ACOLYTE
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Email: sales-us@genledbrands.com

Report No.: 01 **Test Time: 2016/10/17 14:50**

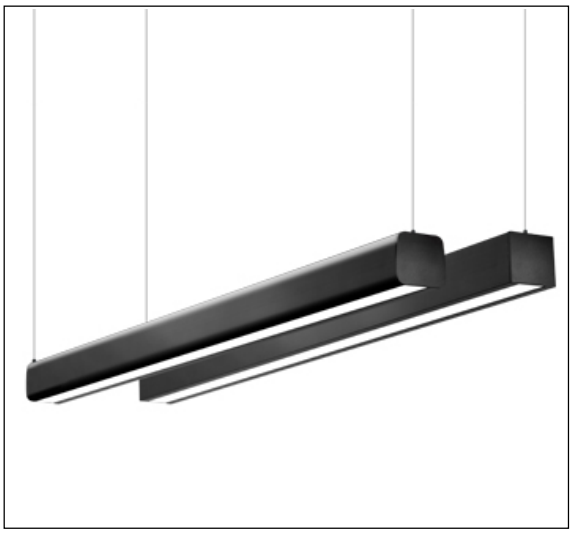
Luminaire Property

Luminaire Manufacturer:
Luminaire Category: Synthesis LED Linear
Luminaire Description: Synthesis Indirect LO 28CM 135 mA 3500K Narrow
Luminous Length (mm): 304 **Luminous Width (mm): 50**
Luminous Height (mm): 2 **Voltage: 219.8 V**
Current: 0.024 A **Power: 4.52 W**
Power Factor: 0.844

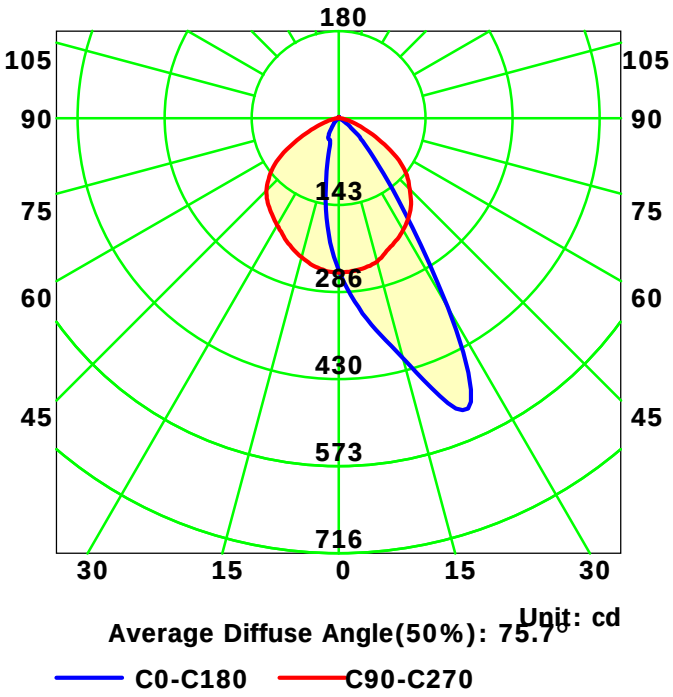
Photometric Results

CIE Class: Direct **Total Rated Lamp Lumens: 478.2 lm**
Measurement Flux: 478.2 lm **Efficiency: 100%**
Downward Ratio: 99% **Upward Ratio: 1%**
Horizontal Diffuse Angle(50%): H42.7
Vertical Diffuse Angle(50%): V108.7
Luminaire Efficacy Rating (LER): 106 **Central Intensity: 250.68 cd**
Max. Intensity: 523.83 cd **Pos of Max. Intensity: H0 V24**

Picture Of Luminaire



Luminous Intensity Distribution Curve



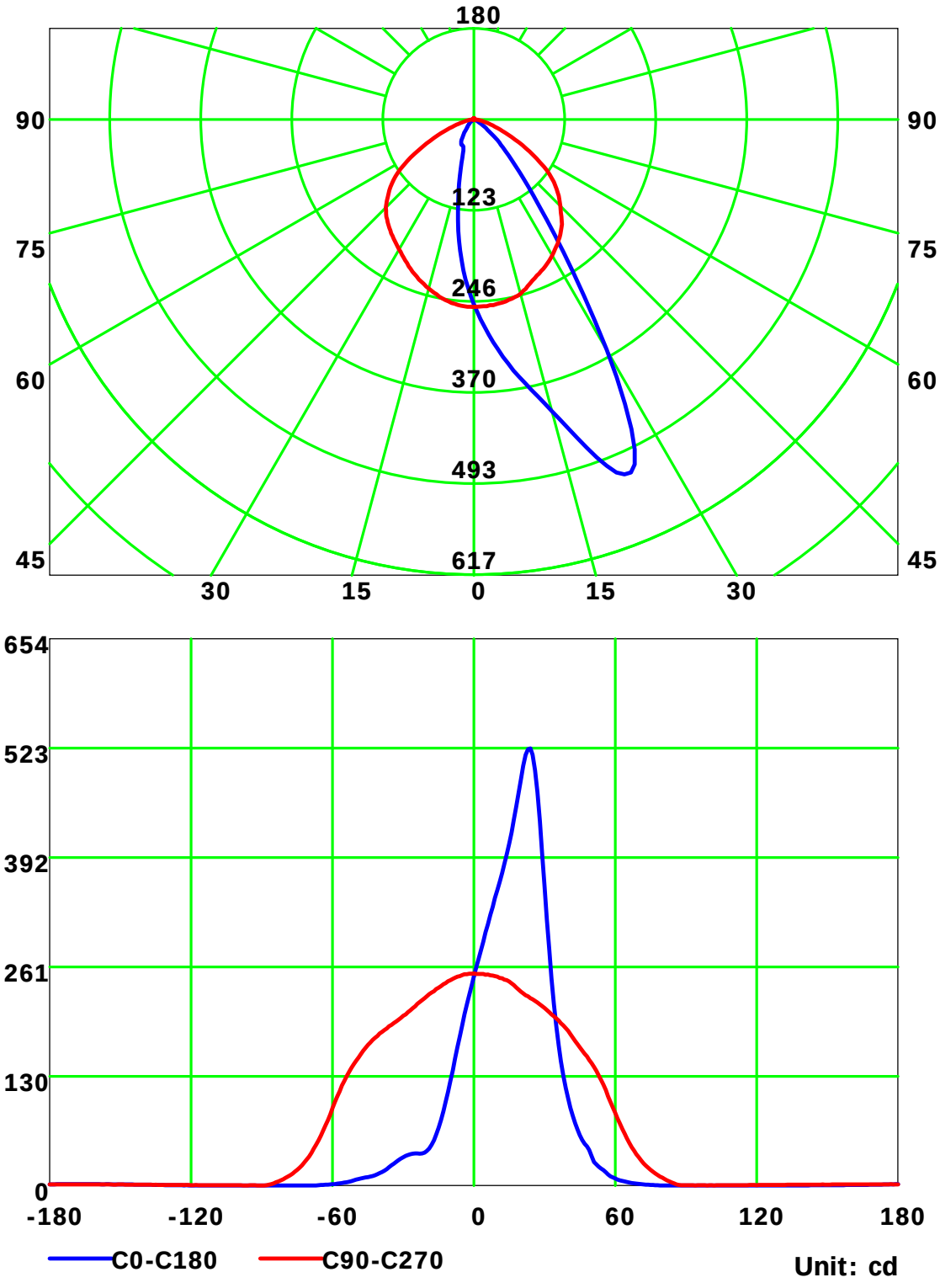
Unit: cd

Average Diffuse Angle(50%): 75.7°

C0-C180 **C90-C270**

C Plane (°):0.0-360.0: 30.0 **Gamma Plane (°):0.0-180.0:1.0**
Test Lab: ACOLYTE **Test Device: GPM-1800B**
Test Type: TYPE C **Distance: 9.028 m**
Temperature: 25℃ **Humidity: 60%**
Operator: leo **Inspector:**

Luminous Intensity Distribution Curve



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Gamma Plane (°):0.0-180.0:1.0
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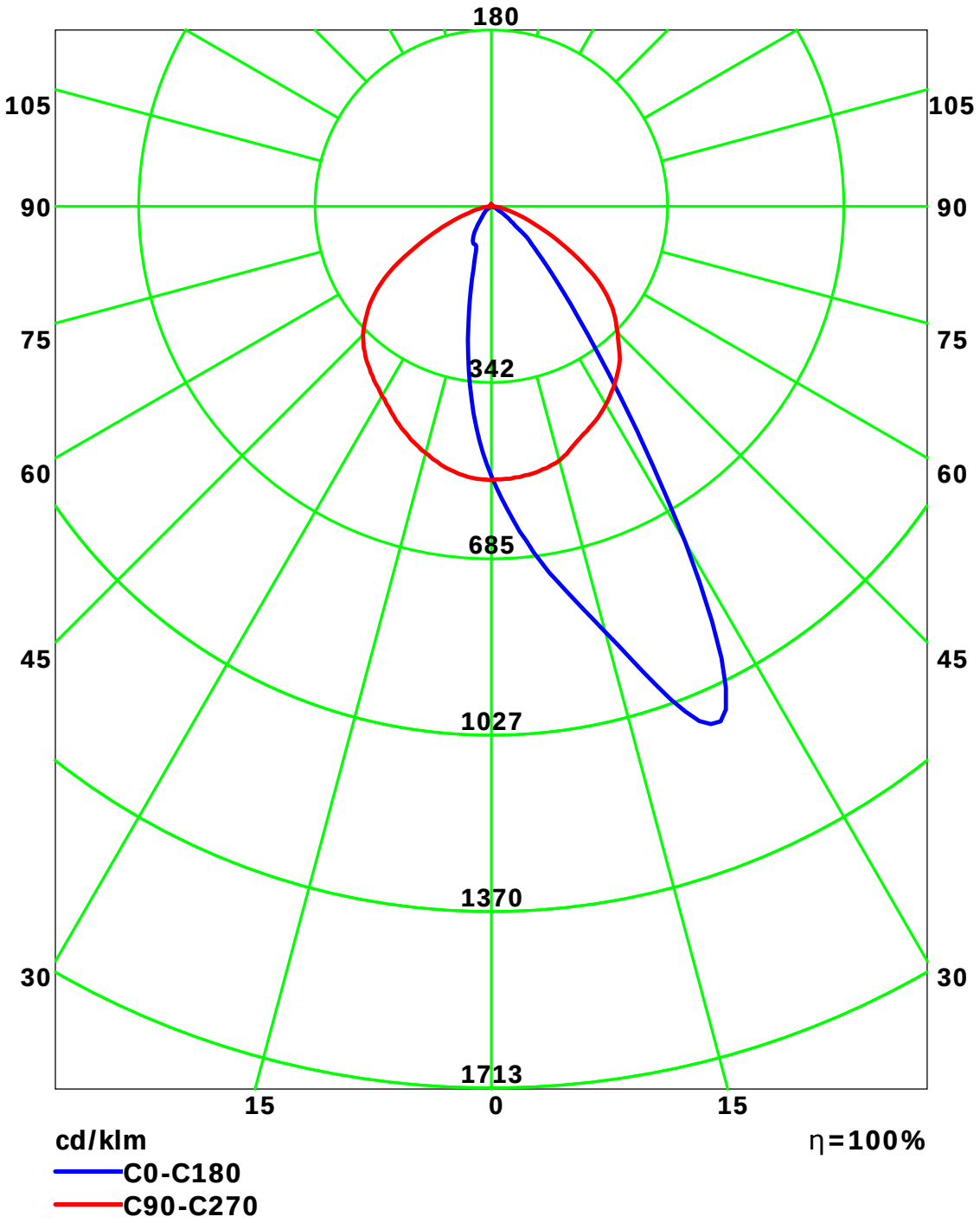
Distance: 9.028 m
Humidity: 60%
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 30.0
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Operator: leo

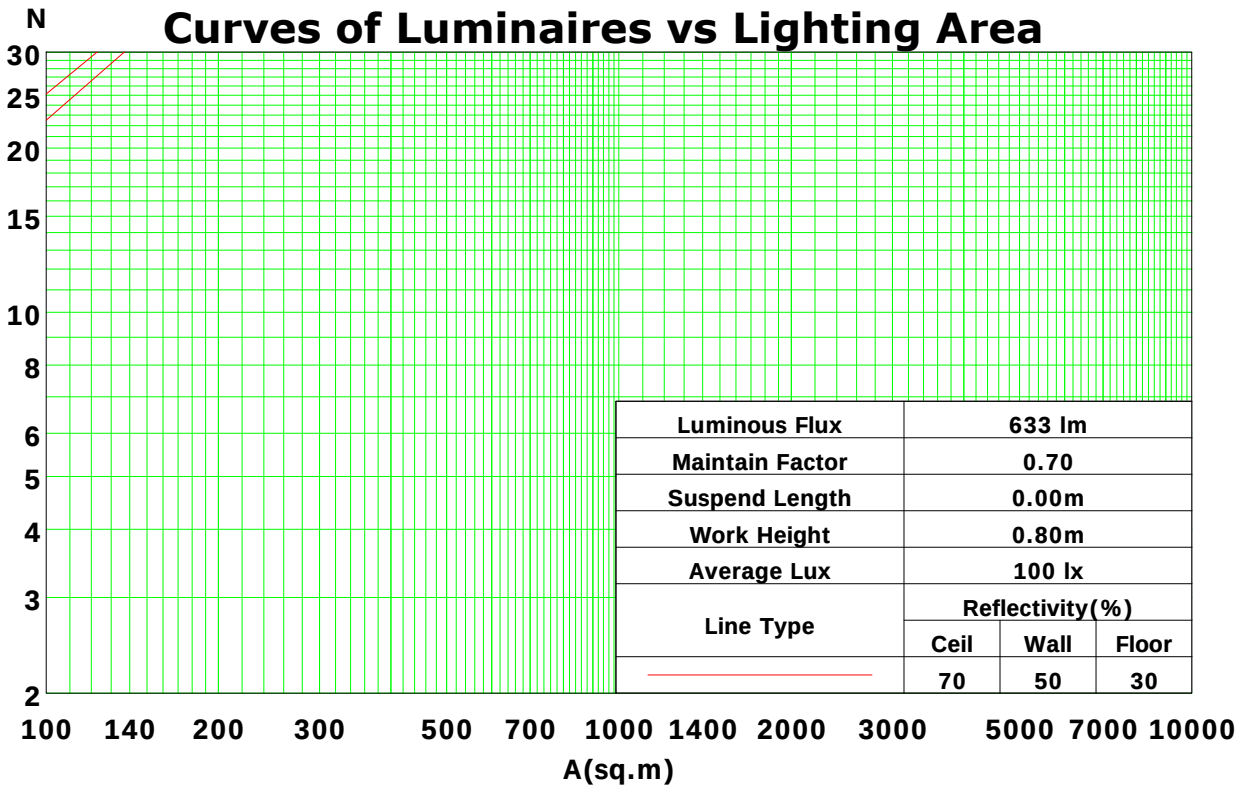
Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 9.028 m
Humidity: 60%
Inspector:

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	91	90	88
2	103	97	91	87	101	95	90	86	91	87	84	88	84	82	85	82	80	78
3	96	87	81	75	93	86	80	75	83	77	73	80	75	72	77	74	71	69
4	89	79	72	66	87	78	71	66	75	69	65	73	68	64	71	66	63	61
5	83	72	64	59	81	71	64	58	69	62	58	67	61	57	65	60	56	54
6	77	66	58	53	75	65	58	52	63	57	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	51	47	57	51	46	55	50	46	44
8	68	56	48	43	66	55	48	43	54	47	42	52	46	42	51	46	42	40
9	63	52	44	39	62	51	44	39	50	43	39	49	43	39	48	42	38	37
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	44	39	35	34

Spacing Criteria (0-180): 1.16
Spacing Criteria (90-270): 1.22
Spacing Criteria (Diagonal): 1.18

Curves of Luminaires vs Lighting Area



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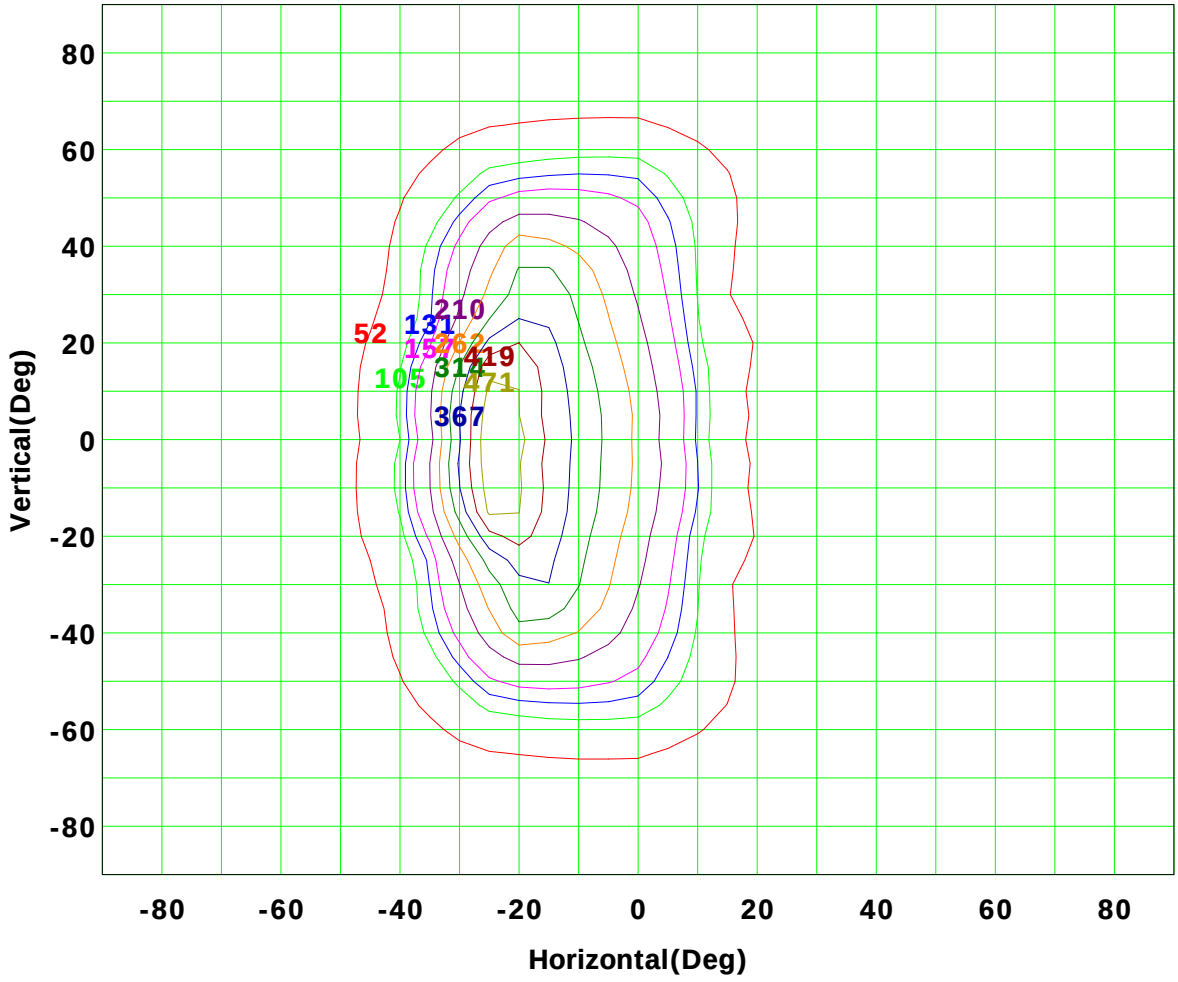
Test Lab: ACOLYTE
Test Type: TYPE C
Temperature: 25℃
Operator: leo

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

Isocandela (rectangle)



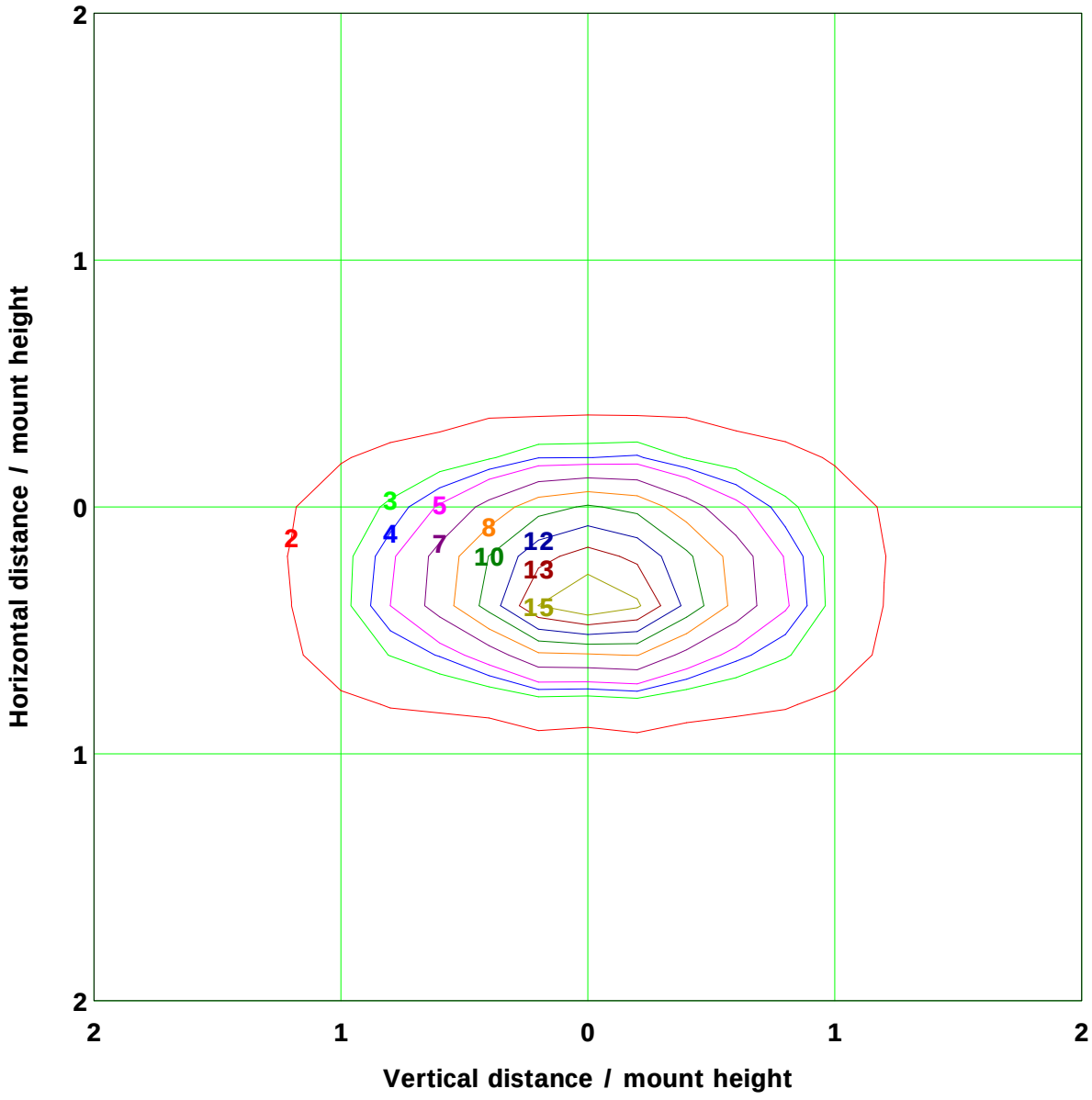
Imax (100%): 524 cd

(10%): 52 cd	(20%): 105 cd
(25%): 131 cd	(30%): 157 cd
(40%): 210 cd	(50%): 262 cd
(60%): 314 cd	(70%): 367 cd
(80%): 419 cd	(90%): 471 cd

C Plane (°):0.0-360.0: 30.0
Test Lab: ACOLYTE
Test Type: TYPE C
Temperature: 25℃
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%): 16.5 lx**

(10%): 1.6 lx	(20%): 3.3 lx
(25%): 4.1 lx	(30%): 4.9 lx
(40%): 6.6 lx	(50%): 8.2 lx
(60%): 9.9 lx	(70%): 11.5 lx
(80%): 13.2 lx	(90%): 14.8 lx

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Test Lab: ACOLYTE
Test Type: TYPE C
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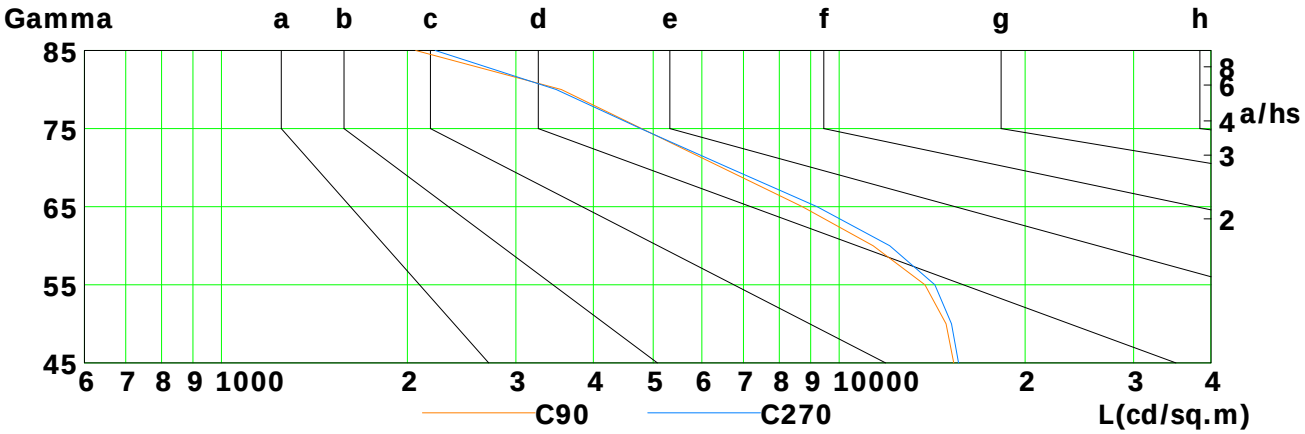
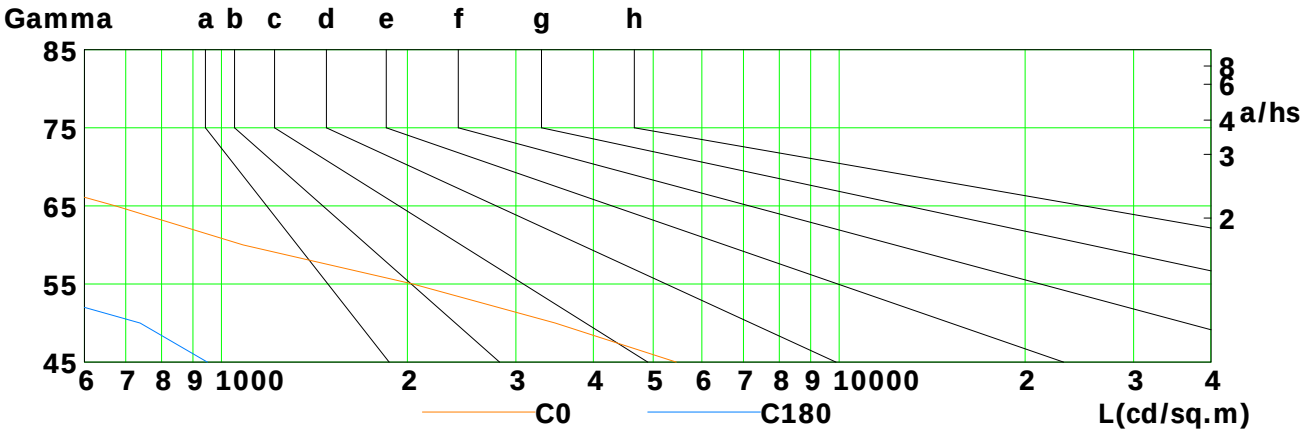
Operator: leo

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



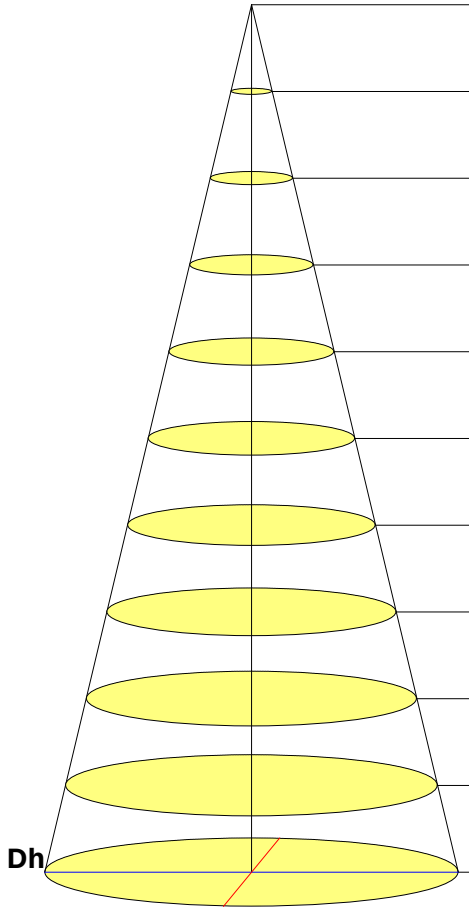


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	5449	3471	2043	1085	674	400	274	185	259
C90	15343	14907	13780	11357	8718	6467	4791	3554	2064
C180	949	739	443	245	153	97	104	139	212
C270	15618	15215	14290	12086	9220	6624	4773	3484	2218

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



Dist(m)	Enadir(lx)	Dh/Dv_B(m)	S_B(sq.m)	Eav_B(lx)
1.0	250.68	0.78/2.79	2.2	81.40
2.0	62.67	1.56/5.58	8.7	20.35
3.0	27.85	2.34/8.36	19.6	9.04
4.0	15.67	3.12/11.15	34.8	5.09
5.0	10.03	3.90/13.94	54.4	3.26
6.0	6.96	4.69/16.73	78.4	2.26
7.0	5.12	5.47/19.52	106.7	1.66
8.0	3.92	6.25/22.30	139.3	1.27
9.0	3.09	7.03/25.09	176.3	1.00
10.0	2.51	7.81/27.88	217.7	0.81

Beam Angle(B): H42.7 V108.7 Field Angle(F): H81.4 V145.4

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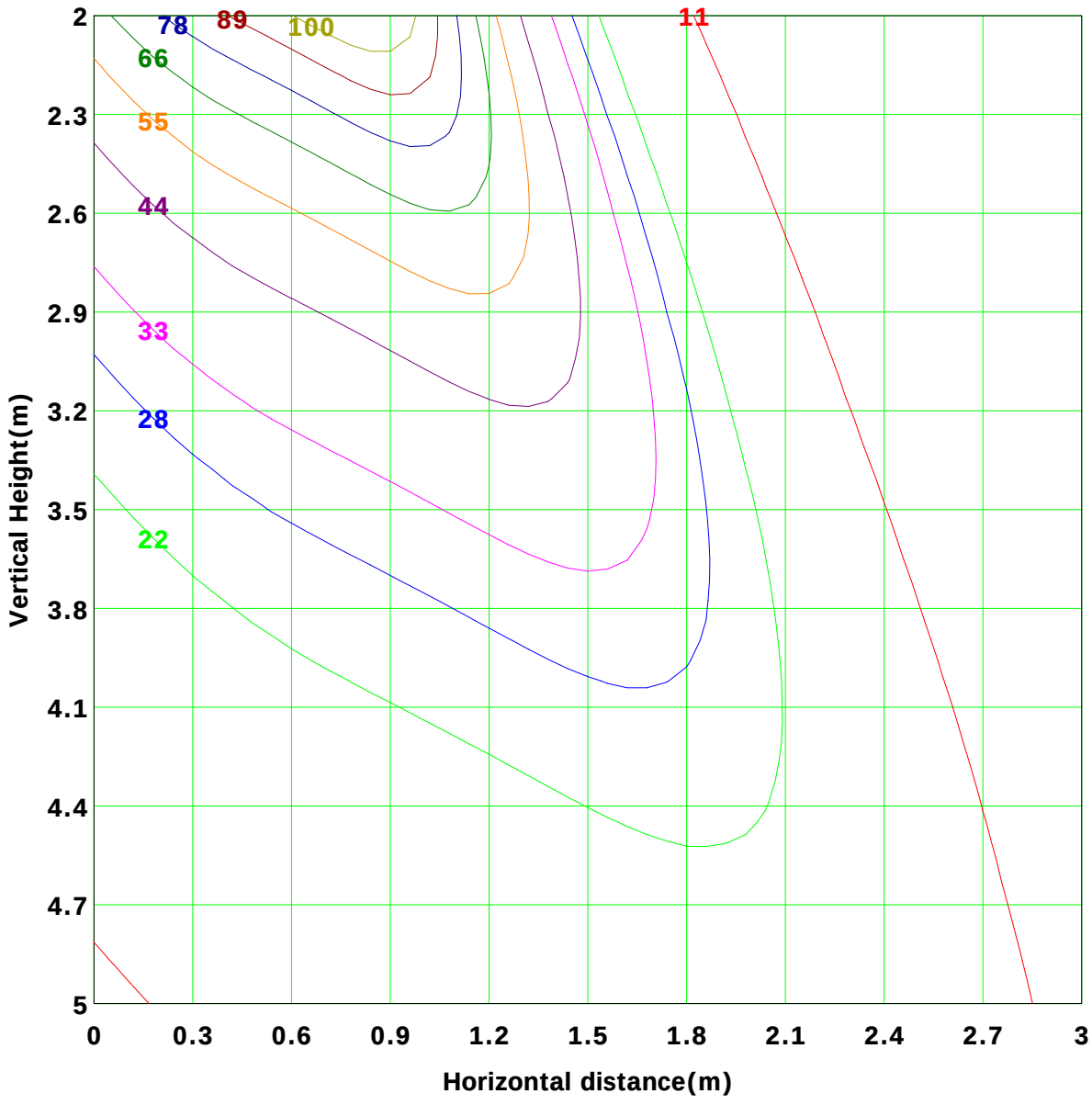
Test Type: TYPE C
Temperature: 25℃
Operator: leo

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

Vertical IsoLux Plot



Lowest(m): 2.0m Highest(m): 5.0m Max Lux: 110.8 lx

(10%): 11.1 lx	(20%): 22.2 lx
(25%): 27.7 lx	(30%): 33.2 lx
(40%): 44.3 lx	(50%): 55.4 lx
(60%): 66.5 lx	(70%): 77.5 lx
(80%): 88.6 lx	(90%): 99.7 lx

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

Area Flux Table

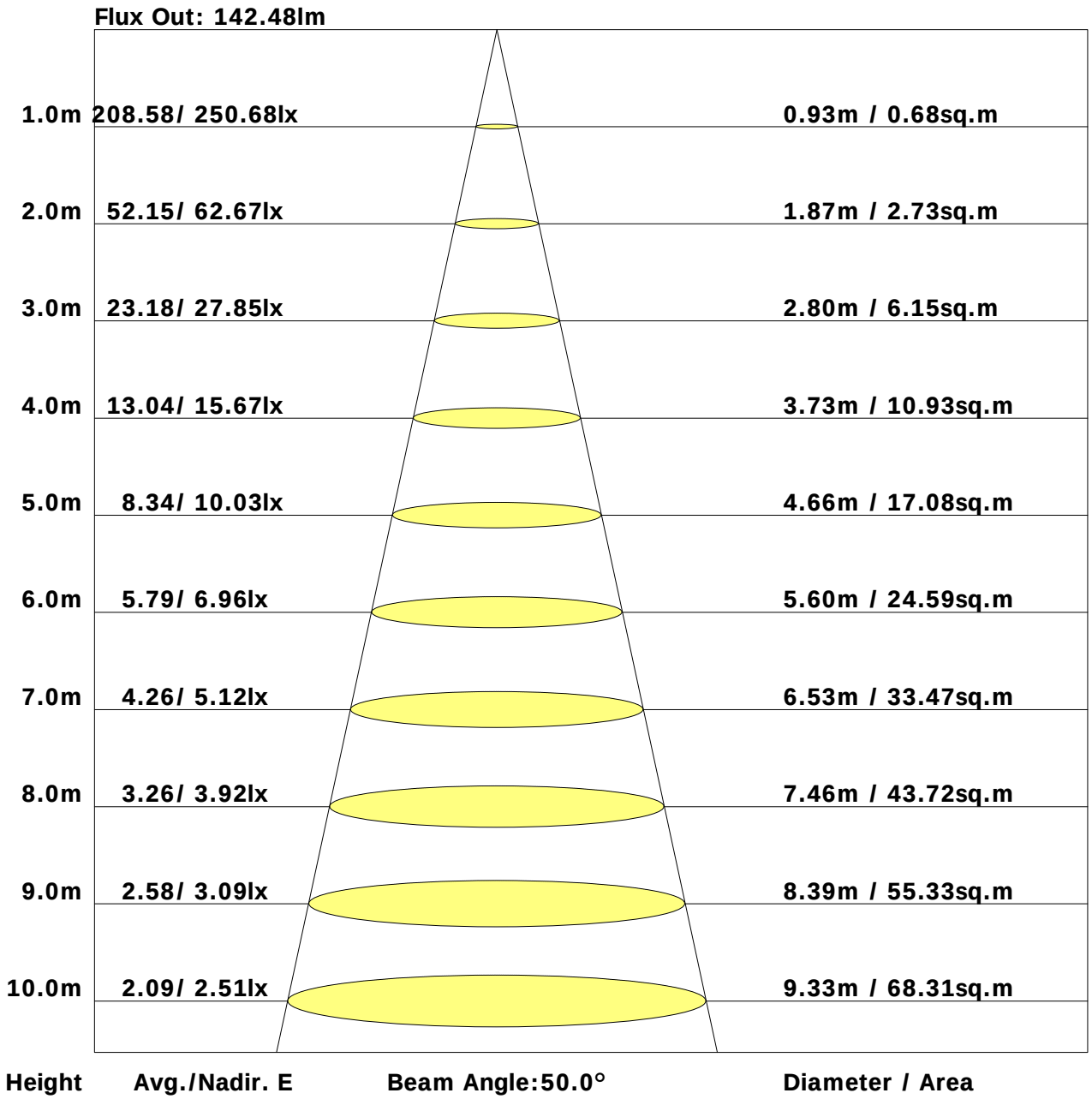
Unit: lm

Vertical plane \ Horizontal plane	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	Flux(T)	Flux(E)
-90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
-80	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.6	0.6	0.5	0.3	0.1	0.0	0.0	0.0	0.0	3.1	0.0
-70	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.9	1.5	1.9	1.7	1.4	0.8	0.3	0.1	0.0	0.0	0.0	9.1	4.3
-60	0.0	0.0	0.0	0.0	0.1	0.2	0.4	1.6	3.1	3.9	3.8	3.0	1.5	0.5	0.1	0.0	0.0	0.0	18.2	15.9
-50	0.0	0.0	0.0	0.0	0.1	0.3	0.5	1.9	4.0	5.8	6.6	5.3	2.4	0.7	0.1	0.0	0.0	0.0	27.7	25.6
-40	0.0	0.0	0.0	0.0	0.1	0.3	0.6	1.8	4.5	7.2	9.2	7.0	3.1	0.8	0.2	0.0	0.0	0.0	34.9	32.4
-30	0.0	0.0	0.0	0.1	0.2	0.4	0.9	2.0	4.9	8.0	10.4	8.6	3.5	1.1	0.3	0.1	0.0	0.0	40.4	37.6
-20	0.0	0.0	0.0	0.1	0.2	0.6	1.0	2.3	5.4	8.7	11.6	11.7	4.8	1.4	0.3	0.1	0.0	0.0	48.2	45.3
-10	0.0	0.0	0.0	0.1	0.2	0.6	1.0	2.3	5.8	9.1	12.0	13.0	5.4	1.5	0.4	0.1	0.0	0.0	51.5	48.5
0	0.0	0.0	0.0	0.1	0.2	0.6	1.1	2.3	5.9	9.1	12.0	13.1	5.5	1.5	0.4	0.1	0.0	0.0	52.0	49.0
10	0.0	0.0	0.0	0.1	0.2	0.6	1.0	2.3	5.6	8.9	11.8	12.2	5.0	1.4	0.4	0.1	0.0	0.0	49.7	46.9
20	0.0	0.0	0.0	0.1	0.2	0.4	0.9	2.0	5.1	8.3	10.9	9.1	3.7	1.2	0.3	0.1	0.0	0.0	42.3	39.5
30	0.0	0.0	0.0	0.0	0.1	0.3	0.6	1.8	4.6	7.5	9.6	7.3	3.2	0.9	0.2	0.0	0.0	0.0	36.3	33.9
40	0.0	0.0	0.0	0.0	0.1	0.2	0.5	1.8	4.0	5.8	6.6	5.3	2.4	0.7	0.1	0.0	0.0	0.0	27.7	25.6
50	0.0	0.0	0.0	0.0	0.1	0.2	0.4	1.5	2.9	3.8	3.7	3.0	1.5	0.5	0.1	0.0	0.0	0.0	17.9	15.5
60	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.8	1.5	1.8	1.7	1.4	0.8	0.3	0.1	0.0	0.0	0.0	8.8	3.9
70	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.6	0.6	0.5	0.3	0.1	0.0	0.0	0.0	0.0	3.1	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Flux(T)	0.0	0.1	0.2	0.7	2.1	5.1	9.9	26.0	60.1	91.3	112.8	102.5	44.2	13.0	3.0	0.6	0.1	0.0	472	
Flux(E)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.8	57.5	88.8	110.5	100.1	41.3	6.8	0.0	0.0	0.0	0.0		424

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



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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	12.5	13.9	12.9	14.2	14.6	23.5	24.8	23.9	25.2	25.5
3H	12.7	13.8	13.1	14.2	14.6	24.2	25.4	24.7	25.8	26.2
4H	12.6	13.7	13.1	14.1	14.5	24.4	25.5	24.9	25.9	26.3
6H	12.6	13.6	13.0	14.0	14.4	24.5	25.5	24.9	25.9	26.3
8H	12.6	13.5	13.0	13.9	14.4	24.5	25.5	25.0	25.9	26.3
12H	12.5	13.4	13.0	13.9	14.3	24.5	25.4	24.9	25.8	26.3
X=4H Y=2H	16.1	17.2	16.5	17.6	18.0	23.4	24.5	23.8	24.9	25.3
3H	16.1	17.0	16.6	17.4	17.9	24.4	25.2	24.8	25.7	26.1
4H	16.1	16.9	16.5	17.3	17.8	24.6	25.4	25.1	25.8	26.3
6H	16.0	16.7	16.5	17.2	17.7	24.7	25.4	25.2	25.9	26.4
8H	15.9	16.6	16.4	17.1	17.6	24.7	25.4	25.2	25.8	26.3
12H	15.9	16.5	16.4	17.0	17.5	24.7	25.3	25.2	25.8	26.3
X=8H Y=4H	17.2	17.8	17.7	18.3	18.8	24.5	25.1	25.0	25.6	26.1
6H	17.1	17.6	17.6	18.1	18.6	24.6	25.2	25.2	25.7	26.2
8H	17.0	17.5	17.6	18.1	18.6	24.6	25.1	25.2	25.6	26.2
12H	17.0	17.4	17.6	17.9	18.5	24.6	25.0	25.2	25.6	26.2
X=12H Y=4H	17.2	17.8	17.7	18.3	18.8	24.5	25.0	25.0	25.5	26.0
6H	17.2	17.7	17.7	18.1	18.7	24.6	25.1	25.1	25.5	26.1
8H	17.1	17.6	17.7	18.1	18.7	24.6	25.0	25.1	25.5	26.1

Calculate in accordance with CIE 190:2010

C Plane (°):0.0-360.0: 30.0
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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	0.67	0.77	0.84	0.88	0.94	0.98	1.01	1.04	1.07
	0.30		0.61	0.71	0.78	0.83	0.89	0.94	0.97	1.01	1.04
	0.20		0.56	0.66	0.73	0.78	0.85	0.90	0.94	0.99	1.02
0.50	0.50	0.20	0.66	0.75	0.81	0.85	0.91	0.95	0.97	1.00	1.02
	0.30		0.60	0.70	0.76	0.81	0.87	0.91	0.94	0.98	1.00
	0.20		0.55	0.65	0.72	0.77	0.84	0.88	0.91	0.96	0.98
0.30	0.50	0.20	0.64	0.73	0.79	0.83	0.88	0.91	0.94	0.96	0.98
	0.30		0.59	0.68	0.75	0.79	0.85	0.89	0.91	0.94	0.97
	0.20		0.55	0.65	0.71	0.76	0.82	0.86	0.89	0.93	0.95
0.00	0.00	0.00	0.53	0.62	0.68	0.73	0.78	0.82	0.85	0.88	0.90

Rating:5W Photometrically tested without ceiling board.
Multiply UF values by service correction factors
Calculate in accordance with CIBSE Technical Memorandum NO.5 1980

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Distance: 9.028 m
Humidity: 60%
Inspector:

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	0.83	0.67	0.56	0.48	0.37	0.31	0.26	0.20	0.16
	0.30		0.69	0.57	0.49	0.42	0.34	0.28	0.24	0.19	0.15
	0.20		0.59	0.50	0.43	0.38	0.31	0.26	0.23	0.18	0.15
0.50	0.50	0.20	0.80	0.63	0.53	0.45	0.35	0.33	0.24	0.19	0.15
	0.30		0.67	0.55	0.47	0.41	0.32	0.27	0.23	0.18	0.14
	0.20		0.58	0.49	0.42	0.37	0.30	0.25	0.22	0.17	0.14
0.30	0.50	0.20	0.77	0.60	0.50	0.43	0.33	0.27	0.23	0.17	0.14
	0.30		0.66	0.53	0.45	0.39	0.31	0.25	0.22	0.17	0.14
	0.20		0.57	0.48	0.41	0.36	0.29	0.24	0.20	0.16	0.13
0.00	0.00	0.00	0.46	0.37	0.31	0.26	0.20	0.17	0.14	0.11	0.09

Rating:5W Photometrically tested without ceiling board.

Multiply UF values by service correction factors

Calculate in accordance with CIBSE Technical Memorandum NO.5 1980

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

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

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	0.14	0.15	0.16	0.18	0.18	0.20	0.21
	0.20		0.06	0.08	0.10	0.11	0.13	0.15	0.16	0.18	0.19
0.50	0.50	0.20	0.16	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	0.14	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:5W Photometrically tested without ceiling board.

Multiply UF values by service correction factors

Calculate in accordance with CIBSE Technical Memorandum NO.5 1980

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

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