

Report No.:

Test Time: 2023/2/21 16:47

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: 大炮

Lamp Catalog: R

Luminous Width (mm): 70

Voltage: 219.2 V

Power: 6.84 W

Luminaire Description: HD30°+3M

Luminous Length (mm): 270

Luminous Height (mm): 20

Current: 0.079 A

Power Factor: 0.393

Photometric Results

CIE Class: Direct

Measurement Flux: 244.9 lm

Downward Ratio: 95%

Horizontal Diffuse Angle(10%,50%): H82,H31.4

Vertical Diffuse Angle(10%,50%): V73.9,V32.1

Luminaire Efficacy Rating (LER): 36

Max. Intensity: 428.8 cd

Total Rated Lamp Lumens: 244.9 lm

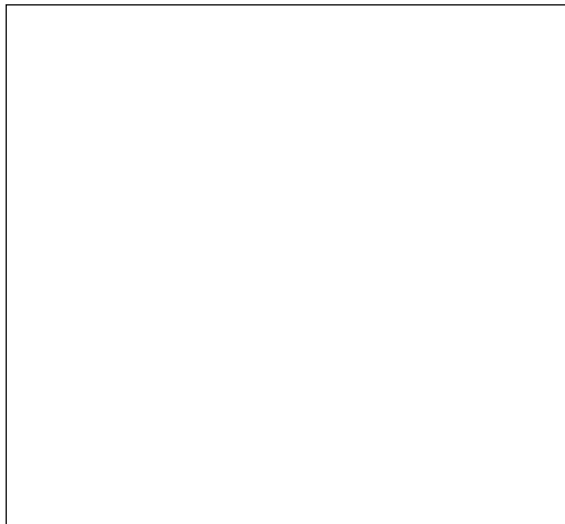
Efficiency: 100%

Upward Ratio: 5%

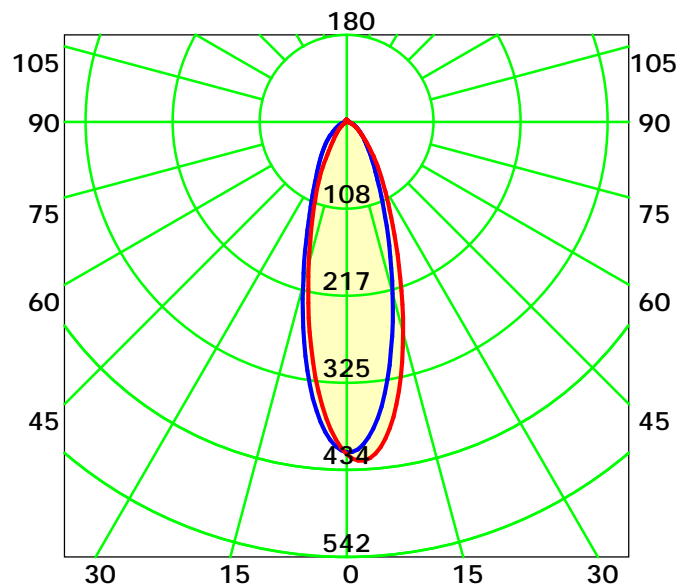
Central Intensity: 411.85 cd

Pos of Max. Intensity: H150 V3

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 31.7° 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

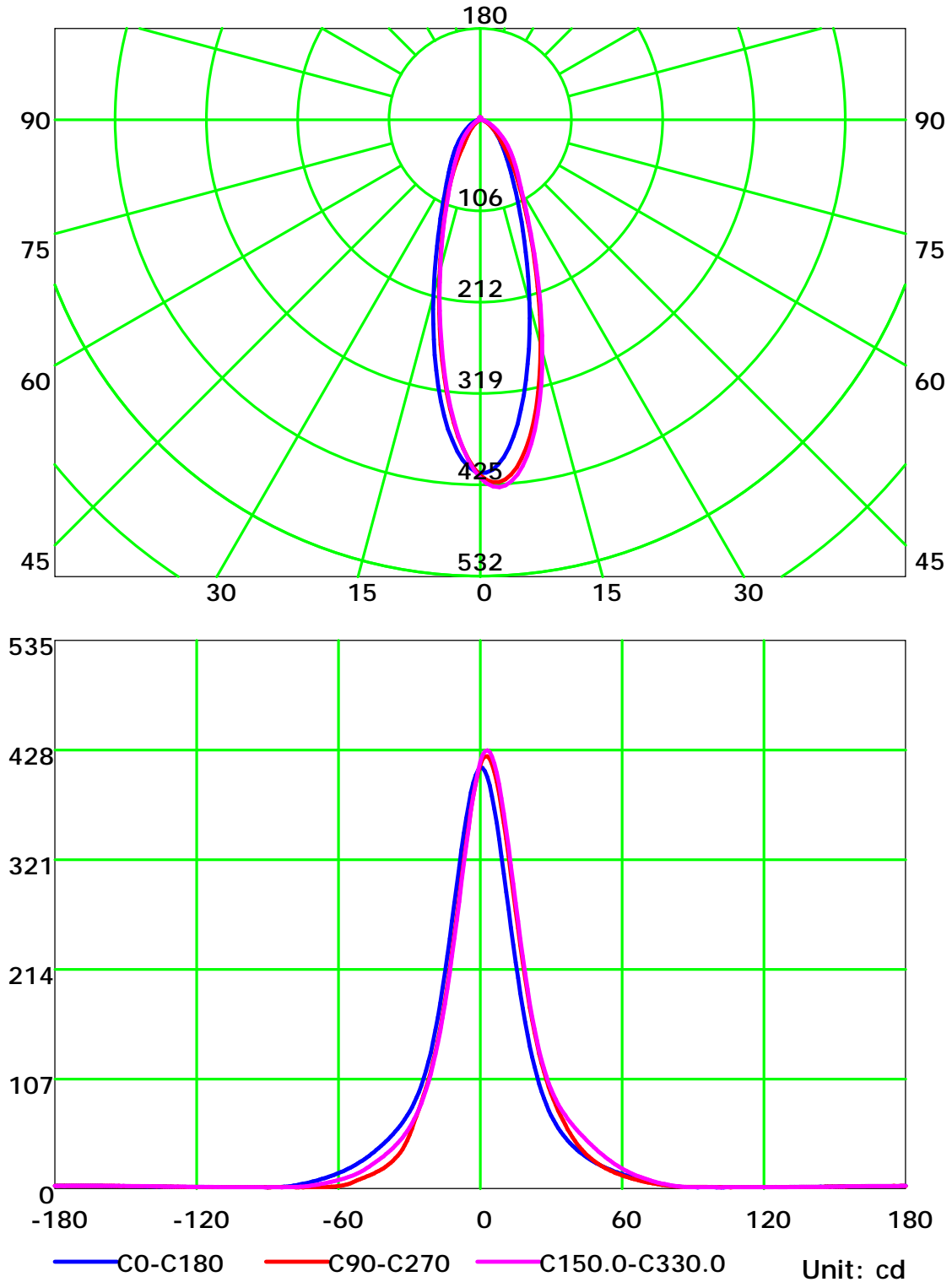
Distance: 9.028 m

Humidity: 60%

Inspector:



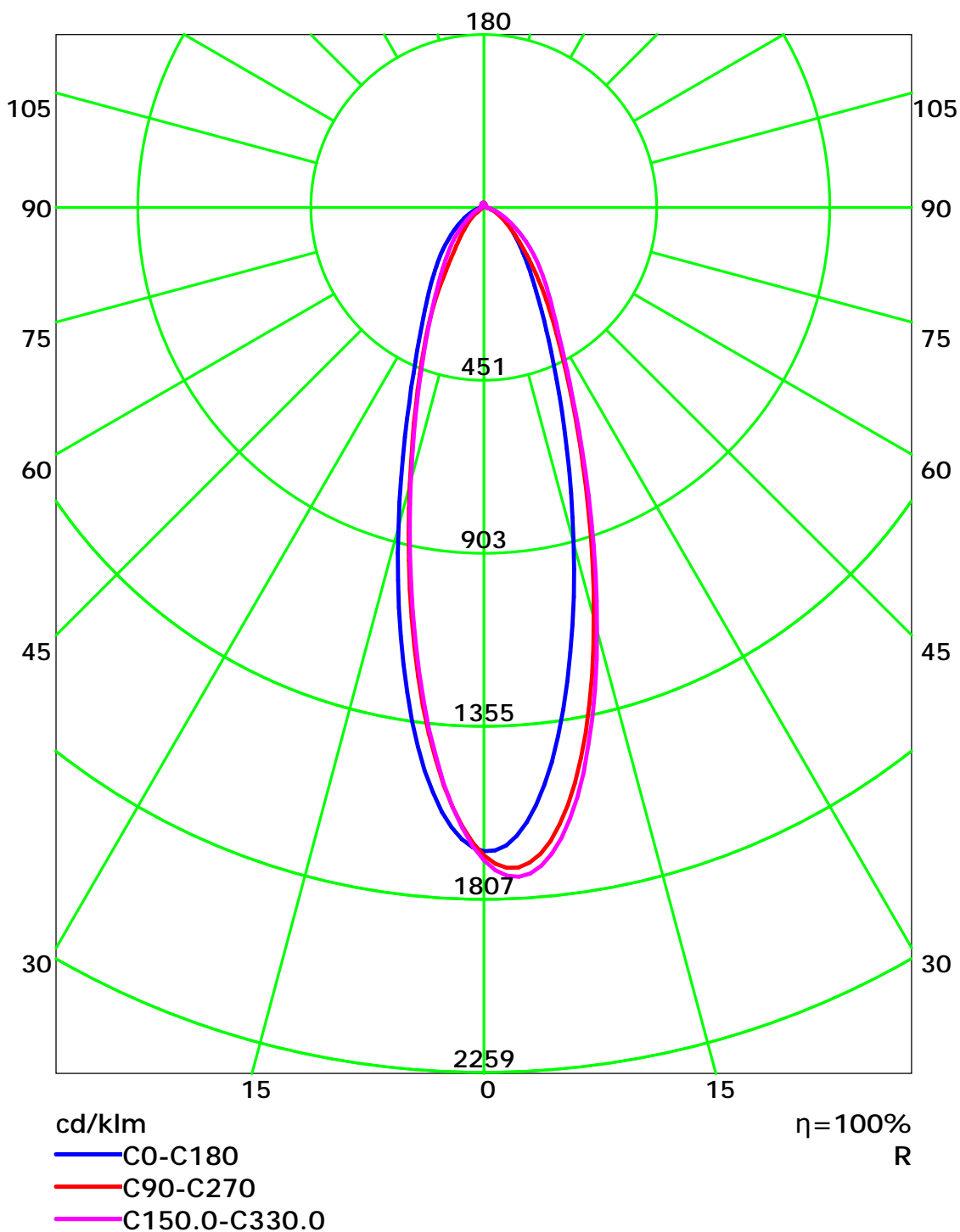
Luminous Intensity Distribution Curve



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:

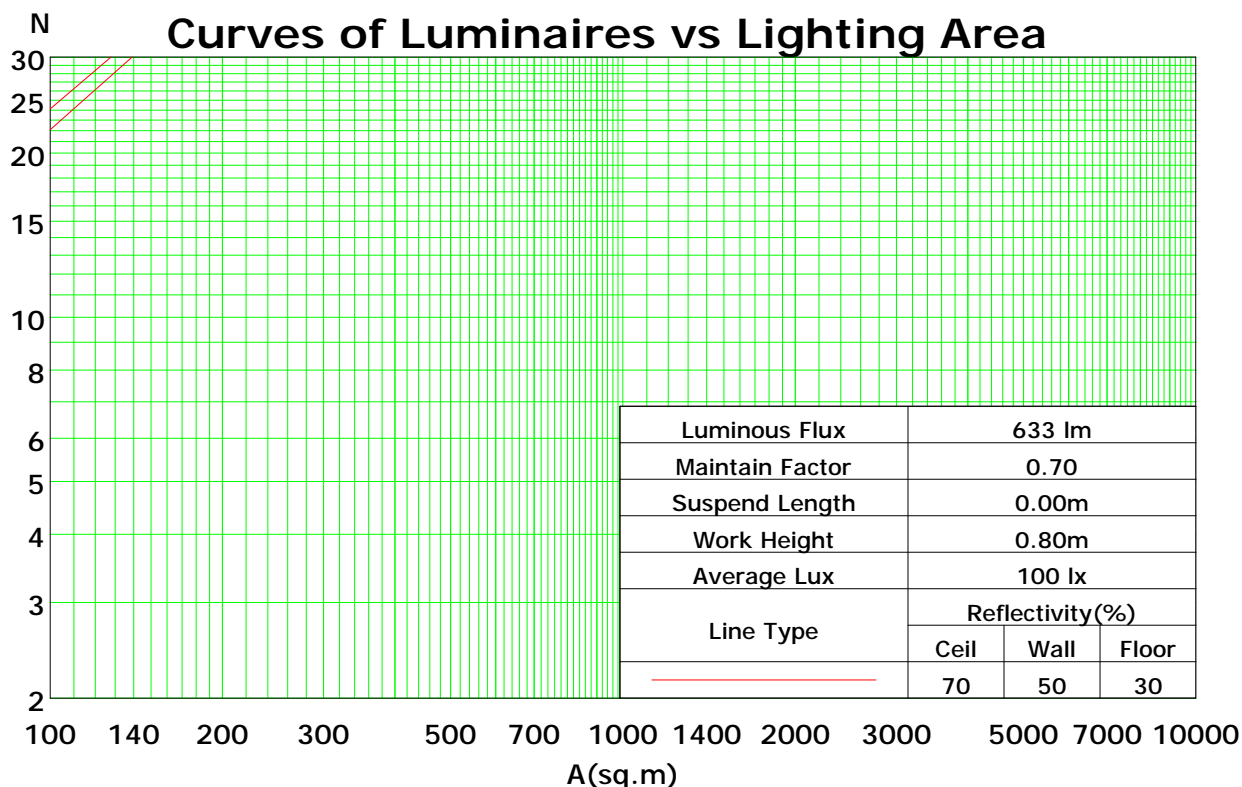
Coefficients Of Utilization - Zonal Cavity Method

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	118	118	118	118	114	114	114	114	108	108	108	103	103	103	97	97	97	95
1	111	108	105	102	108	105	102	100	100	98	96	95	94	92	91	90	89	86
2	105	99	94	90	102	97	92	89	93	89	86	89	86	83	85	83	81	79
3	98	91	85	81	96	89	84	80	86	82	78	83	79	76	80	77	74	72
4	93	84	78	74	91	83	77	73	80	75	71	77	73	70	75	71	69	67
5	88	79	72	67	86	77	71	67	75	70	66	73	68	65	71	67	64	62
6	83	74	67	62	81	72	66	62	70	65	61	68	64	60	67	63	59	58
7	79	69	63	58	77	68	62	58	66	61	57	65	60	56	63	59	56	54
8	75	65	59	54	74	64	58	54	63	57	54	61	57	53	60	56	53	51
9	72	62	55	51	70	61	55	51	60	54	50	58	53	50	57	53	50	48
10	69	58	52	48	67	58	52	48	57	51	48	55	51	47	54	50	47	46

Spacing Criteria (0-180): 0.51

Spacing Criteria (90-270): 0.53

Spacing Criteria (Diagonal): 0.58



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

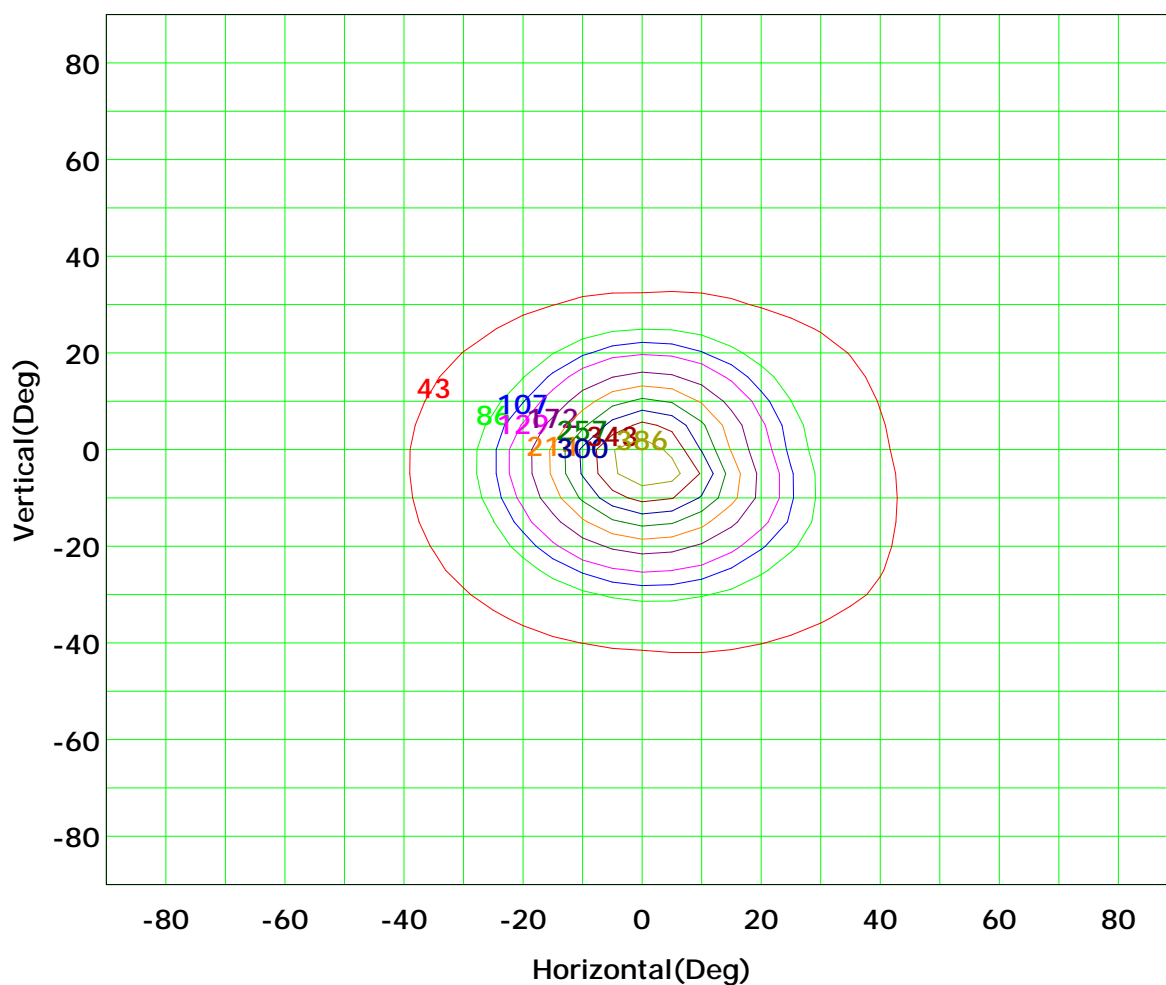
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



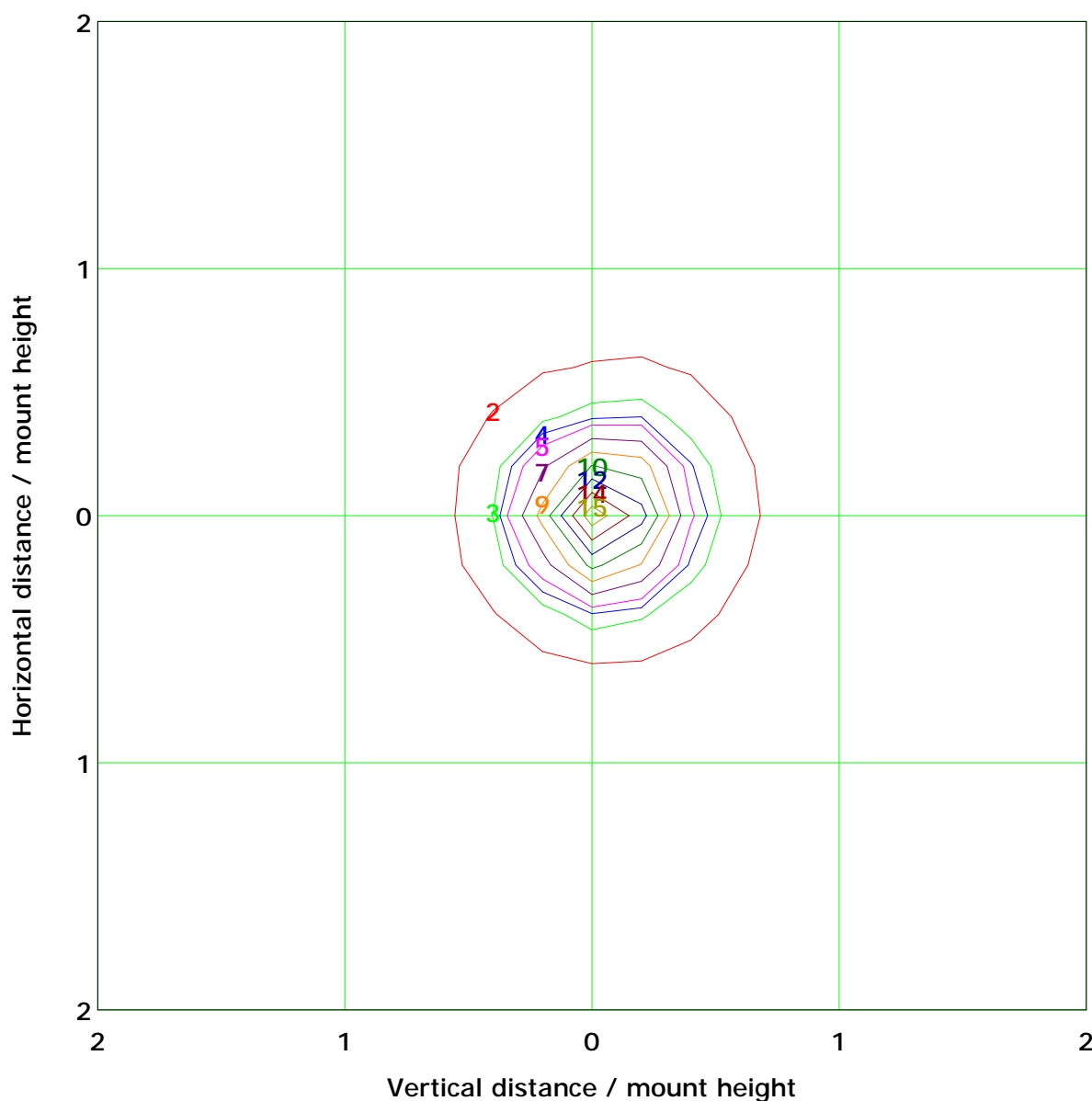
I_{max} (100%): 429 cd

(10%): 43 cd	(20%): 86 cd
(25%): 107 cd	(30%): 129 cd
(40%): 172 cd	(50%): 214 cd
(60%): 257 cd	(70%): 300 cd
(80%): 343 cd	(90%): 386 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%): 17.1 lx	
(10%):	1.7 lx	(20%):	3.4 lx
(25%):	4.3 lx	(30%):	5.1 lx
(40%):	6.8 lx	(50%):	8.5 lx
(60%):	10.2 lx	(70%):	12.0 lx
(80%):	13.7 lx	(90%):	15.4 lx

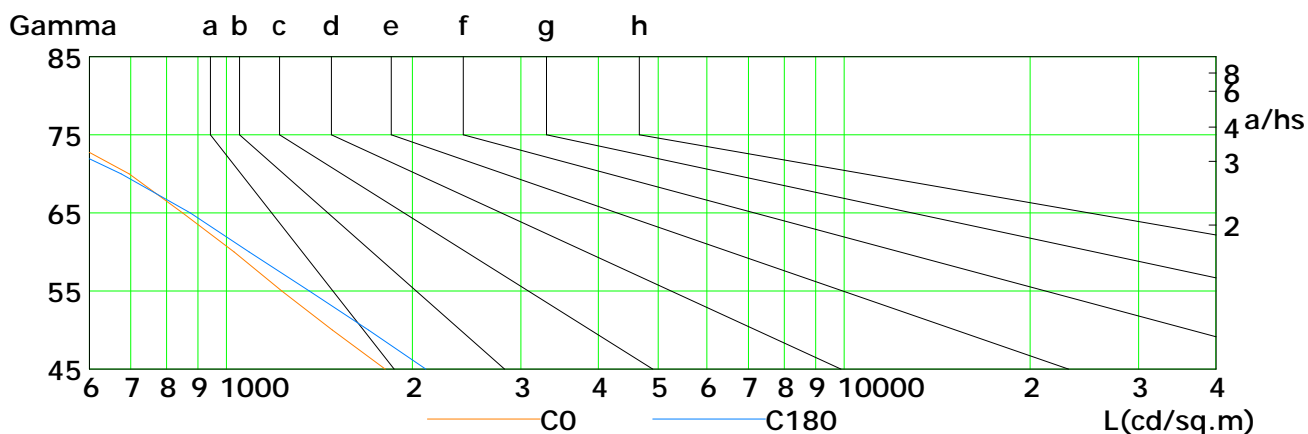
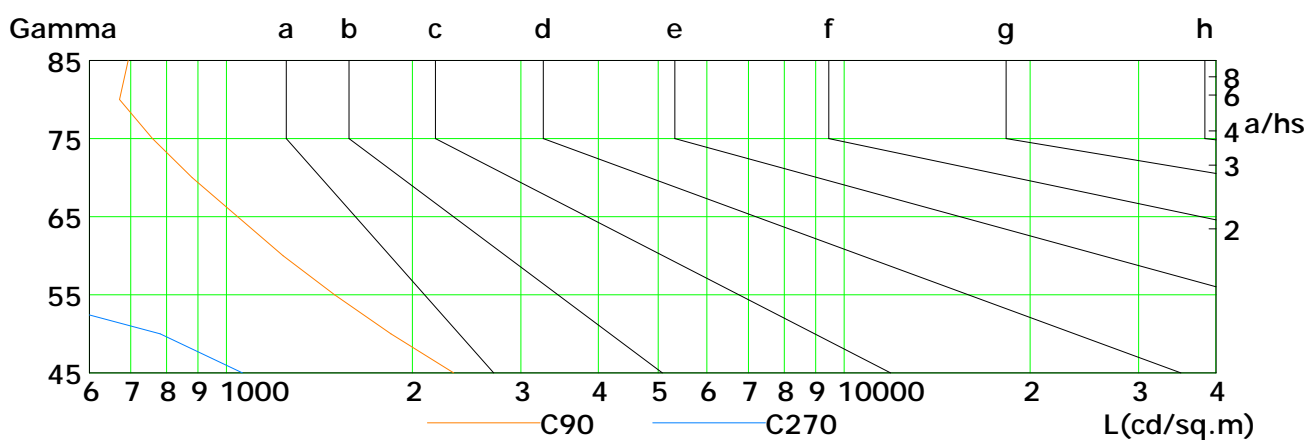
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Test Type: TYPE C
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Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 9.028 m
Humidity: 60%
Inspector:

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

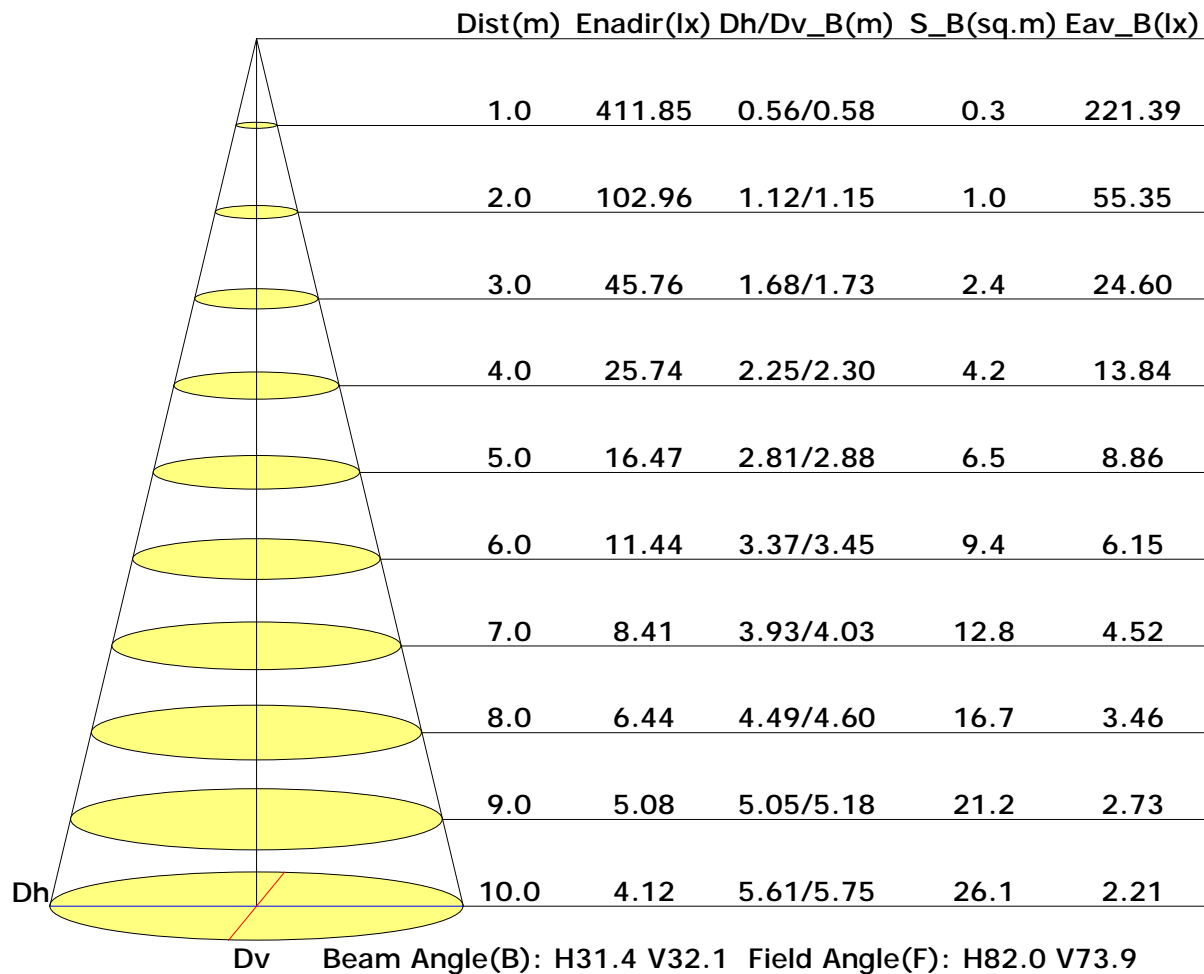


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	1808	1484	1230	1029	849	696	532	398	292
C90	2334	1848	1497	1235	1043	880	759	672	694
C180	2104	1700	1362	1089	874	676	500	327	246
C270	1062	781	455	266	196	208	247	360	559

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

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

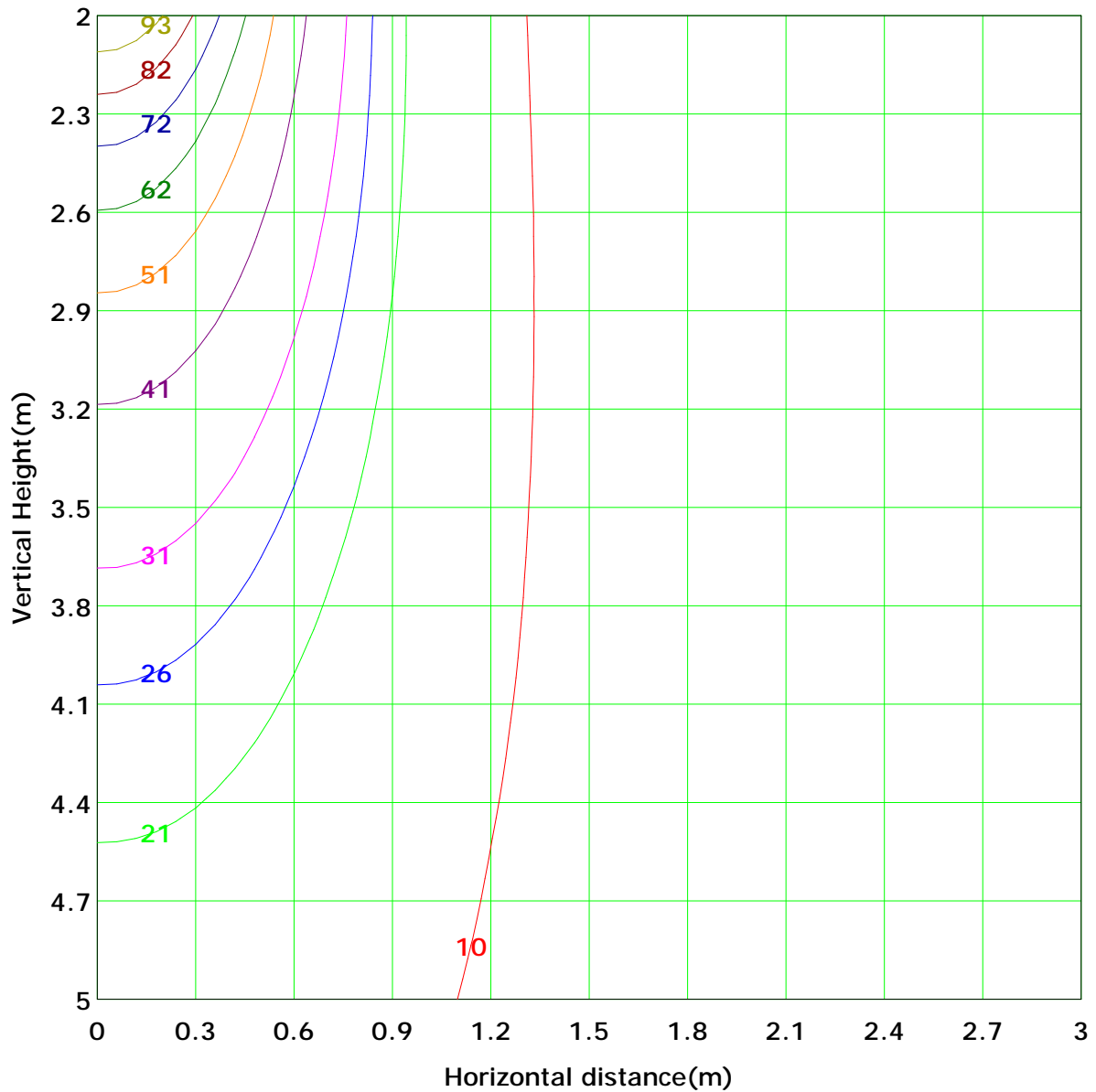
Illuminance at a Distance



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: 103.0 lx
(10%): 10.3 lx	(20%): 20.6 lx	
(25%): 25.7 lx	(30%): 30.9 lx	
(40%): 41.2 lx	(50%): 51.5 lx	
(60%): 61.8 lx	(70%): 72.1 lx	
(80%): 82.4 lx	(90%): 92.7 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

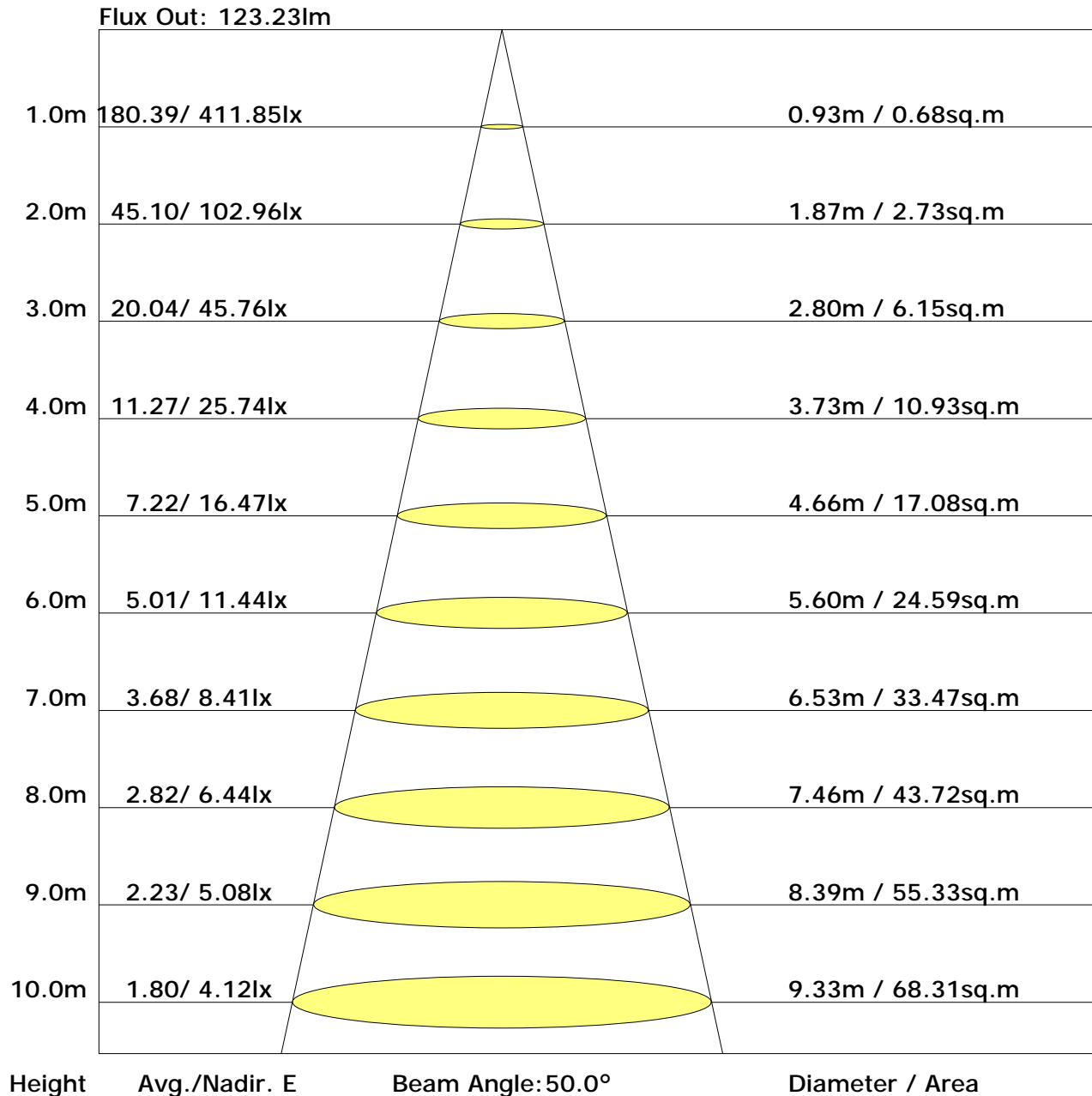
		Vertical plane																		Flux(T)		Flux(E)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80					90																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0</

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:



The Average Illuminance Effective Figure



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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	14.3	15.4	14.7	15.8	16.3	14.3	15.4	14.8	15.8	16.3
3H	15.6	16.6	16.1	17.0	17.5	15.3	16.2	15.7	16.7	17.2
4H	16.1	17.0	16.6	17.5	18.0	15.6	16.5	16.1	16.9	17.5
6H	16.4	17.3	16.9	17.8	18.3	15.8	16.6	16.3	17.1	17.6
8H	16.6	17.4	17.1	17.9	18.4	15.8	16.6	16.3	17.1	17.6
12H	16.7	17.4	17.2	17.9	18.5	15.9	16.6	16.4	17.1	17.7
X=4H Y=2H	14.4	15.3	14.9	15.8	16.3	14.8	15.7	15.3	16.2	16.7
3H	15.8	16.6	16.3	17.1	17.6	15.9	16.6	16.4	17.1	17.7
4H	16.4	17.1	16.9	17.6	18.2	16.3	17.0	16.8	17.5	18.0
6H	16.9	17.4	17.4	18.0	18.6	16.6	17.1	17.1	17.7	18.3
8H	17.0	17.6	17.6	18.1	18.7	16.6	17.2	17.2	17.7	18.3
12H	17.2	17.7	17.8	18.3	18.9	16.7	17.2	17.3	17.8	18.4
X=8H Y=4H	16.4	16.9	16.9	17.5	18.1	16.4	17.0	17.0	17.5	18.1
6H	16.9	17.4	17.5	18.0	18.6	16.8	17.3	17.4	17.9	18.5
8H	17.2	17.6	17.8	18.2	18.8	17.0	17.4	17.6	18.0	18.6
12H	17.4	17.8	18.0	18.4	19.0	17.1	17.5	17.7	18.1	18.7
X=12H Y=4H	16.4	16.8	16.9	17.4	18.0	16.4	16.9	17.0	17.5	18.1
6H	16.9	17.3	17.5	17.9	18.5	16.8	17.2	17.5	17.8	18.5
8H	17.2	17.5	17.8	18.1	18.8	17.0	17.4	17.6	18.0	18.7

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 = 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	0.76	0.83	0.88	0.92	0.97	1.00	1.03	1.05	1.07
	0.30		0.71	0.78	0.83	0.87	0.93	0.96	0.99	1.03	1.05
	0.20		0.67	0.74	0.79	0.83	0.89	0.93	0.96	1.00	1.03
0.50	0.50	0.20	0.74	0.81	0.86	0.89	0.93	0.96	0.98	1.01	1.02
	0.30		0.69	0.76	0.81	0.85	0.90	0.93	0.95	0.98	1.00
	0.20		0.66	0.73	0.78	0.82	0.87	0.90	0.93	0.96	0.99
0.30	0.50	0.20	0.73	0.79	0.83	0.86	0.90	0.92	0.94	0.96	0.98
	0.30		0.68	0.75	0.79	0.83	0.87	0.90	0.92	0.95	0.96
	0.20		0.65	0.72	0.76	0.80	0.85	0.88	0.90	0.93	0.95
0.00	0.00	0.00	0.63	0.69	0.73	0.76	0.81	0.83	0.85	0.88	0.89
Rating: 7W 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	0.69	0.57	0.48	0.42	0.33	0.27	0.23	0.18	0.15	
	0.30		0.58	0.48	0.42	0.37	0.30	0.25	0.22	0.17	0.14	
	0.20		0.50	0.42	0.37	0.33	0.27	0.23	0.20	0.16	0.13	
0.50	0.50	0.20	0.65	0.53	0.45	0.39	0.30	0.29	0.21	0.17	0.14	
	0.30		0.55	0.46	0.39	0.35	0.28	0.23	0.20	0.16	0.13	
	0.20		0.48	0.41	0.35	0.31	0.26	0.22	0.19	0.15	0.12	
0.30	0.50	0.20	0.62	0.50	0.42	0.36	0.28	0.23	0.20	0.15	0.12	
	0.30		0.53	0.44	0.37	0.32	0.26	0.22	0.19	0.15	0.12	
	0.20		0.46	0.39	0.34	0.30	0.24	0.20	0.18	0.14	0.11	
0.00	0.00	0.00	0.33	0.27	0.23	0.20	0.15	0.13	0.11	0.08	0.07	
Rating: 7W 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 = 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	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.26
	0.30		0.14	0.16	0.17	0.18	0.20	0.21	0.22	0.24	0.24
	0.20		0.11	0.12	0.14	0.15	0.17	0.19	0.20	0.22	0.23
0.50	0.50	0.20	0.18	0.20	0.21	0.21	0.23	0.23	0.24	0.24	0.25
	0.30		0.14	0.15	0.17	0.18	0.19	0.21	0.21	0.23	0.23
	0.20		0.11	0.12	0.14	0.15	0.17	0.18	0.20	0.21	0.22
0.30	0.50	0.20	0.18	0.19	0.20	0.21	0.22	0.22	0.23	0.23	0.24
	0.30		0.13	0.15	0.16	0.17	0.19	0.20	0.21	0.22	0.23
	0.20		0.10	0.12	0.14	0.15	0.17	0.18	0.19	0.20	0.21
0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Rating: 7W 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 _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	413.9	0.4	0.4	0.16	0.16
1.0-2.0	411.3	1.2	1.6	0.48	0.64
2.0-3.0	406.3	1.9	3.5	0.79	1.44
3.0-4.0	399.0	2.7	6.2	1.09	2.53
4.0-5.0	389.4	3.4	9.5	1.37	3.90
5.0-6.0	378.0	4.0	13.5	1.62	5.52
6.0-7.0	364.9	4.5	18.0	1.85	7.37
7.0-8.0	350.3	5.0	23.1	2.05	9.42
8.0-9.0	334.6	5.4	28.5	2.21	11.63
9.0-10.0	318.1	5.8	34.2	2.35	13.98
10.0-11.0	301.2	6.0	40.3	2.46	16.44
11.0-12.0	284.0	6.2	46.5	2.54	18.98
12.0-13.0	266.8	6.3	52.8	2.59	21.56
13.0-14.0	249.9	6.4	59.2	2.61	24.17
14.0-15.0	233.1	6.4	65.6	2.61	26.79
15.0-16.0	217.0	6.4	72.0	2.60	29.38
16.0-17.0	201.9	6.3	78.2	2.57	31.95
17.0-18.0	187.4	6.2	84.4	2.52	34.48
18.0-19.0	173.7	6.0	90.5	2.47	36.94
19.0-20.0	160.8	5.9	96.4	2.40	39.35
20.0-21.0	149.0	5.7	102.1	2.34	41.69
21.0-22.0	138.1	5.6	107.6	2.27	43.95
22.0-23.0	128.1	5.4	113.0	2.19	46.15
23.0-24.0	118.9	5.2	118.2	2.12	48.27
24.0-25.0	110.5	5.0	123.2	2.05	50.32
25.0-26.0	102.9	4.9	128.1	1.98	52.31
26.0-27.0	95.9	4.7	132.8	1.92	54.22
27.0-28.0	89.4	4.5	137.3	1.85	56.07
28.0-29.0	83.4	4.4	141.7	1.78	57.85
29.0-30.0	78.0	4.2	145.9	1.72	59.57
30.0-31.0	72.9	4.1	149.9	1.66	61.23
31.0-32.0	68.2	3.9	153.8	1.60	62.83
32.0-33.0	64.0	3.8	157.6	1.54	64.37
33.0-34.0	60.0	3.6	161.2	1.48	65.85
34.0-35.0	56.3	3.5	164.7	1.43	67.27
35.0-36.0	52.9	3.4	168.1	1.38	68.65

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 _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	49.7	3.2	171.3	1.33	69.97
37.0-38.0	46.8	3.1	174.5	1.28	71.25
38.0-39.0	44.1	3.0	177.5	1.23	72.48
39.0-40.0	41.6	2.9	180.4	1.18	73.66
40.0-41.0	39.2	2.8	183.2	1.14	74.80
41.0-42.0	36.9	2.7	185.9	1.10	75.90
42.0-43.0	34.8	2.6	188.4	1.05	76.95
43.0-44.0	32.8	2.5	190.9	1.01	77.96
44.0-45.0	30.9	2.4	193.3	0.97	78.93
45.0-46.0	29.0	2.3	195.5	0.93	79.86
46.0-47.0	27.3	2.2	197.7	0.89	80.74
47.0-48.0	25.7	2.1	199.8	0.85	81.59
48.0-49.0	24.1	2.0	201.8	0.81	82.40
49.0-50.0	22.7	1.9	203.7	0.77	83.17
50.0-51.0	21.3	1.8	205.5	0.73	83.91
51.0-52.0	19.9	1.7	207.2	0.70	84.60
52.0-53.0	18.7	1.6	208.8	0.66	85.27
53.0-54.0	17.5	1.5	210.3	0.63	85.90
54.0-55.0	16.4	1.5	211.8	0.60	86.50
55.0-56.0	15.3	1.4	213.2	0.56	87.06
56.0-57.0	14.3	1.3	214.5	0.53	87.59
57.0-58.0	13.3	1.2	215.7	0.50	88.10
58.0-59.0	12.5	1.2	216.9	0.48	88.57
59.0-60.0	11.6	1.1	218.0	0.45	89.02
60.0-61.0	10.9	1.0	219.0	0.42	89.45
61.0-62.0	10.1	1.0	220.0	0.40	89.85
62.0-63.0	9.5	0.9	220.9	0.38	90.22
63.0-64.0	8.9	0.9	221.8	0.35	90.58
64.0-65.0	8.3	0.8	222.6	0.33	90.91
65.0-66.0	7.7	0.8	223.4	0.32	91.23
66.0-67.0	7.2	0.7	224.1	0.30	91.52
67.0-68.0	6.7	0.7	224.8	0.28	91.80
68.0-69.0	6.3	0.6	225.4	0.26	92.06
69.0-70.0	5.8	0.6	226.0	0.24	92.31
70.0-71.0	5.4	0.6	226.6	0.23	92.54
71.0-72.0	5.0	0.5	227.1	0.21	92.75

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 _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	4.7	0.5	227.6	0.20	92.95
73.0-74.0	4.3	0.5	228.1	0.19	93.14
74.0-75.0	4.0	0.4	228.5	0.17	93.31
75.0-76.0	3.7	0.4	228.9	0.16	93.47
76.0-77.0	3.4	0.4	229.2	0.15	93.62
77.0-78.0	3.2	0.3	229.6	0.14	93.76
78.0-79.0	2.9	0.3	229.9	0.13	93.88
79.0-80.0	2.7	0.3	230.2	0.12	94.00
80.0-81.0	2.5	0.3	230.5	0.11	94.12
81.0-82.0	2.3	0.3	230.7	0.10	94.22
82.0-83.0	2.2	0.2	231.0	0.10	94.32
83.0-84.0	2.0	0.2	231.2	0.09	94.41
84.0-85.0	1.9	0.2	231.4	0.09	94.49
85.0-86.0	1.9	0.2	231.6	0.08	94.58
86.0-87.0	1.8	0.2	231.8	0.08	94.66
87.0-88.0	1.8	0.2	232.0	0.08	94.74
88.0-89.0	1.7	0.2	232.2	0.08	94.81
89.0-90.0	1.7	0.2	232.4	0.08	94.89
90.0-91.0	1.7	0.2	232.6	0.08	94.97
91.0-92.0	1.7	0.2	232.7	0.08	95.05
92.0-93.0	1.7	0.2	232.9	0.08	95.12
93.0-94.0	1.7	0.2	233.1	0.08	95.20
94.0-95.0	1.7	0.2	233.3	0.08	95.28
95.0-96.0	1.7	0.2	233.5	0.08	95.36
96.0-97.0	1.7	0.2	233.7	0.08	95.43
97.0-98.0	1.7	0.2	233.9	0.08	95.51
98.0-99.0	1.7	0.2	234.1	0.08	95.58
99.0-100.0	1.7	0.2	234.2	0.07	95.66
100.0-101.0	1.7	0.2	234.4	0.07	95.73
101.0-102.0	1.7	0.2	234.6	0.07	95.81
102.0-103.0	1.7	0.2	234.8	0.07	95.88
103.0-104.0	1.7	0.2	235.0	0.07	95.95
104.0-105.0	1.7	0.2	235.1	0.07	96.03
105.0-106.0	1.7	0.2	235.3	0.07	96.10
106.0-107.0	1.7	0.2	235.5	0.07	96.17
107.0-108.0	1.7	0.2	235.7	0.07	96.24

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 _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	1.7	0.2	235.9	0.07	96.32
109.0-110.0	1.7	0.2	236.0	0.07	96.39
110.0-111.0	1.7	0.2	236.2	0.07	96.46
111.0-112.0	1.7	0.2	236.4	0.07	96.53
112.0-113.0	1.7	0.2	236.6	0.07	96.61
113.0-114.0	1.7	0.2	236.7	0.07	96.68
114.0-115.0	1.7	0.2	236.9	0.07	96.75
115.0-116.0	1.8	0.2	237.1	0.07	96.82
116.0-117.0	1.8	0.2	237.3	0.07	96.89
117.0-118.0	1.8	0.2	237.4	0.07	96.96
118.0-119.0	1.8	0.2	237.6	0.07	97.03
119.0-120.0	1.8	0.2	237.8	0.07	97.10
120.0-121.0	1.8	0.2	237.9	0.07	97.17
121.0-122.0	1.8	0.2	238.1	0.07	97.24
122.0-123.0	1.8	0.2	238.3	0.07	97.31
123.0-124.0	1.9	0.2	238.5	0.07	97.38
124.0-125.0	1.9	0.2	238.6	0.07	97.45
125.0-126.0	1.9	0.2	238.8	0.07	97.51
126.0-127.0	1.9	0.2	239.0	0.07	97.58
127.0-128.0	1.9	0.2	239.1	0.07	97.65
128.0-129.0	1.9	0.2	239.3	0.07	97.72
129.0-130.0	1.9	0.2	239.5	0.07	97.79
130.0-131.0	2.0	0.2	239.6	0.07	97.85
131.0-132.0	2.0	0.2	239.8	0.07	97.92
132.0-133.0	2.0	0.2	239.9	0.07	97.99
133.0-134.0	2.0	0.2	240.1	0.07	98.05
134.0-135.0	2.1	0.2	240.3	0.07	98.12
135.0-136.0	2.1	0.2	240.4	0.07	98.19
136.0-137.0	2.1	0.2	240.6	0.07	98.25
137.0-138.0	2.2	0.2	240.8	0.07	98.32
138.0-139.0	2.2	0.2	240.9	0.07	98.38
139.0-140.0	2.2	0.2	241.1	0.06	98.45
140.0-141.0	2.2	0.2	241.2	0.06	98.51
141.0-142.0	2.3	0.2	241.4	0.06	98.57
142.0-143.0	2.3	0.2	241.5	0.06	98.64
143.0-144.0	2.3	0.2	241.7	0.06	98.70

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 _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	2.4	0.1	241.8	0.06	98.76
145.0-146.0	2.4	0.1	242.0	0.06	98.82
146.0-147.0	2.4	0.1	242.1	0.06	98.88
147.0-148.0	2.5	0.1	242.3	0.06	98.94
148.0-149.0	2.5	0.1	242.4	0.06	99.00
149.0-150.0	2.5	0.1	242.6	0.06	99.06
150.0-151.0	2.5	0.1	242.7	0.06	99.11
151.0-152.0	2.6	0.1	242.8	0.06	99.17
152.0-153.0	2.6	0.1	243.0	0.05	99.22
153.0-154.0	2.6	0.1	243.1	0.05	99.27
154.0-155.0	2.6	0.1	243.2	0.05	99.32
155.0-156.0	2.7	0.1	243.3	0.05	99.37
156.0-157.0	2.7	0.1	243.5	0.05	99.42
157.0-158.0	2.7	0.1	243.6	0.05	99.47
158.0-159.0	2.7	0.1	243.7	0.05	99.51
159.0-160.0	2.8	0.1	243.8	0.04	99.56
160.0-161.0	2.8	0.1	243.9	0.04	99.60
161.0-162.0	2.8	0.1	244.0	0.04	99.64
162.0-163.0	2.8	0.1	244.1	0.04	99.68
163.0-164.0	2.8	0.1	244.2	0.04	99.71
164.0-165.0	2.9	0.1	244.3	0.03	99.75
165.0-166.0	2.9	0.1	244.3	0.03	99.78
166.0-167.0	2.9	0.1	244.4	0.03	99.81
167.0-168.0	2.9	0.1	244.5	0.03	99.84
168.0-169.0	2.9	0.1	244.5	0.03	99.86
169.0-170.0	2.9	0.1	244.6	0.02	99.89
170.0-171.0	2.9	0.1	244.6	0.02	99.91
171.0-172.0	2.9	0.0	244.7	0.02	99.93
172.0-173.0	2.9	0.0	244.7	0.02	99.94
173.0-174.0	2.9	0.0	244.8	0.01	99.96
174.0-175.0	2.9	0.0	244.8	0.01	99.97
175.0-176.0	2.9	0.0	244.8	0.01	99.98
176.0-177.0	2.9	0.0	244.8	0.01	99.99
177.0-178.0	2.9	0.0	244.9	0.01	100.00
178.0-179.0	2.9	0.0	244.9	0.00	100.00
179.0-180.0	2.9	0.0	244.9	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: