

Report No.:

Test Time: 2022/8/29 16:51

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: PPNP230306060WH

Lamp Catalog: Upside

Luminous Width (mm): 24

Voltage: 24.0 V

Power: 19.94 W

Luminaire Description: PPNP230306060WH

Luminous Length (mm): 550

Luminous Height (mm): 100

Current: 0.832 A

Power Factor: 1.000

## Photometric Results

CIE Class: Direct

Measurement Flux: 619.7 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(10%,50%): H152.6,H101.8

Vertical Diffuse Angle(10%,50%): V156.3,V104

Luminaire Efficacy Rating (LER): 31

Max. Intensity: 246.59 cd

Total Rated Lamp Lumens: 619.7 lm

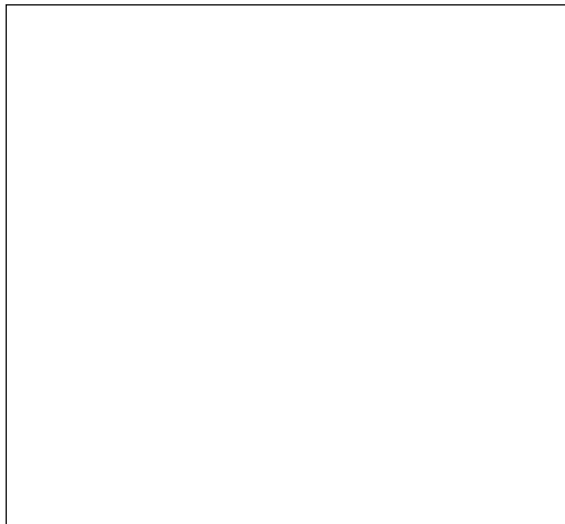
Efficiency: 100%

Upward Ratio: 1%

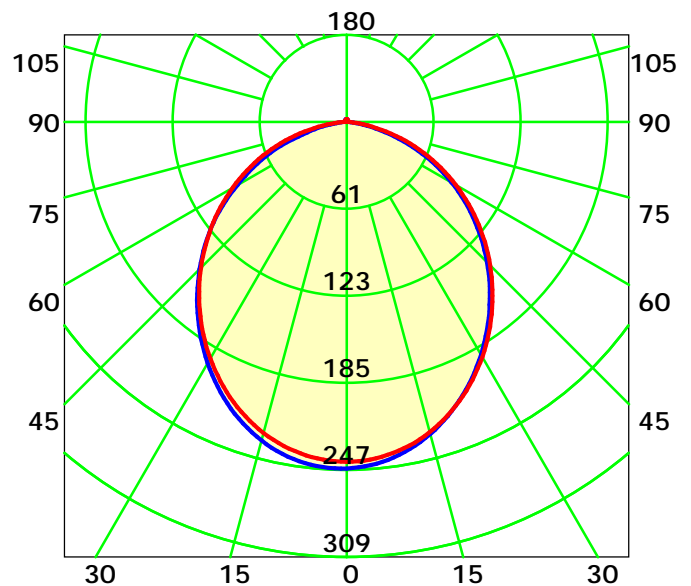
Central Intensity: 246.47 cd

Pos of Max. Intensity: H180 V1

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 102.9° Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Jacky

Gamma Plane (°):0.0-180.0: 1.0

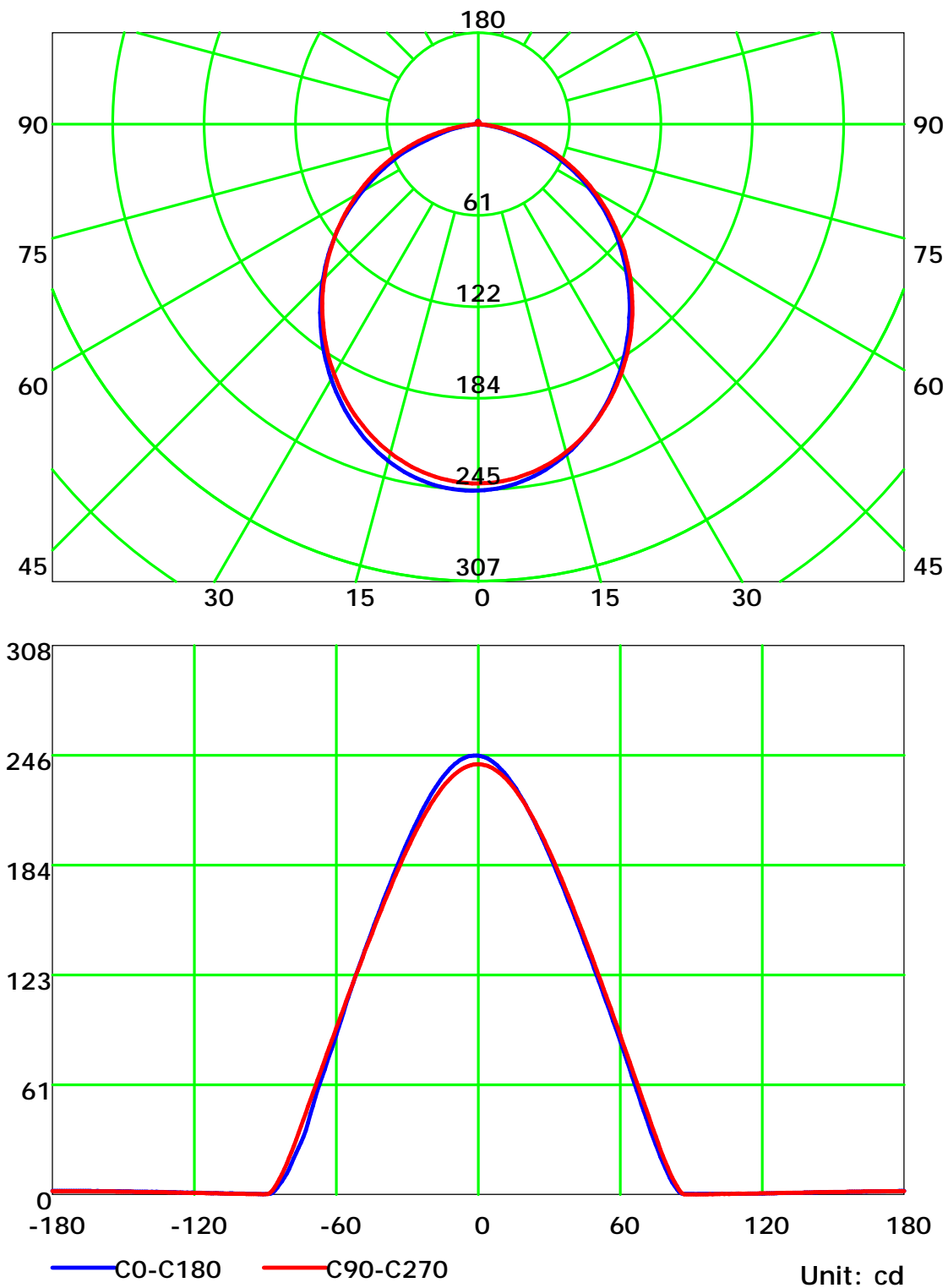
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

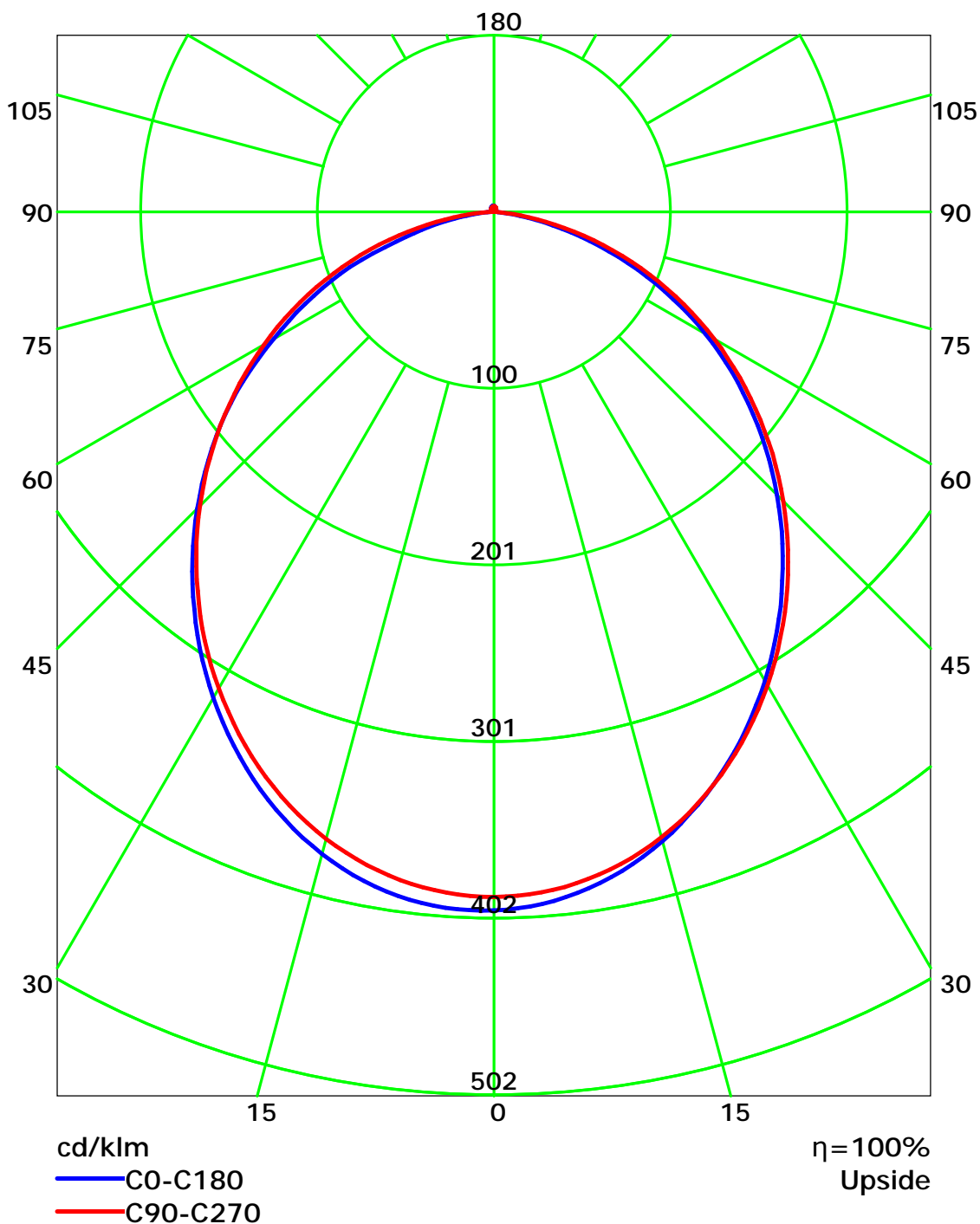
## Luminous Intensity Distribution Curve



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

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:  
Test Type: TYPE C  
Temperature: 25  
Operator: Jacky

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

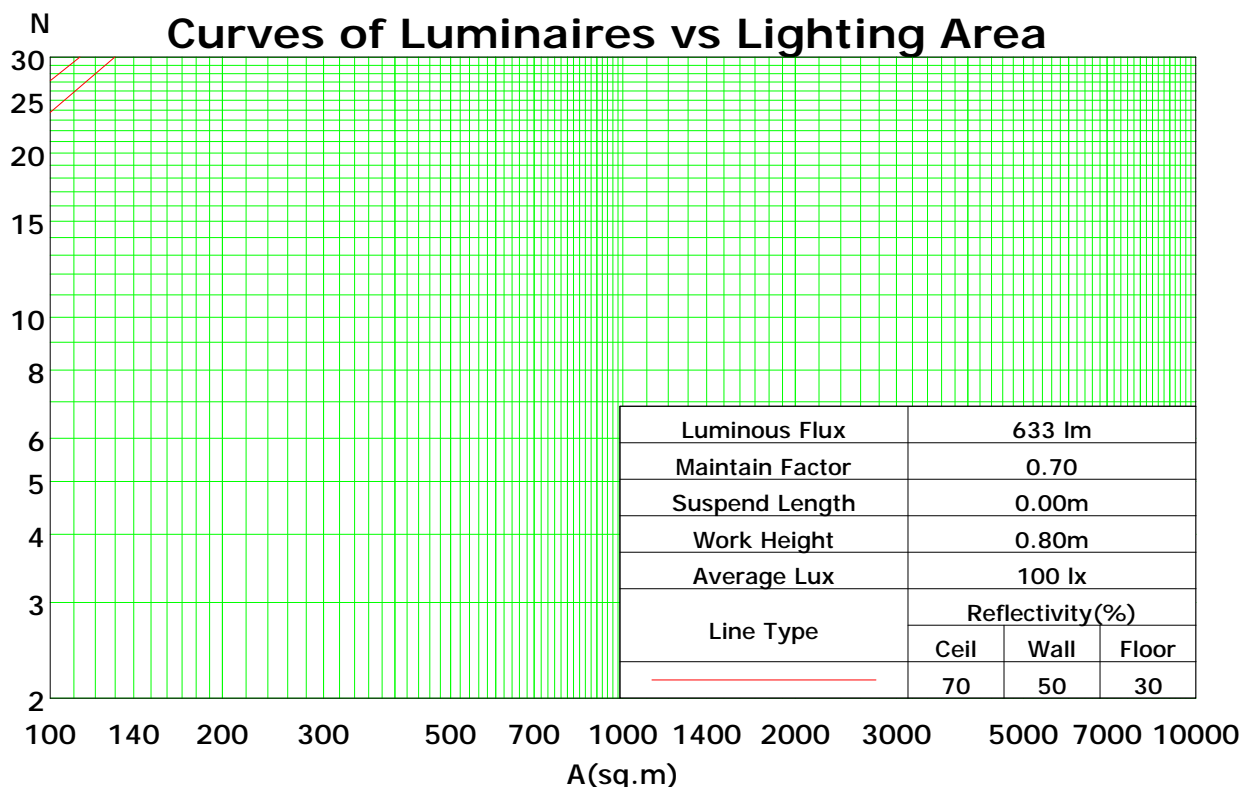
## Coefficients Of Utilization - Zonal Cavity Method

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	111	111	111	106	106	106	101	101	101	99
1	109	105	101	97	106	102	99	95	98	95	92	94	91	89	90	88	86	84
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	73	68	64	71	66	62	60
4	84	72	63	57	81	71	63	56	68	61	56	65	60	55	63	58	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	51	47	45
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	42	39
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	47	41	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	33	44	38	33	31
9	58	44	36	31	56	44	36	31	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	28	37	32	27	26

Spacing Criteria (0-180): 1.18

Spacing Criteria (90-270): 1.20

Spacing Criteria (Diagonal): 1.29



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0

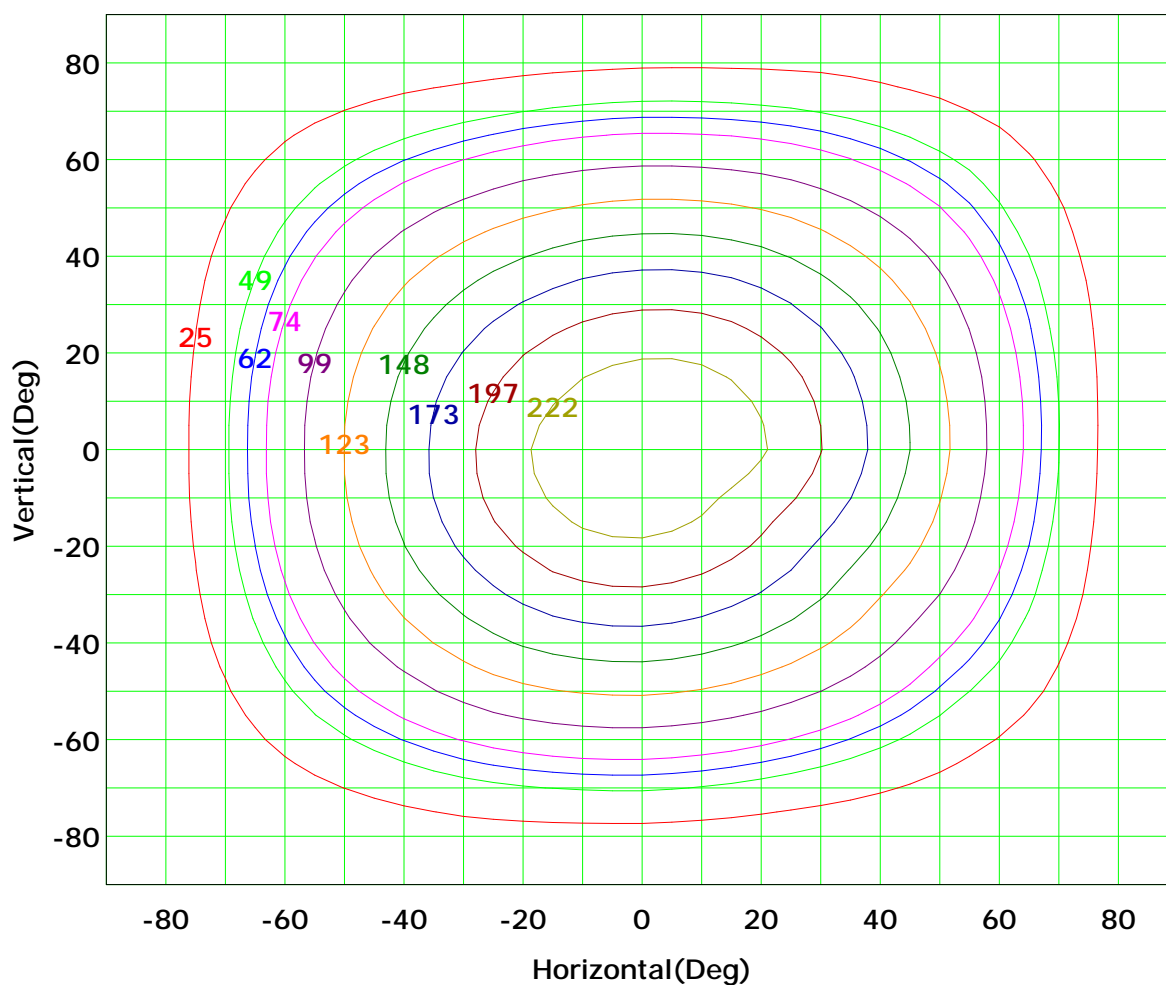
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Isocandela (rectangle)



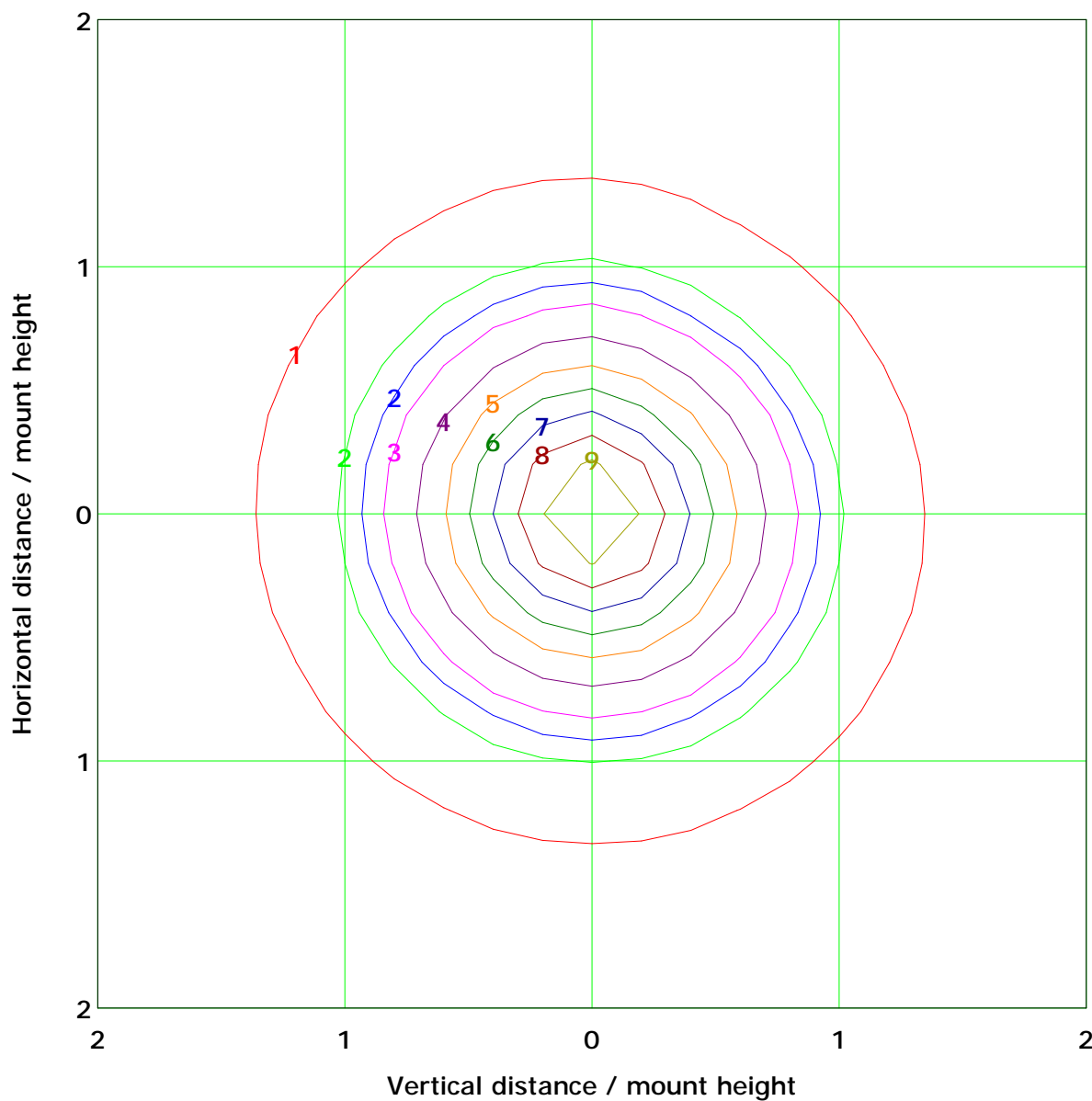
I<sub>max</sub> (100%): 247 cd

( 10%): 25 cd	( 20%): 49 cd
( 25%): 62 cd	( 30%): 74 cd
( 40%): 99 cd	( 50%): 123 cd
( 60%): 148 cd	( 70%): 173 cd
( 80%): 197 cd	( 90%): 222 cd

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

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%): 9.9 lx

( 10%): 1.0 lx	( 20%): 2.0 lx
( 25%): 2.5 lx	( 30%): 3.0 lx
( 40%): 3.9 lx	( 50%): 4.9 lx
( 60%): 5.9 lx	( 70%): 6.9 lx
( 80%): 7.9 lx	( 90%): 8.9 lx

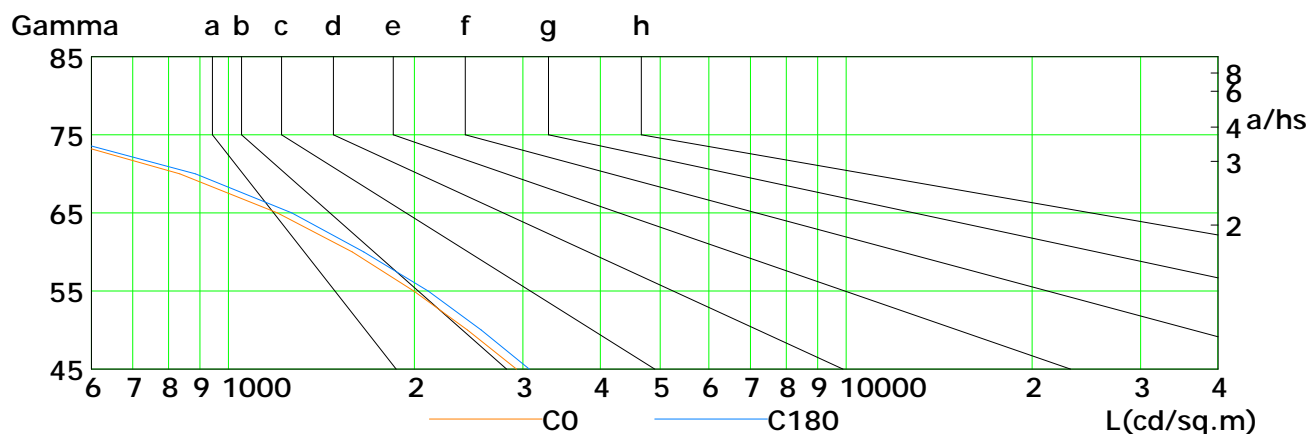
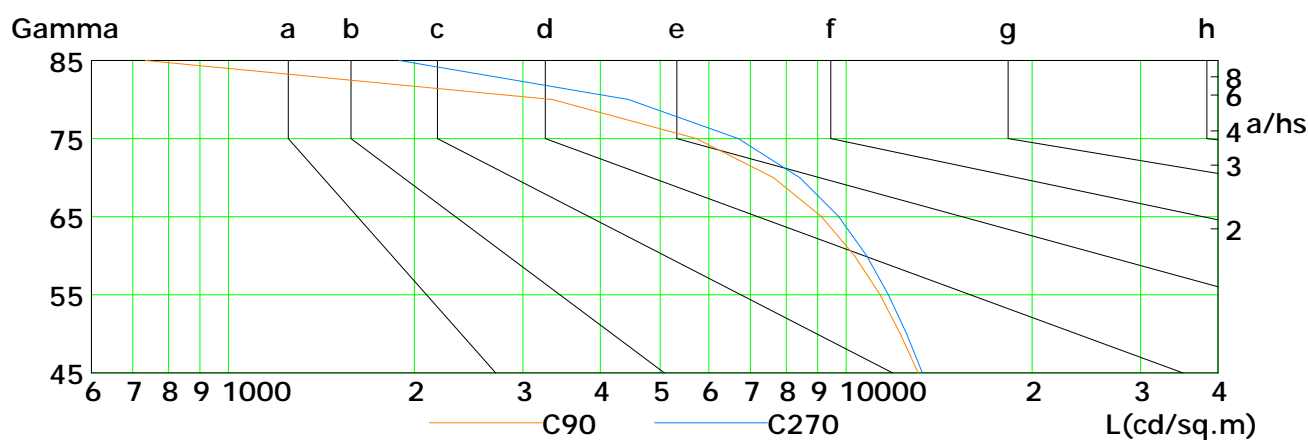
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: Jacky

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

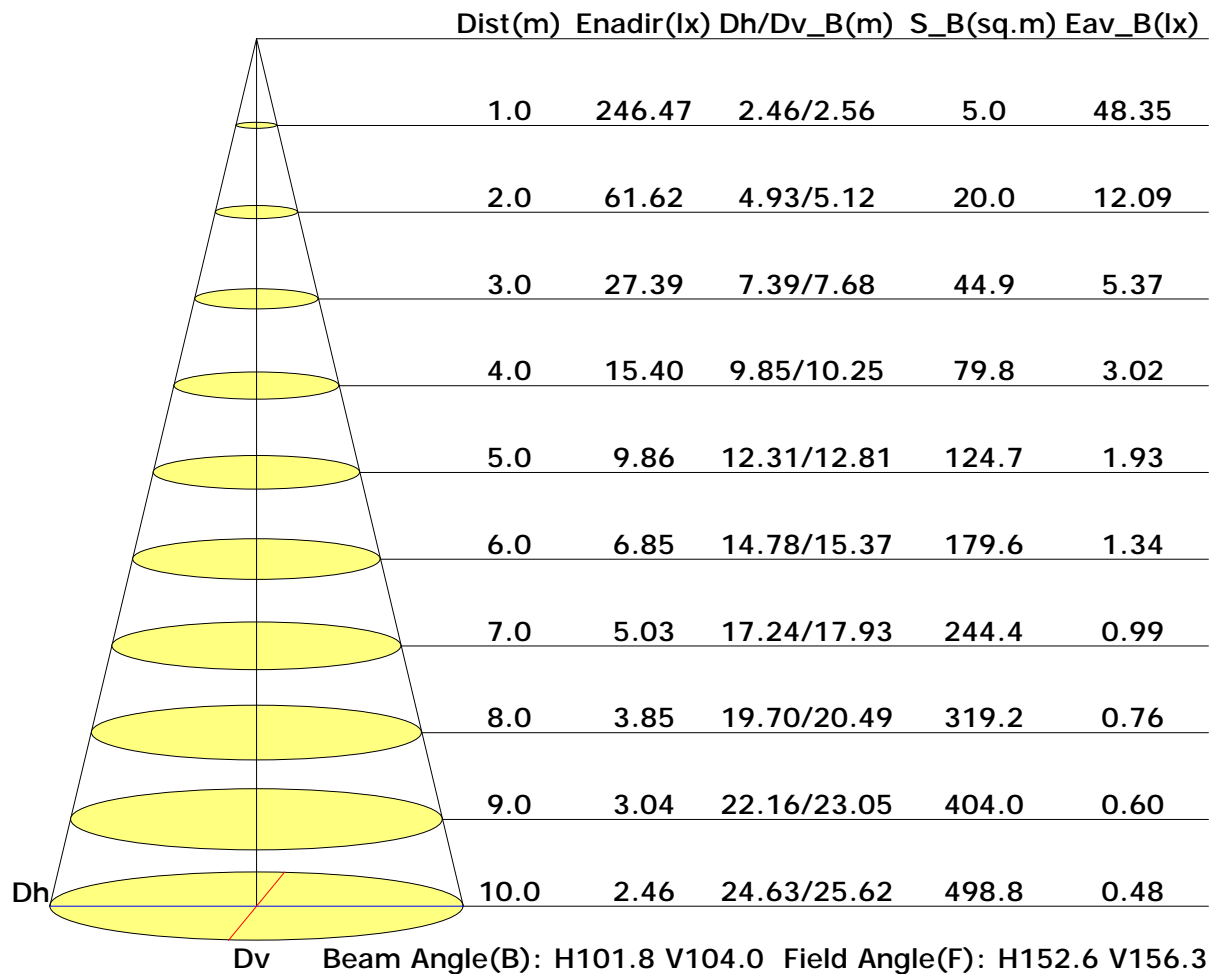


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	2927	2438	1997	1588	1201	834	498	216	26
C90	13090	12247	11350	10324	9131	7634	5723	3344	734
C180	3070	2567	2106	1657	1266	885	516	254	73
C270	13295	12531	11718	10799	9736	8411	6689	4446	1892

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

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

## Illuminance at a Distance

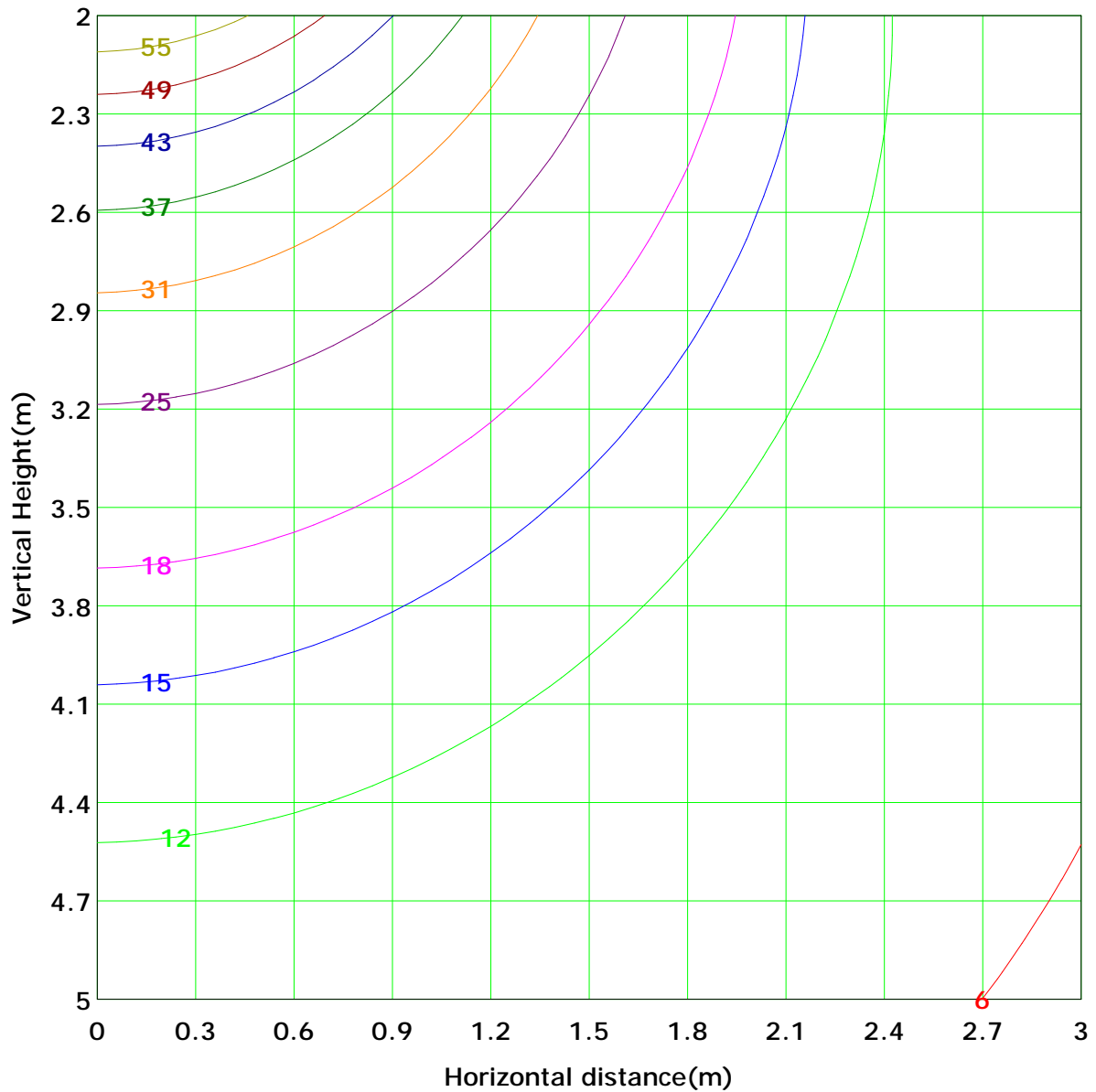


C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: Jacky

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: 61.6 lx
( 10%): 6.2 lx	( 20%): 12.3 lx	
( 25%): 15.4 lx	( 30%): 18.5 lx	
( 40%): 24.6 lx	( 50%): 30.8 lx	
( 60%): 37.0 lx	( 70%): 43.1 lx	
( 80%): 49.3 lx	( 90%): 55.5 lx	

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

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

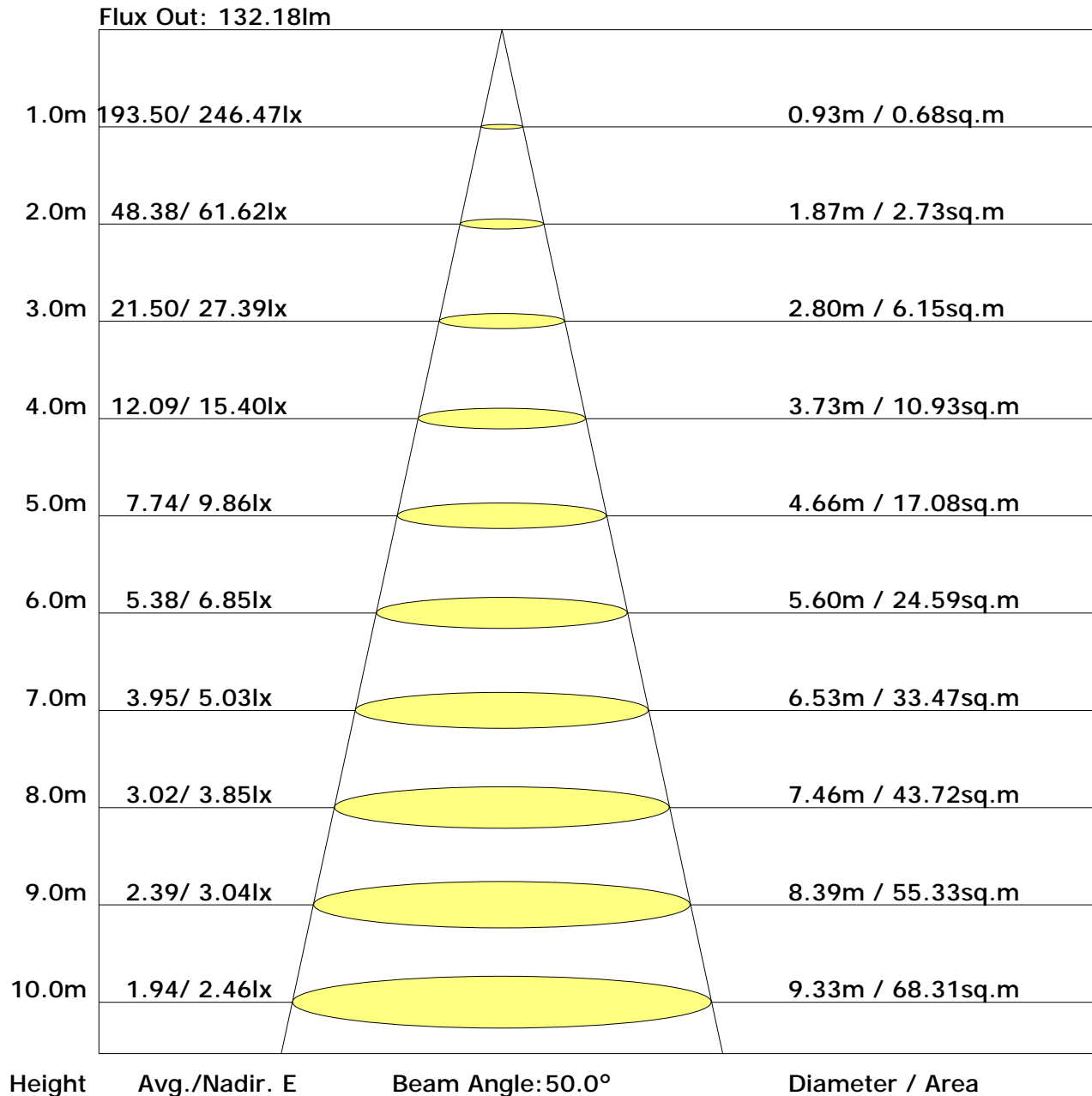
## Area Flux Table

Unit: lm

		Vertical plane																		Orbit, m		
		-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	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0
	-80	0.0	0.0	0.1	0.3	0.5	0.8	1.0	1.1	1.2	1.1	1.0	0.8	0.6	0.4	0.3	0.2	0.1	0.0	0.0	2.4	1.4
	-70	0.0	0.1	0.3	0.6	1.0	1.5	1.9	2.2	2.3	2.2	2.0	1.7	1.3	0.9	0.6	0.4	0.3	0.2	0.0	8.8	8.1
	-60	0.0	0.1	0.4	1.0	1.6	2.2	2.8	3.2	3.4	3.3	3.1	2.6	2.1	1.7	1.3	0.9	0.7	0.5	0.0	19.1	18.4
	-50	0.0	0.2	0.6	1.3	2.1	2.9	3.6	4.2	4.4	4.4	4.0	3.5	2.9	2.5	2.2	1.9	1.6	1.3	0.0	31.8	31.1
	-40	0.0	0.2	0.7	1.5	2.5	3.5	4.4	5.1	5.4	5.4	4.9	4.2	3.5	2.9	2.6	2.3	2.0	1.7	0.0	45.4	44.8
	-30	0.0	0.2	0.8	1.7	2.8	4.0	5.1	5.9	6.3	6.2	5.7	4.8	3.8	2.7	2.1	1.9	1.6	1.3	0.0	58.3	57.6
	-20	0.0	0.2	0.9	1.9	3.1	4.4	5.6	6.5	6.9	6.8	6.4	5.3	4.1	2.9	2.1	1.8	1.5	1.2	0.0	68.2	67.6
	-10	0.0	0.3	0.9	1.9	3.2	4.5	5.8	6.8	7.3	7.2	6.6	5.6	4.3	3.0	2.2	1.9	1.6	1.3	0.0	73.6	73.0
	0	0.0	0.2	0.9	1.9	3.1	4.4	5.7	6.7	7.2	7.3	6.7	5.6	4.4	3.0	2.2	1.9	1.6	1.3	0.0	73.6	72.9
	10	0.0	0.2	0.8	1.8	2.9	4.1	5.3	6.2	6.8	6.9	6.4	5.4	4.2	2.9	2.1	1.8	1.5	1.2	0.0	68.0	67.3
	20	0.0	0.2	0.7	1.6	2.6	3.7	4.7	5.6	6.2	6.2	5.8	4.9	3.9	2.7	2.1	1.8	1.5	1.2	0.0	57.9	57.2
	30	0.0	0.2	0.6	1.3	2.2	3.2	4.1	4.9	5.3	5.4	5.0	4.3	3.4	2.4	1.9	1.6	1.3	0.9	0.0	45.0	44.4
	40	0.0	0.2	0.6	1.3	2.2	3.2	4.1	4.9	5.3	5.4	5.0	4.3	3.4	2.4	1.9	1.6	1.3	0.9	0.0	31.4	30.8
	50	0.0	0.1	0.5	1.0	1.8	2.6	3.3	3.9	4.3	4.4	4.1	3.5	2.8	1.9	1.5	1.2	0.9	0.7	0.0	18.8	18.1
	60	0.0	0.1	0.3	0.7	1.3	1.9	2.5	2.9	3.2	3.3	3.1	2.7	2.1	1.5	0.9	0.4	0.2	0.1	0.0	7.4	7.9
	70	0.0	0.0	0.2	0.4	0.7	1.2	1.6	1.9	2.1	2.1	2.0	1.7	1.3	0.9	0.5	0.2	0.0	0.0	0.0	2.2	1.3
	80	0.0	0.0	0.0	0.1	0.3	0.5	0.7	0.8	1.0	1.0	0.9	0.8	0.6	0.4	0.2	0.1	0.0	0.0	0.0	0.1	0.0
	90	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	613	602
	Flux(T)	0.2	2.4	8.8	19.1	31.8	45.4	58.3	68.2	73.6	73.6	68.0	57.9	45.0	31.4	18.8	8.6	2.2	0.1	0.0		
	Flux(E)	0.0	1.4	8.1	18.4	31.1	44.8	57.6	67.6	73.0	72.9	67.3	57.2	44.4	30.8	18.1	7.9	1.3	0.0	0.0		



## The Average Illuminance Effective Figure



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

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

## 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	18.6	20.1	19.0	20.5	20.8	15.9	17.5	16.3	17.8	18.2
3H	20.0	21.4	20.4	21.8	22.2	17.0	18.4	17.4	18.7	19.1
4H	20.4	21.7	20.8	22.1	22.5	17.2	18.6	17.7	18.9	19.3
6H	20.6	21.8	21.0	22.2	22.6	17.3	18.5	17.8	18.9	19.4
8H	20.6	21.8	21.0	22.2	22.6	17.3	18.5	17.8	18.9	19.3
12H	20.6	21.7	21.0	22.1	22.5	17.3	18.4	17.7	18.8	19.3
X=4H Y=2H	18.8	20.1	19.2	20.5	20.9	16.4	17.8	16.9	18.1	18.5
3H	20.3	21.4	20.7	21.8	22.3	17.6	18.7	18.1	19.2	19.6
4H	20.8	21.8	21.2	22.2	22.7	18.0	19.0	18.4	19.4	19.9
6H	21.0	21.9	21.5	22.3	22.8	18.1	19.0	18.6	19.4	19.9
8H	21.0	21.8	21.5	22.3	22.8	18.1	18.9	18.6	19.4	19.8
12H	21.0	21.7	21.5	22.2	22.7	18.1	18.8	18.6	19.3	19.8
X=8H Y=4H	20.8	21.6	21.3	22.1	22.6	18.1	18.9	18.6	19.4	19.9
6H	21.0	21.7	21.5	22.2	22.7	18.2	18.9	18.8	19.4	19.9
8H	21.0	21.6	21.6	22.2	22.7	18.2	18.8	18.8	19.4	19.9
12H	21.0	21.6	21.6	22.1	22.7	18.2	18.8	18.8	19.3	19.9
X=12H Y=4H	20.8	21.5	21.3	22.0	22.5	18.1	18.8	18.6	19.3	19.8
6H	21.0	21.6	21.5	22.1	22.7	18.2	18.8	18.8	19.3	19.9
8H	21.0	21.6	21.6	22.1	22.7	18.2	18.8	18.8	19.3	19.9

Calculate in accordance with CIE 190:2010

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

 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 = 1.25								
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	0.59	0.69	0.76	0.81	0.89	0.94	0.97	1.01	1.04
	0.30		0.51	0.62	0.69	0.75	0.83	0.88	0.92	0.97	1.01
	0.20		0.46	0.56	0.64	0.70	0.78	0.84	0.88	0.94	0.98
0.50	0.50	0.20	0.57	0.67	0.74	0.79	0.85	0.90	0.93	0.97	1.00
	0.30		0.50	0.60	0.68	0.73	0.80	0.86	0.89	0.94	0.97
	0.20		0.45	0.55	0.63	0.68	0.76	0.82	0.86	0.91	0.95
0.30	0.50	0.20	0.55	0.65	0.71	0.76	0.82	0.87	0.90	0.93	0.96
	0.30		0.49	0.59	0.66	0.71	0.78	0.83	0.86	0.91	0.94
	0.20		0.45	0.55	0.62	0.67	0.75	0.80	0.84	0.88	0.91
0.00	0.00	0.00	0.43	0.52	0.59	0.64	0.71	0.76	0.79	0.84	0.87
Rating: 20W 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 = 1.25									
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	0.96	0.79	0.67	0.58	0.46	0.38	0.32	0.25	0.20	
	0.30		0.80	0.67	0.58	0.51	0.42	0.35	0.30	0.23	0.19	
	0.20		0.69	0.59	0.52	0.46	0.38	0.32	0.28	0.22	0.18	
0.50	0.50	0.20	0.93	0.76	0.64	0.55	0.44	0.39	0.31	0.23	0.19	
	0.30		0.78	0.66	0.56	0.50	0.40	0.33	0.29	0.22	0.18	
	0.20		0.68	0.58	0.51	0.45	0.37	0.31	0.27	0.21	0.18	
0.30	0.50	0.20	0.90	0.72	0.61	0.53	0.42	0.34	0.29	0.22	0.18	
	0.30		0.77	0.64	0.55	0.48	0.38	0.32	0.27	0.21	0.17	
	0.20		0.67	0.57	0.50	0.44	0.36	0.30	0.26	0.20	0.17	
0.00	0.00	0.00	0.57	0.47	0.40	0.35	0.28	0.23	0.20	0.15	0.12	
Rating: 20W 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(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.25								
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	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	0.23
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20
	0.20		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18
0.50	0.50	0.20	0.16	0.18	0.18	0.19	0.20	0.20	0.21	0.21	0.22
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.17	0.19	0.19
	0.20		0.06	0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.17
0.30	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.20	0.20	0.20	0.21
	0.30		0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19
	0.20		0.06	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17
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: 20W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											

## Zonal Lumen

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	242.7	0.2	0.2	0.04	0.04
1.0-2.0	242.6	0.7	0.9	0.11	0.15
2.0-3.0	242.3	1.2	2.1	0.19	0.34
3.0-4.0	242.0	1.6	3.7	0.26	0.60
4.0-5.0	241.5	2.1	5.8	0.34	0.93
5.0-6.0	240.9	2.5	8.3	0.41	1.34
6.0-7.0	240.1	3.0	11.3	0.48	1.82
7.0-8.0	239.3	3.4	14.7	0.55	2.38
8.0-9.0	238.3	3.9	18.6	0.62	3.00
9.0-10.0	237.2	4.3	22.9	0.69	3.69
10.0-11.0	236.0	4.7	27.6	0.76	4.45
11.0-12.0	234.7	5.1	32.7	0.83	5.28
12.0-13.0	233.2	5.5	38.3	0.89	6.17
13.0-14.0	231.7	5.9	44.2	0.96	7.13
14.0-15.0	230.1	6.3	50.5	1.02	8.15
15.0-16.0	228.3	6.7	57.2	1.08	9.23
16.0-17.0	226.5	7.1	64.3	1.14	10.37
17.0-18.0	224.5	7.4	71.7	1.19	11.56
18.0-19.0	222.5	7.7	79.4	1.25	12.81
19.0-20.0	220.4	8.1	87.5	1.30	14.11
20.0-21.0	218.1	8.4	95.8	1.35	15.47
21.0-22.0	215.8	8.7	104.5	1.40	16.87
22.0-23.0	213.5	9.0	113.5	1.45	18.31
23.0-24.0	211.0	9.2	122.7	1.49	19.80
24.0-25.0	208.4	9.5	132.2	1.53	21.33
25.0-26.0	205.8	9.7	141.9	1.57	22.90
26.0-27.0	203.1	9.9	151.8	1.60	24.50
27.0-28.0	200.4	10.1	162.0	1.64	26.14
28.0-29.0	197.6	10.3	172.3	1.67	27.81
29.0-30.0	194.7	10.5	182.8	1.70	29.50
30.0-31.0	191.8	10.7	193.5	1.72	31.22
31.0-32.0	188.8	10.8	204.3	1.75	32.97
32.0-33.0	185.7	10.9	215.3	1.77	34.74
33.0-34.0	182.7	11.1	226.3	1.78	36.52
34.0-35.0	179.5	11.2	237.5	1.80	38.32
35.0-36.0	176.4	11.2	248.7	1.81	40.13

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

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



## Zonal Lumen (Continue 1)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	173.2	11.3	260.0	1.82	41.95
37.0-38.0	169.9	11.3	271.3	1.83	43.78
38.0-39.0	166.6	11.4	282.7	1.84	45.62
39.0-40.0	163.3	11.4	294.1	1.84	47.46
40.0-41.0	159.9	11.4	305.5	1.84	49.30
41.0-42.0	156.6	11.4	316.9	1.84	51.13
42.0-43.0	153.2	11.3	328.2	1.83	52.96
43.0-44.0	149.8	11.3	339.5	1.82	54.79
44.0-45.0	146.3	11.2	350.8	1.81	56.60
45.0-46.0	142.8	11.2	361.9	1.80	58.40
46.0-47.0	139.3	11.1	373.0	1.79	60.19
47.0-48.0	135.7	11.0	384.0	1.77	61.96
48.0-49.0	132.2	10.9	394.9	1.75	63.71
49.0-50.0	128.7	10.7	405.6	1.73	65.45
50.0-51.0	125.1	10.6	416.2	1.71	67.15
51.0-52.0	121.5	10.4	426.6	1.68	68.83
52.0-53.0	117.9	10.3	436.8	1.65	70.49
53.0-54.0	114.2	10.1	446.9	1.62	72.11
54.0-55.0	110.5	9.9	456.8	1.59	73.71
55.0-56.0	106.8	9.7	466.4	1.56	75.26
56.0-57.0	103.1	9.4	475.9	1.52	76.79
57.0-58.0	99.4	9.2	485.1	1.48	78.27
58.0-59.0	95.6	8.9	494.0	1.44	79.71
59.0-60.0	91.8	8.7	502.7	1.40	81.11
60.0-61.0	88.0	8.4	511.1	1.36	82.47
61.0-62.0	84.2	8.1	519.2	1.31	83.78
62.0-63.0	80.4	7.8	527.0	1.26	85.04
63.0-64.0	76.6	7.5	534.5	1.21	86.25
64.0-65.0	72.7	7.2	541.7	1.16	87.41
65.0-66.0	68.9	6.9	548.6	1.11	88.52
66.0-67.0	65.0	6.5	555.1	1.06	89.58
67.0-68.0	61.2	6.2	561.3	1.00	90.58
68.0-69.0	57.4	5.9	567.2	0.94	91.52
69.0-70.0	53.5	5.5	572.7	0.89	92.41
70.0-71.0	49.6	5.1	577.8	0.83	93.24
71.0-72.0	45.8	4.8	582.6	0.77	94.00

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

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

## Zonal Lumen (Continue 2)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	42.0	4.4	587.0	0.71	94.71
73.0-74.0	38.2	4.0	591.0	0.65	95.36
74.0-75.0	34.6	3.7	594.6	0.59	95.95
75.0-76.0	31.1	3.3	597.9	0.53	96.48
76.0-77.0	27.6	2.9	600.9	0.47	96.96
77.0-78.0	24.2	2.6	603.5	0.42	97.38
78.0-79.0	20.9	2.2	605.7	0.36	97.74
79.0-80.0	17.6	1.9	607.6	0.31	98.05
80.0-81.0	14.6	1.6	609.2	0.26	98.30
81.0-82.0	11.9	1.3	610.5	0.21	98.51
82.0-83.0	9.3	1.0	611.5	0.16	98.67
83.0-84.0	6.8	0.7	612.2	0.12	98.79
84.0-85.0	4.8	0.5	612.8	0.08	98.88
85.0-86.0	3.1	0.3	613.1	0.05	98.93
86.0-87.0	1.8	0.2	613.3	0.03	98.96
87.0-88.0	1.0	0.1	613.4	0.02	98.98
88.0-89.0	0.5	0.1	613.5	0.01	98.99
89.0-90.0	0.3	0.0	613.5	0.01	98.99
90.0-91.0	0.3	0.0	613.5	0.01	99.00
91.0-92.0	0.3	0.0	613.6	0.01	99.00
92.0-93.0	0.3	0.0	613.6	0.01	99.01
93.0-94.0	0.3	0.0	613.6	0.01	99.02
94.0-95.0	0.3	0.0	613.7	0.01	99.02
95.0-96.0	0.4	0.0	613.7	0.01	99.03
96.0-97.0	0.4	0.0	613.8	0.01	99.03
97.0-98.0	0.4	0.0	613.8	0.01	99.04
98.0-99.0	0.4	0.0	613.8	0.01	99.05
99.0-100.0	0.4	0.0	613.9	0.01	99.06
100.0-101.0	0.5	0.0	613.9	0.01	99.06
101.0-102.0	0.5	0.1	614.0	0.01	99.07
102.0-103.0	0.5	0.1	614.0	0.01	99.08
103.0-104.0	0.5	0.1	614.1	0.01	99.09
104.0-105.0	0.5	0.1	614.2	0.01	99.10
105.0-106.0	0.6	0.1	614.2	0.01	99.11
106.0-107.0	0.6	0.1	614.3	0.01	99.12
107.0-108.0	0.6	0.1	614.3	0.01	99.13

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

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

## Zonal Lumen (Continue 3)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	0.6	0.1	614.4	0.01	99.14
109.0-110.0	0.7	0.1	614.5	0.01	99.15
110.0-111.0	0.7	0.1	614.6	0.01	99.16
111.0-112.0	0.7	0.1	614.6	0.01	99.17
112.0-113.0	0.7	0.1	614.7	0.01	99.19
113.0-114.0	0.7	0.1	614.8	0.01	99.20
114.0-115.0	0.8	0.1	614.8	0.01	99.21
115.0-116.0	0.8	0.1	614.9	0.01	99.22
116.0-117.0	0.8	0.1	615.0	0.01	99.24
117.0-118.0	0.9	0.1	615.1	0.01	99.25
118.0-119.0	0.9	0.1	615.2	0.01	99.26
119.0-120.0	0.9	0.1	615.3	0.01	99.28
120.0-121.0	0.9	0.1	615.3	0.01	99.29
121.0-122.0	0.9	0.1	615.4	0.01	99.31
122.0-123.0	1.0	0.1	615.5	0.01	99.32
123.0-124.0	1.0	0.1	615.6	0.01	99.34
124.0-125.0	1.0	0.1	615.7	0.02	99.35
125.0-126.0	1.1	0.1	615.8	0.02	99.37
126.0-127.0	1.1	0.1	615.9	0.02	99.38
127.0-128.0	1.1	0.1	616.0	0.02	99.40
128.0-129.0	1.2	0.1	616.1	0.02	99.41
129.0-130.0	1.2	0.1	616.2	0.02	99.43
130.0-131.0	1.2	0.1	616.3	0.02	99.45
131.0-132.0	1.2	0.1	616.4	0.02	99.46
132.0-133.0	1.2	0.1	616.5	0.02	99.48
133.0-134.0	1.3	0.1	616.6	0.02	99.49
134.0-135.0	1.3	0.1	616.7	0.02	99.51
135.0-136.0	1.3	0.1	616.8	0.02	99.53
136.0-137.0	1.4	0.1	616.9	0.02	99.54
137.0-138.0	1.4	0.1	617.0	0.02	99.56
138.0-139.0	1.4	0.1	617.1	0.02	99.58
139.0-140.0	1.4	0.1	617.2	0.02	99.59
140.0-141.0	1.5	0.1	617.3	0.02	99.61
141.0-142.0	1.5	0.1	617.4	0.02	99.63
142.0-143.0	1.5	0.1	617.5	0.02	99.64
143.0-144.0	1.5	0.1	617.6	0.02	99.66

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

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

## Zonal Lumen (Continue 4)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	1.6	0.1	617.7	0.02	99.67
145.0-146.0	1.6	0.1	617.8	0.02	99.69
146.0-147.0	1.6	0.1	617.9	0.02	99.70
147.0-148.0	1.6	0.1	618.0	0.02	99.72
148.0-149.0	1.6	0.1	618.1	0.02	99.74
149.0-150.0	1.7	0.1	618.2	0.01	99.75
150.0-151.0	1.7	0.1	618.3	0.01	99.76
151.0-152.0	1.7	0.1	618.4	0.01	99.78
152.0-153.0	1.7	0.1	618.5	0.01	99.79
153.0-154.0	1.7	0.1	618.5	0.01	99.81
154.0-155.0	1.8	0.1	618.6	0.01	99.82
155.0-156.0	1.8	0.1	618.7	0.01	99.83
156.0-157.0	1.8	0.1	618.8	0.01	99.85
157.0-158.0	1.8	0.1	618.9	0.01	99.86
158.0-159.0	1.8	0.1	618.9	0.01	99.87
159.0-160.0	1.8	0.1	619.0	0.01	99.88
160.0-161.0	1.9	0.1	619.1	0.01	99.89
161.0-162.0	1.9	0.1	619.1	0.01	99.90
162.0-163.0	1.9	0.1	619.2	0.01	99.91
163.0-164.0	1.9	0.1	619.3	0.01	99.92
164.0-165.0	1.9	0.1	619.3	0.01	99.93
165.0-166.0	1.9	0.1	619.4	0.01	99.94
166.0-167.0	1.9	0.0	619.4	0.01	99.95
167.0-168.0	2.0	0.0	619.5	0.01	99.96
168.0-169.0	2.0	0.0	619.5	0.01	99.96
169.0-170.0	2.0	0.0	619.5	0.01	99.97
170.0-171.0	2.0	0.0	619.6	0.01	99.97
171.0-172.0	2.0	0.0	619.6	0.01	99.98
172.0-173.0	2.0	0.0	619.6	0.00	99.98
173.0-174.0	2.0	0.0	619.7	0.00	99.99
174.0-175.0	2.1	0.0	619.7	0.00	99.99
175.0-176.0	2.1	0.0	619.7	0.00	99.99
176.0-177.0	2.1	0.0	619.7	0.00	100.00
177.0-178.0	2.1	0.0	619.7	0.00	100.00
178.0-179.0	2.1	0.0	619.7	0.00	100.00
179.0-180.0	2.1	0.0	619.7	0.00	100.00

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

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