

Report No.: 01

Test Time: 2016/10/17 11:08

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: Synthesis LED Linear

Luminaire Description: Synthesis Indirect SO 28CM 180 mA 3500K Narrow

Luminous Length (mm): 304

Luminous Width (mm): 50

Luminous Height (mm): 2

Voltage: 219.7 V

Current: 0.031 A

Power: 6.00 W

Power Factor: 0.870

## Photometric Results

CIE Class: Direct

Measurement Flux: 639.8 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H40.5

Vertical Diffuse Angle(50%): V104.4

Luminaire Efficacy Rating (LER): 107

Max. Intensity: 715.72 cd

Total Rated Lamp Lumens: 639.8 lm

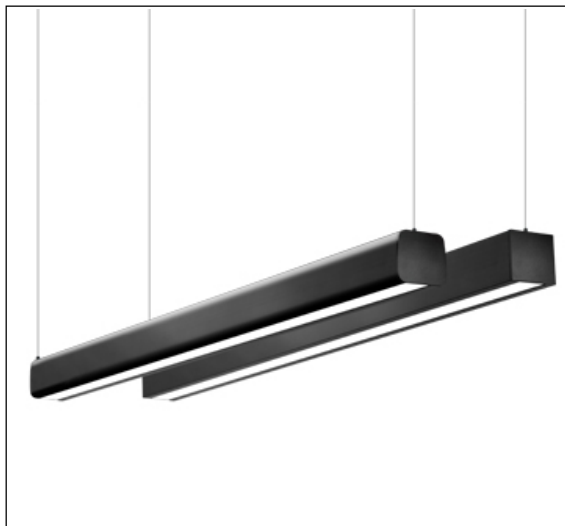
Efficiency: 100%

Upward Ratio: 1%

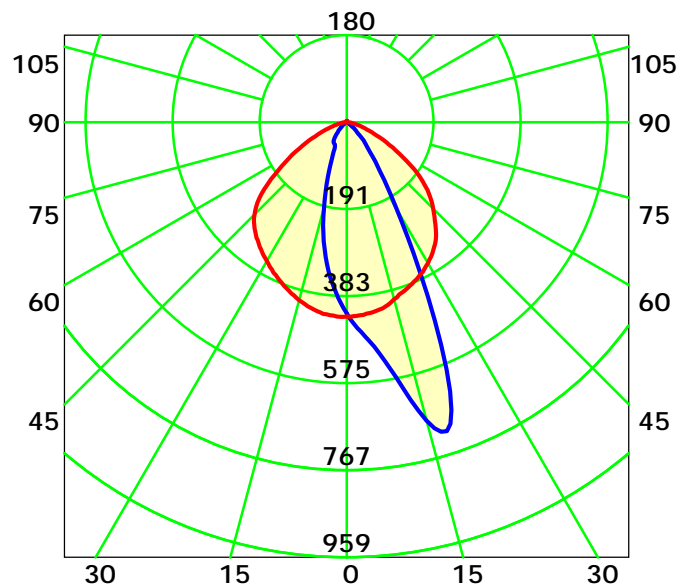
Central Intensity: 421.49 cd

Pos of Max. Intensity: H0 V18

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 72.5° Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Test Lab: ACOLYTE

Test Type: TYPE C

Temperature: 25°C

Operator: leo

Gamma Plane (°):0.0-180.0: 1.0

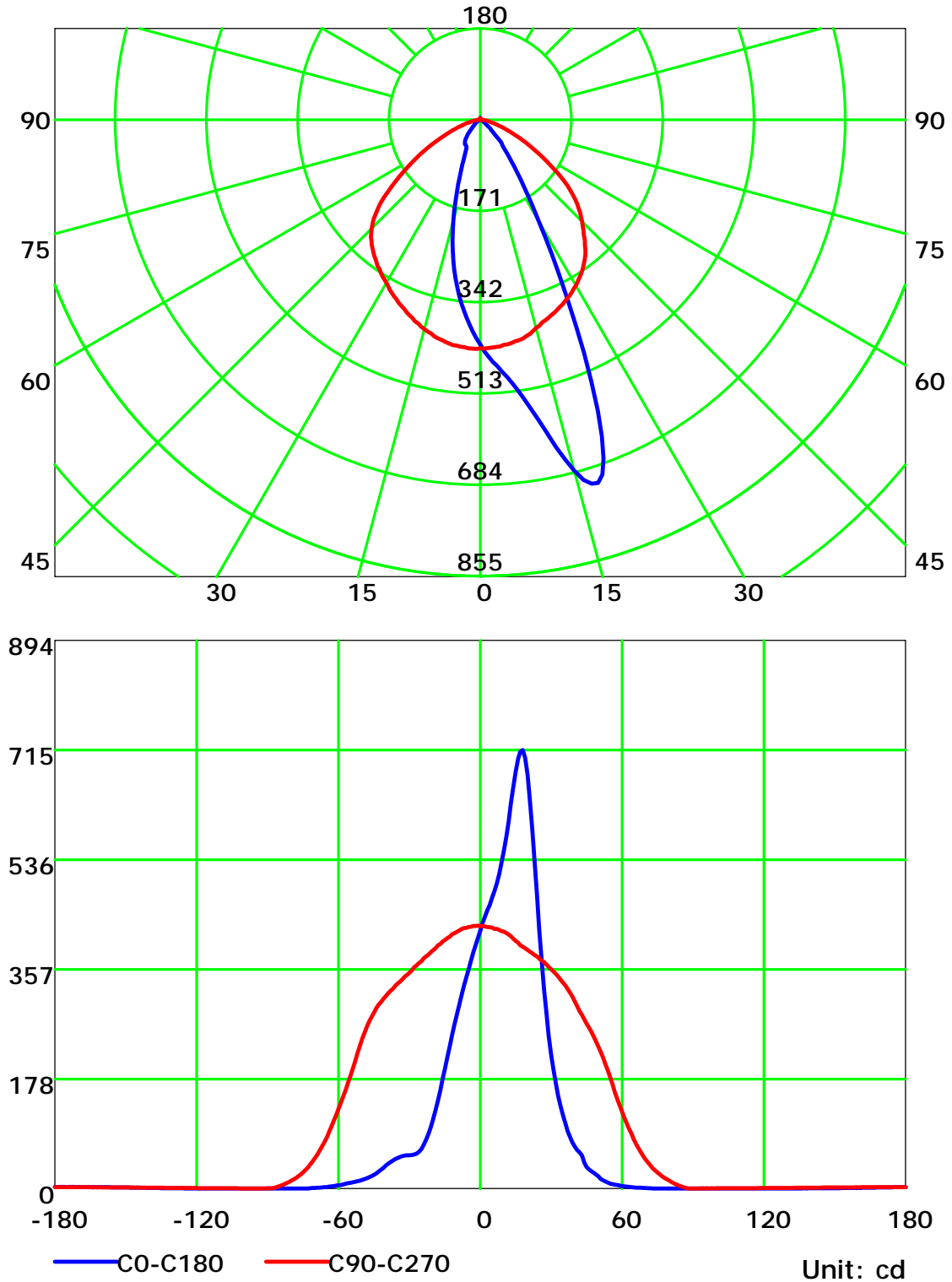
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

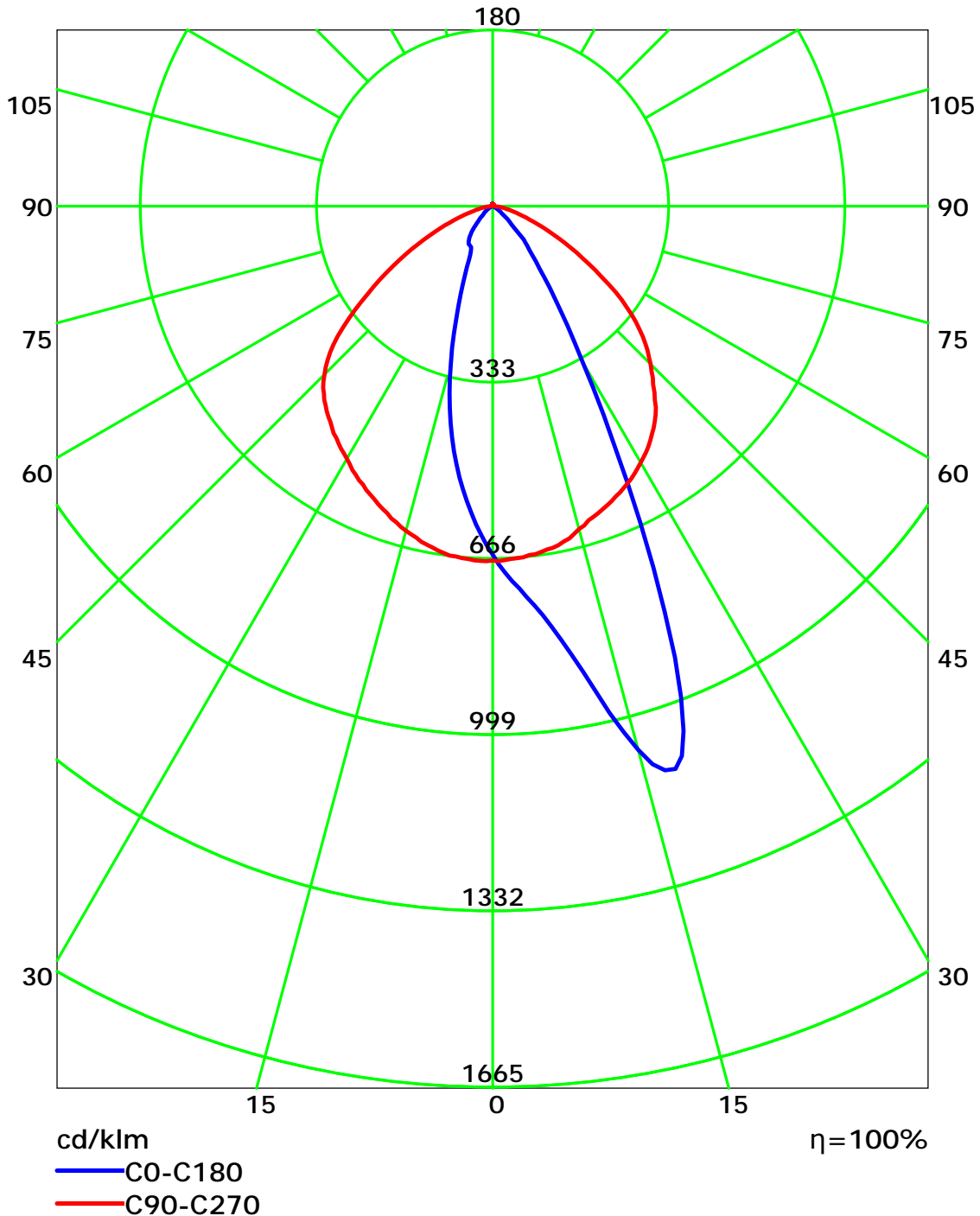
## Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 30.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 25°C  
Operator: leo

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 30.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 25°C  
Operator: leo

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

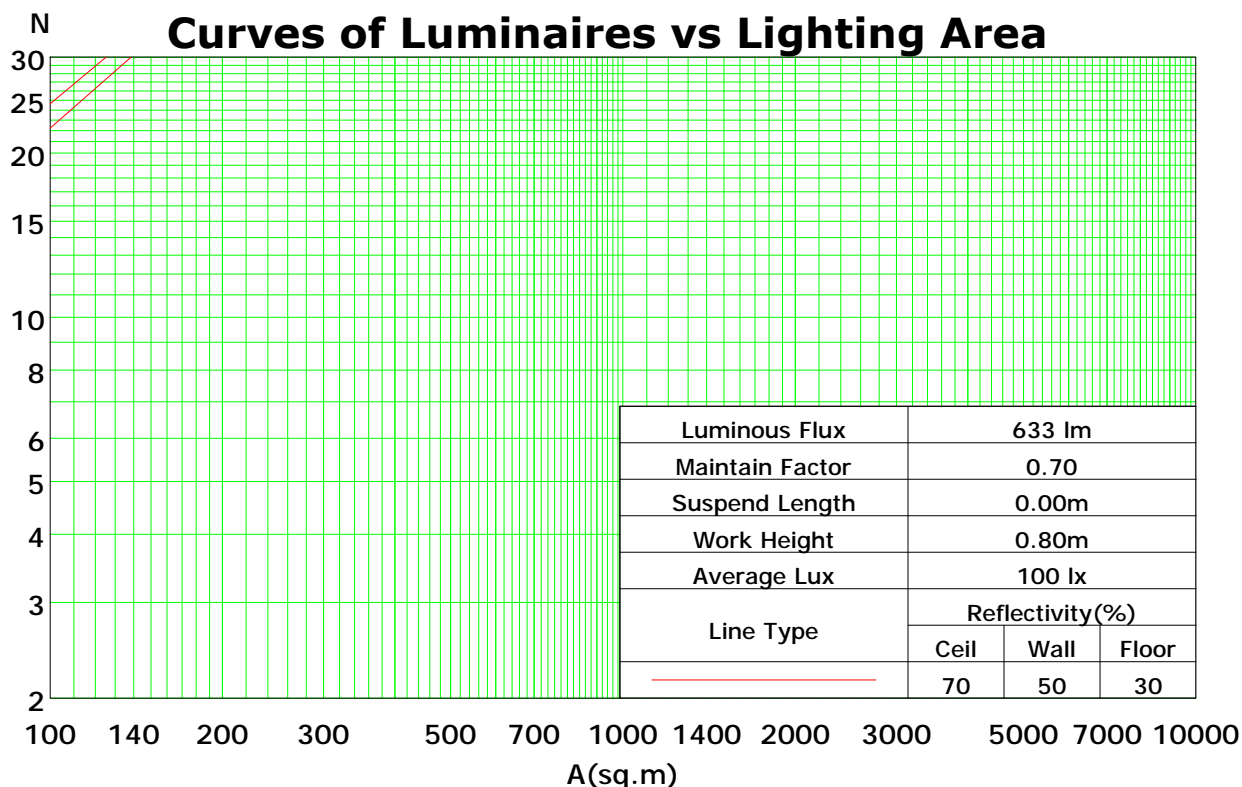
## Coefficients Of Utilization - Zonal Cavity Method

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	112	108	105	102	109	106	103	100	101	99	97	97	96	94	94	92	91	89
2	104	98	93	89	102	96	91	87	92	89	85	89	86	83	86	84	81	79
3	97	89	83	78	95	87	82	77	85	80	76	82	78	74	79	76	73	71
4	91	81	74	69	89	80	73	69	77	72	68	75	70	67	73	69	66	64
5	85	74	67	62	83	73	67	62	71	65	61	69	64	60	68	63	59	58
6	79	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	52
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	58	53	50	48
8	70	59	52	47	69	58	51	46	57	51	46	56	50	46	54	49	46	44
9	66	55	48	43	65	54	47	43	53	47	43	52	46	42	51	46	42	41
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38

Spacing Criteria (0-180): 0.89

Spacing Criteria (90-270): 1.24

Spacing Criteria (Diagonal): 1.02



C Plane (°):0.0-360.0: 30.0

Test Lab: ACOLYTE

Test Type: TYPE C

Temperature: 25°C

Operator: leo

Gamma Plane (°):0.0-180.0:1.0

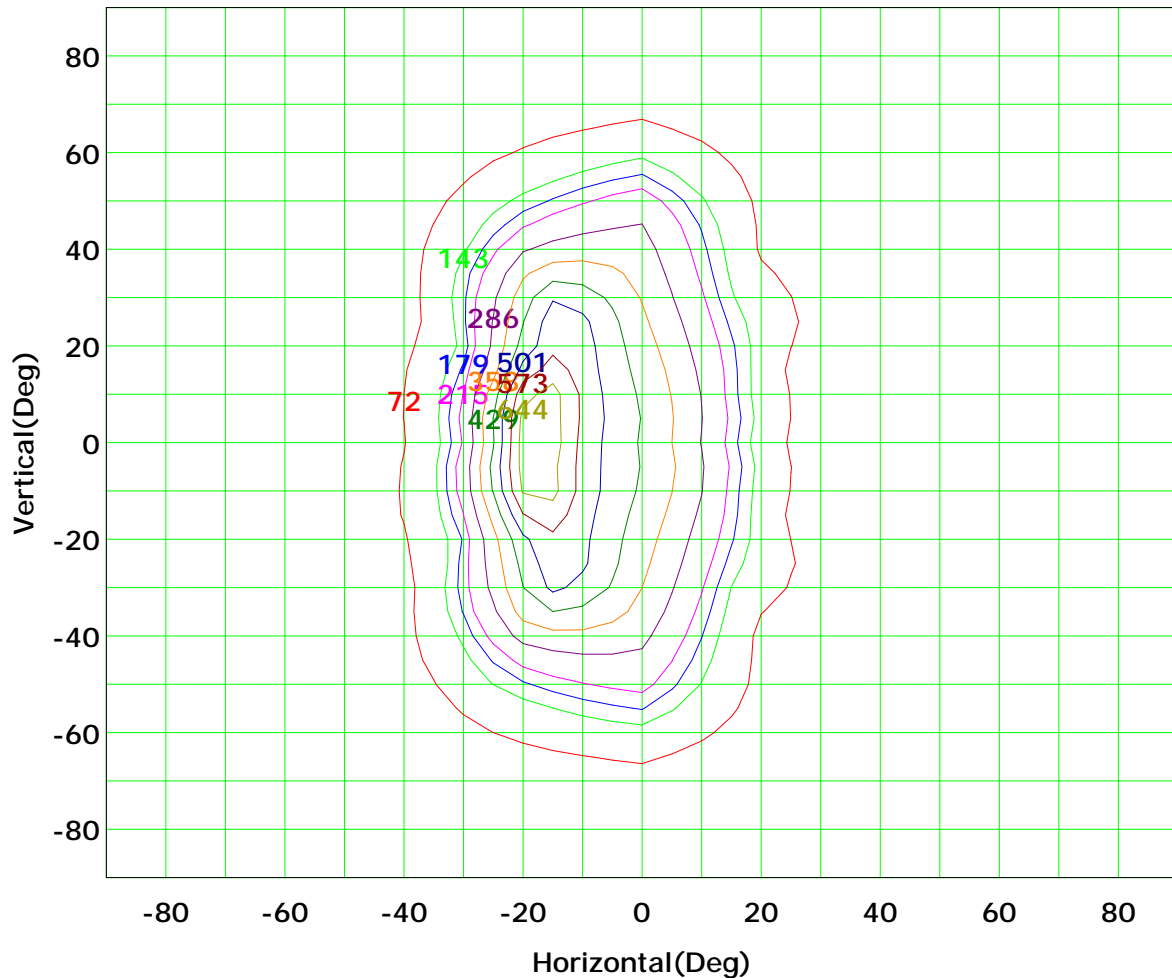
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Isocandela (rectangle)



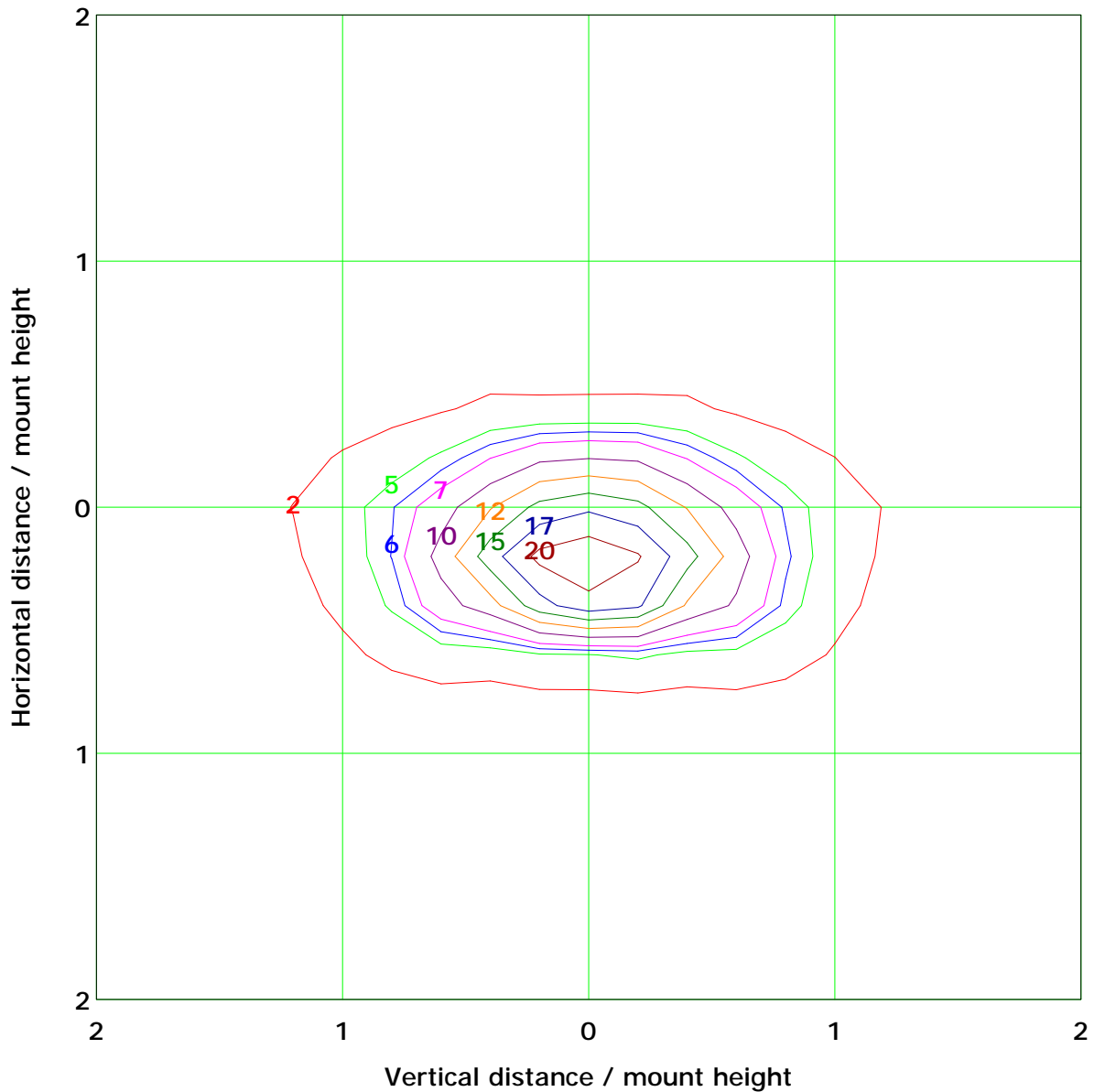
I<sub>max</sub> (100%): 716 cd

( 10%): 72 cd	( 20%): 143 cd
( 25%): 179 cd	( 30%): 215 cd
( 40%): 286 cd	( 50%): 358 cd
( 60%): 429 cd	( 70%): 501 cd
( 80%): 573 cd	( 90%): 644 cd

C Plane (°):0.0-360.0: 30.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 25°C  
Operator: leo

Gamma Plane (°):0.0-180.0: 1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## IsoLux Plot



Mounting Height: 5.0m Max Lux(100%): 25.0 lx

( 10%): 2.5 lx	( 20%): 5.0 lx
( 25%): 6.2 lx	( 30%): 7.5 lx
( 40%): 10.0 lx	( 50%): 12.5 lx
( 60%): 15.0 lx	( 70%): 17.5 lx
( 80%): 20.0 lx	( 90%): 22.5 lx

C Plane (°):0.0-360.0: 30.0

Test Lab: ACOLYTE

Test Type: TYPE C

Temperature: 25°C

Operator: leo

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 9.028 m

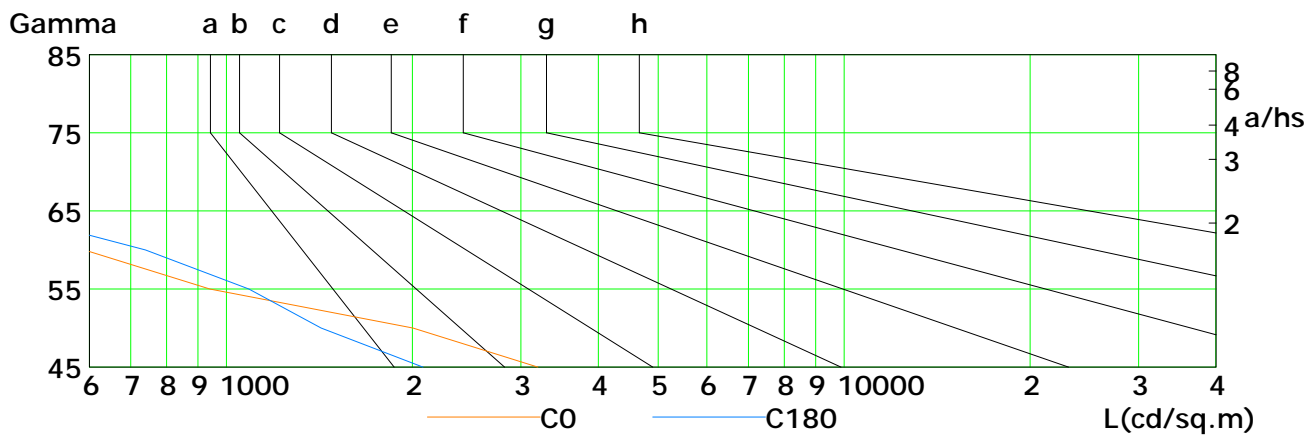
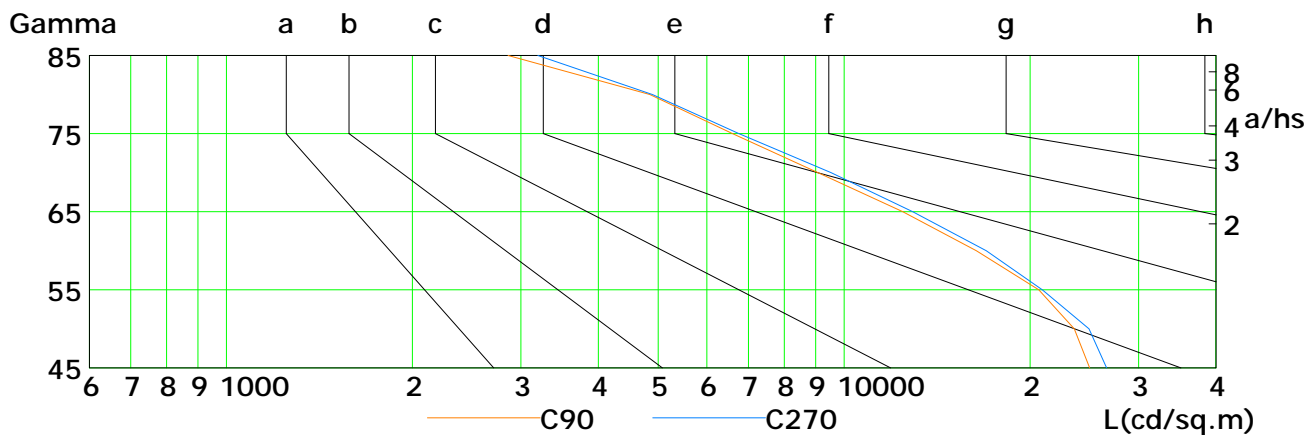
Humidity: 60%

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	3196	2005	941	588	353	231	173	235	373
C90	24971	23579	20660	16379	12446	9073	6594	4850	2857
C180	2081	1424	1087	740	427	296	173	222	378
C270	26627	24914	20928	16989	12921	9530	6758	4898	3194

C Plane (°):0.0-360.0: 30.0

Test Lab: ACOLYTE

Test Type: TYPE C

Temperature: 25°C

Operator: leo

Gamma Plane (°):0.0-180.0:1.0

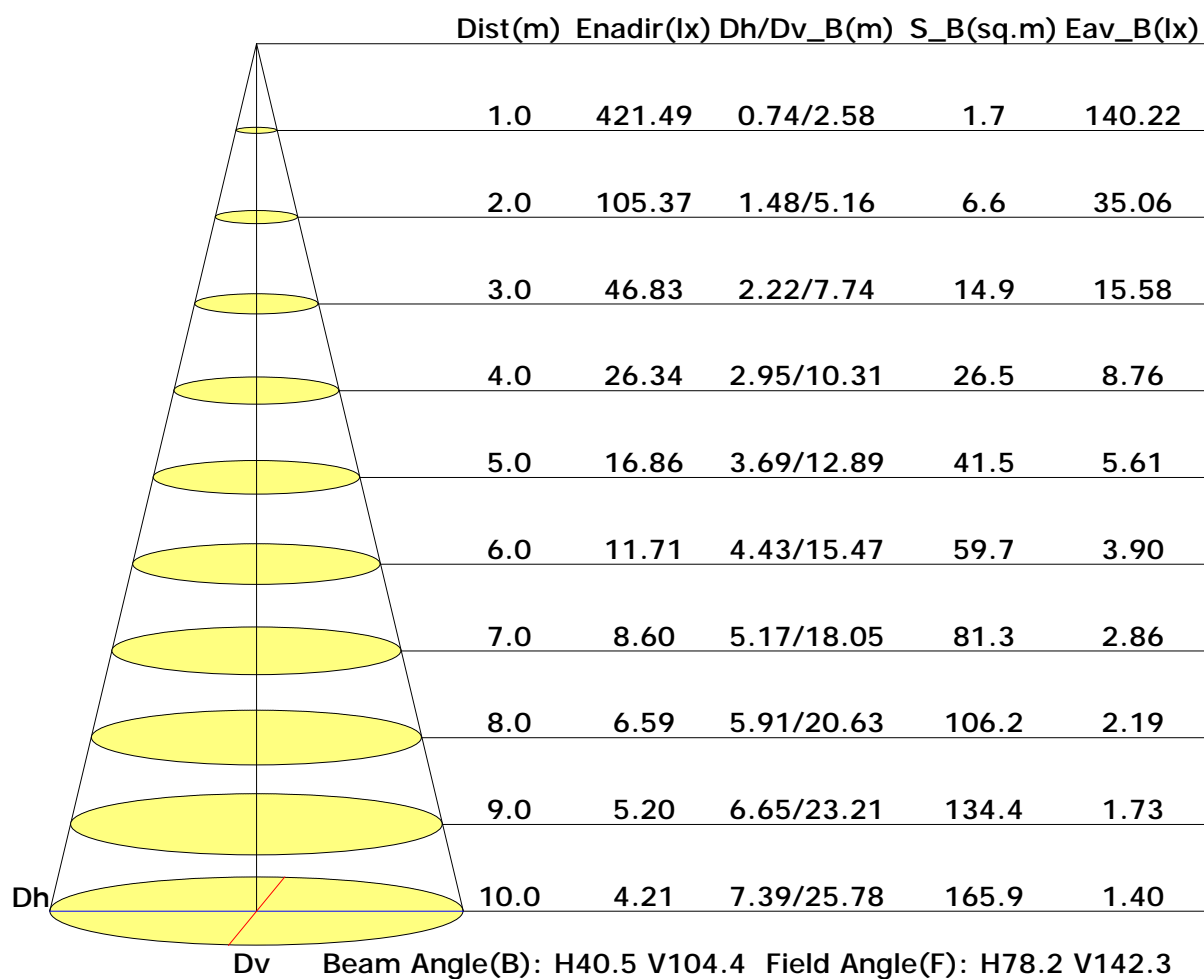
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

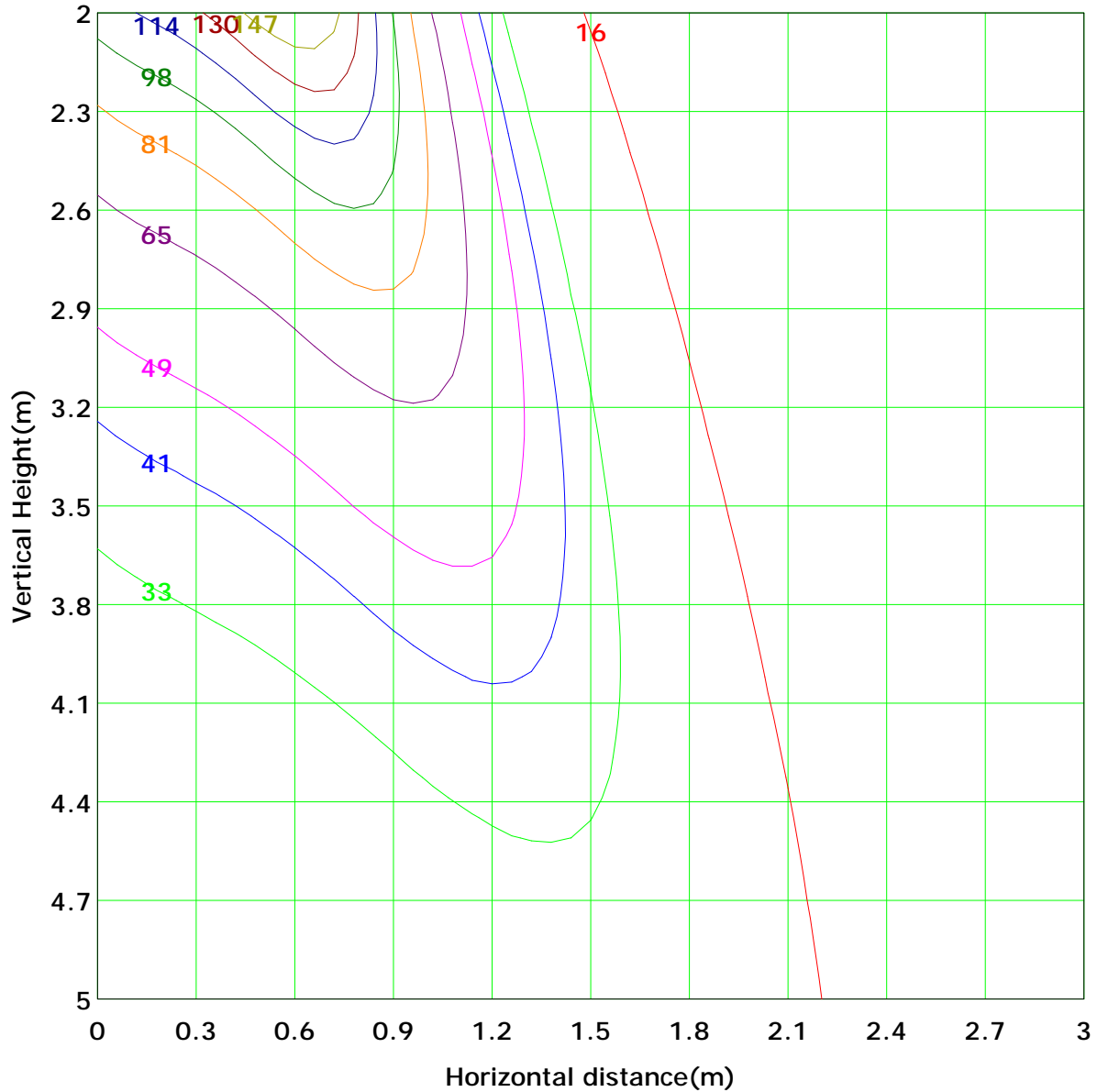
Inspector:

## Illuminance at a Distance





## Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 162.8 lx
( 10%): 16.3 lx	( 20%): 32.6 lx	
( 25%): 40.7 lx	( 30%): 48.9 lx	
( 40%): 65.1 lx	( 50%): 81.4 lx	
( 60%): 97.7 lx	( 70%): 114.0 lx	
( 80%): 130.3 lx	( 90%): 146.6 lx	

C Plane (°):0.0-360.0: 30.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 25°C  
Operator: leo

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:



## Area Flux Table

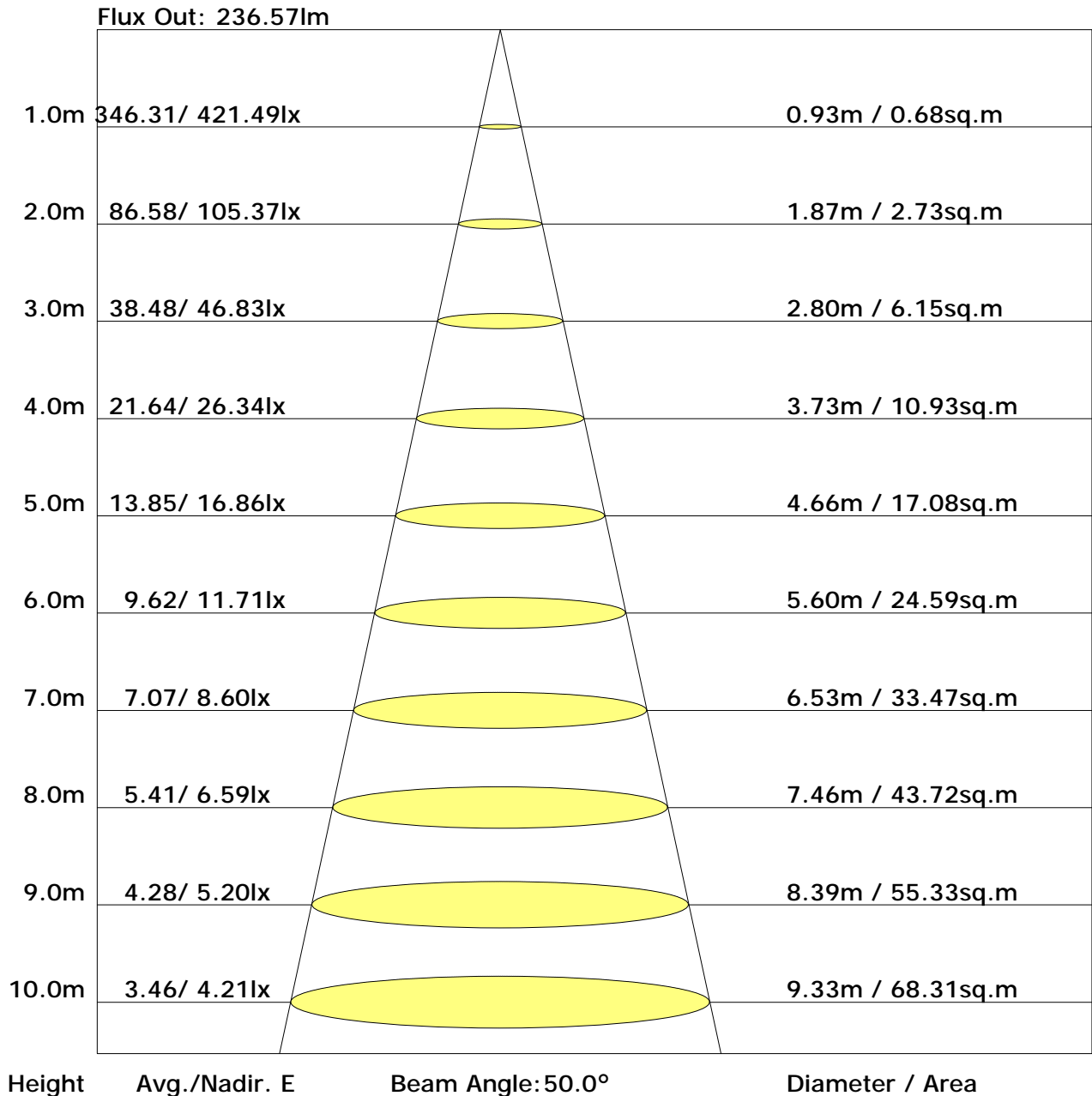
Unit: lm

Vertical plane		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)
Horizontal plane	-90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	-80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
	-70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
	-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0
	-50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.0
	-40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4	0.0
	-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.7	8.4
	-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.4	50.9
	-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.3	102.8
	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	140.3	137.0
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	154.5	151.1
	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.4	90.7
	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.4	25.0
	40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	0.2
	50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0
	60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
	70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
	80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Flux(T)	0.0	0.1	0.4	1.6	4.6	10.4	20.7	56.4	106.3	140.3	154.5	94.4	31.4	8.5	1.6	0.4	0.1	0.0	0.0	632	
	Flux(E)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		566

C Plane (°): 0.0-360.0: 30.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 25°C  
Operator: leo

Gamma Plane (°): 0.0-180.0: 1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## The Average Illuminance Effective Figure



## UGR Table

Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	6.0	7.3	6.4	7.6	8.0	22.7	23.9	23.0	24.3	24.6
3H	6.2	7.3	6.6	7.7	8.1	23.6	24.7	24.0	25.0	25.4
4H	6.2	7.2	6.6	7.6	8.0	23.8	24.8	24.2	25.2	25.6
6H	6.2	7.1	6.6	7.5	7.9	23.9	24.8	24.3	25.2	25.7
8H	6.2	7.1	6.6	7.5	7.9	23.9	24.8	24.3	25.2	25.6
12H	6.2	7.1	6.7	7.5	8.0	23.9	24.7	24.3	25.1	25.6
X=4H Y=2H	11.9	12.9	12.3	13.3	13.7	22.5	23.6	22.9	23.9	24.4
3H	11.8	12.7	12.3	13.1	13.5	23.5	24.4	23.9	24.8	25.2
4H	11.7	12.5	12.2	12.9	13.4	23.8	24.5	24.2	25.0	25.4
6H	11.7	12.3	12.2	12.8	13.3	23.9	24.5	24.4	25.0	25.5
8H	11.6	12.3	12.1	12.7	13.2	23.9	24.5	24.4	25.0	25.5
12H	11.6	12.2	12.1	12.7	13.2	23.9	24.4	24.4	24.9	25.4
X=8H Y=4H	12.9	13.5	13.4	14.0	14.5	23.6	24.2	24.1	24.7	25.2
6H	12.8	13.3	13.3	13.8	14.3	23.7	24.3	24.3	24.8	25.3
8H	12.8	13.2	13.3	13.7	14.3	23.8	24.2	24.3	24.7	25.3
12H	12.8	13.2	13.3	13.7	14.3	23.8	24.2	24.3	24.7	25.3
X=12H Y=4H	12.9	13.4	13.4	13.9	14.4	23.6	24.1	24.1	24.6	25.1
6H	12.8	13.3	13.4	13.7	14.3	23.7	24.1	24.2	24.6	25.2
8H	12.8	13.2	13.3	13.7	14.3	23.7	24.1	24.3	24.6	25.2

Calculate in accordance with CIE 190:2010

C Plane (°):0.0-360.0: 30.0  
 Test Lab: ACOLYTE  
 Test Type: TYPE C  
 Temperature: 25°C  
 Operator: leo

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 9.028 m  
 Humidity: 60%  
 Inspector:

## Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.00								
Room Reflectance			Room Index(RI)								
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.72	0.80	0.86	0.91	0.96	1.00	1.02	1.05	1.08
	0.30		0.65	0.75	0.81	0.85	0.92	0.96	0.99	1.03	1.05
	0.20		0.61	0.70	0.77	0.81	0.88	0.92	0.96	1.00	1.03
0.50	0.50	0.20	0.70	0.78	0.84	0.88	0.93	0.96	0.99	1.01	1.03
	0.30		0.65	0.73	0.79	0.84	0.89	0.93	0.96	0.99	1.01
	0.20		0.61	0.70	0.76	0.80	0.86	0.90	0.93	0.97	0.99
0.30	0.50	0.20	0.69	0.77	0.82	0.85	0.90	0.93	0.95	0.98	0.99
	0.30		0.64	0.72	0.78	0.82	0.87	0.90	0.93	0.96	0.98
	0.20		0.60	0.69	0.75	0.79	0.84	0.88	0.91	0.94	0.96
0.00	0.00	0.00	0.58	0.67	0.72	0.76	0.81	0.84	0.87	0.90	0.91
Rating: 6W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											

## Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 1.00								
Room Reflectance			Room Index(RI)								
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.77	0.62	0.52	0.45	0.35	0.29	0.24	0.19	0.15
	0.30		0.64	0.53	0.45	0.39	0.32	0.26	0.23	0.18	0.14
	0.20		0.55	0.46	0.40	0.35	0.29	0.24	0.21	0.17	0.14
0.50	0.50	0.20	0.74	0.59	0.49	0.42	0.33	0.31	0.23	0.17	0.14
	0.30		0.62	0.51	0.43	0.38	0.30	0.25	0.21	0.16	0.13
	0.20		0.54	0.45	0.39	0.34	0.28	0.23	0.20	0.16	0.13
0.30	0.50	0.20	0.71	0.56	0.46	0.40	0.31	0.25	0.21	0.16	0.13
	0.30		0.60	0.49	0.42	0.36	0.28	0.24	0.20	0.16	0.13
	0.20		0.53	0.44	0.38	0.33	0.26	0.22	0.19	0.15	0.12
0.00	0.00	0.00	0.41	0.33	0.27	0.23	0.18	0.15	0.13	0.10	0.08
<p>Rating: 6W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											

## Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.00									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.12	0.13	0.15	0.16	0.18	0.18	0.20	0.21	
	0.20		0.07	0.08	0.10	0.11	0.13	0.15	0.16	0.18	0.19	
0.50	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.06	0.08	0.10	0.11	0.13	0.15	0.16	0.17	0.18	
0.30	0.50	0.20	0.15	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.20	
	0.30		0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.06	0.08	0.10	0.11	0.13	0.14	0.15	0.17	0.18	
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Rating:6W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

Report No.: 01

Test Time: 2016/10/17 11:49

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: ABC upside with Driver 180mA with Lens C 14454\_FLORENCE-1R-O

Luminaire Description: ABC upside with Driver 180mA with Lens C 14454\_FLORENCE-1R-O

Luminous Length (mm): 304

Luminous Width (mm): 50

Luminous Height (mm): 2

Voltage: 219.7 V

Current: 0.031 A

Power: 6.00 W

Power Factor: 0.871

## Photometric Results

CIE Class: Direct

Measurement Flux: 619.8 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H34.8

Vertical Diffuse Angle(50%): V86.1

Luminaire Efficacy Rating (LER): 103

Max. Intensity: 637.61 cd

Total Rated Lamp Lumens: 619.8 lm

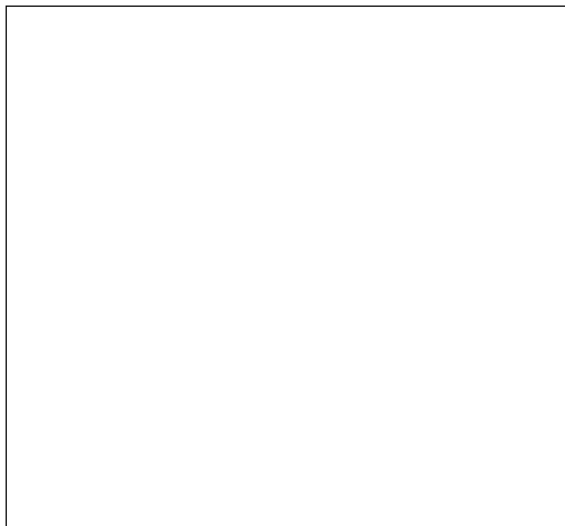
Efficiency: 100%

Upward Ratio: 1%

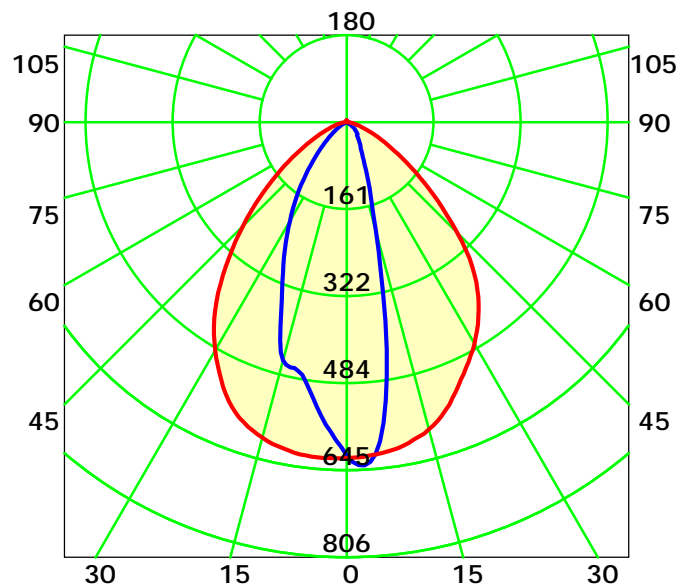
Central Intensity: 618.07 cd

Pos of Max. Intensity: H30 V3

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 60.5° Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Test Lab: ACOLYTE

Test Type: TYPE C

Temperature: 25°C

Operator: leo

Gamma Plane (°):0.0-180.0: 1.0

Test Device: GPM-1800B

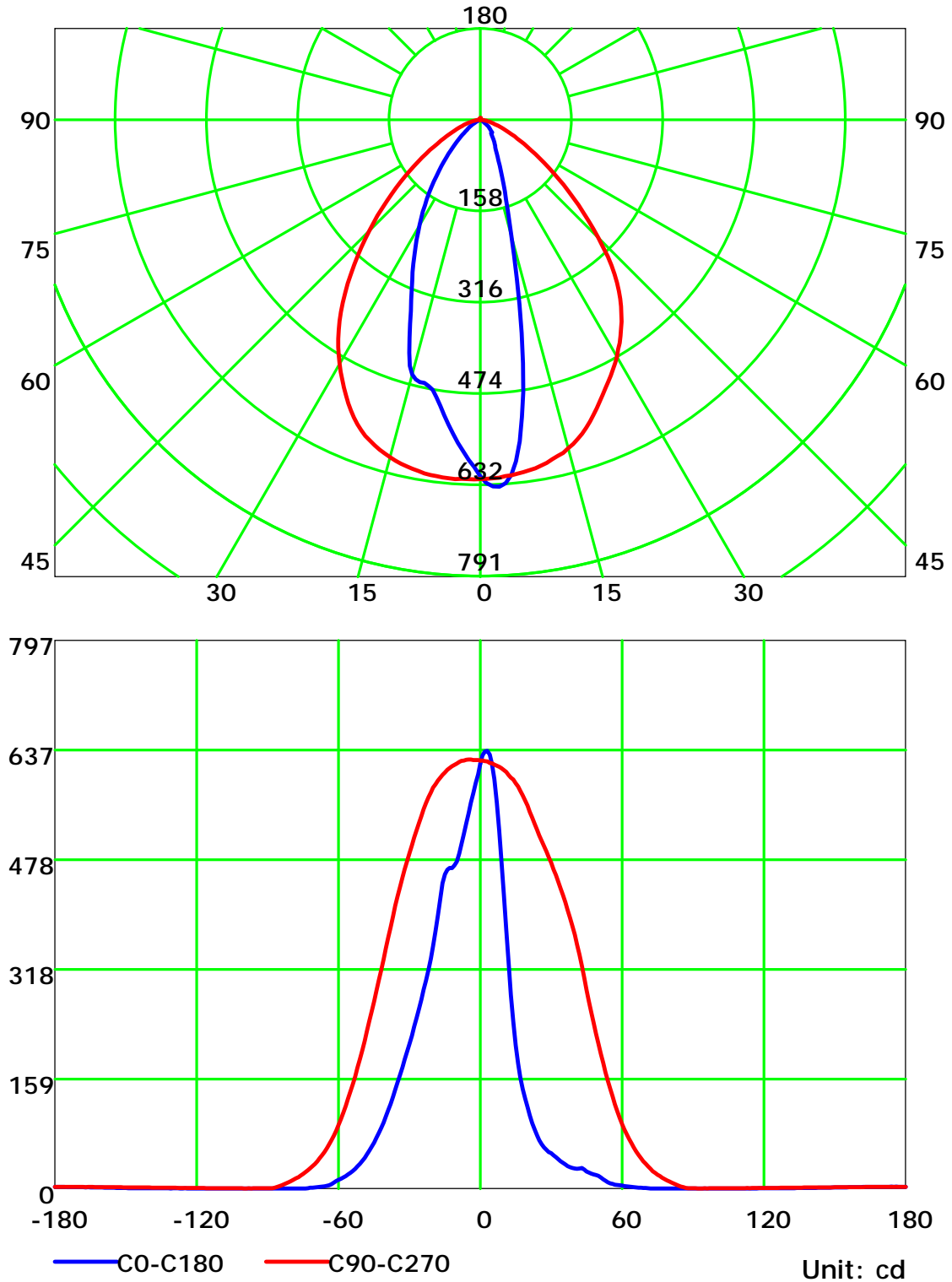
Distance: 9.028 m

Humidity: 60%

Inspector:



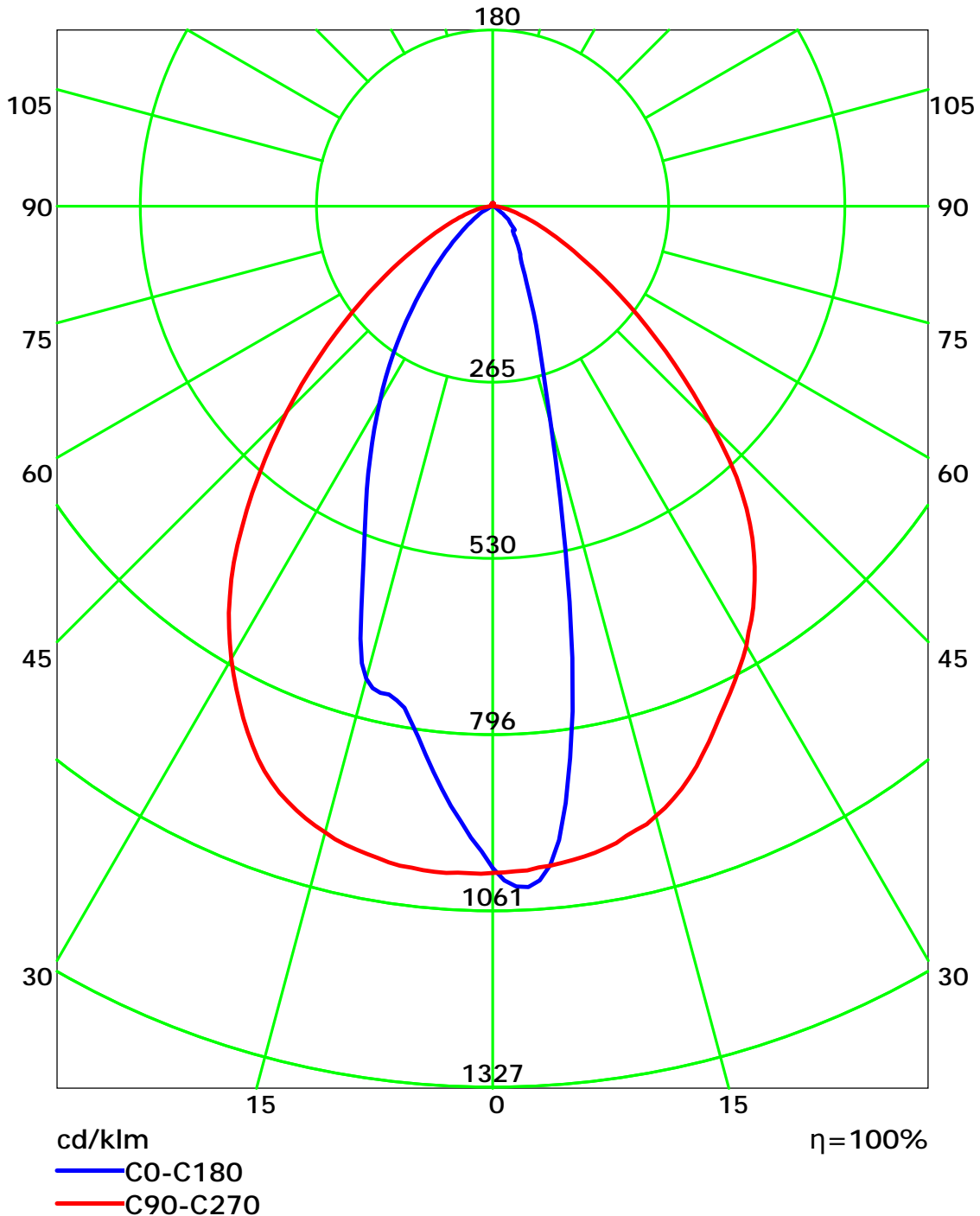
## Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 30.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 25°C  
Operator: leo

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 30.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 25°C  
Operator: leo

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

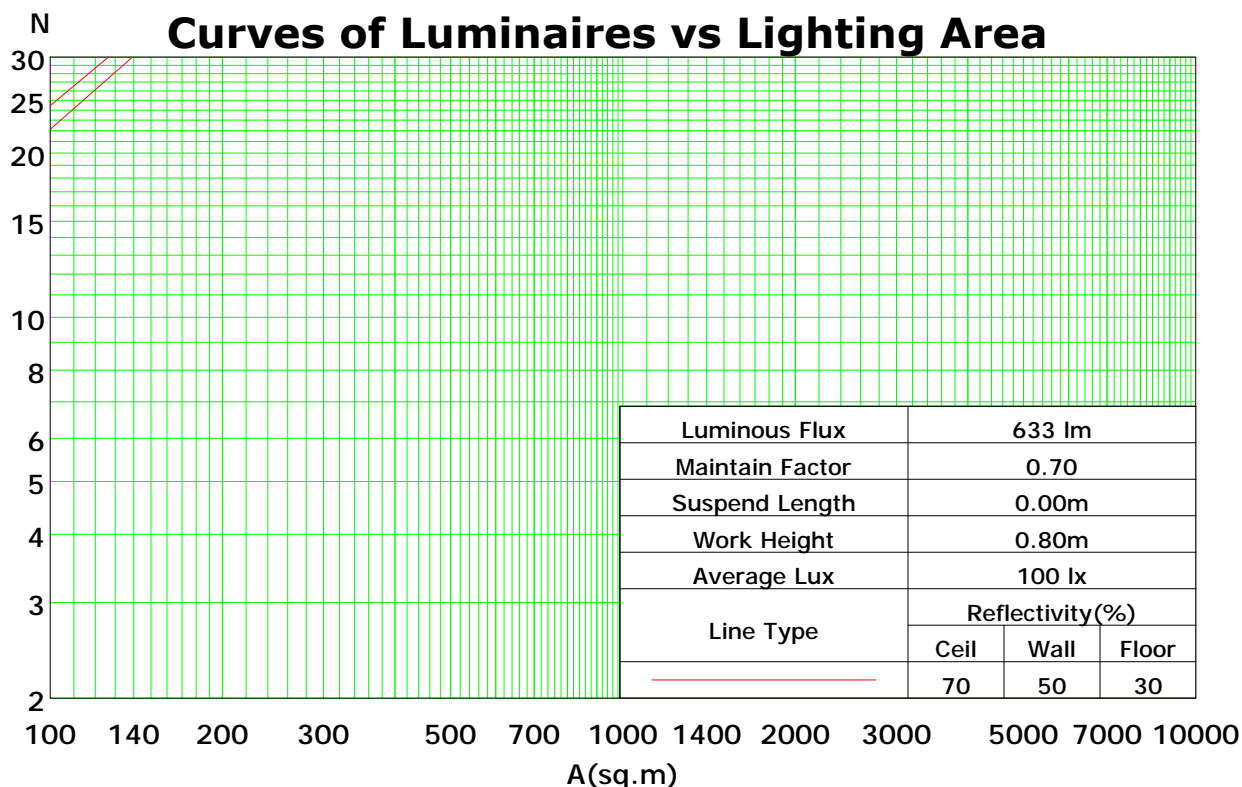
## Coefficients Of Utilization - Zonal Cavity Method

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	112	108	105	102	109	106	103	101	102	99	97	98	96	94	94	93	91	89
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	84	82	80
3	98	90	84	79	95	88	82	78	85	80	76	82	78	75	80	77	74	72
4	91	82	75	70	89	81	75	70	78	73	69	76	71	68	74	70	67	65
5	86	76	68	63	84	74	68	63	72	67	62	70	65	61	69	64	61	59
6	80	70	63	57	79	69	62	57	67	61	57	65	60	56	64	59	56	54
7	76	65	58	53	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	68	56	50	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43
10	64	53	46	42	63	52	46	42	51	46	42	51	45	41	50	45	41	40

Spacing Criteria (0-180): 0.52

Spacing Criteria (90-270): 1.16

Spacing Criteria (Diagonal): 0.75



C Plane (°):0.0-360.0: 30.0

Test Lab: ACOLYTE

Test Type: TYPE C

Temperature: 25°C

Operator: leo

Gamma Plane (°):0.0-180.0:1.0

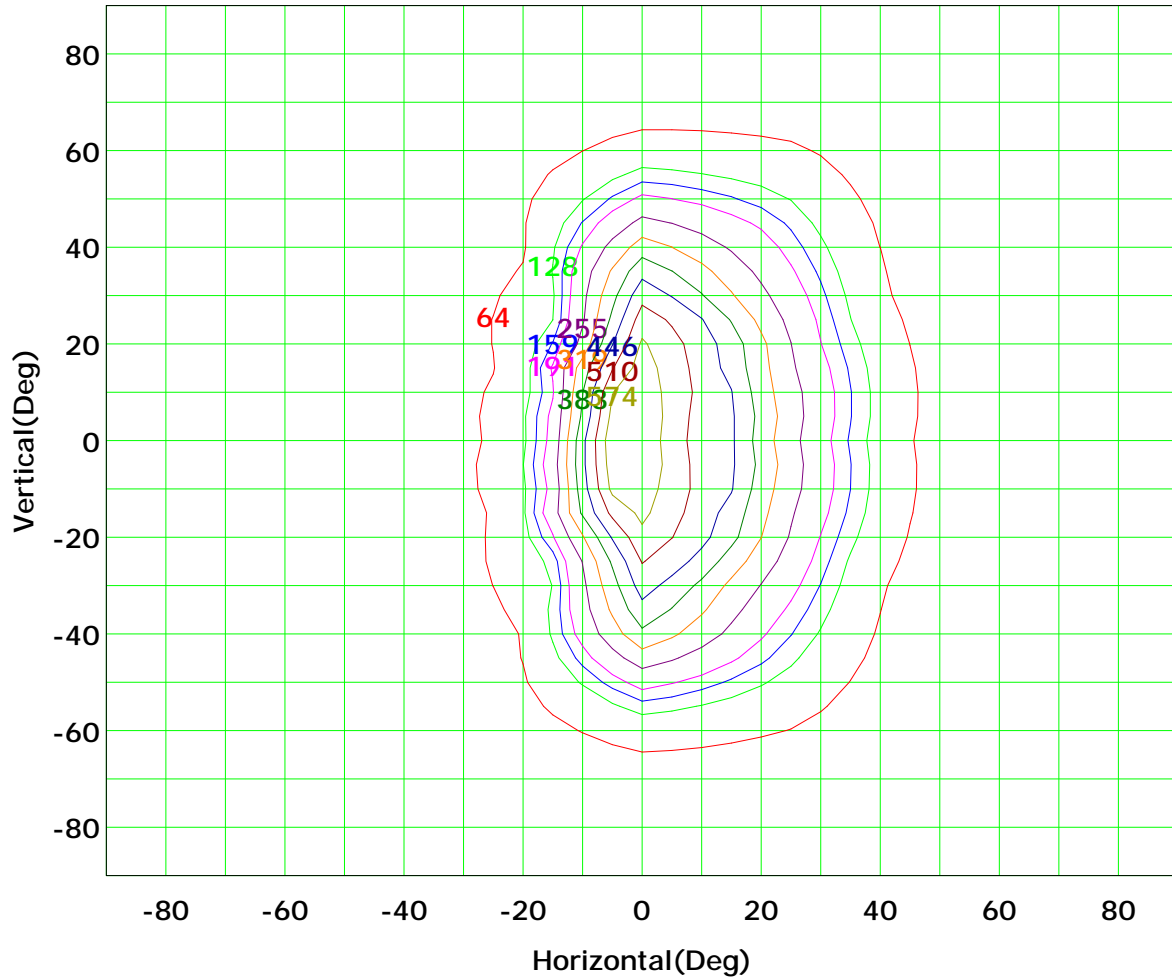
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Isocandela (rectangle)



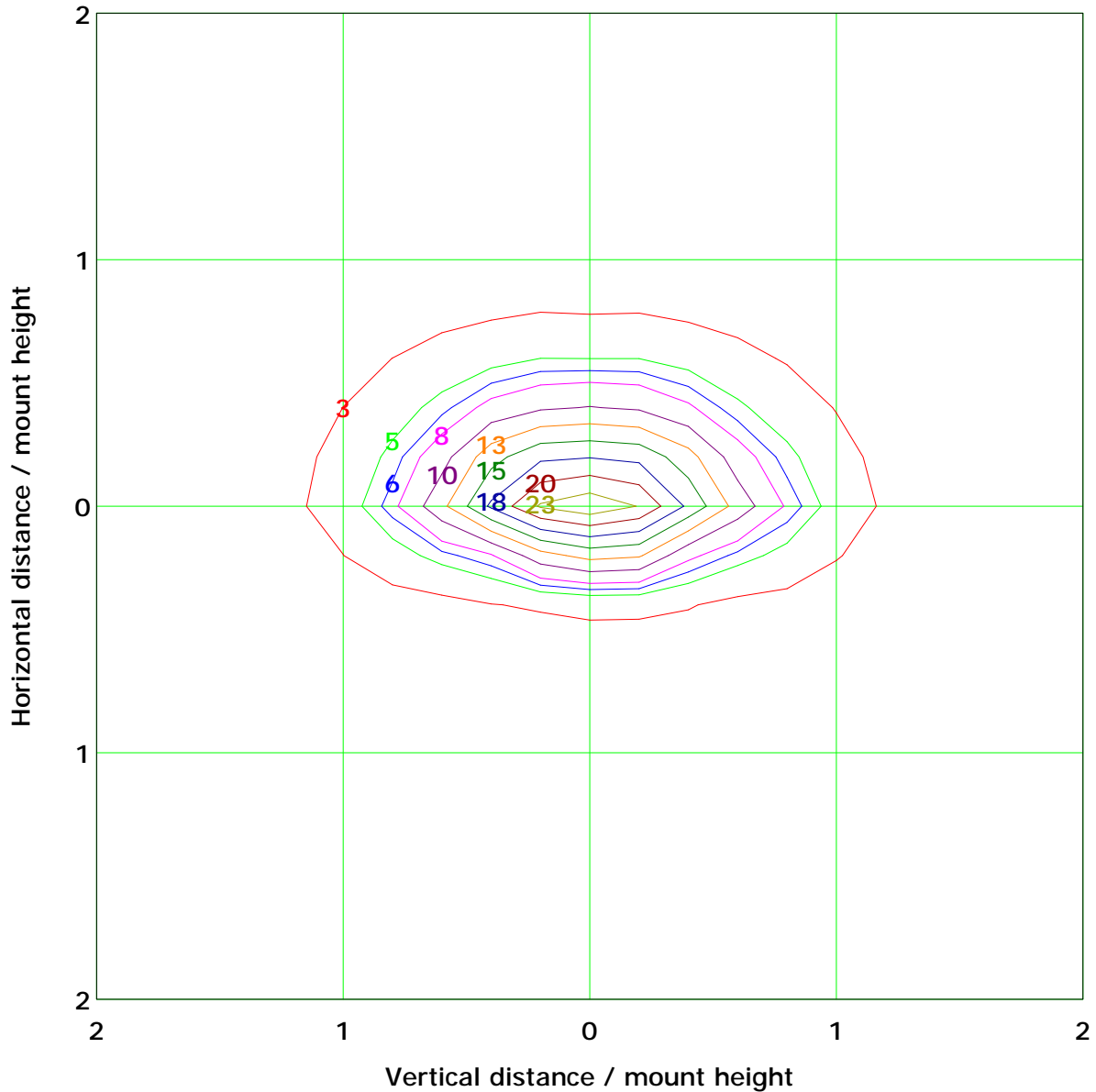
I<sub>max</sub> (100%): 638 cd

( 10%): 64 cd	( 20%): 128 cd
( 25%): 159 cd	( 30%): 191 cd
( 40%): 255 cd	( 50%): 319 cd
( 60%): 383 cd	( 70%): 446 cd
( 80%): 510 cd	( 90%): 574 cd

C Plane (°):0.0-360.0: 30.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 25°C  
Operator: leo

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## IsoLux Plot



Mounting Height: 5.0m    Max Lux(100%): 25.5 lx	
( 10%): 2.5 lx	( 20%): 5.1 lx
( 25%): 6.4 lx	( 30%): 7.6 lx
( 40%): 10.2 lx	( 50%): 12.7 lx
( 60%): 15.3 lx	( 70%): 17.8 lx
( 80%): 20.4 lx	( 90%): 22.9 lx

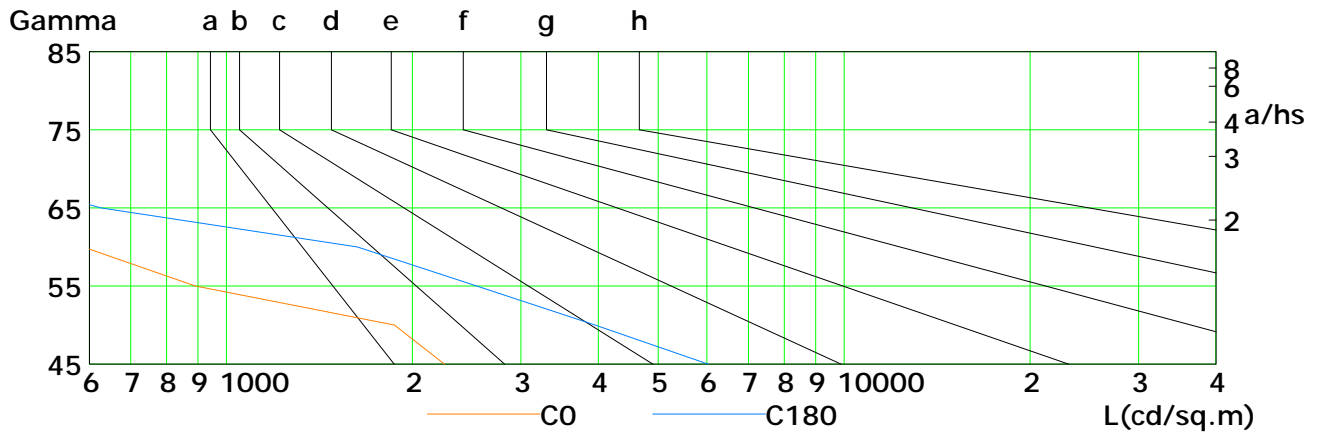
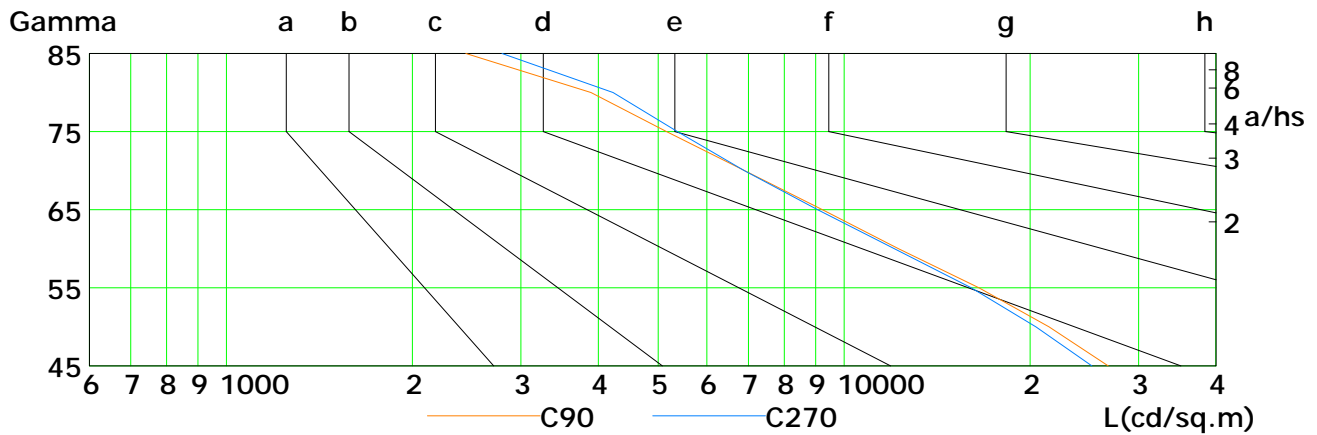
C Plane (°):0.0-360.0: 30.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 25°C  
Operator: leo

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
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	2254	1872	891	587	376	224	153	232	363
C90	26765	21461	16537	12255	9223	6904	5158	3893	2443
C180	6029	3953	2542	1630	627	374	168	213	295
C270	25194	20447	16068	12073	9063	6896	5371	4226	2794

C Plane (°):0.0-360.0: 30.0

Test Lab: ACOLYTE

Test Type: TYPE C

Temperature: 25°C

Operator: leo

Gamma Plane (°):0.0-180.0:1.0

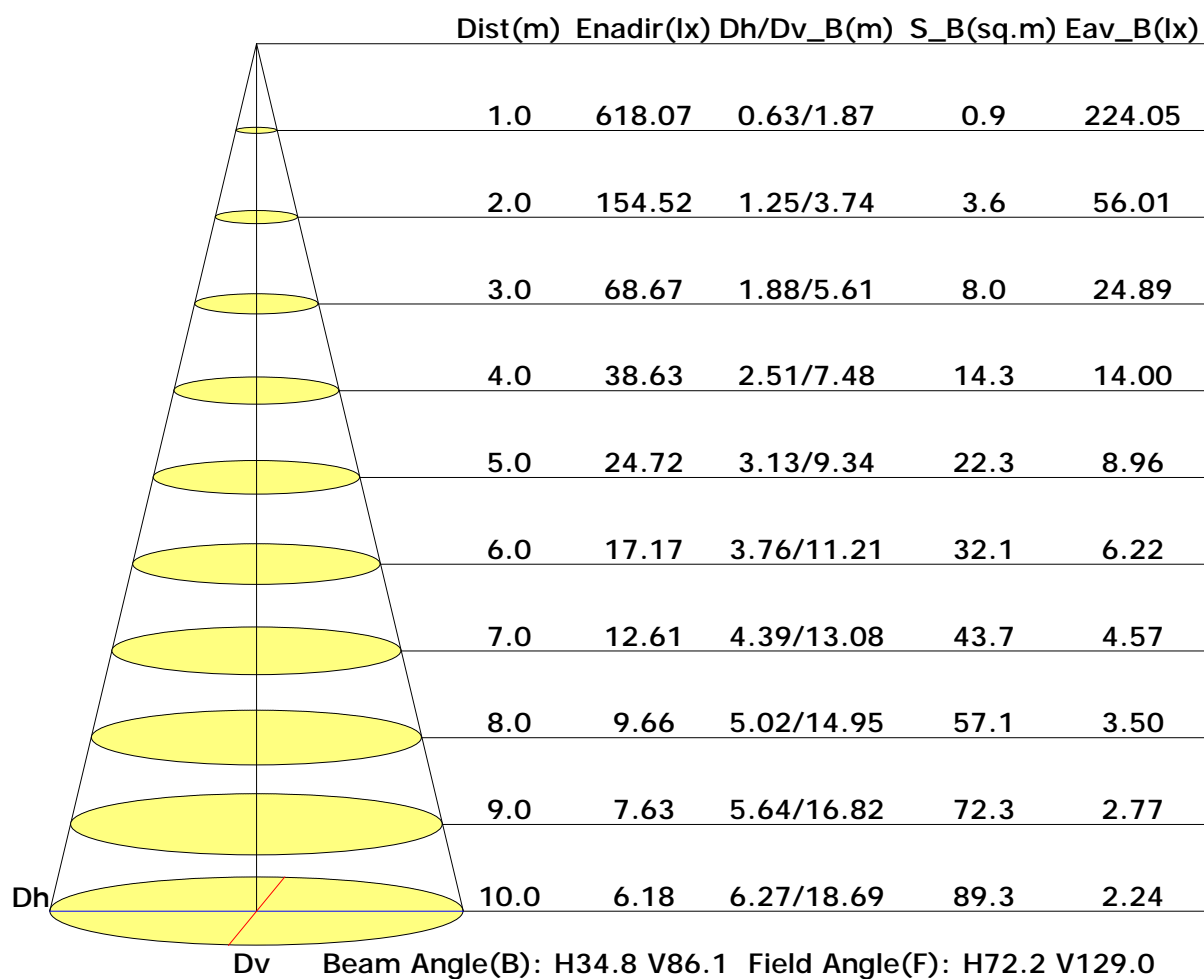
Test Device: GPM-1800B

Distance: 9.028 m

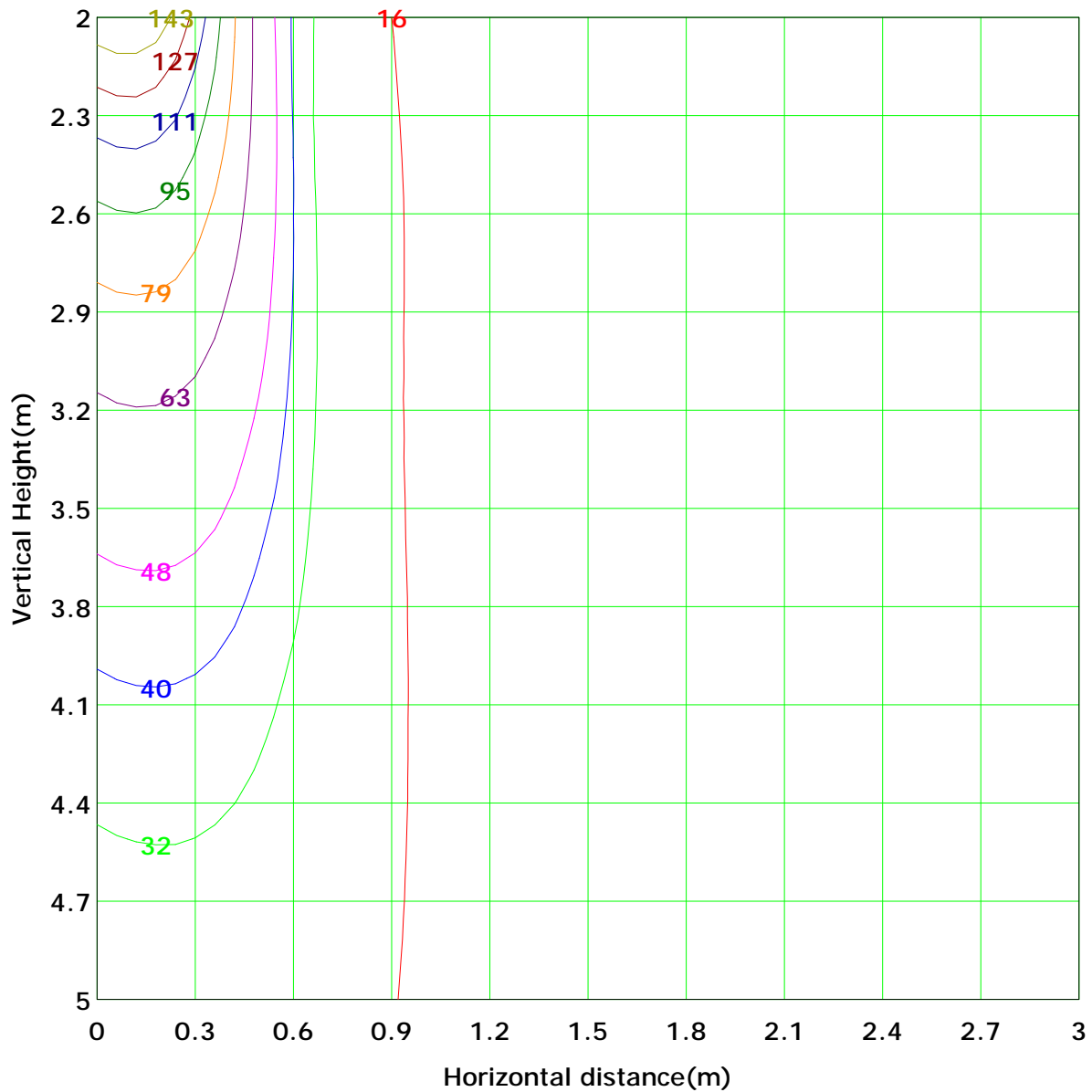
Humidity: 60%

Inspector:

## Illuminance at a Distance



## Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 158.4 lx
( 10%): 15.8 lx	( 20%): 31.7 lx	
( 25%): 39.6 lx	( 30%): 47.5 lx	
( 40%): 63.3 lx	( 50%): 79.2 lx	
( 60%): 95.0 lx	( 70%): 110.9 lx	
( 80%): 126.7 lx	( 90%): 142.5 lx	

C Plane (°):0.0-360.0: 30.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 25°C  
Operator: leo

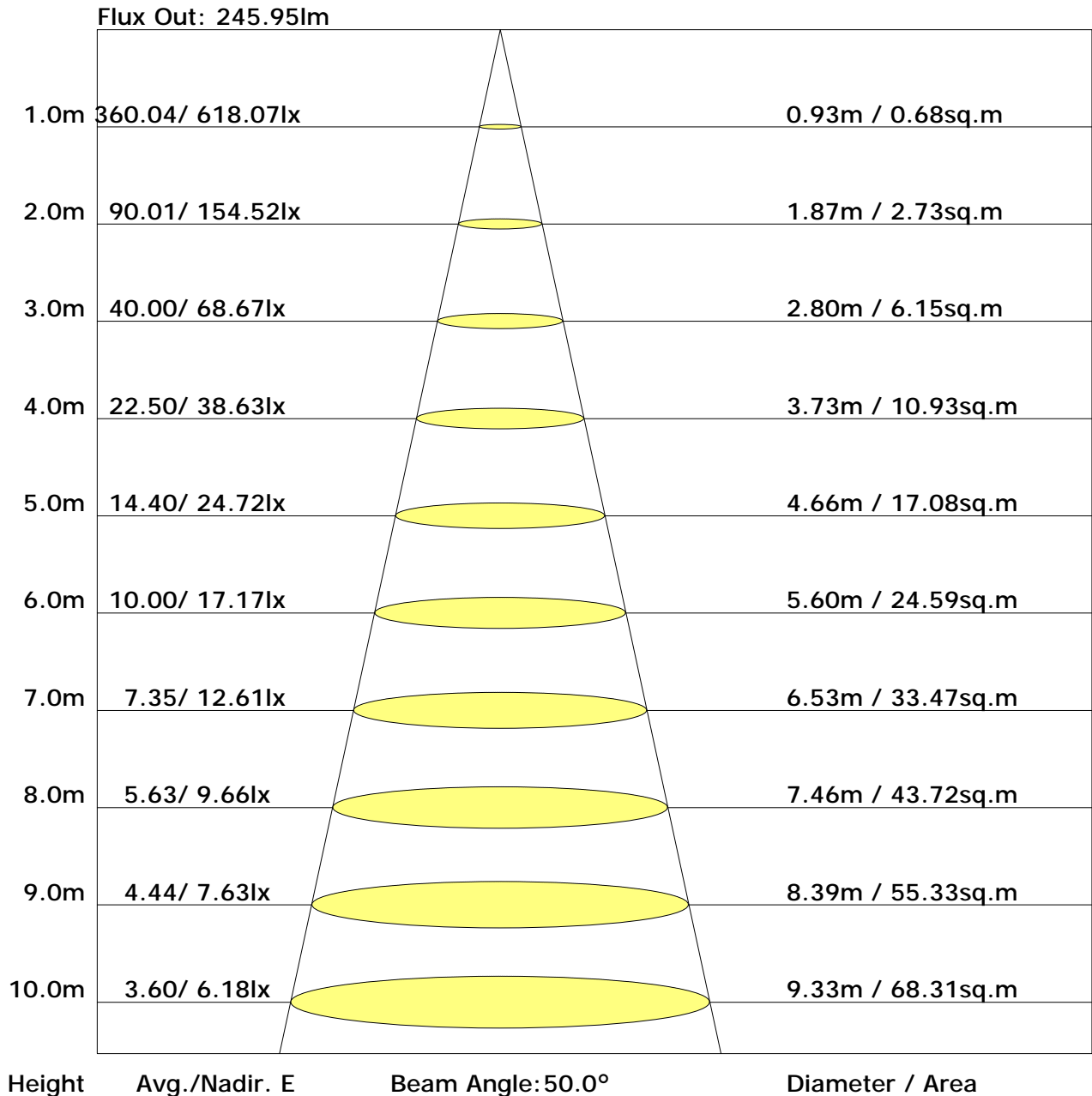
Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:



## Unit: 1m

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## The Average Illuminance Effective Figure



## UGR Table

Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	5.3	6.6	5.7	6.9	7.3	21.5	22.8	21.9	23.1	23.5
3H	5.5	6.6	5.9	7.0	7.4	22.4	23.5	22.8	23.8	24.2
4H	5.5	6.5	5.9	6.9	7.3	22.6	23.6	23.0	24.0	24.4
6H	5.5	6.5	5.9	6.9	7.3	22.7	23.6	23.1	24.0	24.4
8H	5.5	6.4	6.0	6.9	7.3	22.7	23.6	23.1	24.0	24.4
12H	5.6	6.5	6.1	6.9	7.4	22.6	23.5	23.1	23.9	24.4
X=4H Y=2H	7.2	8.2	7.6	8.6	9.0	21.4	22.4	21.8	22.8	23.2
3H	7.4	8.2	7.8	8.6	9.1	22.4	23.2	22.8	23.7	24.1
4H	7.3	8.1	7.8	8.5	9.0	22.7	23.4	23.1	23.9	24.3
6H	7.3	8.0	7.8	8.5	9.0	22.8	23.4	23.3	23.9	24.4
8H	7.4	8.0	7.9	8.4	8.9	22.8	23.4	23.3	23.9	24.4
12H	7.5	8.0	8.0	8.5	9.0	22.8	23.3	23.3	23.8	24.3
X=8H Y=4H	8.1	8.7	8.6	9.1	9.6	22.5	23.1	23.0	23.6	24.1
6H	8.1	8.6	8.6	9.1	9.6	22.6	23.1	23.2	23.7	24.2
8H	8.1	8.6	8.7	9.1	9.6	22.6	23.1	23.2	23.6	24.1
12H	8.3	8.7	8.8	9.2	9.8	22.6	23.0	23.2	23.6	24.2
X=12H Y=4H	8.1	8.7	8.7	9.2	9.7	22.5	23.0	23.0	23.5	24.0
6H	8.2	8.6	8.7	9.1	9.7	22.6	23.0	23.1	23.5	24.1
8H	8.3	8.6	8.8	9.2	9.8	22.6	23.0	23.1	23.5	24.1

Calculate in accordance with CIE 190:2010

C Plane (°):0.0-360.0: 30.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 25°C  
Operator: leo

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 0.75								
Room Reflectance			Room Index(RI)								
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.70	0.79	0.86	0.90	0.96	1.00	1.02	1.06	1.08
	0.30		0.64	0.73	0.80	0.85	0.91	0.95	0.98	1.03	1.05
	0.20		0.60	0.69	0.75	0.80	0.87	0.92	0.95	1.00	1.03
0.50	0.50	0.20	0.69	0.77	0.83	0.87	0.93	0.96	0.98	1.01	1.03
	0.30		0.63	0.72	0.78	0.83	0.89	0.93	0.95	0.99	1.01
	0.20		0.59	0.68	0.74	0.79	0.85	0.90	0.93	0.97	0.99
0.30	0.50	0.20	0.67	0.75	0.81	0.85	0.90	0.93	0.95	0.98	0.99
	0.30		0.62	0.71	0.77	0.81	0.86	0.90	0.92	0.96	0.98
	0.20		0.59	0.67	0.73	0.78	0.84	0.88	0.90	0.94	0.96
0.00	0.00	0.00	0.57	0.65	0.71	0.75	0.80	0.84	0.86	0.89	0.91
Rating: 6W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											

## Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 0.75								
Room Reflectance			Room Index(RI)								
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.79	0.64	0.54	0.46	0.36	0.30	0.25	0.19	0.16
	0.30		0.66	0.55	0.47	0.41	0.33	0.27	0.23	0.18	0.15
	0.20		0.57	0.48	0.42	0.37	0.30	0.25	0.22	0.17	0.14
0.50	0.50	0.20	0.76	0.61	0.51	0.44	0.34	0.32	0.24	0.18	0.15
	0.30		0.64	0.53	0.45	0.39	0.31	0.26	0.22	0.17	0.14
	0.20		0.56	0.47	0.40	0.35	0.29	0.24	0.21	0.16	0.13
0.30	0.50	0.20	0.73	0.58	0.48	0.41	0.32	0.26	0.22	0.17	0.14
	0.30		0.62	0.51	0.43	0.37	0.30	0.24	0.21	0.16	0.13
	0.20		0.55	0.46	0.39	0.34	0.28	0.23	0.20	0.15	0.13
0.00	0.00	0.00	0.43	0.34	0.29	0.25	0.19	0.16	0.13	0.10	0.08
<p>Rating: 6W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											

## Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 0.75								
Room Reflectance			Room Index(RI)								
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22
	0.30		0.10	0.12	0.14	0.15	0.16	0.18	0.19	0.20	0.21
	0.20		0.07	0.08	0.10	0.11	0.13	0.15	0.16	0.18	0.19
0.50	0.50	0.20	0.15	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20
	0.20		0.06	0.08	0.10	0.11	0.13	0.15	0.16	0.17	0.18
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.21
	0.30		0.10	0.12	0.13	0.14	0.15	0.17	0.17	0.18	0.19
	0.20		0.06	0.08	0.10	0.11	0.13	0.14	0.15	0.17	0.18
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Rating: 6W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											