

Report No.:

Test Time: 2023/10/30 10:29

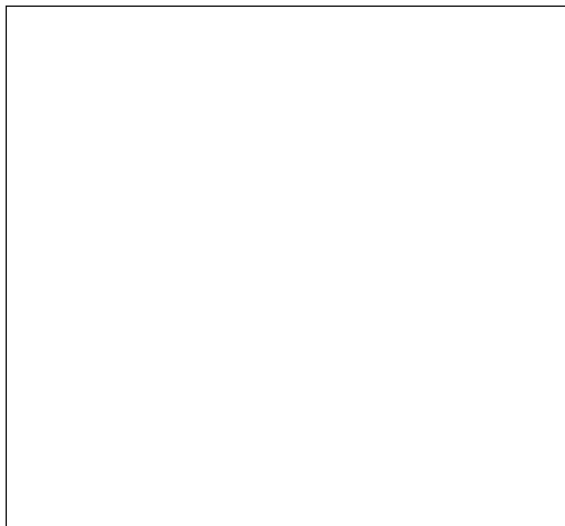
## Luminaire Property

Luminaire Manufacturer: Acolyte  
Luminaire Category: Scroll pendants  
Luminaire Description: Scroll pendants C50S SW SO 17W  
Luminous Length (mm): 300  
Luminous Width (mm): 50  
Luminous Height (mm): 30  
Voltage: 32.8 V  
Current: 0.145 A  
Power: 4.75 W  
Power Factor: 1.000

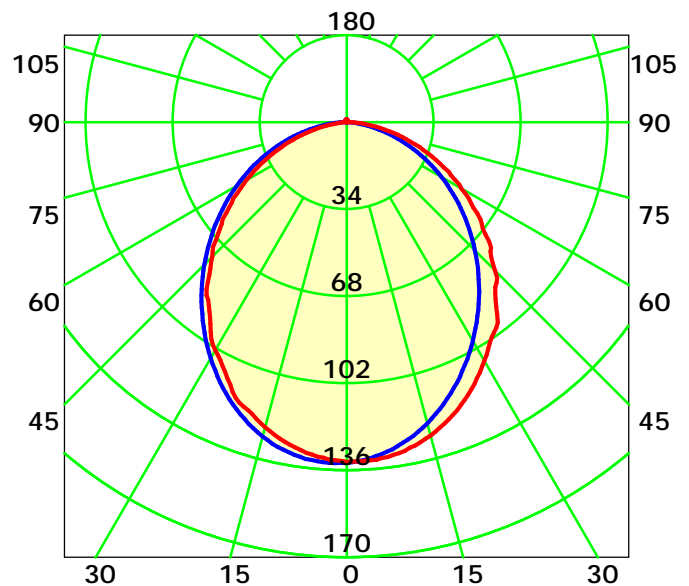
## Photometric Results

CIE Class: Direct  
Measurement Flux: 336.5 lm  
Downward Ratio: 99%  
Horizontal Diffuse Angle(10%,50%): H156.5,H98.6  
Vertical Diffuse Angle(10%,50%): V156.9,V102  
Luminaire Efficacy Rating (LER): 71  
Max. Intensity: 133.7 cd  
Total Rated Lamp Lumens: 336.5 lm  
Efficiency: 100%  
Upward Ratio: 1%  
Central Intensity: 133.43 cd  
Pos of Max. Intensity: H150 V5

Picture Of Luminaire



Luminous Intensity Distribution Curve



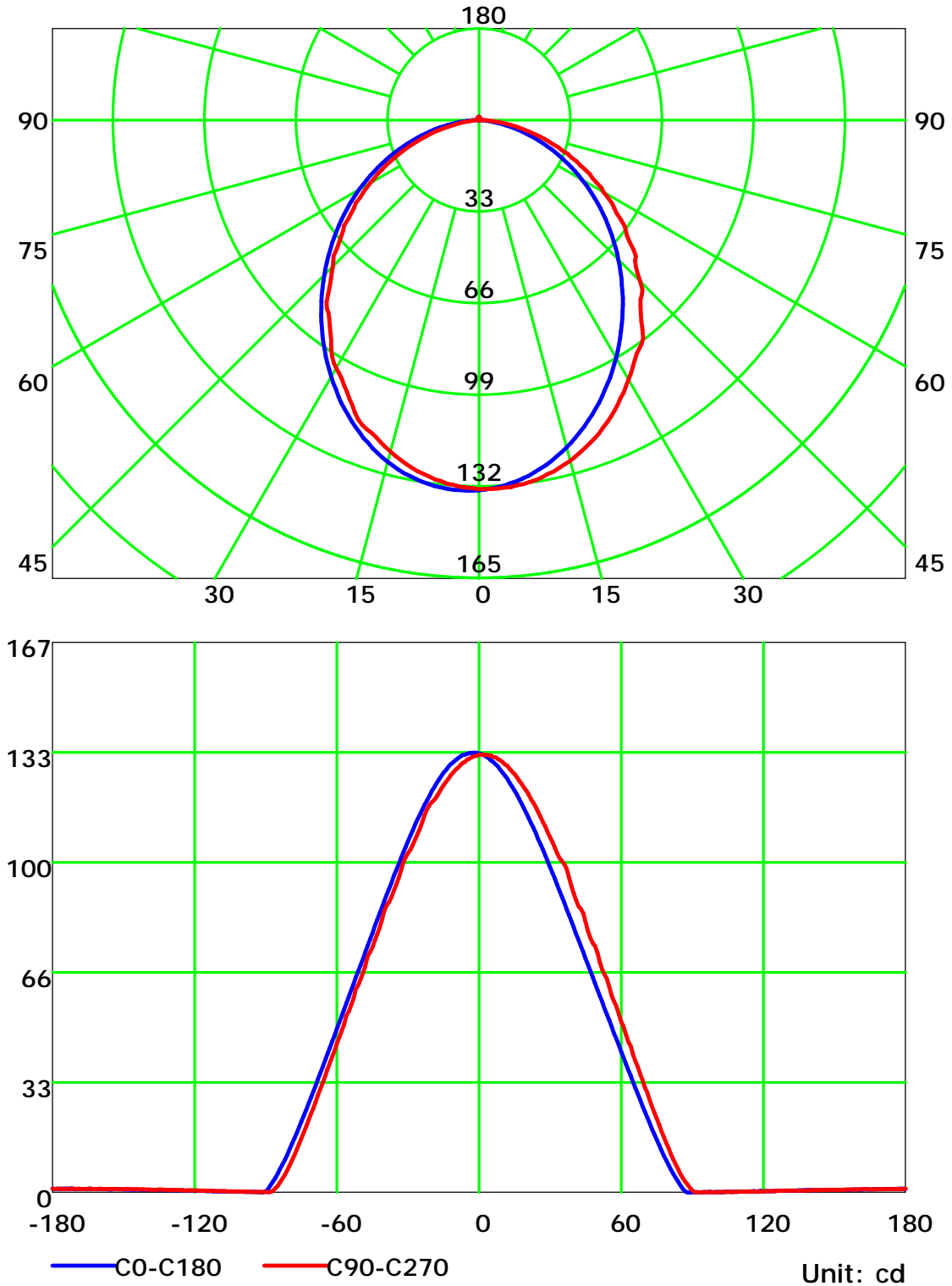
Average Diffuse Angle(50%): 100.3°  
Unit: cd  
— C0-C180 — C90-C270

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

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



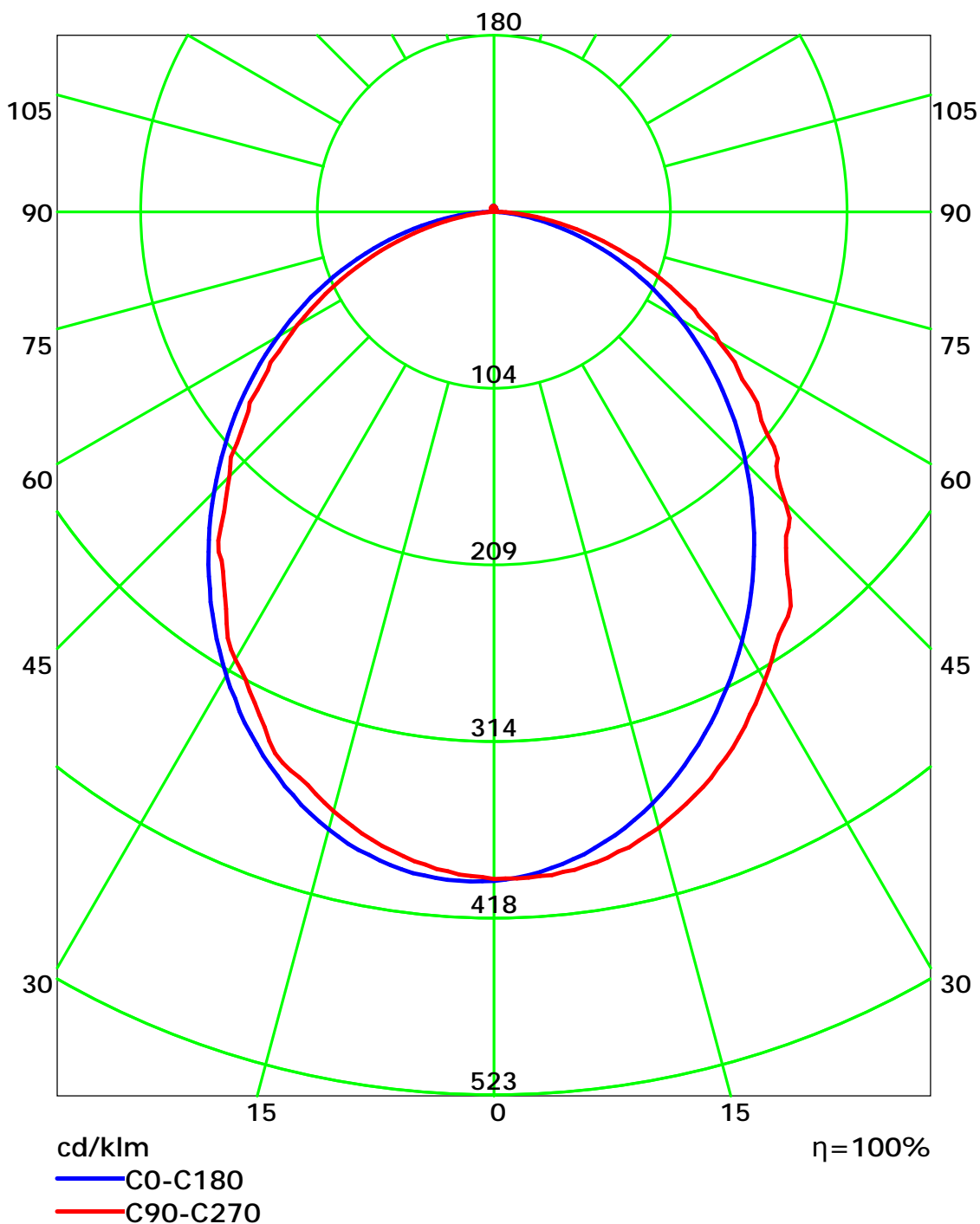
## Luminous Intensity Distribution Curve



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

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: Nick

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

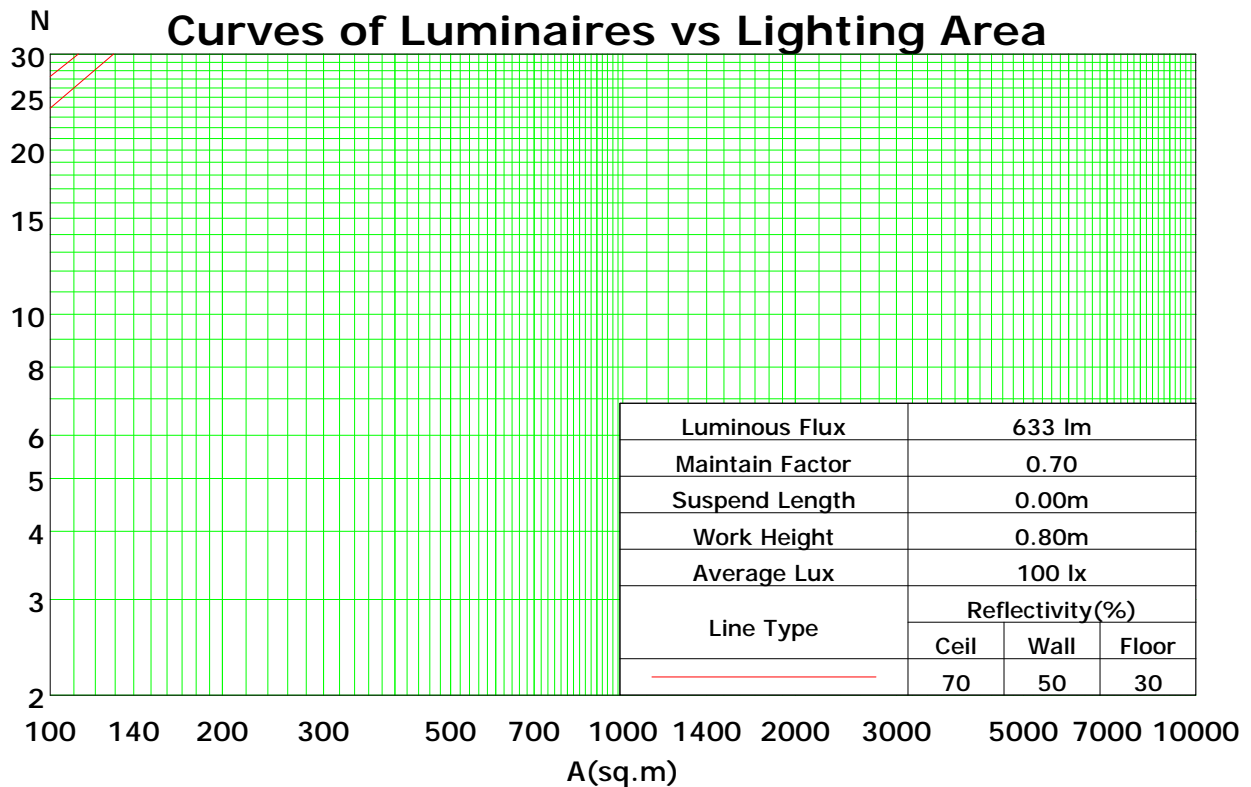
## Coefficients Of Utilization - Zonal Cavity Method

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	104	100	96	106	102	98	95	98	94	92	93	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	82	78	74	79	76	72	70
3	91	81	73	66	88	79	72	66	76	69	64	73	68	63	70	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51
5	77	64	55	49	75	63	55	49	61	53	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	43	38	33	31
9	57	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	27	37	32	27	26

Spacing Criteria (0-180): 1.16

Spacing Criteria (90-270): 1.19

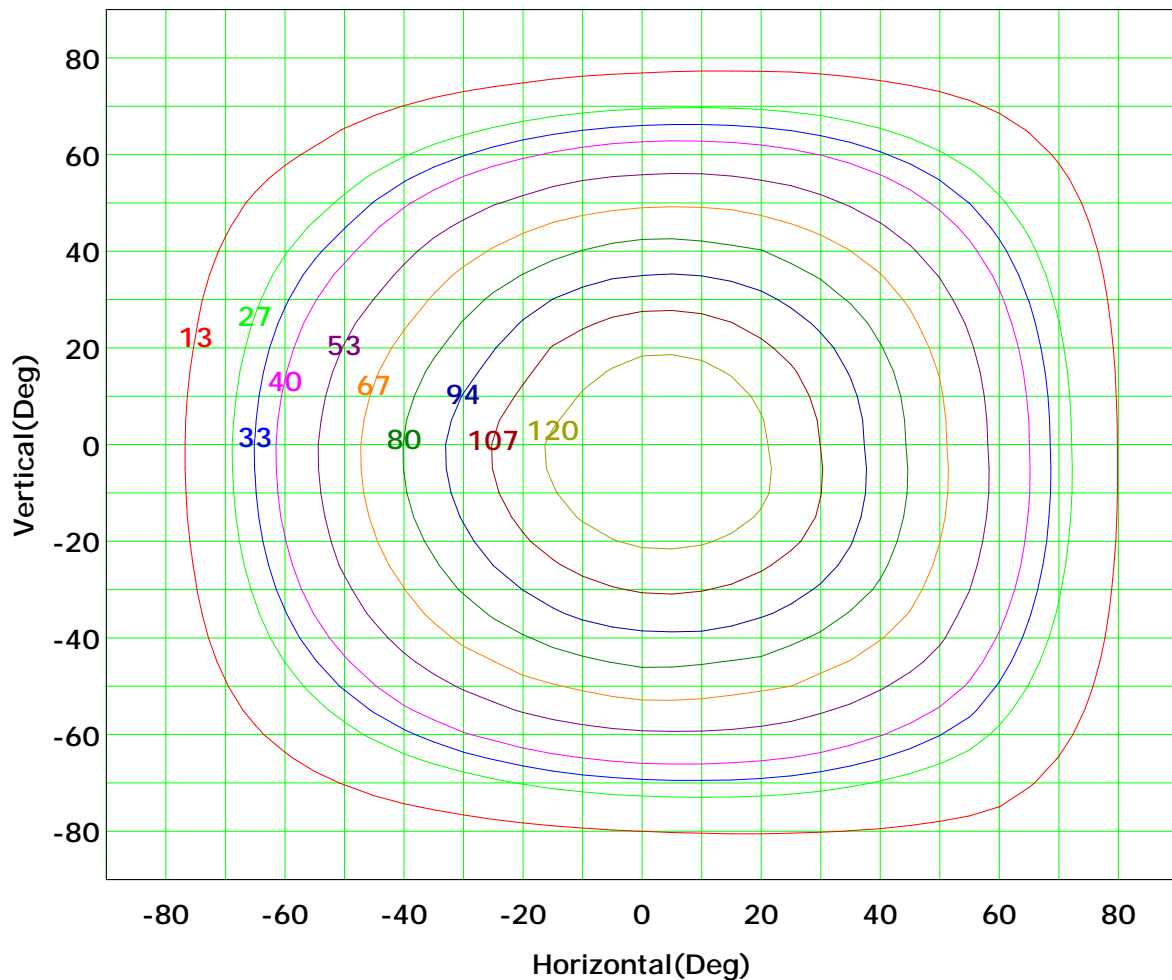
Spacing Criteria (Diagonal): 1.29



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

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

## Isocandela (rectangle)



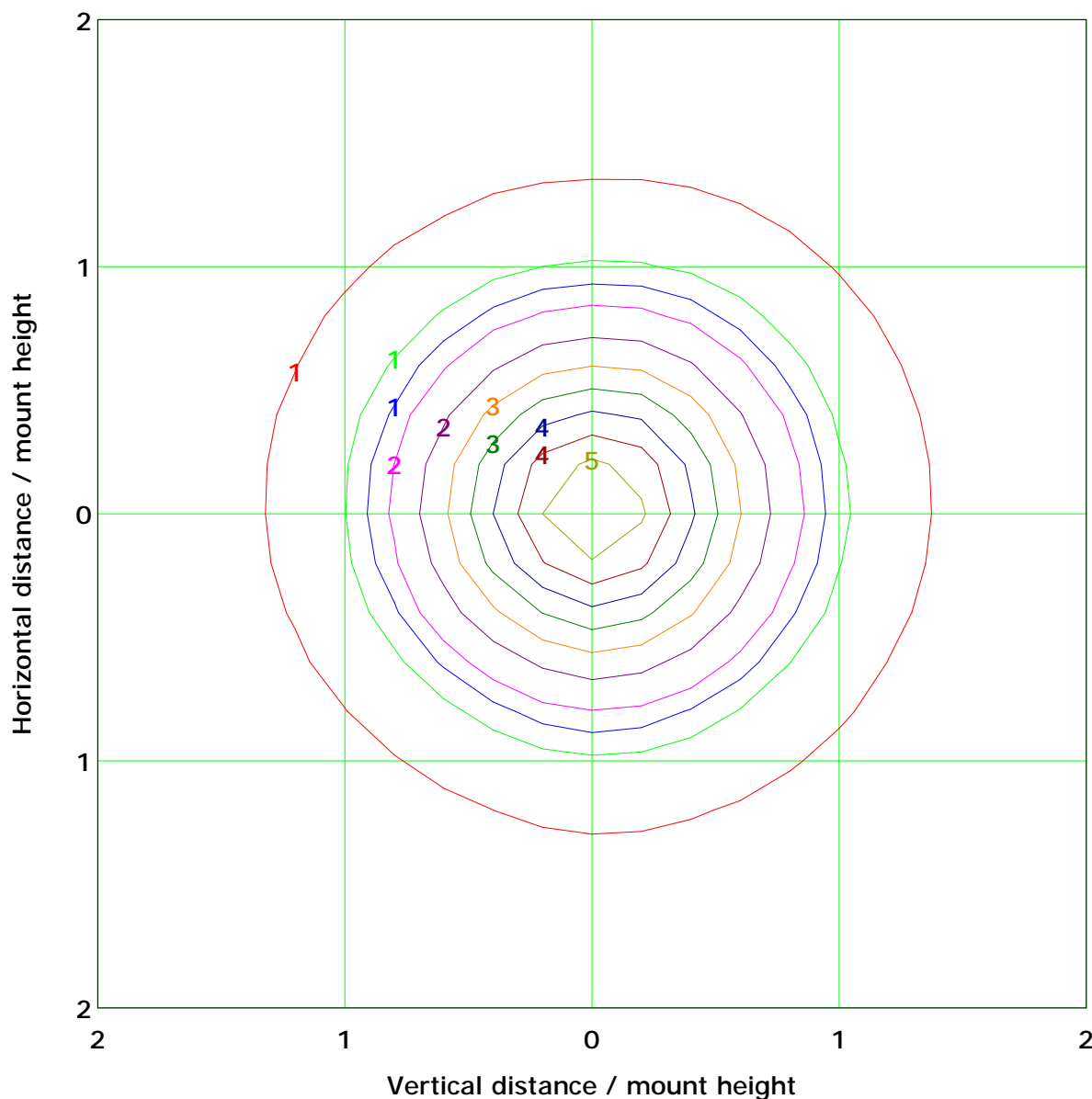
I<sub>max</sub> (100%): 134 cd

( 10%):	13 cd	( 20%):	27 cd
( 25%):	33 cd	( 30%):	40 cd
( 40%):	53 cd	( 50%):	67 cd
( 60%):	80 cd	( 70%):	94 cd
( 80%):	107 cd	( 90%):	120 cd

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

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%): 5.3 lx

( 10%): 0.5 lx	( 20%): 1.1 lx
( 25%): 1.3 lx	( 30%): 1.6 lx
( 40%): 2.1 lx	( 50%): 2.7 lx
( 60%): 3.2 lx	( 70%): 3.7 lx
( 80%): 4.3 lx	( 90%): 4.8 lx

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

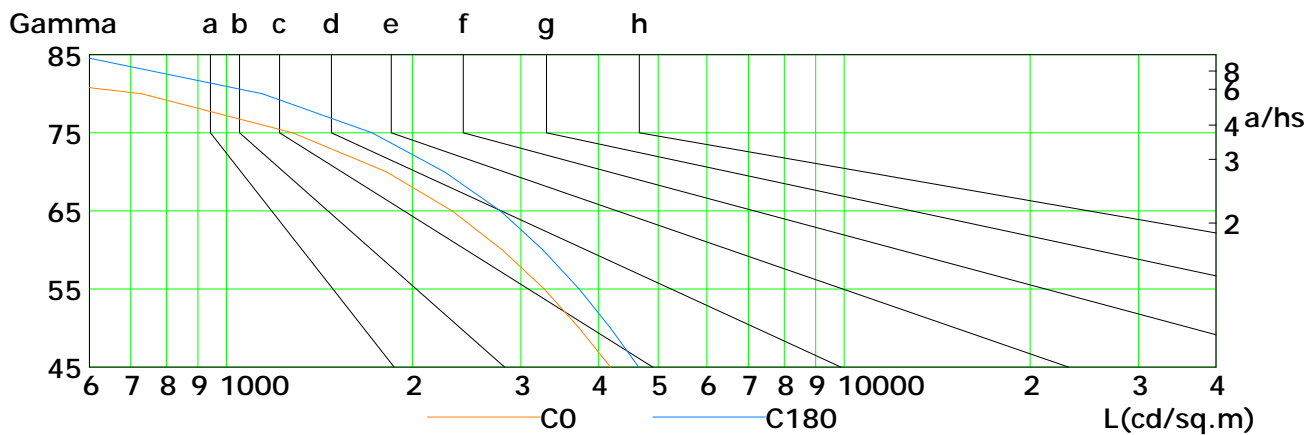
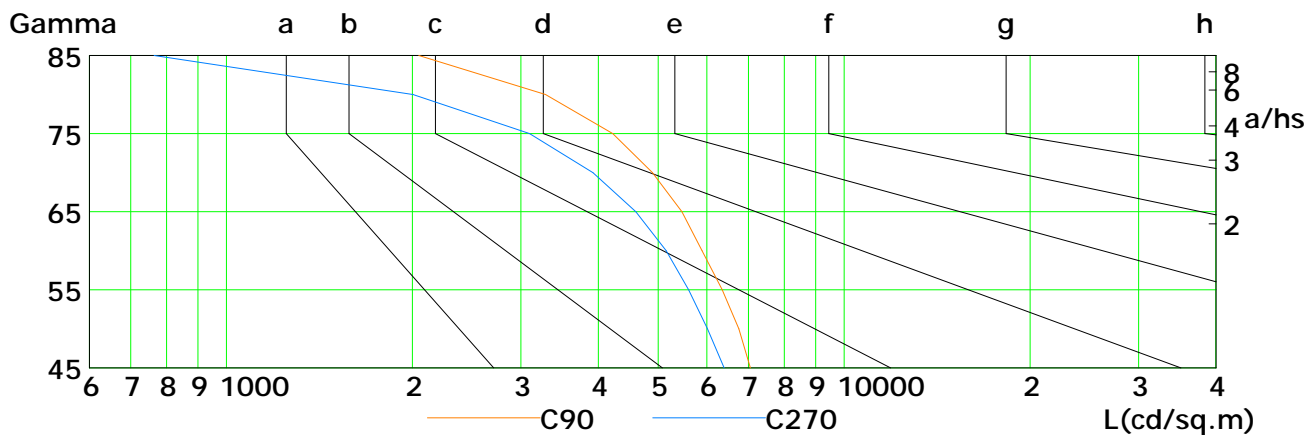
Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:



## 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

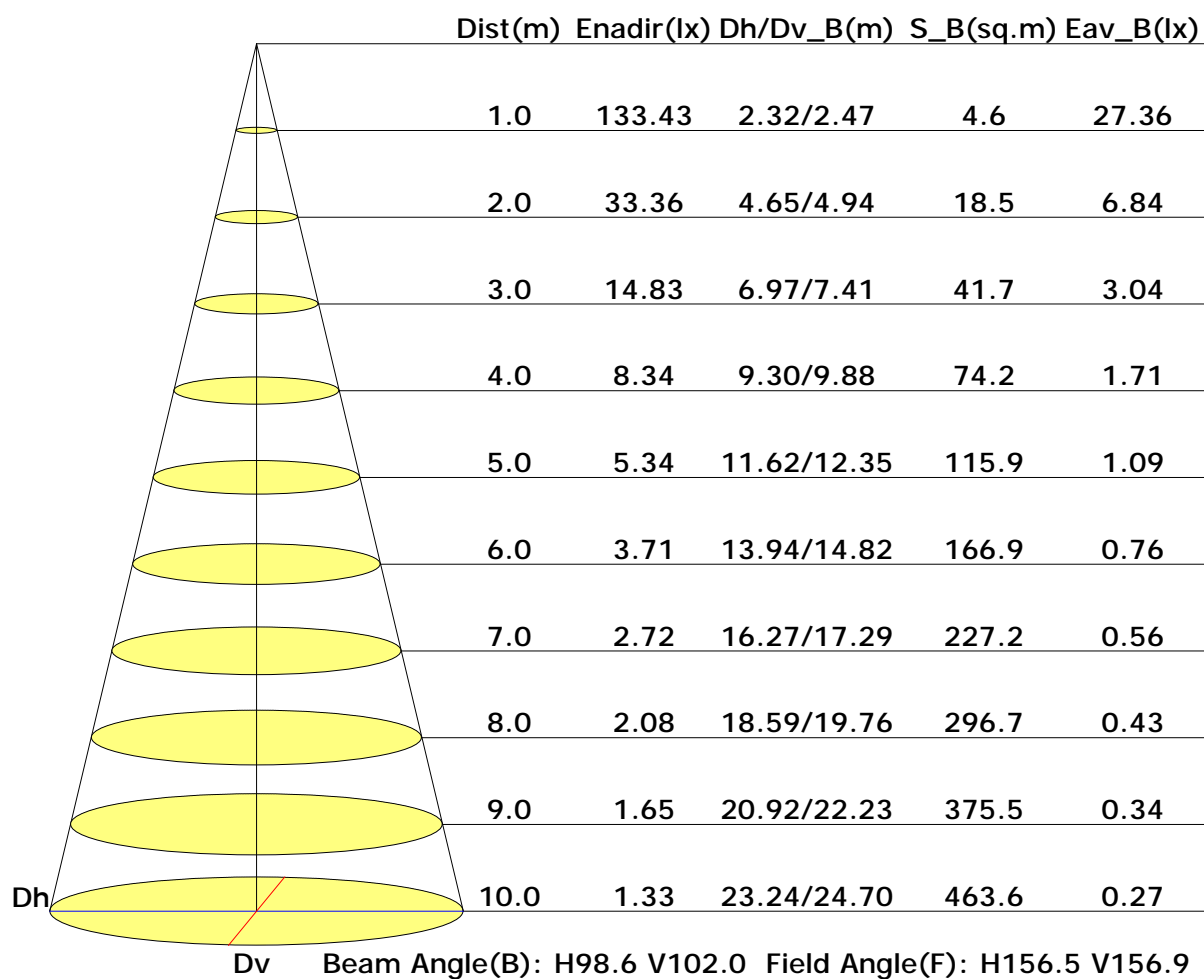


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	4188	3728	3272	2798	2319	1816	1281	729	218
C90	7051	6758	6352	5889	5462	4895	4222	3288	2049
C180	4650	4187	3725	3255	2778	2255	1722	1143	563
C270	6395	6012	5601	5153	4599	3924	3095	2006	764

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

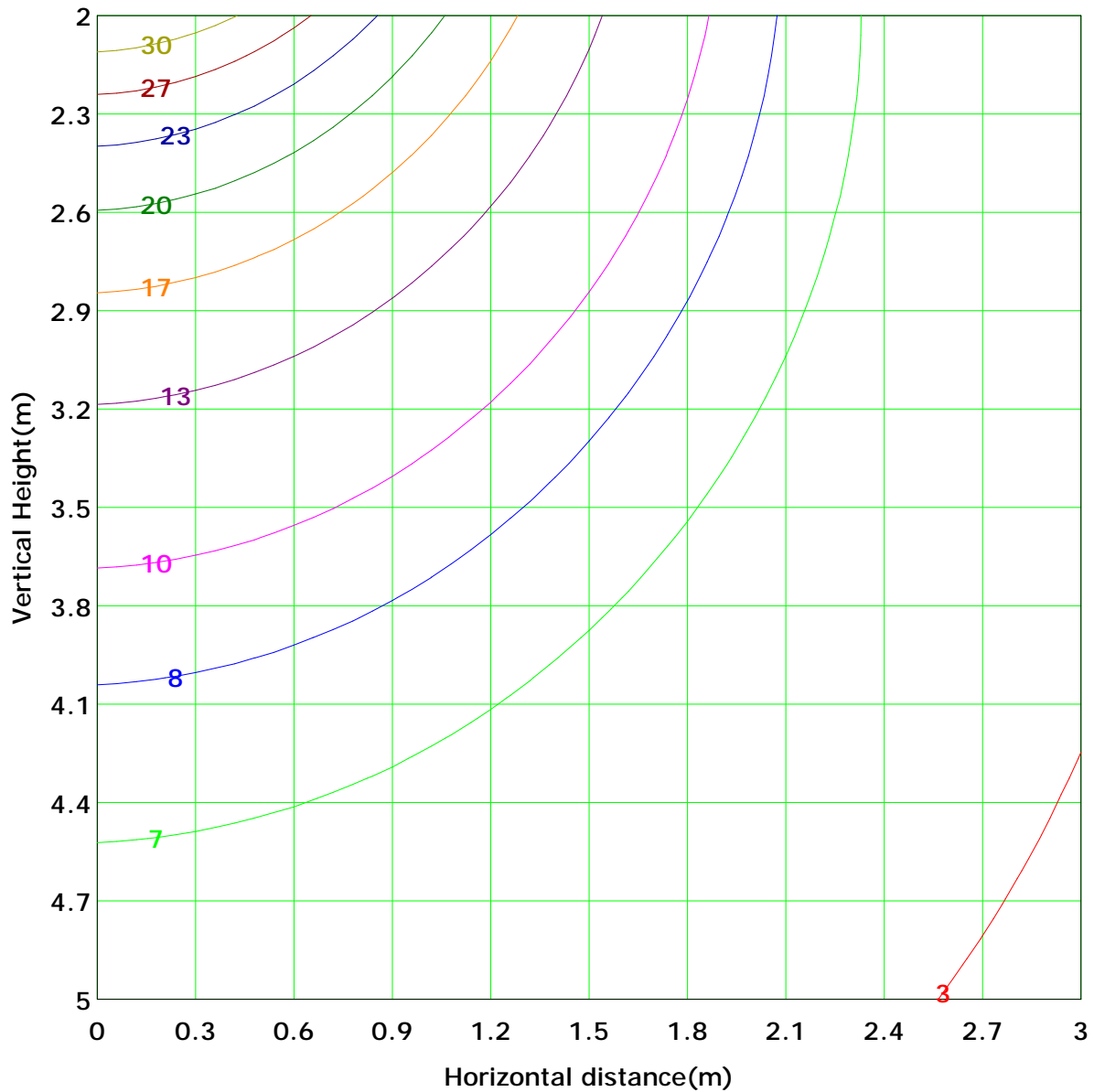
Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## Illuminance at a Distance





## Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 33.4 lx
( 10%): 3.3 lx	( 20%): 6.7 lx	
( 25%): 8.3 lx	( 30%): 10.0 lx	
( 40%): 13.3 lx	( 50%): 16.7 lx	
( 60%): 20.0 lx	( 70%): 23.4 lx	
( 80%): 26.7 lx	( 90%): 30.0 lx	

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

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

## Area Flux Table

Unit: lm

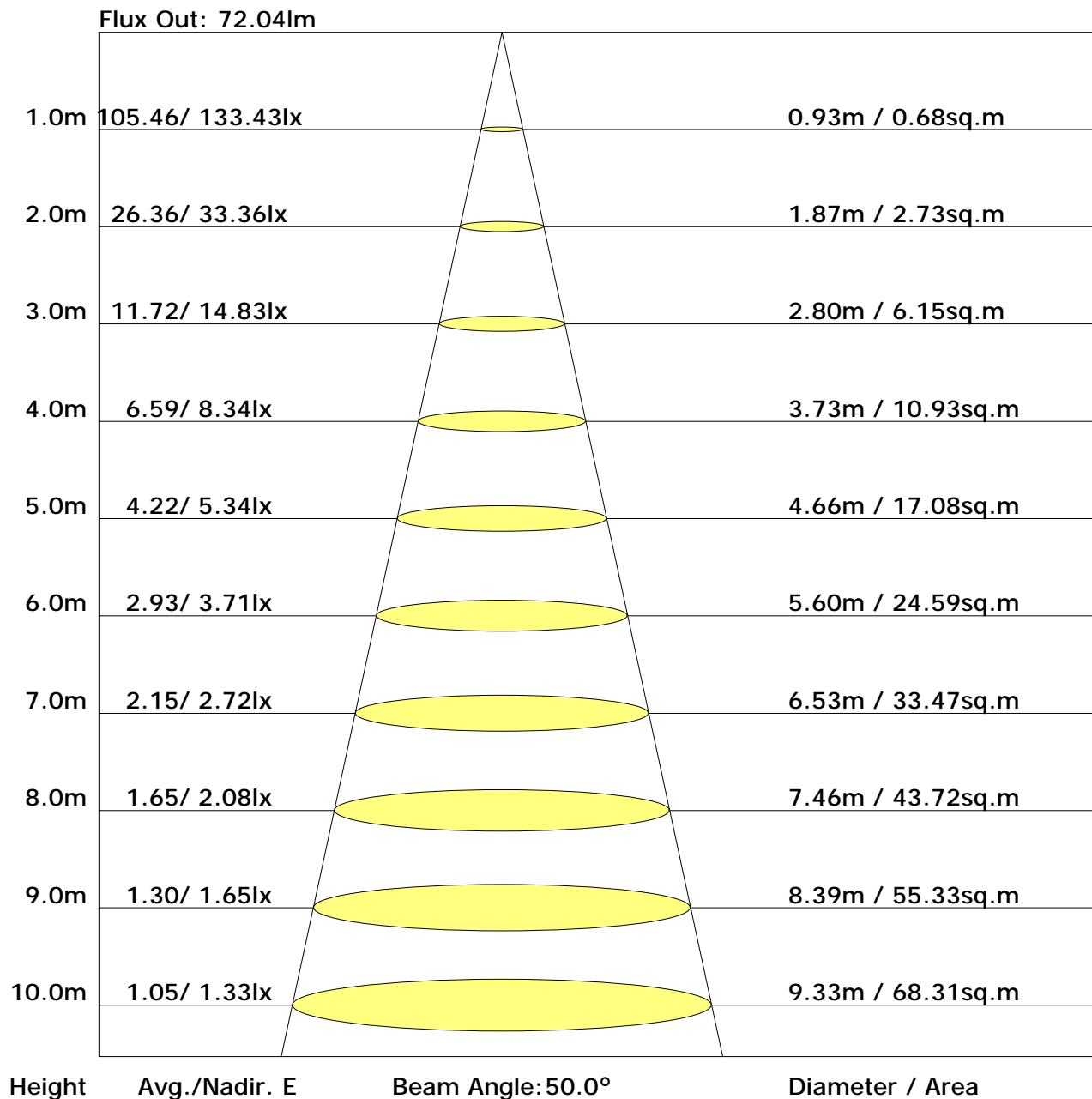
	Vertical plane																		Flux(T)	Flux(E)
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80		
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(E)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Flux(T)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	

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

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: Nick

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	20.2	21.7	20.6	22.1	22.4	20.5	22.1	20.9	22.4	22.8
3H	21.7	23.1	22.0	23.4	23.8	21.9	23.4	22.3	23.7	24.1
4H	22.1	23.5	22.5	23.8	24.2	22.4	23.7	22.8	24.1	24.5
6H	22.4	23.6	22.8	24.0	24.4	22.6	23.9	23.1	24.3	24.7
8H	22.4	23.6	22.9	24.0	24.4	22.7	23.9	23.1	24.3	24.7
12H	22.4	23.6	22.9	24.0	24.4	22.7	23.8	23.2	24.3	24.7
X=4H Y=2H	20.6	21.9	21.0	22.3	22.7	21.1	22.4	21.5	22.8	23.2
3H	22.2	23.3	22.6	23.7	24.1	22.7	23.8	23.1	24.2	24.6
4H	22.7	23.7	23.1	24.1	24.6	23.2	24.2	23.7	24.7	25.1
6H	23.0	23.9	23.5	24.4	24.8	23.6	24.5	24.1	24.9	25.4
8H	23.1	23.9	23.6	24.4	24.8	23.7	24.5	24.1	25.0	25.4
12H	23.1	23.8	23.6	24.3	24.8	23.7	24.4	24.2	24.9	25.4
X=8H Y=4H	22.8	23.6	23.3	24.1	24.6	23.5	24.3	24.0	24.8	25.3
6H	23.1	23.8	23.7	24.3	24.8	23.9	24.6	24.4	25.1	25.6
8H	23.2	23.8	23.7	24.4	24.9	24.0	24.6	24.6	25.2	25.7
12H	23.2	23.8	23.8	24.3	24.9	24.1	24.6	24.6	25.2	25.7
X=12H Y=4H	22.8	23.5	23.3	24.0	24.5	23.5	24.2	24.0	24.7	25.2
6H	23.1	23.8	23.7	24.2	24.8	24.0	24.6	24.5	25.0	25.6
8H	23.2	23.8	23.7	24.3	24.9	24.1	24.6	24.6	25.1	25.7

Calculate in accordance with CIE 190:2010

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

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	0.88	0.93	0.97	1.01	1.04
	0.30		0.51	0.61	0.69	0.74	0.82	0.88	0.92	0.97	1.00
	0.20		0.45	0.56	0.63	0.69	0.77	0.83	0.88	0.93	0.97
0.50	0.50	0.20	0.57	0.67	0.73	0.78	0.85	0.89	0.93	0.97	0.99
	0.30		0.50	0.60	0.67	0.73	0.80	0.85	0.89	0.93	0.97
	0.20		0.45	0.55	0.62	0.68	0.76	0.81	0.85	0.91	0.94
0.30	0.50	0.20	0.55	0.65	0.71	0.76	0.82	0.86	0.89	0.93	0.95
	0.30		0.49	0.59	0.66	0.71	0.78	0.82	0.86	0.90	0.93
	0.20		0.45	0.54	0.61	0.67	0.74	0.79	0.83	0.88	0.91
0.00	0.00	0.00	0.42	0.52	0.59	0.64	0.71	0.75	0.79	0.83	0.86
Rating:5W 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	0.59	0.47	0.39	0.33	0.26	0.21	
	0.30		0.80	0.68	0.59	0.52	0.42	0.35	0.31	0.24	0.20	
	0.20		0.69	0.59	0.52	0.47	0.39	0.33	0.29	0.23	0.19	
0.50	0.50	0.20	0.93	0.76	0.64	0.56	0.44	0.40	0.31	0.24	0.20	
	0.30		0.79	0.66	0.57	0.50	0.41	0.34	0.29	0.23	0.19	
	0.20		0.68	0.58	0.51	0.45	0.37	0.32	0.28	0.22	0.18	
0.30	0.50	0.20	0.90	0.73	0.62	0.54	0.42	0.35	0.30	0.23	0.19	
	0.30		0.77	0.64	0.55	0.49	0.39	0.33	0.28	0.22	0.18	
	0.20		0.67	0.57	0.50	0.44	0.36	0.31	0.27	0.21	0.17	
0.00	0.00	0.00	0.57	0.47	0.41	0.36	0.29	0.24	0.20	0.16	0.13	
Rating:5W 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	0.18	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:5W 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	133.0	0.1	0.1	0.04	0.04
1.0-2.0	132.9	0.4	0.5	0.11	0.15
2.0-3.0	132.8	0.6	1.1	0.19	0.34
3.0-4.0	132.6	0.9	2.0	0.26	0.60
4.0-5.0	132.3	1.1	3.2	0.34	0.94
5.0-6.0	131.9	1.4	4.6	0.41	1.35
6.0-7.0	131.5	1.6	6.2	0.49	1.84
7.0-8.0	131.0	1.9	8.1	0.56	2.40
8.0-9.0	130.4	2.1	10.2	0.63	3.02
9.0-10.0	129.8	2.3	12.5	0.70	3.72
10.0-11.0	129.1	2.6	15.1	0.77	4.49
11.0-12.0	128.3	2.8	17.9	0.83	5.32
12.0-13.0	127.4	3.0	20.9	0.90	6.22
13.0-14.0	126.5	3.2	24.2	0.96	7.18
14.0-15.0	125.5	3.4	27.6	1.02	8.21
15.0-16.0	124.5	3.6	31.3	1.08	9.29
16.0-17.0	123.4	3.8	35.1	1.14	10.43
17.0-18.0	122.3	4.0	39.1	1.20	11.63
18.0-19.0	121.1	4.2	43.4	1.25	12.89
19.0-20.0	119.9	4.4	47.7	1.30	14.19
20.0-21.0	118.6	4.6	52.3	1.35	15.54
21.0-22.0	117.3	4.7	57.0	1.40	16.94
22.0-23.0	116.0	4.9	61.9	1.45	18.39
23.0-24.0	114.6	5.0	66.9	1.49	19.88
24.0-25.0	113.1	5.1	72.0	1.53	21.41
25.0-26.0	111.5	5.3	77.3	1.56	22.97
26.0-27.0	109.9	5.4	82.7	1.60	24.57
27.0-28.0	108.2	5.5	88.2	1.63	26.20
28.0-29.0	106.6	5.6	93.7	1.66	27.86
29.0-30.0	105.0	5.7	99.4	1.68	29.54
30.0-31.0	103.3	5.7	105.2	1.71	31.25
31.0-32.0	101.6	5.8	111.0	1.73	32.98
32.0-33.0	99.9	5.9	116.9	1.75	34.73
33.0-34.0	98.2	5.9	122.8	1.77	36.50
34.0-35.0	96.5	6.0	128.8	1.78	38.28
35.0-36.0	94.8	6.0	134.8	1.79	40.07

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

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	92.9	6.1	140.9	1.80	41.87
37.0-38.0	91.1	6.1	147.0	1.81	43.68
38.0-39.0	89.2	6.1	153.1	1.81	45.49
39.0-40.0	87.4	6.1	159.2	1.81	47.30
40.0-41.0	85.6	6.1	165.3	1.81	49.11
41.0-42.0	83.6	6.1	171.3	1.81	50.92
42.0-43.0	81.7	6.1	177.4	1.80	52.72
43.0-44.0	79.8	6.0	183.4	1.79	54.51
44.0-45.0	77.8	6.0	189.4	1.78	56.29
45.0-46.0	75.8	5.9	195.3	1.76	58.05
46.0-47.0	73.9	5.9	201.2	1.75	59.80
47.0-48.0	72.0	5.8	207.0	1.73	61.53
48.0-49.0	70.1	5.8	212.8	1.71	63.24
49.0-50.0	68.2	5.7	218.5	1.69	64.93
50.0-51.0	66.2	5.6	224.1	1.67	66.59
51.0-52.0	64.3	5.5	229.6	1.64	68.23
52.0-53.0	62.3	5.4	235.0	1.61	69.84
53.0-54.0	60.4	5.3	240.3	1.58	71.43
54.0-55.0	58.5	5.2	245.6	1.55	72.98
55.0-56.0	56.5	5.1	250.7	1.52	74.49
56.0-57.0	54.5	5.0	255.7	1.48	75.97
57.0-58.0	52.6	4.9	260.5	1.44	77.42
58.0-59.0	50.6	4.7	265.2	1.41	78.83
59.0-60.0	48.6	4.6	269.8	1.37	80.19
60.0-61.0	46.7	4.5	274.3	1.32	81.52
61.0-62.0	44.8	4.3	278.6	1.28	82.80
62.0-63.0	42.8	4.2	282.8	1.24	84.04
63.0-64.0	40.8	4.0	286.8	1.19	85.23
64.0-65.0	38.9	3.9	290.6	1.15	86.37
65.0-66.0	37.0	3.7	294.3	1.10	87.47
66.0-67.0	35.0	3.5	297.9	1.05	88.51
67.0-68.0	33.1	3.4	301.2	1.00	89.51
68.0-69.0	31.2	3.2	304.4	0.95	90.46
69.0-70.0	29.3	3.0	307.4	0.90	91.35
70.0-71.0	27.5	2.8	310.2	0.84	92.20
71.0-72.0	25.6	2.7	312.9	0.79	92.99

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

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	23.8	2.5	315.4	0.74	93.73
73.0-74.0	22.0	2.3	317.7	0.69	94.42
74.0-75.0	20.2	2.1	319.8	0.63	95.05
75.0-76.0	18.4	2.0	321.8	0.58	95.63
76.0-77.0	16.7	1.8	323.6	0.53	96.16
77.0-78.0	15.0	1.6	325.2	0.48	96.63
78.0-79.0	13.3	1.4	326.6	0.43	97.06
79.0-80.0	11.7	1.3	327.9	0.38	97.44
80.0-81.0	10.2	1.1	329.0	0.33	97.76
81.0-82.0	8.7	0.9	329.9	0.28	98.05
82.0-83.0	7.3	0.8	330.7	0.24	98.28
83.0-84.0	6.0	0.7	331.4	0.19	98.48
84.0-85.0	4.8	0.5	331.9	0.16	98.63
85.0-86.0	3.7	0.4	332.3	0.12	98.75
86.0-87.0	2.7	0.3	332.6	0.09	98.84
87.0-88.0	1.9	0.2	332.8	0.06	98.90
88.0-89.0	1.2	0.1	332.9	0.04	98.94
89.0-90.0	0.8	0.1	333.0	0.03	98.97
90.0-91.0	0.5	0.1	333.1	0.02	98.98
91.0-92.0	0.3	0.0	333.1	0.01	98.99
92.0-93.0	0.2	0.0	333.1	0.01	99.00
93.0-94.0	0.1	0.0	333.1	0.00	99.00
94.0-95.0	0.2	0.0	333.2	0.01	99.01
95.0-96.0	0.2	0.0	333.2	0.01	99.02
96.0-97.0	0.2	0.0	333.2	0.01	99.02
97.0-98.0	0.2	0.0	333.2	0.01	99.03
98.0-99.0	0.2	0.0	333.3	0.01	99.03
99.0-100.0	0.2	0.0	333.3	0.01	99.04
100.0-101.0	0.2	0.0	333.3	0.01	99.05
101.0-102.0	0.2	0.0	333.3	0.01	99.06
102.0-103.0	0.3	0.0	333.4	0.01	99.06
103.0-104.0	0.3	0.0	333.4	0.01	99.07
104.0-105.0	0.3	0.0	333.4	0.01	99.08
105.0-106.0	0.3	0.0	333.4	0.01	99.09
106.0-107.0	0.3	0.0	333.5	0.01	99.10
107.0-108.0	0.3	0.0	333.5	0.01	99.11

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

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	0.3	0.0	333.5	0.01	99.12
109.0-110.0	0.4	0.0	333.6	0.01	99.13
110.0-111.0	0.4	0.0	333.6	0.01	99.14
111.0-112.0	0.4	0.0	333.7	0.01	99.15
112.0-113.0	0.4	0.0	333.7	0.01	99.17
113.0-114.0	0.4	0.0	333.7	0.01	99.18
114.0-115.0	0.4	0.0	333.8	0.01	99.19
115.0-116.0	0.4	0.0	333.8	0.01	99.20
116.0-117.0	0.5	0.0	333.9	0.01	99.22
117.0-118.0	0.5	0.0	333.9	0.01	99.23
118.0-119.0	0.5	0.0	334.0	0.01	99.24
119.0-120.0	0.5	0.0	334.0	0.01	99.26
120.0-121.0	0.5	0.0	334.1	0.01	99.27
121.0-122.0	0.5	0.0	334.1	0.01	99.29
122.0-123.0	0.5	0.1	334.2	0.01	99.30
123.0-124.0	0.5	0.1	334.2	0.01	99.32
124.0-125.0	0.6	0.1	334.3	0.02	99.33
125.0-126.0	0.6	0.1	334.3	0.02	99.35
126.0-127.0	0.6	0.1	334.4	0.02	99.37
127.0-128.0	0.6	0.1	334.4	0.02	99.38
128.0-129.0	0.6	0.1	334.5	0.02	99.40
129.0-130.0	0.6	0.1	334.5	0.02	99.41
130.0-131.0	0.7	0.1	334.6	0.02	99.43
131.0-132.0	0.7	0.1	334.6	0.02	99.45
132.0-133.0	0.7	0.1	334.7	0.02	99.46
133.0-134.0	0.7	0.1	334.8	0.02	99.48
134.0-135.0	0.7	0.1	334.8	0.02	99.50
135.0-136.0	0.7	0.1	334.9	0.02	99.51
136.0-137.0	0.8	0.1	334.9	0.02	99.53
137.0-138.0	0.8	0.1	335.0	0.02	99.55
138.0-139.0	0.8	0.1	335.0	0.02	99.56
139.0-140.0	0.8	0.1	335.1	0.02	99.58
140.0-141.0	0.8	0.1	335.1	0.02	99.60
141.0-142.0	0.8	0.1	335.2	0.02	99.62
142.0-143.0	0.8	0.1	335.3	0.02	99.63
143.0-144.0	0.8	0.1	335.3	0.02	99.65

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

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	0.9	0.1	335.4	0.02	99.66
145.0-146.0	0.9	0.1	335.4	0.02	99.68
146.0-147.0	0.9	0.1	335.5	0.02	99.70
147.0-148.0	0.9	0.1	335.5	0.02	99.71
148.0-149.0	0.9	0.1	335.6	0.02	99.73
149.0-150.0	0.9	0.1	335.6	0.02	99.74
150.0-151.0	0.9	0.1	335.7	0.02	99.76
151.0-152.0	1.0	0.0	335.7	0.01	99.77
152.0-153.0	1.0	0.0	335.8	0.01	99.79
153.0-154.0	1.0	0.0	335.8	0.01	99.80
154.0-155.0	1.0	0.0	335.9	0.01	99.82
155.0-156.0	1.0	0.0	335.9	0.01	99.83
156.0-157.0	1.0	0.0	336.0	0.01	99.84
157.0-158.0	1.0	0.0	336.0	0.01	99.85
158.0-159.0	1.0	0.0	336.1	0.01	99.87
159.0-160.0	1.0	0.0	336.1	0.01	99.88
160.0-161.0	1.0	0.0	336.1	0.01	99.89
161.0-162.0	1.1	0.0	336.2	0.01	99.90
162.0-163.0	1.1	0.0	336.2	0.01	99.91
163.0-164.0	1.1	0.0	336.2	0.01	99.92
164.0-165.0	1.1	0.0	336.3	0.01	99.93
165.0-166.0	1.1	0.0	336.3	0.01	99.94
166.0-167.0	1.1	0.0	336.3	0.01	99.95
167.0-168.0	1.1	0.0	336.3	0.01	99.96
168.0-169.0	1.1	0.0	336.4	0.01	99.96
169.0-170.0	1.1	0.0	336.4	0.01	99.97
170.0-171.0	1.1	0.0	336.4	0.01	99.97
171.0-172.0	1.1	0.0	336.4	0.01	99.98
172.0-173.0	1.1	0.0	336.4	0.00	99.98
173.0-174.0	1.1	0.0	336.5	0.00	99.99
174.0-175.0	1.1	0.0	336.5	0.00	99.99
175.0-176.0	1.1	0.0	336.5	0.00	99.99
176.0-177.0	1.1	0.0	336.5	0.00	100.00
177.0-178.0	1.1	0.0	336.5	0.00	100.00
178.0-179.0	1.2	0.0	336.5	0.00	100.00
179.0-180.0	1.2	0.0	336.5	0.00	100.00

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

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