10510

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:5.0

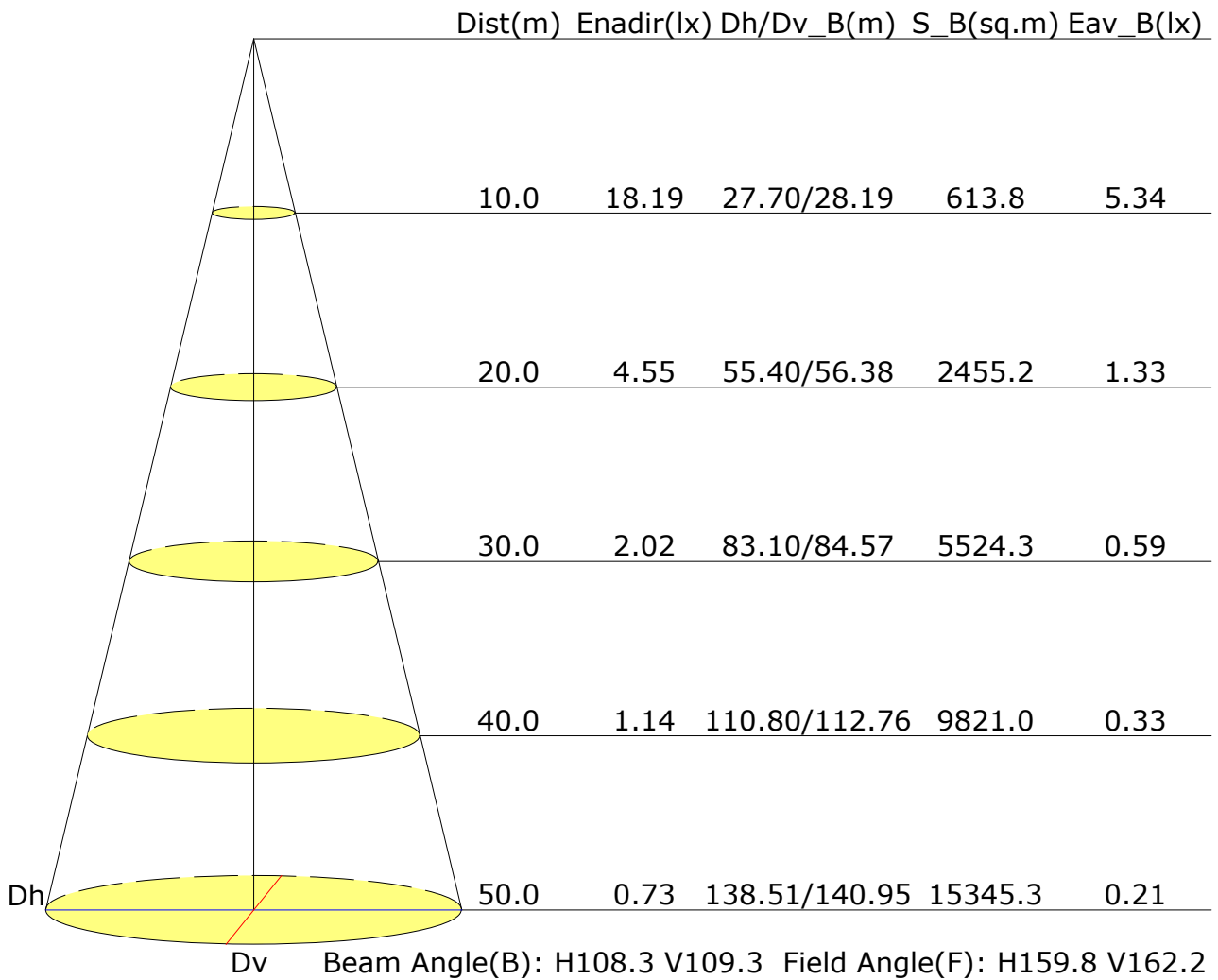
Test Device: LSG-1800B

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

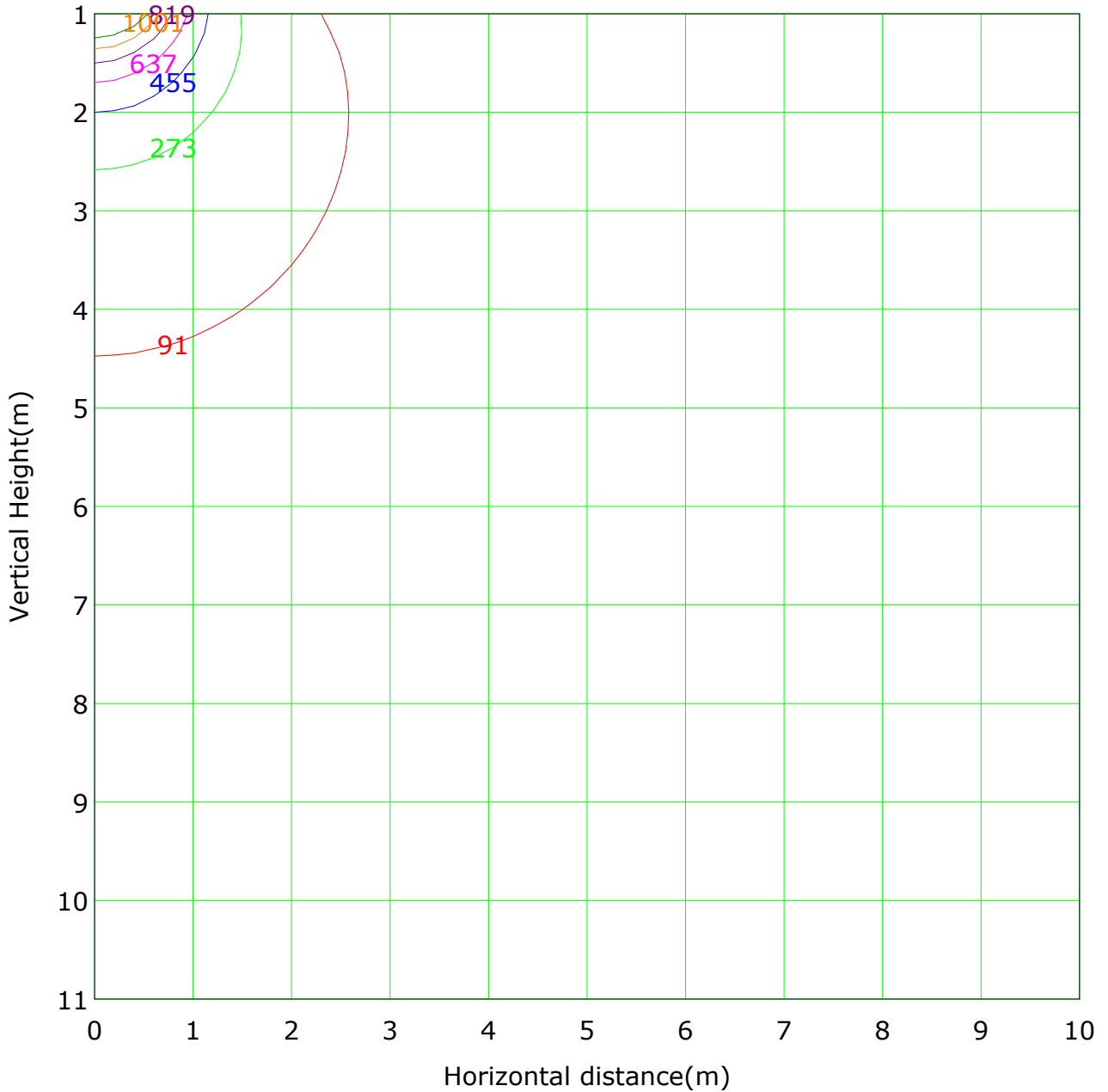
Test Device: LSG-1800B

Distance: 12.654 m

Humidity:

Inspector:

## Vertical IsoLux Plot

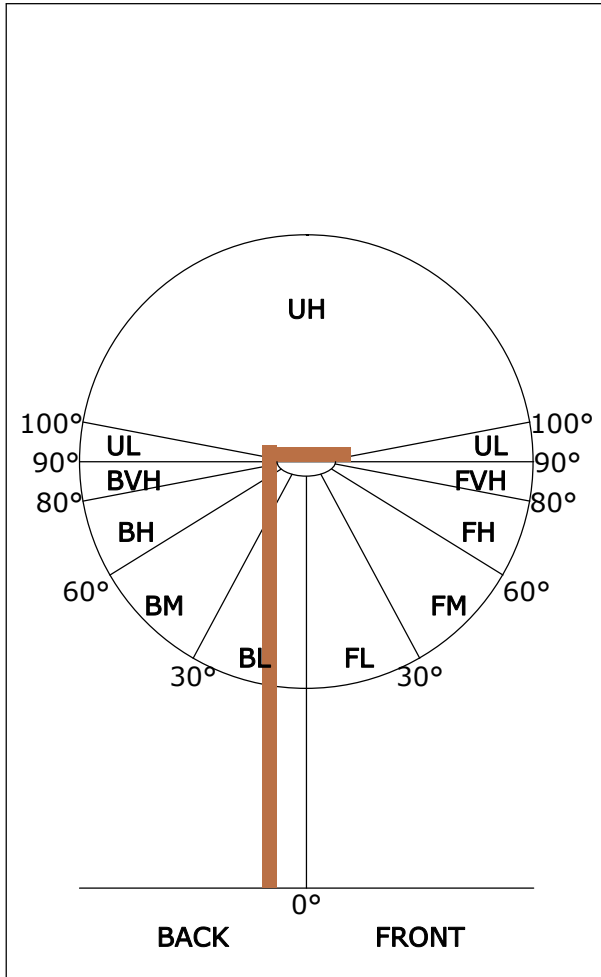


Lowest(m): 1.0m	Highest(m): 11.0m	Max Lux: 1819.2 lx
— ( 5%): 91.0 lx	— ( 15%): 272.9 lx	
— ( 25%): 454.8 lx	— ( 35%): 636.7 lx	
— ( 45%): 818.6 lx	— ( 55%): 1000.6 lx	
— ( 65%): 1182.5 lx		

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	2509	49.5
FL ( 0°-30°)	697	13.7
FM (30°-60°)	1282	25.3
FH (60°-80°)	479	9.5
FVH (80°-90°)	51	1.0
BACK LIGHT	2503	49.4
BL ( 0°-30°)	696	13.7
BM (30°-60°)	1279	25.2
BH (60°-80°)	478	9.4
BVH (80°-90°)	51	1.0
UP LIGHT	58	1.1
UL (90°-100°)	19	0.4
UH (100°-180°)	39	0.8
TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B2 U2 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B2 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: