

Report No.: 1

Test Time: 03.11.2018 15:12

## Luminaire Property

Luminaire Manufacturer: FAROS

Luminaire Description: FL 80 60LED 0,30A 32W 5000K 90 degrees F15523

Lamp Description: LED

Luminous Length (mm): 1500

Luminous Width (mm): 80

Luminous Height (mm): 75

Voltage: 221.8 V

Current: 0.135 A

Power: 29.50 W

Power Factor: 0.977

## Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 3957.6 lm

Measurement Flux: 3957.6 lm

Efficiency: 100%

Downward Ratio: 97%

Upward Ratio: 3%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.2, 128.2, 137.9, 138.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 100.0, 85.8, 85.8, 85.0

Luminaire Efficacy Rating (LER): 134.21

Central Intensity: 1836.86 cd

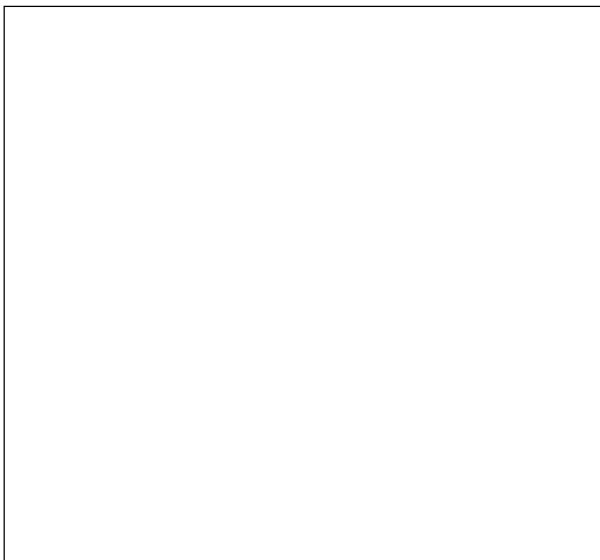
Max. Intensity: 1846.22 cd

Pos of Max. Intensity: H22.5 V5

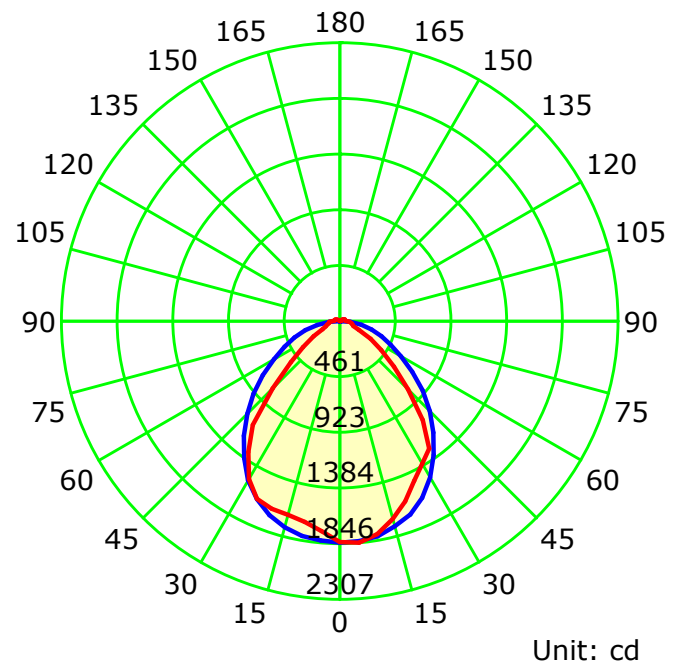
S/MH(C0/C180): 1.22

S/MH(C90/C270): 1.17

Picture Of Luminaire



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Gamma Plane (°):0.0-180.0:5.0

Test Lab:

Test Device: LSG-1800B

Test Type: TYPE C

Distance: 12.654 m

Temperature:

Humidity:

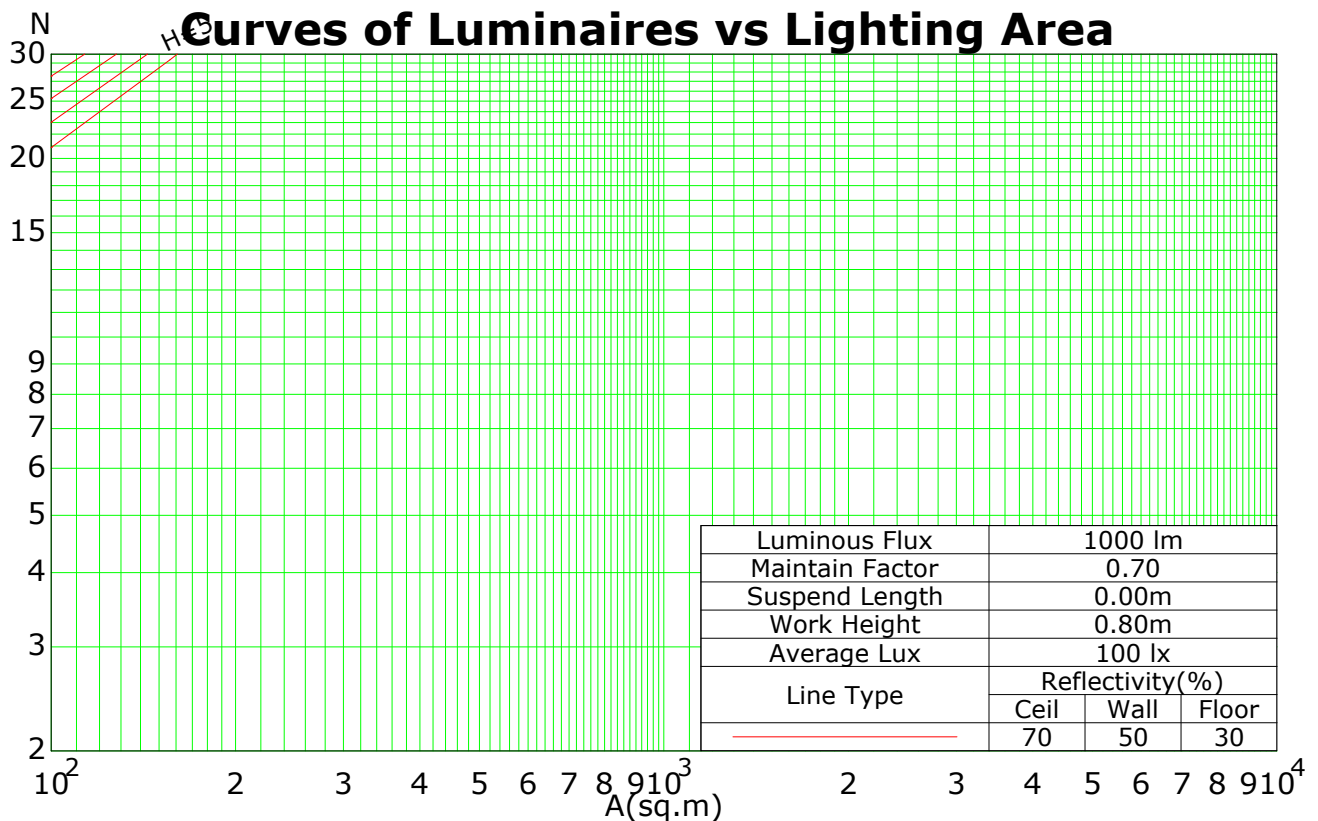
Operator:

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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	109	105	101	98	106	102	99	96	98	95	92	93	91	89	89	87	86	83
2	100	93	87	82	98	91	85	81	87	82	78	83	79	76	80	77	74	72
3	93	83	76	70	90	81	75	69	78	72	67	75	70	66	72	68	64	62
4	86	75	67	61	83	73	66	60	70	64	59	68	62	58	65	61	57	55
5	79	67	59	53	77	66	58	53	64	57	52	62	56	51	59	54	50	48
6	74	61	53	47	72	60	52	47	58	51	46	56	50	46	54	49	45	43
7	69	56	48	42	67	55	47	42	53	46	41	52	46	41	50	45	40	39
8	64	51	43	38	62	51	43	38	49	42	37	48	42	37	46	41	37	35
9	60	47	40	35	59	47	39	34	45	39	34	44	38	34	43	37	33	32
10	56	44	36	32	55	43	36	31	42	36	31	41	35	31	40	35	31	29

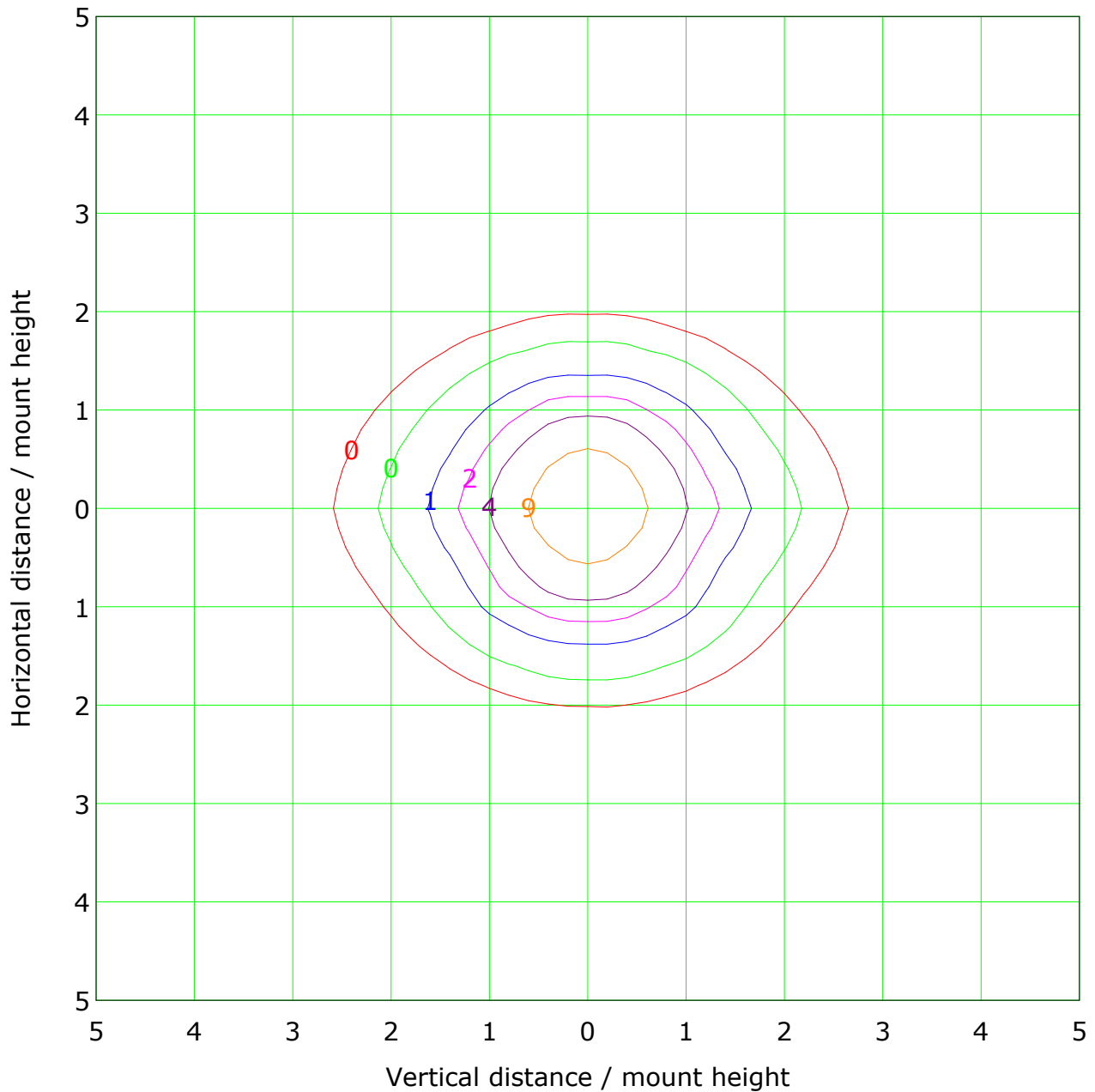
Spacing Criteria (0-180): 1.22  
 Spacing Criteria (90-270): 1.17  
 Spacing Criteria (Diagonal): 1.18



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



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

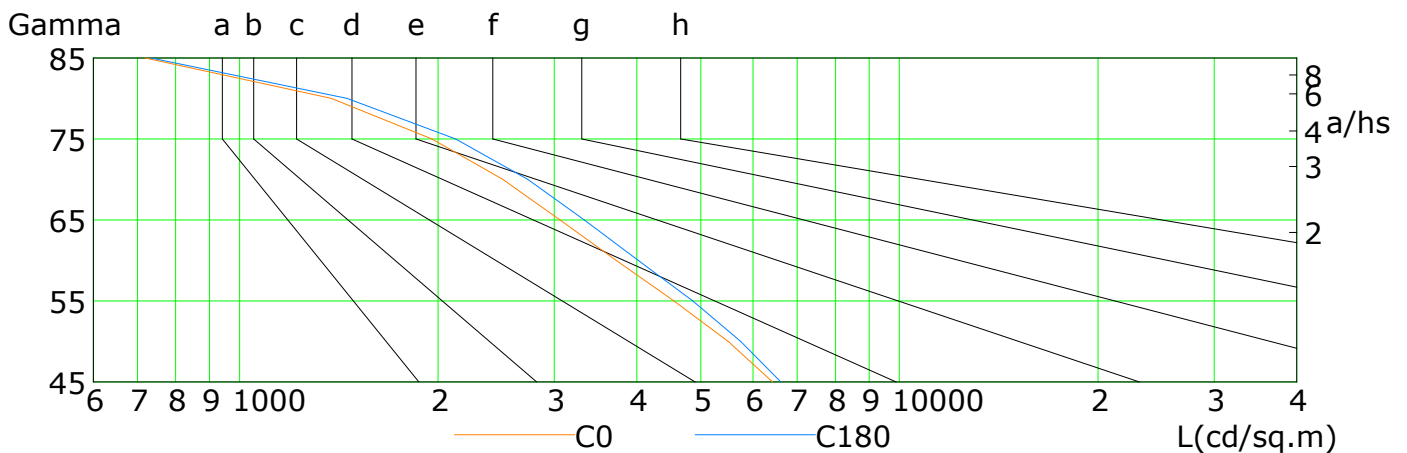
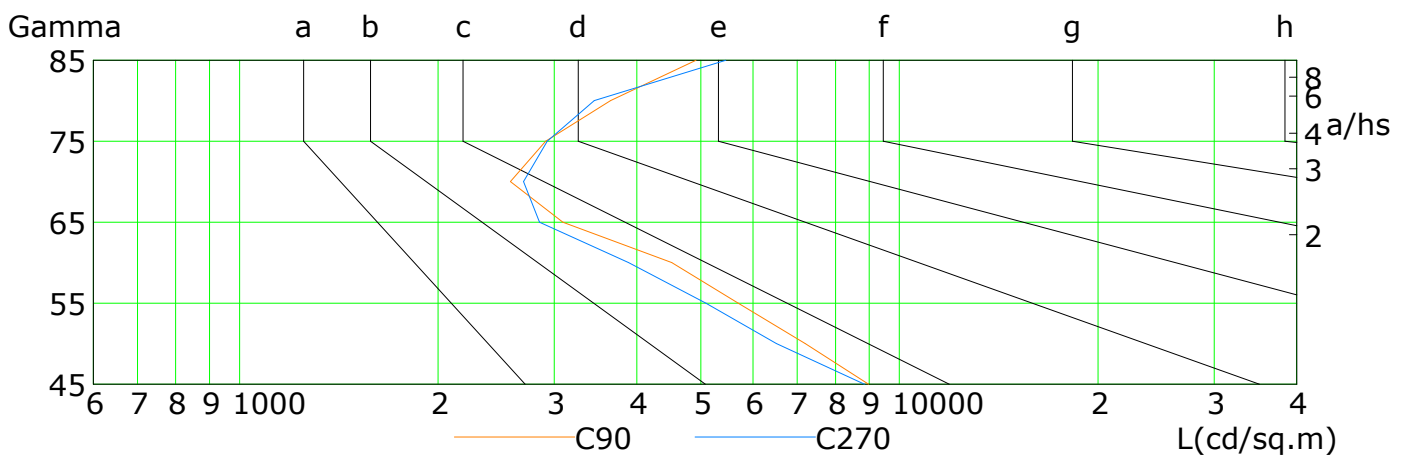
Humidity:

Inspector:

## Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
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	6420	5500	4552	3720	3059	2504	1958	1376	720
C90	8976	7197	5699	4517	3089	2574	2910	3651	4917
C180	6615	5741	4863	4016	3329	2732	2127	1454	734
C270	8849	6508	5094	3886	2850	2695	2926	3448	5459

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:5.0

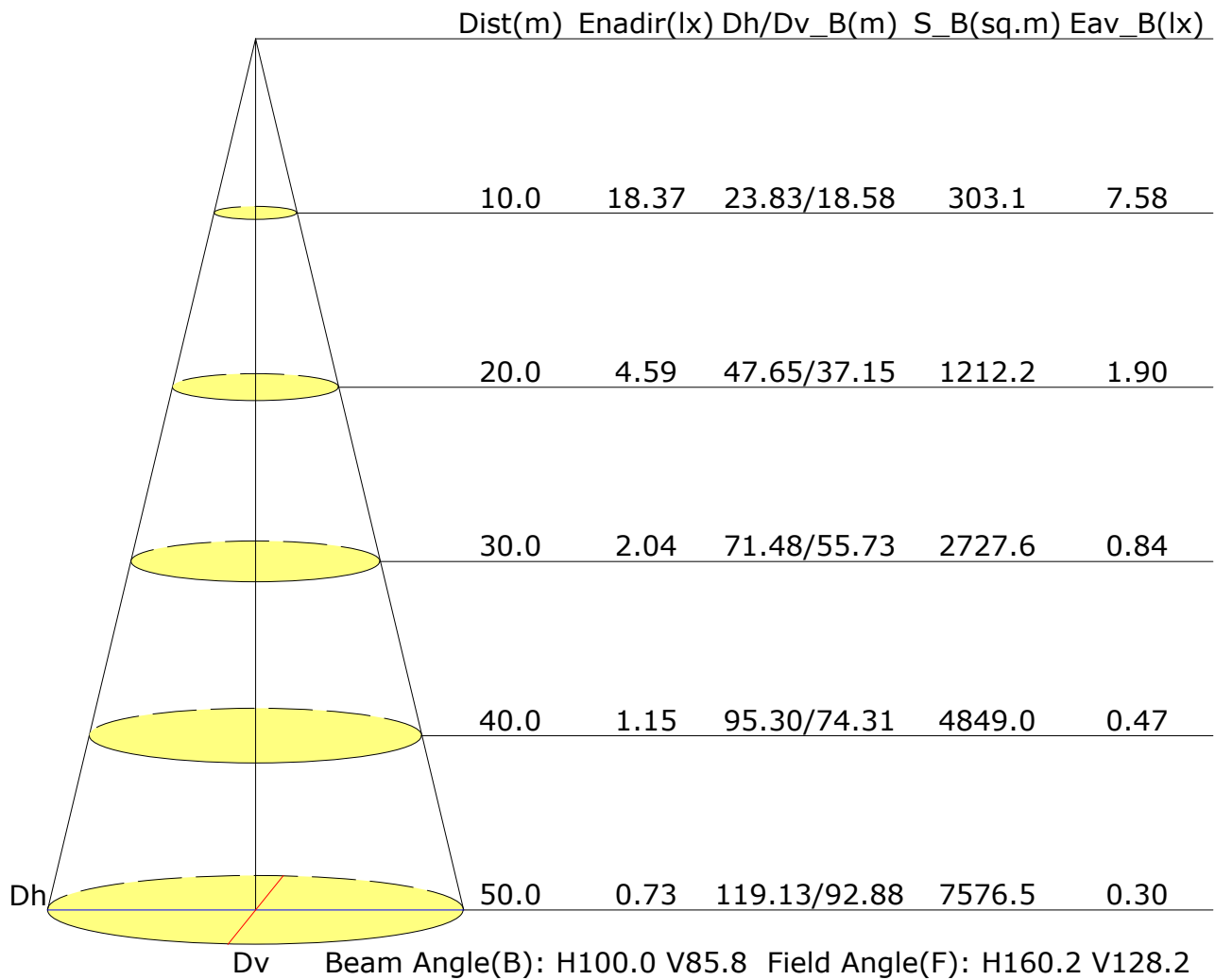
Test Device: LSG-1800B

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

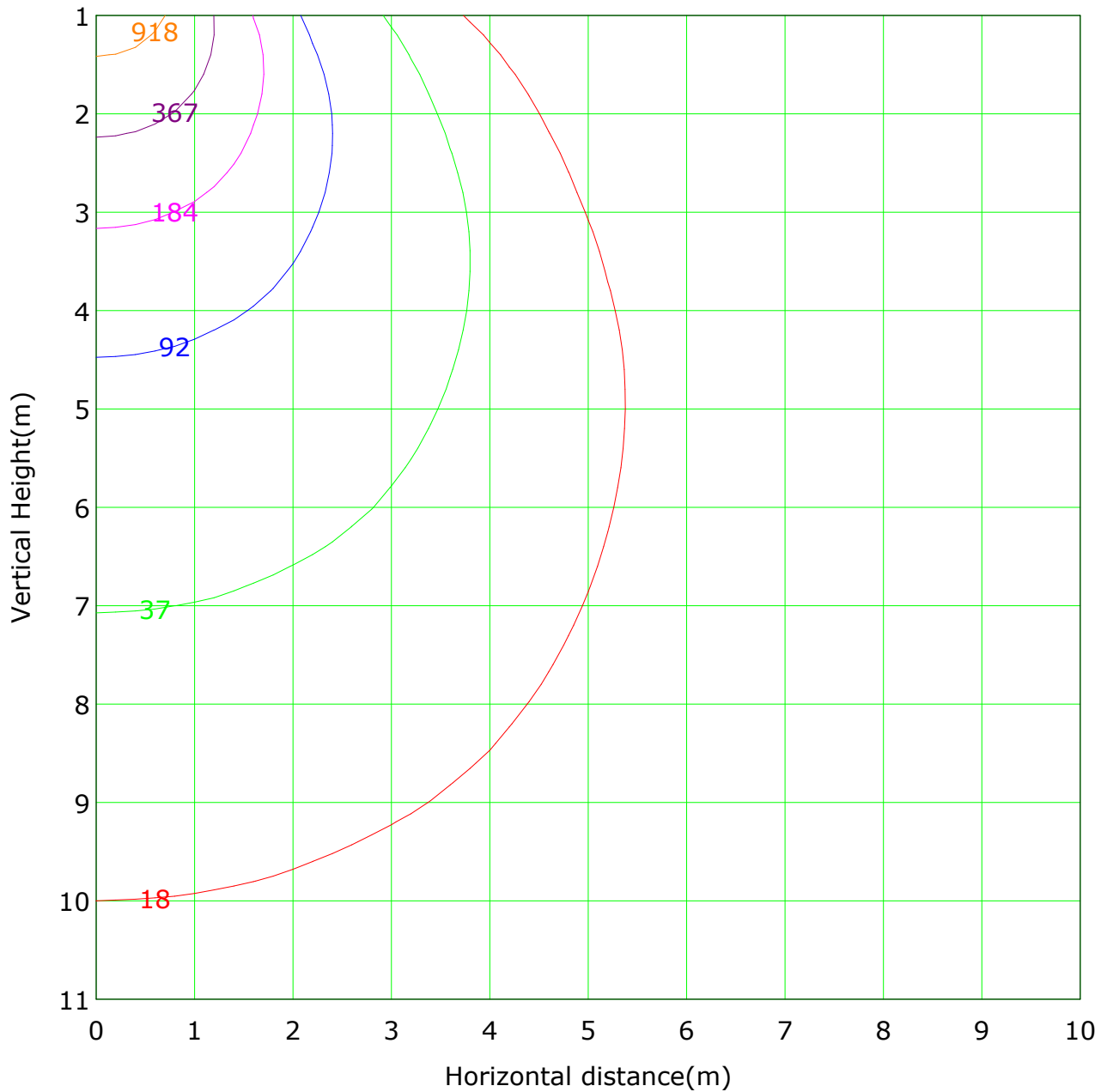
Test Device: LSG-1800B

Distance: 12.654 m

Humidity:

Inspector:

## Vertical IsoLux Plot



Lowest(m): 1.0m   Highest(m): 11.0m   Max Lux: 1836.9 lx  
— ( 1%): 18.4 lx   — ( 2%): 36.7 lx  
— ( 5%): 91.8 lx   — ( 10%): 183.7 lx  
— ( 20%): 367.4 lx   — ( 50%): 918.4 lx  
— (100%):1836.9 lx

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

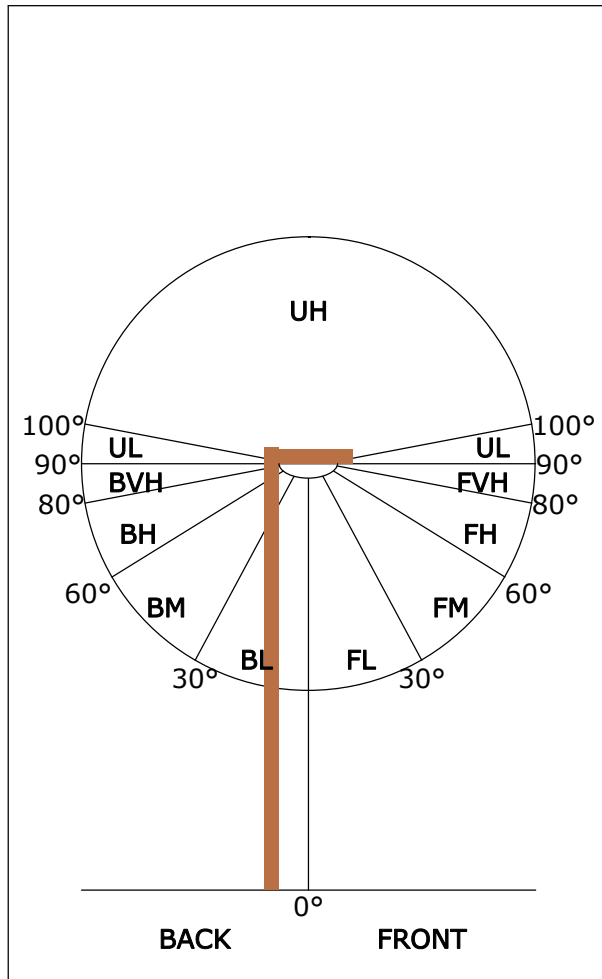
Gamma Plane (°):0.0-180.0:5.0

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	1900	48.0
FL ( 0°-30°)	681	17.2
FM (30°-60°)	958	24.2
FH (60°-80°)	222	5.6
FVH (80°-90°)	39	1.0
BACK LIGHT	1933	48.9
BL ( 0°-30°)	683	17.2
BM (30°-60°)	984	24.9
BH (60°-80°)	225	5.7
BVH (80°-90°)	41	1.0
UP LIGHT	124	3.1
UL (90°-100°)	40	1.0
UH (100°-180°)	84	2.1
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

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Gamma Plane (°):0.0-180.0:5.0

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