

Report No.:

Test Time: 2023/10/8 16:22

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: TRI NODE RGB-0.75W-UCS8903

Luminaire Description: CLEAR FLAT IP67

Lamp Description: 3 nodes RED

Luminous Width (mm): 50

Voltage: 24.0 V

Power: 1.62 W

Lamp Catalog: NODE

Luminous Length (mm): 250

Luminous Height (mm): 30

Current: 0.068 A

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 9.3 lm

Downward Ratio: 98%

Horizontal Diffuse Angle(10%,50%): H148.6,H106.2

Vertical Diffuse Angle(10%,50%): V149.7,V106.7

Luminaire Efficacy Rating (LER): 6

Max. Intensity: 3.62 cd

Total Rated Lamp Lumens: 9.3 lm

Efficiency: 100%

Upward Ratio: 2%

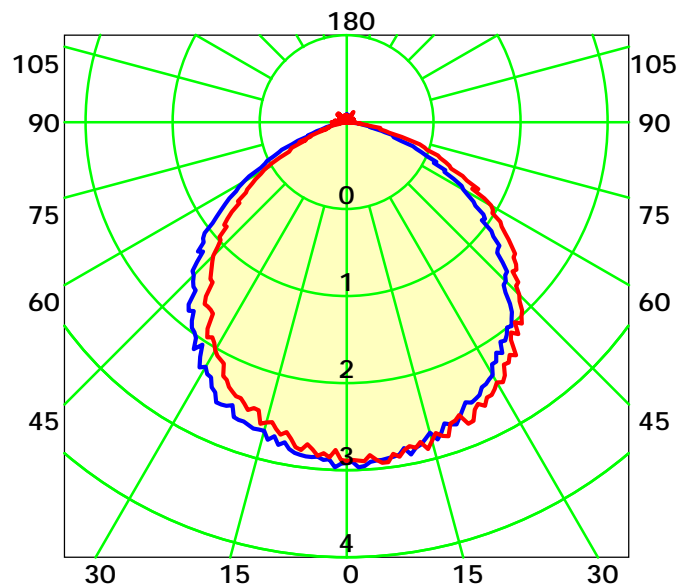
Central Intensity: 3.57 cd

Pos of Max. Intensity: H0 V2

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 106.5° 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

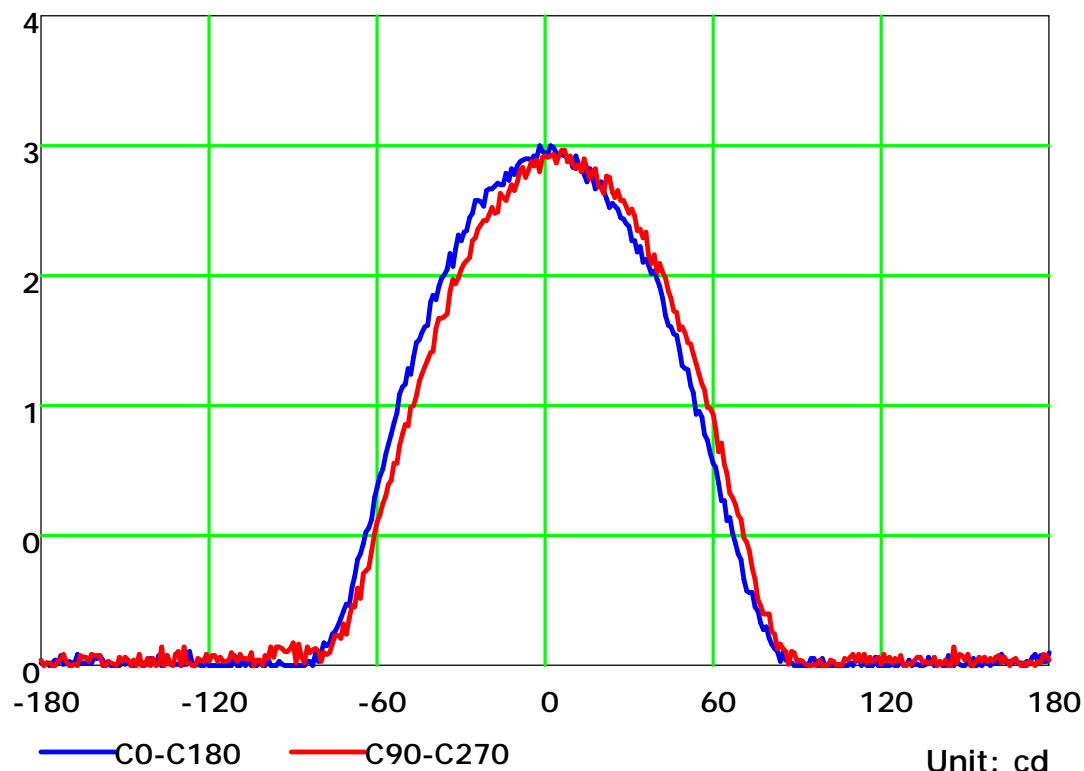
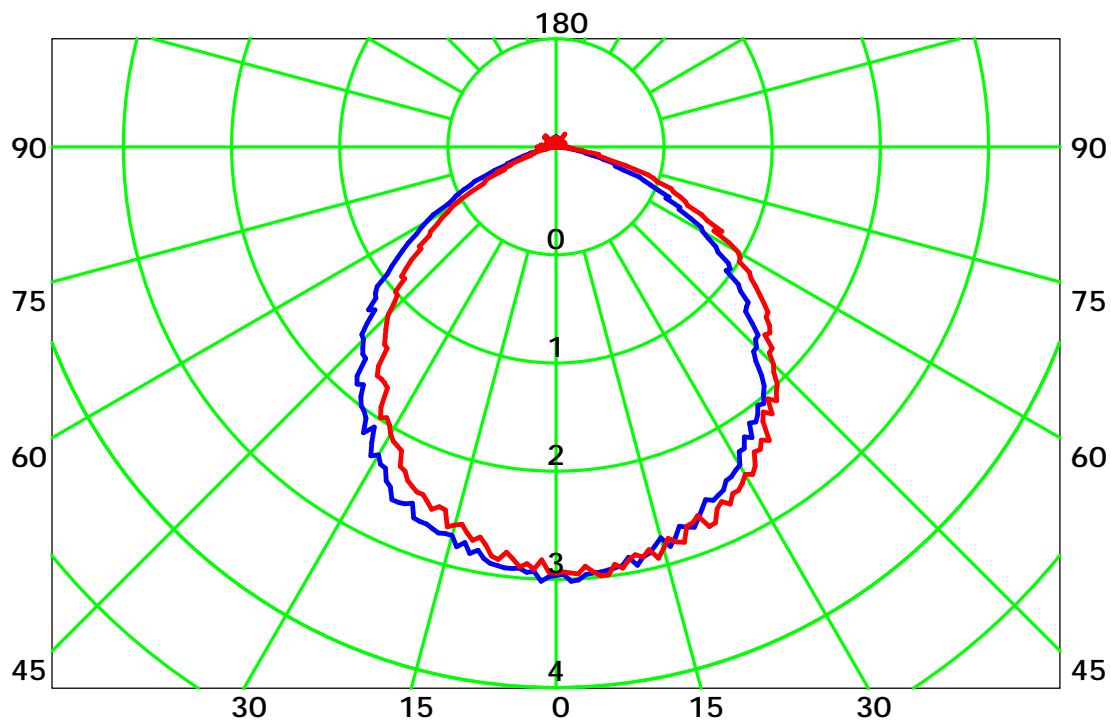
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

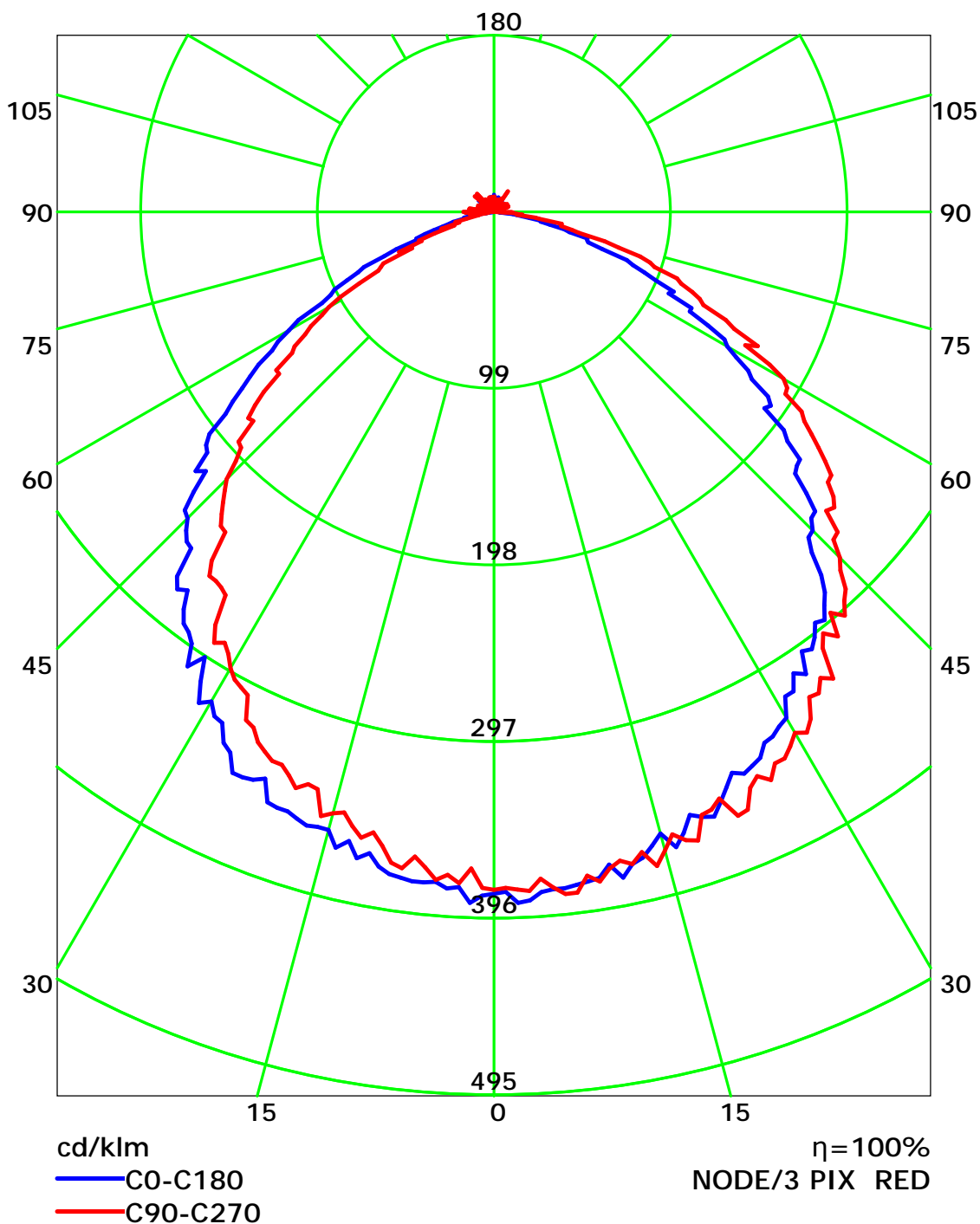
Luminous Intensity Distribution Curve



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:

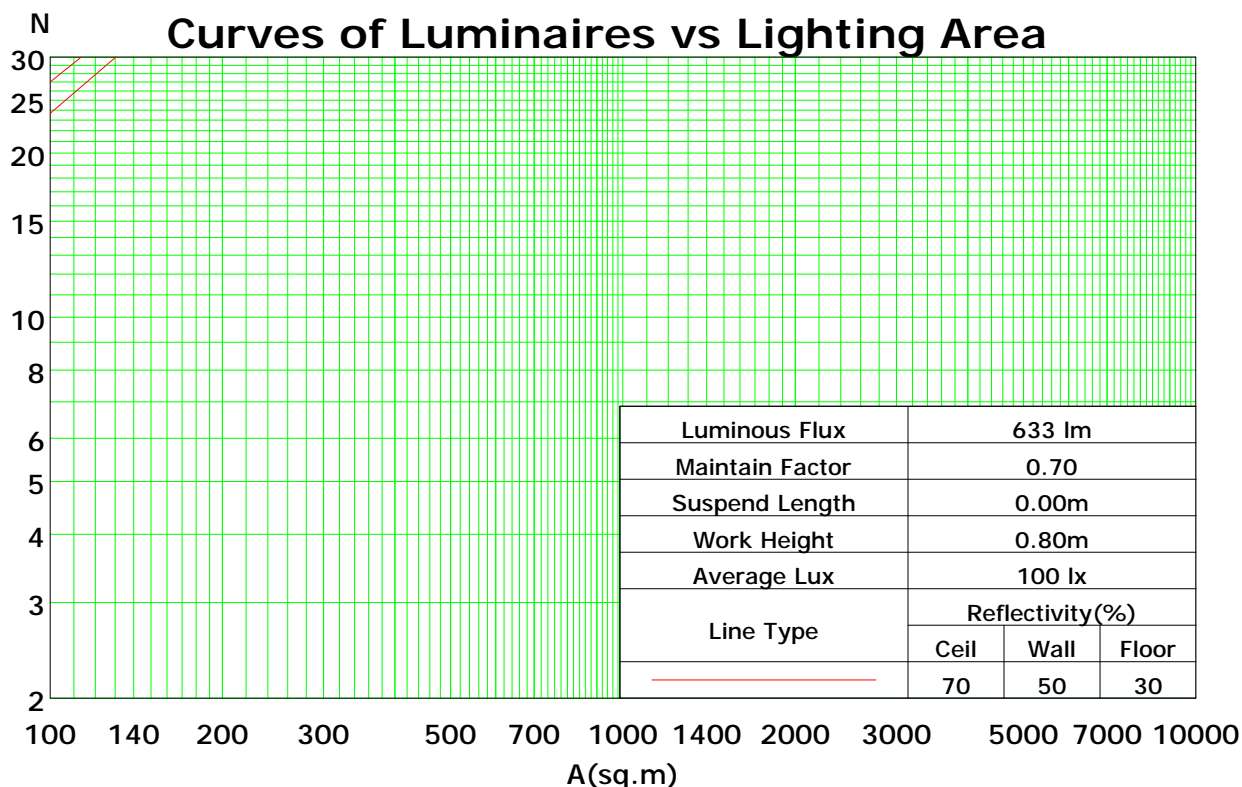
Coefficients Of Utilization - Zonal Cavity Method

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	110	110	110	105	105	105	100	100	100	98
1	109	105	101	97	106	102	99	96	98	95	92	94	91	89	90	88	86	84
2	100	92	86	81	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	82	74	68	89	80	73	67	77	70	65	74	68	64	71	66	63	61
4	84	73	64	58	82	71	63	57	68	62	56	66	60	55	63	58	54	52
5	77	65	56	50	75	64	56	50	61	54	49	59	53	48	57	52	47	45
6	71	59	50	44	69	58	49	43	56	48	43	54	47	42	52	46	42	40
7	66	53	45	39	64	52	44	38	51	43	38	49	42	38	47	42	37	35
8	62	49	40	35	60	48	40	34	46	39	34	45	38	34	44	38	33	31
9	58	45	37	31	56	44	36	31	43	36	31	41	35	30	40	34	30	28
10	54	41	33	28	53	41	33	28	39	33	28	38	32	28	37	32	27	26

Spacing Criteria (0-180): 1.25

Spacing Criteria (90-270): 1.24

Spacing Criteria (Diagonal): 1.35



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

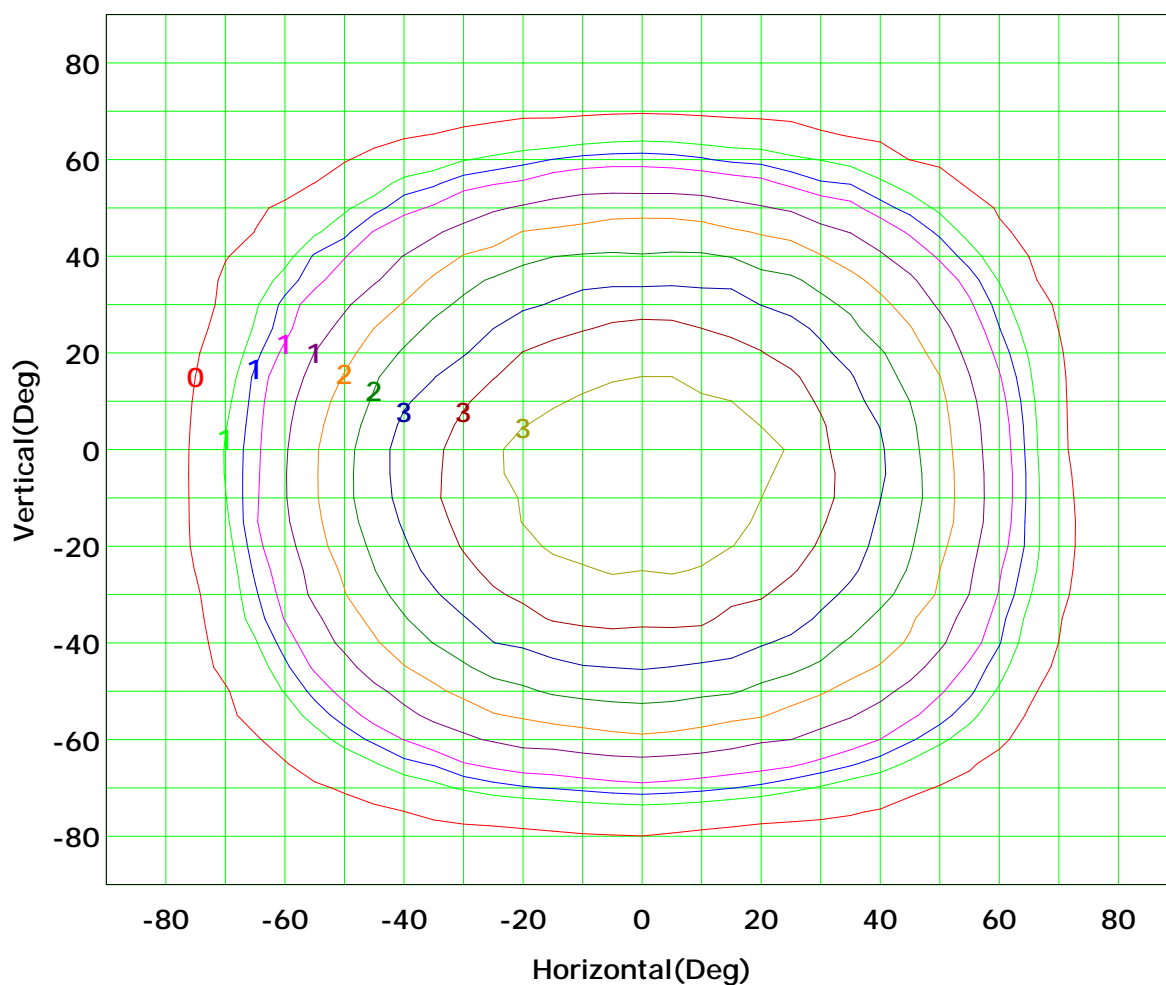
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



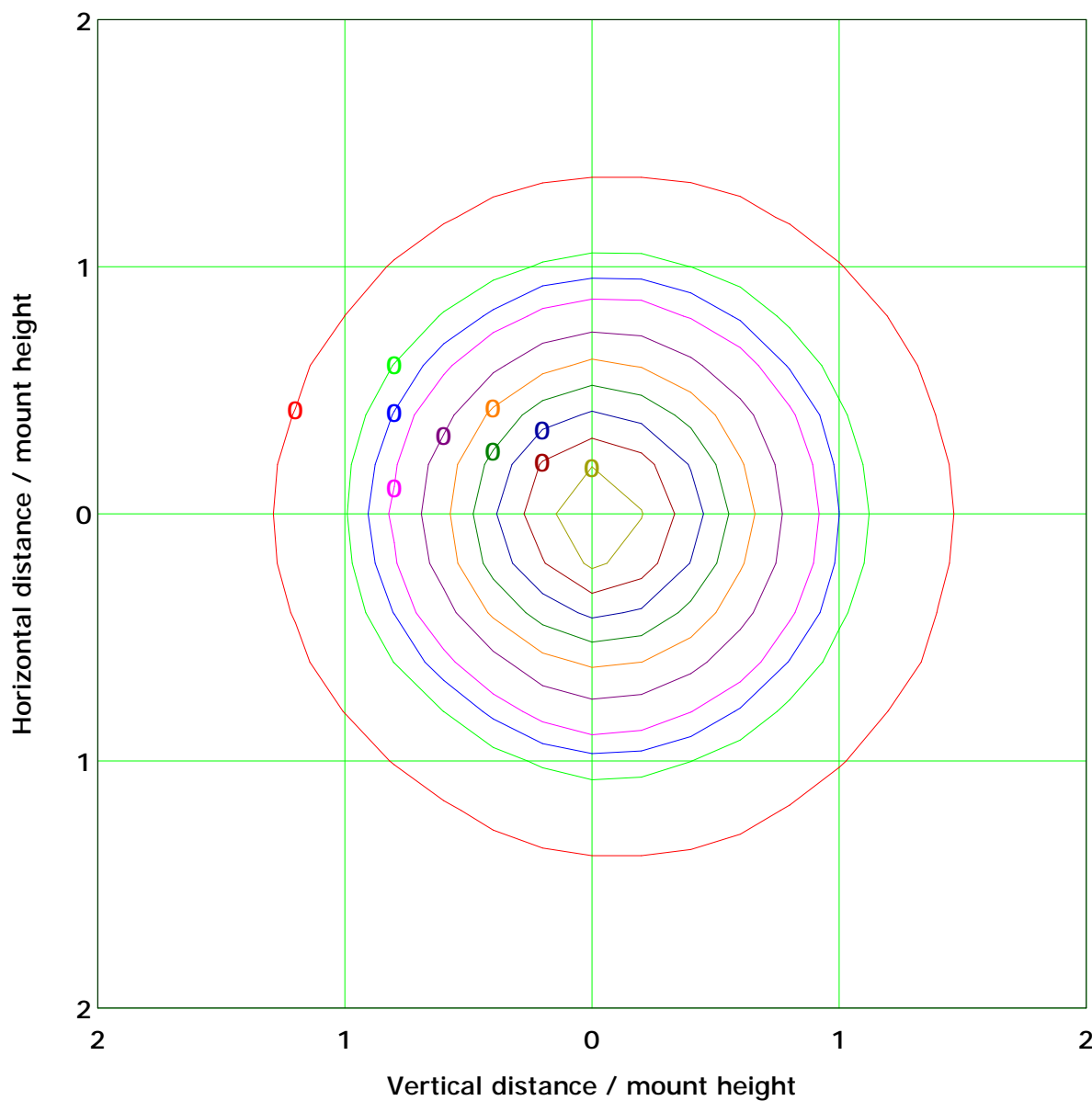
I_{max} (100%): 4 cd

(10%):	0 cd	(20%):	1 cd
(25%):	1 cd	(30%):	1 cd
(40%):	1 cd	(50%):	2 cd
(60%):	2 cd	(70%):	3 cd
(80%):	3 cd	(90%):	3 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%): 0.1 lx

(10%): 0.0 lx	(20%): 0.0 lx
(25%): 0.0 lx	(30%): 0.0 lx
(40%): 0.1 lx	(50%): 0.1 lx
(60%): 0.1 lx	(70%): 0.1 lx
(80%): 0.1 lx	(90%): 0.1 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

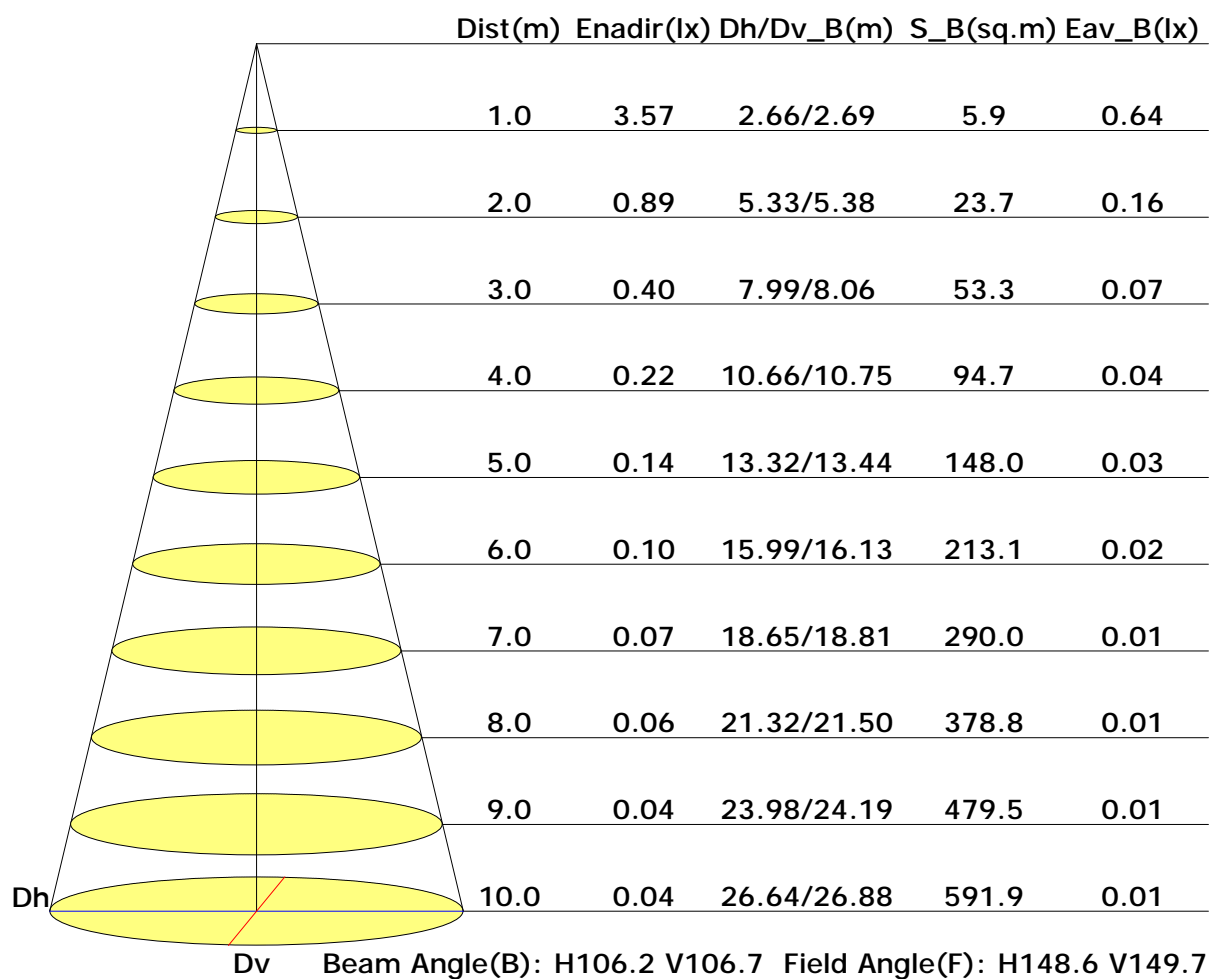


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	167	150	133	111	84	65	39	20	11
C90	259	253	242	232	202	179	128	99	46
C180	161	142	121	97	70	37	23	9	4
C270	200	183	154	132	96	58	45	8	50

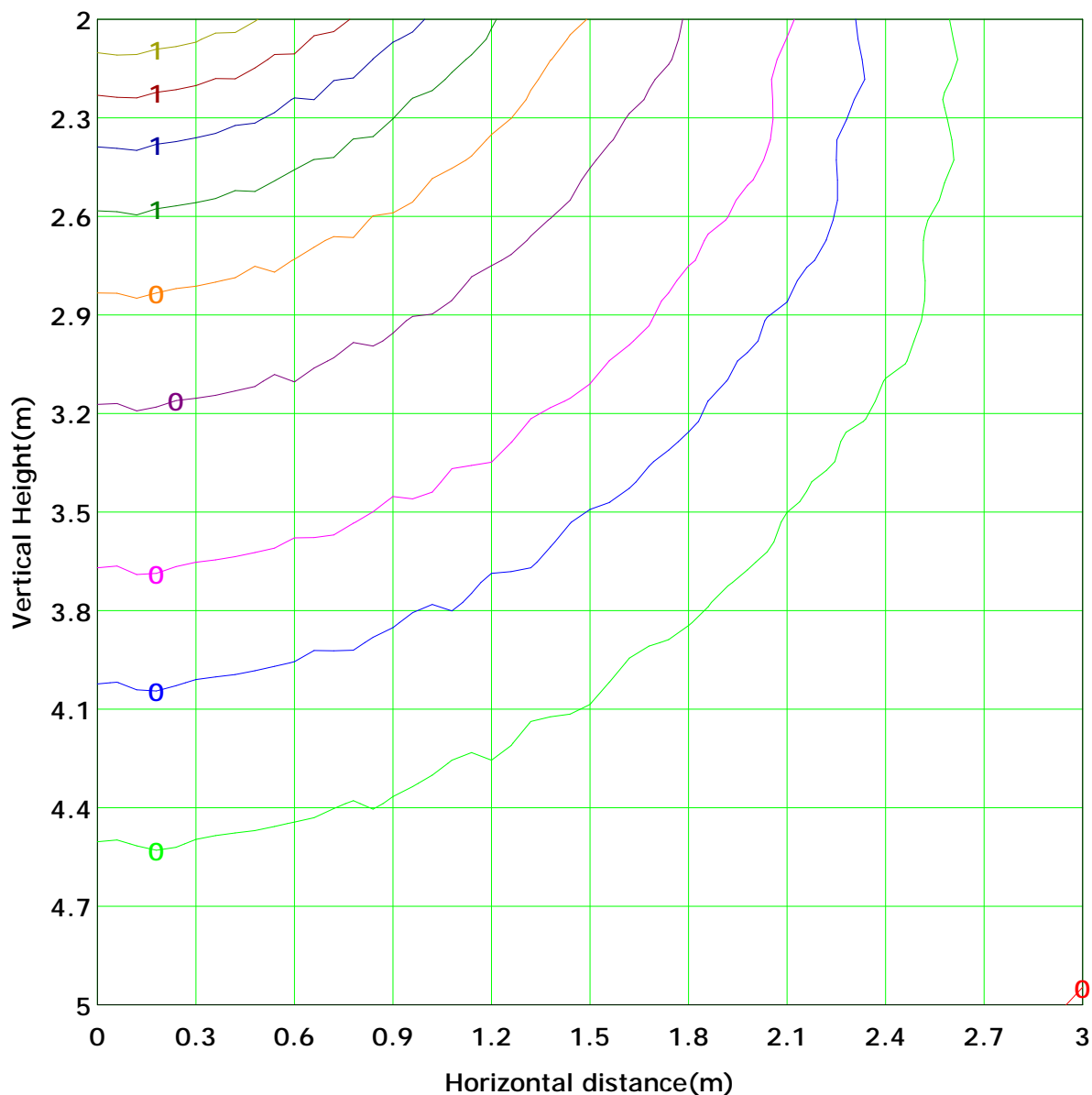
C Plane (°):0.0-360.0: 30.0
Test Lab:
Test Type: TYPE C
Temperature: 25
Operator: Jacky

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

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 0.9 lx
(10%): 0.1 lx	(20%): 0.2 lx	(30%): 0.3 lx
(25%): 0.2 lx	(40%): 0.4 lx	(50%): 0.4 lx
(60%): 0.5 lx	(70%): 0.6 lx	(90%): 0.8 lx
(80%): 0.7 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:

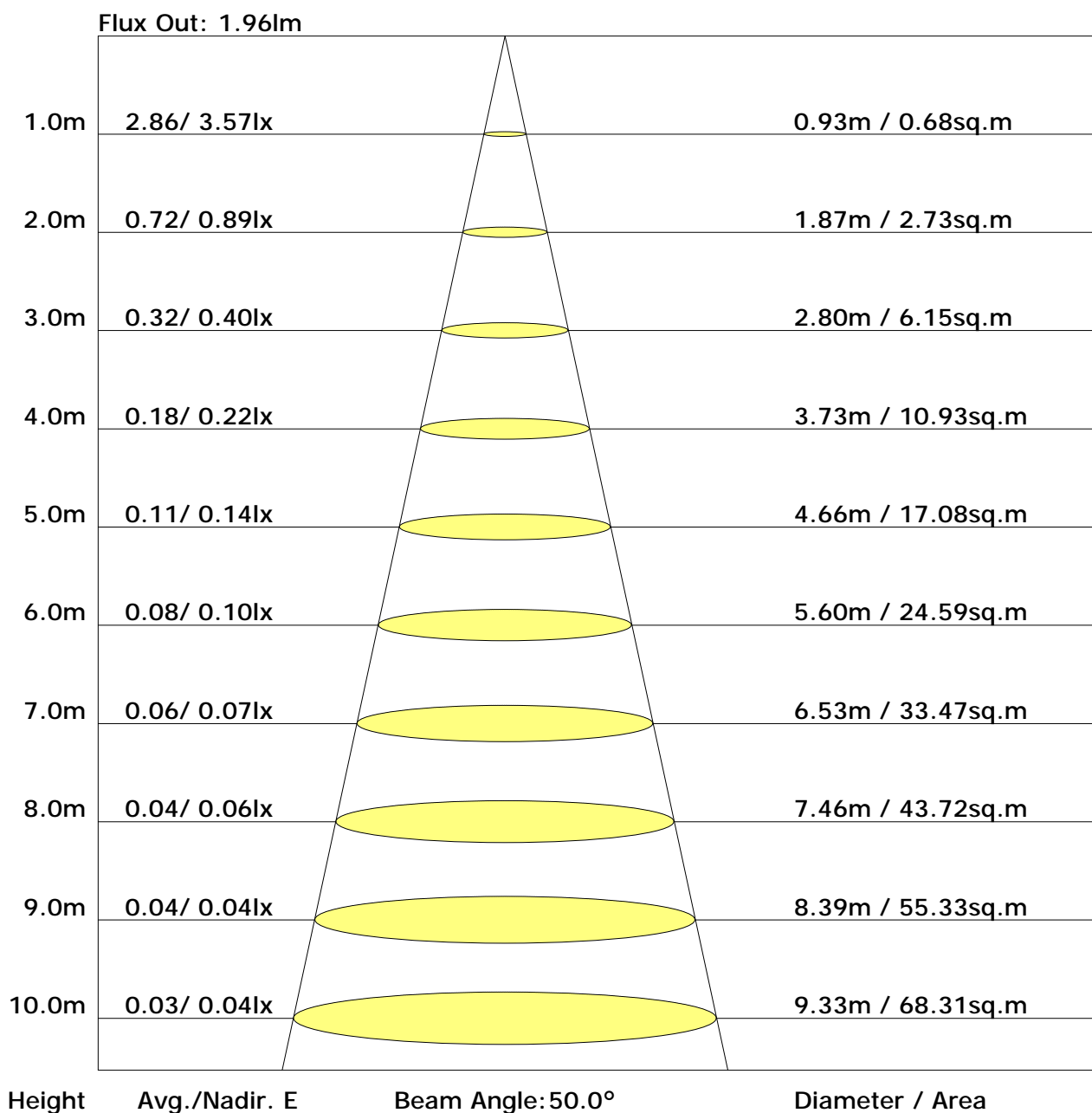
Area Flux Table

Unit: lm																	
Vertical plane																	
-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
-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
-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
-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	0.1	0.1
-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	0.3	0.3
-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	0.5	0.5
-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	0.7	0.7
-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	0.9	0.9
-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	1.0	1.0
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
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	1.1	1.1
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	1.0	1.0
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	0.9	0.9
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	0.7	0.7
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	0.5	0.5
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	0.3	0.3
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	0.1	0.1
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
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
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
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
-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
-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
-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
-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
-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
-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
-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
-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	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
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
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
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
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
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
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
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.3	0.1	0.0
Flux(E)	0.0	0.0	0.1	0.3	0.5	0.7	0.9	1.0	1.1	1.1							

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



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	21.9	23.4	22.3	23.8	24.2	22.1	23.7	22.5	24.0	24.4
3H	23.1	24.5	23.5	24.9	25.3	23.5	24.8	23.9	25.2	25.6
4H	23.5	24.8	23.9	25.1	25.6	23.8	25.1	24.2	25.5	25.9
6H	23.6	24.8	24.0	25.2	25.6	23.9	25.1	24.3	25.5	25.9
8H	23.6	24.7	24.0	25.1	25.6	23.9	25.0	24.4	25.5	25.9
12H	23.6	24.6	24.0	25.1	25.6	23.9	25.0	24.4	25.4	25.9
X=4H Y=2H	22.2	23.5	22.6	23.9	24.3	22.6	23.9	23.0	24.3	24.7
3H	23.6	24.6	24.0	25.1	25.5	24.1	25.2	24.6	25.6	26.1
4H	23.9	24.9	24.4	25.4	25.8	24.5	25.5	25.0	25.9	26.4
6H	24.1	24.9	24.6	25.4	25.9	24.7	25.5	25.2	26.0	26.5
8H	24.1	24.9	24.6	25.4	25.9	24.7	25.5	25.2	26.0	26.5
12H	24.1	24.8	24.6	25.3	25.8	24.7	25.4	25.2	25.9	26.4
X=8H Y=4H	24.0	24.8	24.5	25.2	25.8	24.6	25.4	25.1	25.9	26.4
6H	24.1	24.8	24.7	25.3	25.8	24.8	25.5	25.4	26.0	26.5
8H	24.2	24.7	24.7	25.3	25.8	24.9	25.4	25.4	26.0	26.5
12H	24.2	24.7	24.7	25.2	25.8	24.9	25.4	25.4	25.9	26.5
X=12H Y=4H	24.0	24.7	24.5	25.2	25.7	24.6	25.3	25.1	25.8	26.3
6H	24.1	24.7	24.7	25.2	25.8	24.8	25.4	25.4	25.9	26.5
8H	24.2	24.7	24.7	25.2	25.8	24.9	25.4	25.4	25.9	26.5

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	0.70	0.77	0.82	0.89	0.94	0.97	1.01	1.04
	0.30		0.51	0.62	0.70	0.76	0.83	0.89	0.93	0.98	1.01
	0.20		0.46	0.57	0.65	0.70	0.79	0.85	0.89	0.94	0.98
0.50	0.50	0.20	0.57	0.67	0.74	0.79	0.86	0.90	0.93	0.97	1.00
	0.30		0.50	0.61	0.68	0.74	0.81	0.86	0.89	0.94	0.97
	0.20		0.45	0.56	0.64	0.69	0.77	0.82	0.86	0.91	0.95
0.30	0.50	0.20	0.56	0.65	0.72	0.76	0.83	0.87	0.89	0.93	0.95
	0.30		0.50	0.60	0.67	0.72	0.79	0.83	0.86	0.91	0.93
	0.20		0.45	0.55	0.62	0.68	0.75	0.80	0.84	0.88	0.91
0.00	0.00	0.00	0.43	0.53	0.59	0.65	0.71	0.76	0.79	0.84	0.86
Rating: 2W 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	0.95	0.78	0.65	0.57	0.45	0.37	0.31	0.24	0.20	
	0.30		0.80	0.66	0.57	0.50	0.40	0.34	0.29	0.23	0.19	
	0.20		0.68	0.58	0.51	0.45	0.37	0.31	0.27	0.21	0.18	
0.50	0.50	0.20	0.91	0.74	0.62	0.54	0.42	0.38	0.30	0.23	0.18	
	0.30		0.77	0.64	0.55	0.48	0.39	0.32	0.28	0.22	0.18	
	0.20		0.67	0.57	0.49	0.44	0.36	0.30	0.26	0.20	0.17	
0.30	0.50	0.20	0.88	0.71	0.59	0.51	0.40	0.33	0.28	0.21	0.17	
	0.30		0.75	0.62	0.53	0.46	0.37	0.31	0.26	0.20	0.17	
	0.20		0.66	0.56	0.48	0.43	0.35	0.29	0.25	0.20	0.16	
0.00	0.00	0.00	0.55	0.45	0.39	0.33	0.27	0.22	0.19	0.14	0.12	
Rating: 2W 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	0.18	0.19	0.20	0.21	0.22	0.22	0.23	0.23	0.24
	0.30		0.12	0.13	0.15	0.16	0.17	0.18	0.19	0.21	0.21
	0.20		0.07	0.09	0.10	0.11	0.13	0.15	0.16	0.18	0.19
0.50	0.50	0.20	0.17	0.19	0.19	0.20	0.21	0.21	0.22	0.22	0.23
	0.30		0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.21
	0.20		0.07	0.08	0.10	0.11	0.13	0.15	0.16	0.17	0.19
0.30	0.50	0.20	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.21	0.22
	0.30		0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20
	0.20		0.07	0.08	0.10	0.11	0.13	0.14	0.15	0.17	0.18
0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Rating: 2W 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	3.5	0.0	0.0	0.04	0.04
1.0-2.0	3.5	0.0	0.0	0.11	0.15
2.0-3.0	3.5	0.0	0.0	0.18	0.33
3.0-4.0	3.5	0.0	0.1	0.25	0.58
4.0-5.0	3.5	0.0	0.1	0.32	0.90
5.0-6.0	3.5	0.0	0.1	0.39	1.30
6.0-7.0	3.5	0.0	0.2	0.46	1.76
7.0-8.0	3.5	0.0	0.2	0.54	2.30
8.0-9.0	3.5	0.1	0.3	0.60	2.90
9.0-10.0	3.5	0.1	0.3	0.67	3.57
10.0-11.0	3.4	0.1	0.4	0.74	4.31
11.0-12.0	3.4	0.1	0.5	0.80	5.11
12.0-13.0	3.4	0.1	0.6	0.87	5.98
13.0-14.0	3.4	0.1	0.6	0.93	6.91
14.0-15.0	3.4	0.1	0.7	0.99	7.90
15.0-16.0	3.4	0.1	0.8	1.05	8.95
16.0-17.0	3.3	0.1	0.9	1.12	10.07
17.0-18.0	3.3	0.1	1.0	1.17	11.24
18.0-19.0	3.3	0.1	1.2	1.23	12.47
19.0-20.0	3.3	0.1	1.3	1.29	13.76
20.0-21.0	3.3	0.1	1.4	1.34	15.10
21.0-22.0	3.2	0.1	1.5	1.39	16.49
22.0-23.0	3.2	0.1	1.7	1.45	17.93
23.0-24.0	3.2	0.1	1.8	1.49	19.43
24.0-25.0	3.2	0.1	2.0	1.54	20.97
25.0-26.0	3.1	0.1	2.1	1.58	22.55
26.0-27.0	3.1	0.2	2.3	1.62	24.17
27.0-28.0	3.1	0.2	2.4	1.66	25.84
28.0-29.0	3.0	0.2	2.6	1.70	27.53
29.0-30.0	3.0	0.2	2.7	1.73	29.26
30.0-31.0	3.0	0.2	2.9	1.76	31.02
31.0-32.0	2.9	0.2	3.1	1.79	32.81
32.0-33.0	2.9	0.2	3.2	1.81	34.62
33.0-34.0	2.8	0.2	3.4	1.84	36.46
34.0-35.0	2.8	0.2	3.6	1.86	38.32
35.0-36.0	2.7	0.2	3.7	1.86	40.18

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	2.7	0.2	3.9	1.88	42.06
37.0-38.0	2.7	0.2	4.1	1.90	43.96
38.0-39.0	2.6	0.2	4.3	1.91	45.88
39.0-40.0	2.6	0.2	4.5	1.92	47.80
40.0-41.0	2.5	0.2	4.6	1.92	49.72
41.0-42.0	2.5	0.2	4.8	1.92	51.64
42.0-43.0	2.4	0.2	5.0	1.92	53.56
43.0-44.0	2.4	0.2	5.2	1.91	55.47
44.0-45.0	2.3	0.2	5.4	1.90	57.37
45.0-46.0	2.3	0.2	5.5	1.89	59.25
46.0-47.0	2.2	0.2	5.7	1.87	61.12
47.0-48.0	2.1	0.2	5.9	1.84	62.96
48.0-49.0	2.1	0.2	6.0	1.82	64.79
49.0-50.0	2.0	0.2	6.2	1.80	66.59
50.0-51.0	2.0	0.2	6.4	1.78	68.37
51.0-52.0	1.9	0.2	6.5	1.75	70.11
52.0-53.0	1.8	0.2	6.7	1.71	71.82
53.0-54.0	1.8	0.2	6.9	1.66	73.49
54.0-55.0	1.7	0.2	7.0	1.62	75.11
55.0-56.0	1.6	0.1	7.2	1.58	76.68
56.0-57.0	1.6	0.1	7.3	1.53	78.22
57.0-58.0	1.5	0.1	7.4	1.48	79.70
58.0-59.0	1.4	0.1	7.6	1.42	81.12
59.0-60.0	1.4	0.1	7.7	1.38	82.50
60.0-61.0	1.3	0.1	7.8	1.32	83.82
61.0-62.0	1.2	0.1	7.9	1.25	85.07
62.0-63.0	1.1	0.1	8.0	1.18	86.25
63.0-64.0	1.1	0.1	8.2	1.13	87.38
64.0-65.0	1.0	0.1	8.3	1.07	88.45
65.0-66.0	0.9	0.1	8.3	0.99	89.44
66.0-67.0	0.9	0.1	8.4	0.93	90.36
67.0-68.0	0.8	0.1	8.5	0.87	91.23
68.0-69.0	0.7	0.1	8.6	0.80	92.03
69.0-70.0	0.7	0.1	8.7	0.73	92.76
70.0-71.0	0.6	0.1	8.7	0.66	93.42
71.0-72.0	0.5	0.1	8.8	0.60	94.02

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	0.5	0.1	8.8	0.54	94.56
73.0-74.0	0.4	0.0	8.9	0.48	95.04
74.0-75.0	0.4	0.0	8.9	0.44	95.48
75.0-76.0	0.3	0.0	8.9	0.38	95.86
76.0-77.0	0.3	0.0	9.0	0.31	96.17
77.0-78.0	0.2	0.0	9.0	0.27	96.44
78.0-79.0	0.2	0.0	9.0	0.24	96.68
79.0-80.0	0.2	0.0	9.0	0.20	96.88
80.0-81.0	0.1	0.0	9.1	0.16	97.05
81.0-82.0	0.1	0.0	9.1	0.15	97.20
82.0-83.0	0.1	0.0	9.1	0.13	97.33
83.0-84.0	0.1	0.0	9.1	0.10	97.43
84.0-85.0	0.1	0.0	9.1	0.08	97.51
85.0-86.0	0.1	0.0	9.1	0.06	97.58
86.0-87.0	0.0	0.0	9.1	0.06	97.64
87.0-88.0	0.0	0.0	9.1	0.06	97.69
88.0-89.0	0.0	0.0	9.1	0.05	97.74
89.0-90.0	0.0	0.0	9.1	0.04	97.79
90.0-91.0	0.0	0.0	9.1	0.04	97.83
91.0-92.0	0.0	0.0	9.1	0.04	97.87
92.0-93.0	0.0	0.0	9.1	0.04	97.91
93.0-94.0	0.0	0.0	9.1	0.03	97.94
94.0-95.0	0.0	0.0	9.1	0.05	97.99
95.0-96.0	0.0	0.0	9.1	0.05	98.04
96.0-97.0	0.0	0.0	9.1	0.03	98.07
97.0-98.0	0.0	0.0	9.2	0.03	98.10
98.0-99.0	0.0	0.0	9.2	0.05	98.15
99.0-100.0	0.0	0.0	9.2	0.04	98.18
100.0-101.0	0.0	0.0	9.2	0.04	98.22
101.0-102.0	0.0	0.0	9.2	0.04	98.26
102.0-103.0	0.0	0.0	9.2	0.03	98.29
103.0-104.0	0.0	0.0	9.2	0.04	98.33
104.0-105.0	0.0	0.0	9.2	0.04	98.37
105.0-106.0	0.0	0.0	9.2	0.03	98.41
106.0-107.0	0.0	0.0	9.2	0.04	98.45
107.0-108.0	0.0	0.0	9.2	0.05	98.49

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	0.0	0.0	9.2	0.05	98.54
109.0-110.0	0.0	0.0	9.2	0.05	98.59
110.0-111.0	0.0	0.0	9.2	0.05	98.64
111.0-112.0	0.0	0.0	9.2	0.04	98.69
112.0-113.0	0.0	0.0	9.2	0.03	98.72
113.0-114.0	0.0	0.0	9.2	0.04	98.76
114.0-115.0	0.0	0.0	9.2	0.04	98.80
115.0-116.0	0.0	0.0	9.2	0.04	98.84
116.0-117.0	0.0	0.0	9.2	0.03	98.87
117.0-118.0	0.0	0.0	9.2	0.03	98.90
118.0-119.0	0.0	0.0	9.2	0.04	98.94
119.0-120.0	0.0	0.0	9.2	0.04	98.98
120.0-121.0	0.0	0.0	9.2	0.04	99.02
121.0-122.0	0.0	0.0	9.2	0.03	99.06
122.0-123.0	0.0	0.0	9.2	0.04	99.10
123.0-124.0	0.0	0.0	9.2	0.04	99.13
124.0-125.0	0.0	0.0	9.3	0.02	99.15
125.0-126.0	0.0	0.0	9.3	0.02	99.17
126.0-127.0	0.0	0.0	9.3	0.03	99.20
127.0-128.0	0.0	0.0	9.3	0.03	99.23
128.0-129.0	0.0	0.0	9.3	0.02	99.25
129.0-130.0	0.0	0.0	9.3	0.02	99.27
130.0-131.0	0.0	0.0	9.3	0.03	99.29
131.0-132.0	0.0	0.0	9.3	0.03	99.33
132.0-133.0	0.0	0.0	9.3	0.03	99.36
133.0-134.0	0.0	0.0	9.3	0.02	99.38
134.0-135.0	0.0	0.0	9.3	0.02	99.40
135.0-136.0	0.0	0.0	9.3	0.02	99.42
136.0-137.0	0.0	0.0	9.3	0.03	99.45
137.0-138.0	0.0	0.0	9.3	0.03	99.48
138.0-139.0	0.0	0.0	9.3	0.03	99.50
139.0-140.0	0.0	0.0	9.3	0.02	99.52
140.0-141.0	0.0	0.0	9.3	0.02	99.55
141.0-142.0	0.0	0.0	9.3	0.03	99.57
142.0-143.0	0.0	0.0	9.3	0.03	99.60
143.0-144.0	0.0	0.0	9.3	0.02	99.62

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	0.0	0.0	9.3	0.03	99.65
145.0-146.0	0.0	0.0	9.3	0.02	99.67
146.0-147.0	0.0	0.0	9.3	0.02	99.69
147.0-148.0	0.0	0.0	9.3	0.02	99.71
148.0-149.0	0.0	0.0	9.3	0.02	99.72
149.0-150.0	0.0	0.0	9.3	0.02	99.74
150.0-151.0	0.0	0.0	9.3	0.01	99.75
151.0-152.0	0.0	0.0	9.3	0.01	99.77
152.0-153.0	0.0	0.0	9.3	0.01	99.78
153.0-154.0	0.0	0.0	9.3	0.01	99.79
154.0-155.0	0.0	0.0	9.3	0.01	99.81
155.0-156.0	0.0	0.0	9.3	0.01	99.82
156.0-157.0	0.0	0.0	9.3	0.01	99.83
157.0-158.0	0.0	0.0	9.3	0.01	99.84
158.0-159.0	0.0	0.0	9.3	0.01	99.85
159.0-160.0	0.0	0.0	9.3	0.02	99.87
160.0-161.0	0.0	0.0	9.3	0.01	99.88
161.0-162.0	0.0	0.0	9.3	0.01	99.89
162.0-163.0	0.0	0.0	9.3	0.01	99.91
163.0-164.0	0.0	0.0	9.3	0.01	99.92
164.0-165.0	0.0	0.0	9.3	0.01	99.93
165.0-166.0	0.0	0.0	9.3	0.01	99.95
166.0-167.0	0.0	0.0	9.3	0.01	99.95
167.0-168.0	0.0	0.0	9.3	0.01	99.96
168.0-169.0	0.0	0.0	9.3	0.01	99.97
169.0-170.0	0.0	0.0	9.3	0.00	99.97
170.0-171.0	0.0	0.0	9.3	0.01	99.98
171.0-172.0	0.0	0.0	9.3	0.00	99.98
172.0-173.0	0.0	0.0	9.3	0.00	99.99
173.0-174.0	0.0	0.0	9.3	0.00	99.99
174.0-175.0	0.0	0.0	9.3	0.00	99.99
175.0-176.0	0.0	0.0	9.3	0.00	99.99
176.0-177.0	0.0	0.0	9.3	0.00	100.00
177.0-178.0	0.0	0.0	9.3	0.00	100.00
178.0-179.0	0.0	0.0	9.3	0.00	100.00
179.0-180.0	0.0	0.0	9.3	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: