

Report No.: 20230811

Test Time: 2023/8/11 11:22

## Luminaire Property

Luminaire Manufacturer: ACOLYTE

Luminaire Category: CHANNEL

Luminaire Description: CHAS2M90SWS2203.030

Luminous Length (mm): 500

Luminous Width (mm): 17.2

Luminous Height (mm): 15.2

Voltage: 24.0 V

Current: 0.191 A

Power: 4.59 W

Power Factor: 1.000

## Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 226.2 lm

Measurement Flux: 226.2 lm

Efficiency: 100%

Downward Ratio: 99%

Upward Ratio: 1%

Horizontal Diffuse Angle(10%,50%): H159.9,H110.8

Vertical Diffuse Angle(10%,50%): V164.4,V111.5

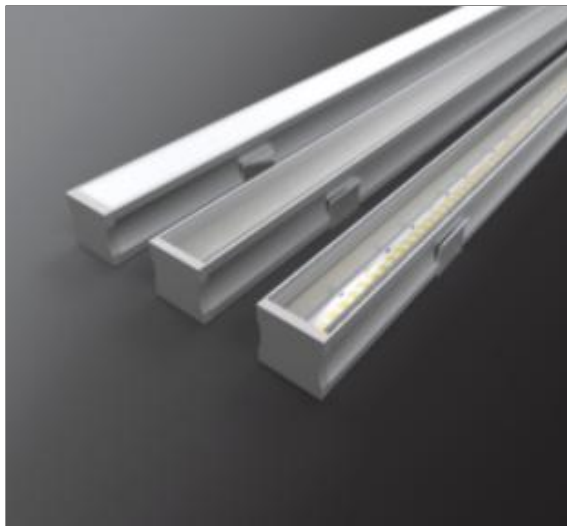
Luminaire Efficacy Rating (LER): 49

Central Intensity: 78.89 cd

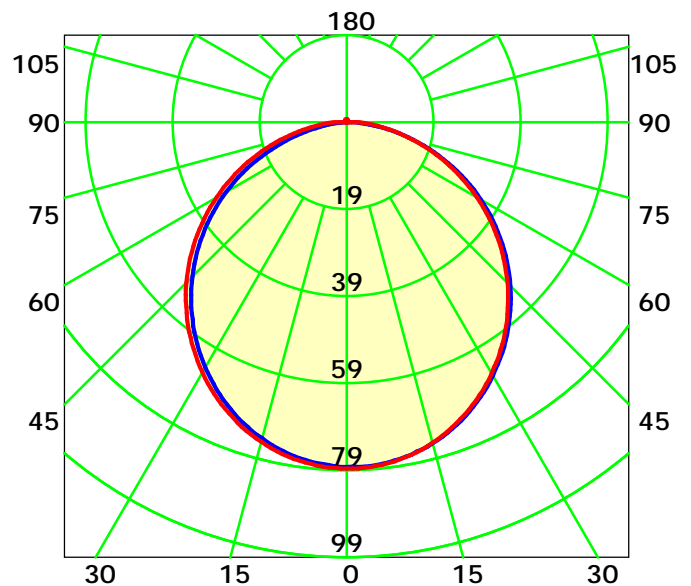
Max. Intensity: 79.32 cd

Pos of Max. Intensity: H150 V1

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd  
Average Diffuse Angle(50%): 111.1°  
— 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

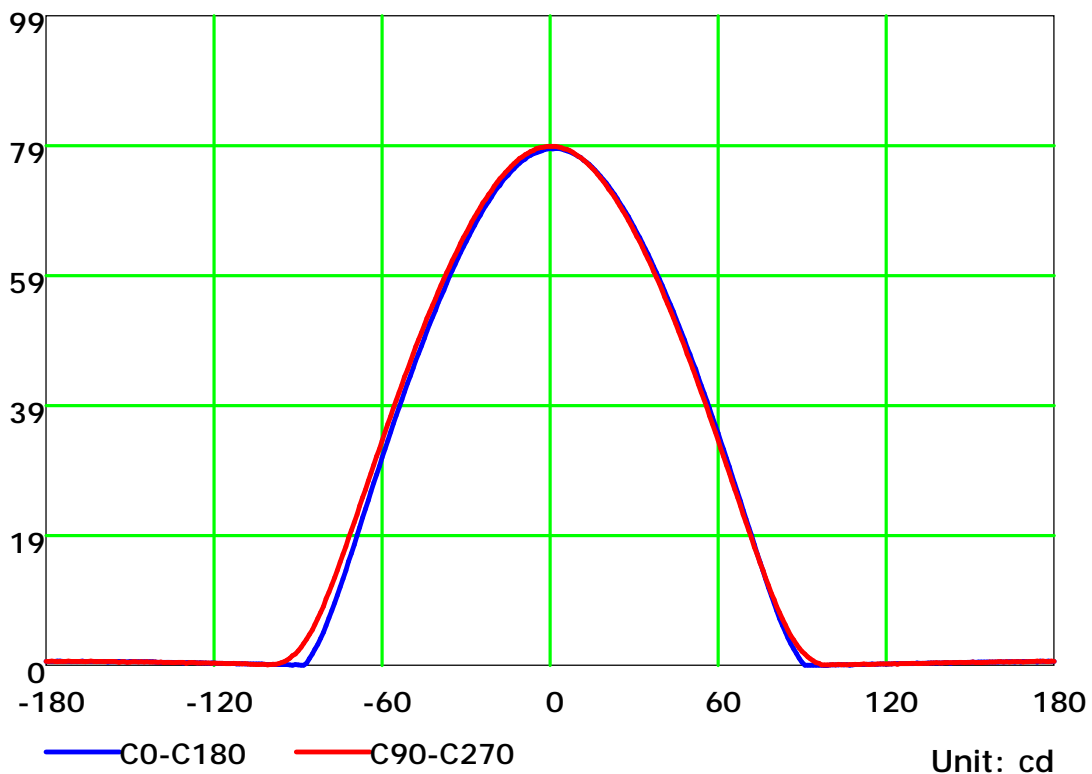
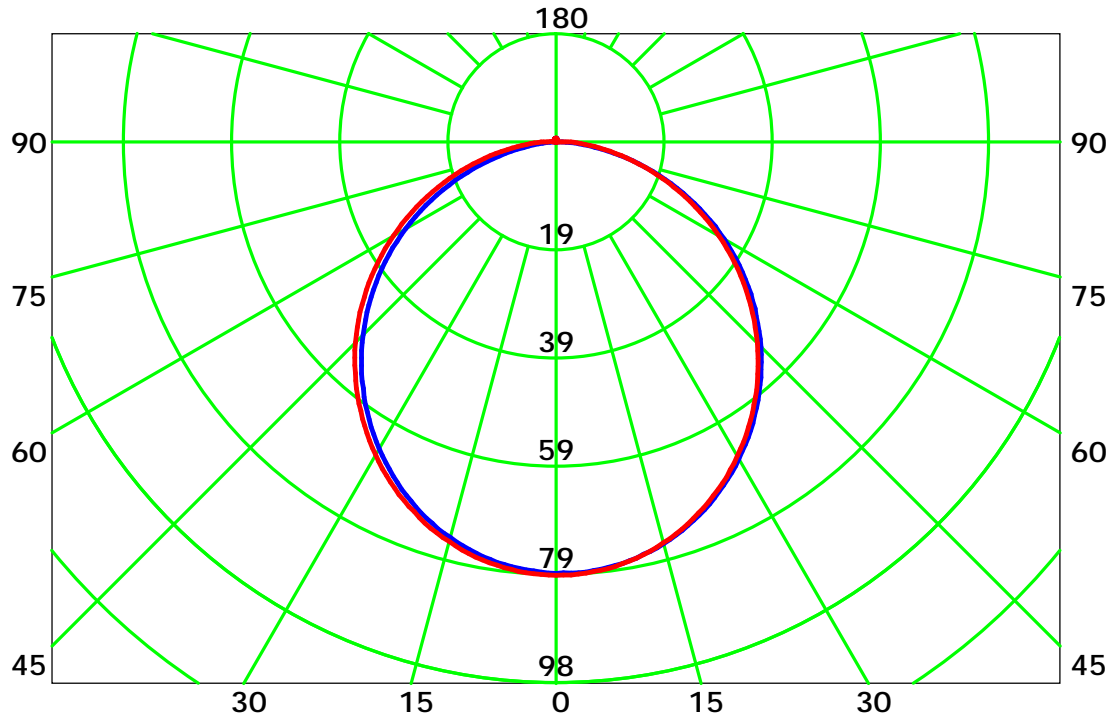
Distance: 9.028 m

Humidity: 60%

Inspector:



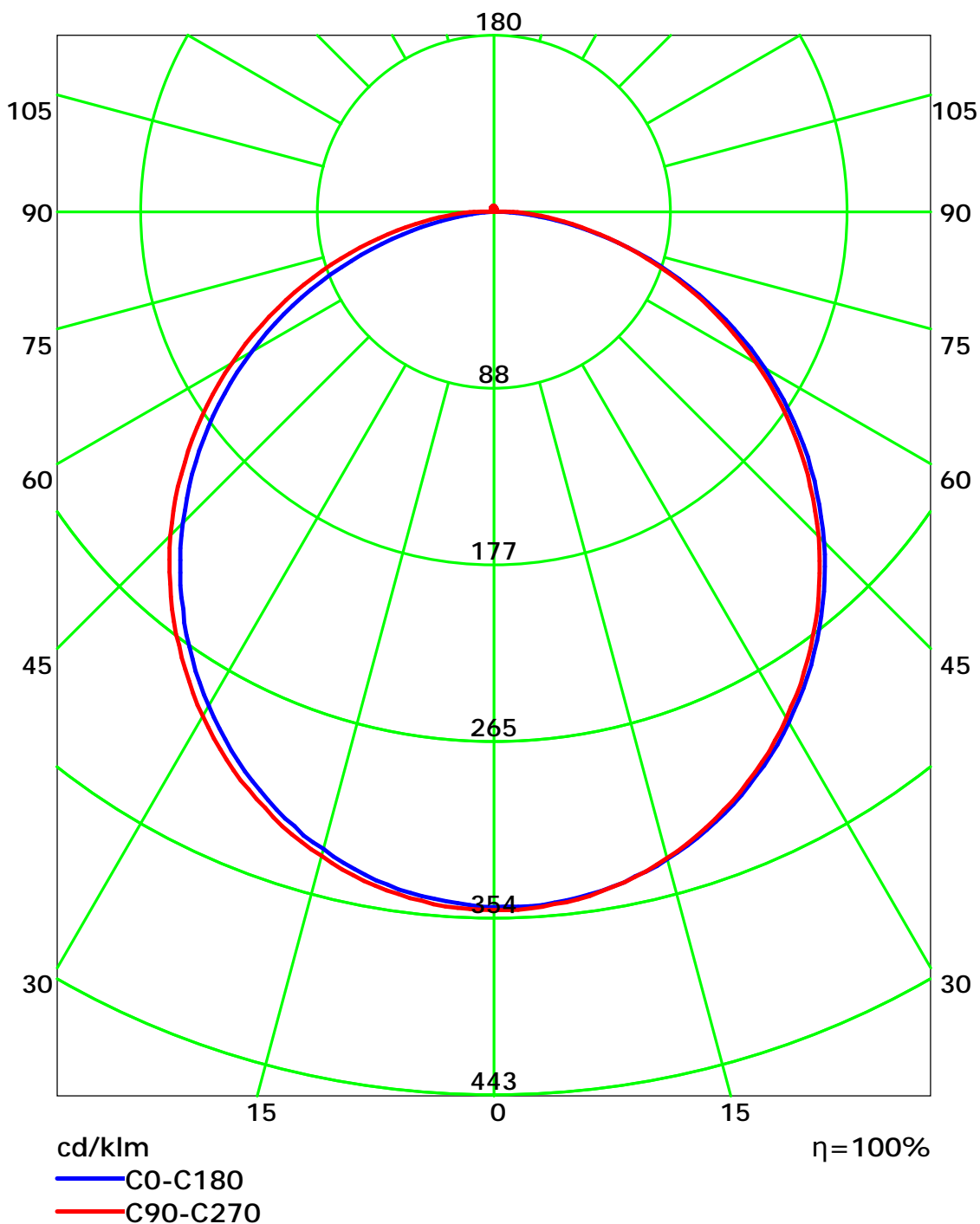
## Luminous Intensity Distribution Curve



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:

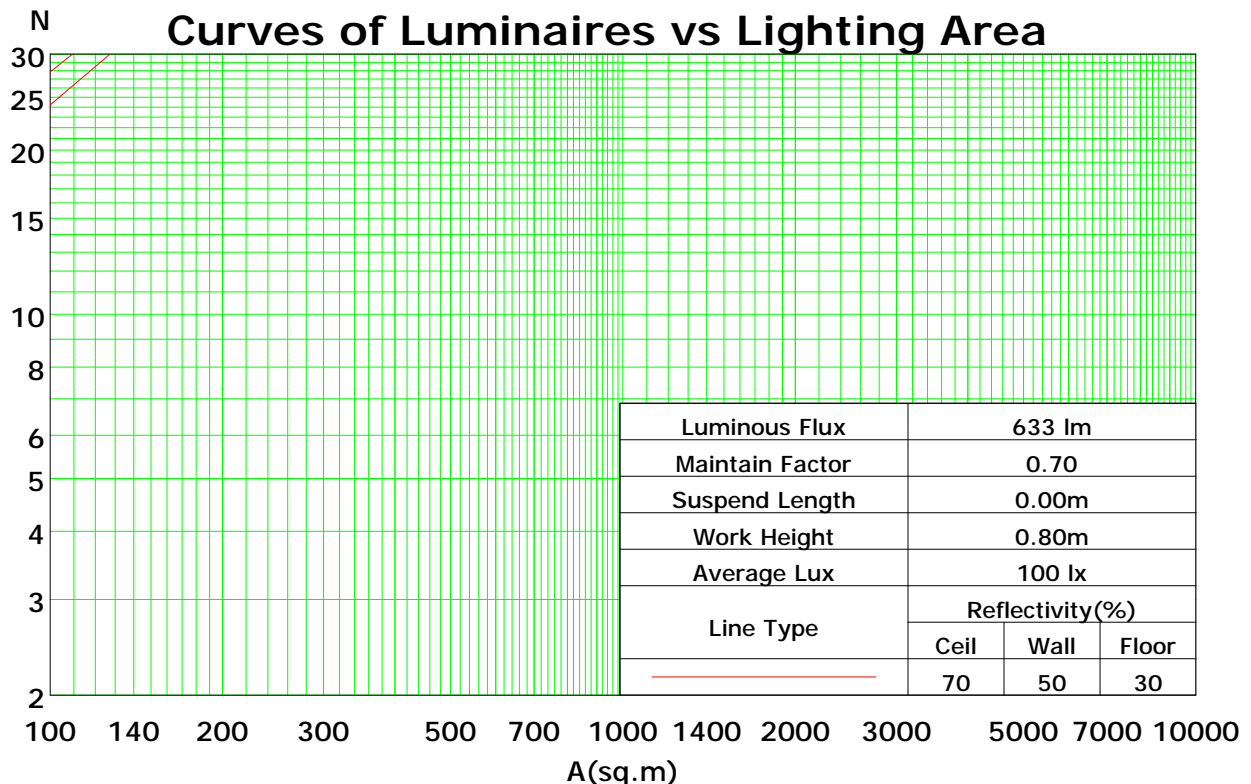
## Coefficients Of Utilization - Zonal Cavity Method

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	108	103	99	95	105	101	97	94	97	93	90	93	90	87	89	87	85	82
2	98	90	83	77	96	88	82	76	84	79	74	81	76	73	78	74	71	69
3	90	79	71	64	87	77	70	64	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	63	57	52	61	56	51	49
5	75	63	53	47	73	61	53	46	59	52	46	57	50	45	55	49	45	42
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	39	35	33
8	60	47	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

Spacing Criteria (0-180): 1.24

Spacing Criteria (90-270): 1.24

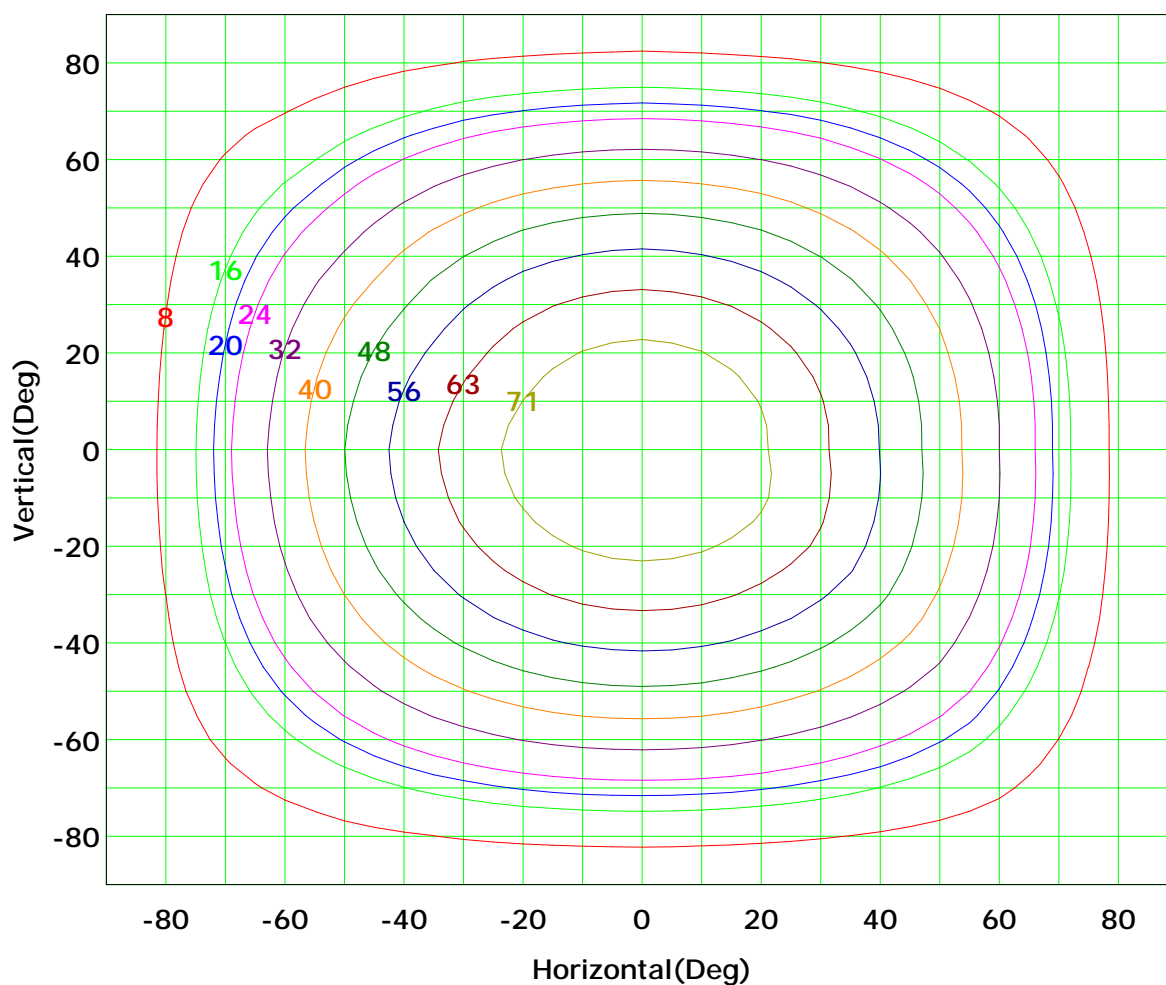
Spacing Criteria (Diagonal): 1.36



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)



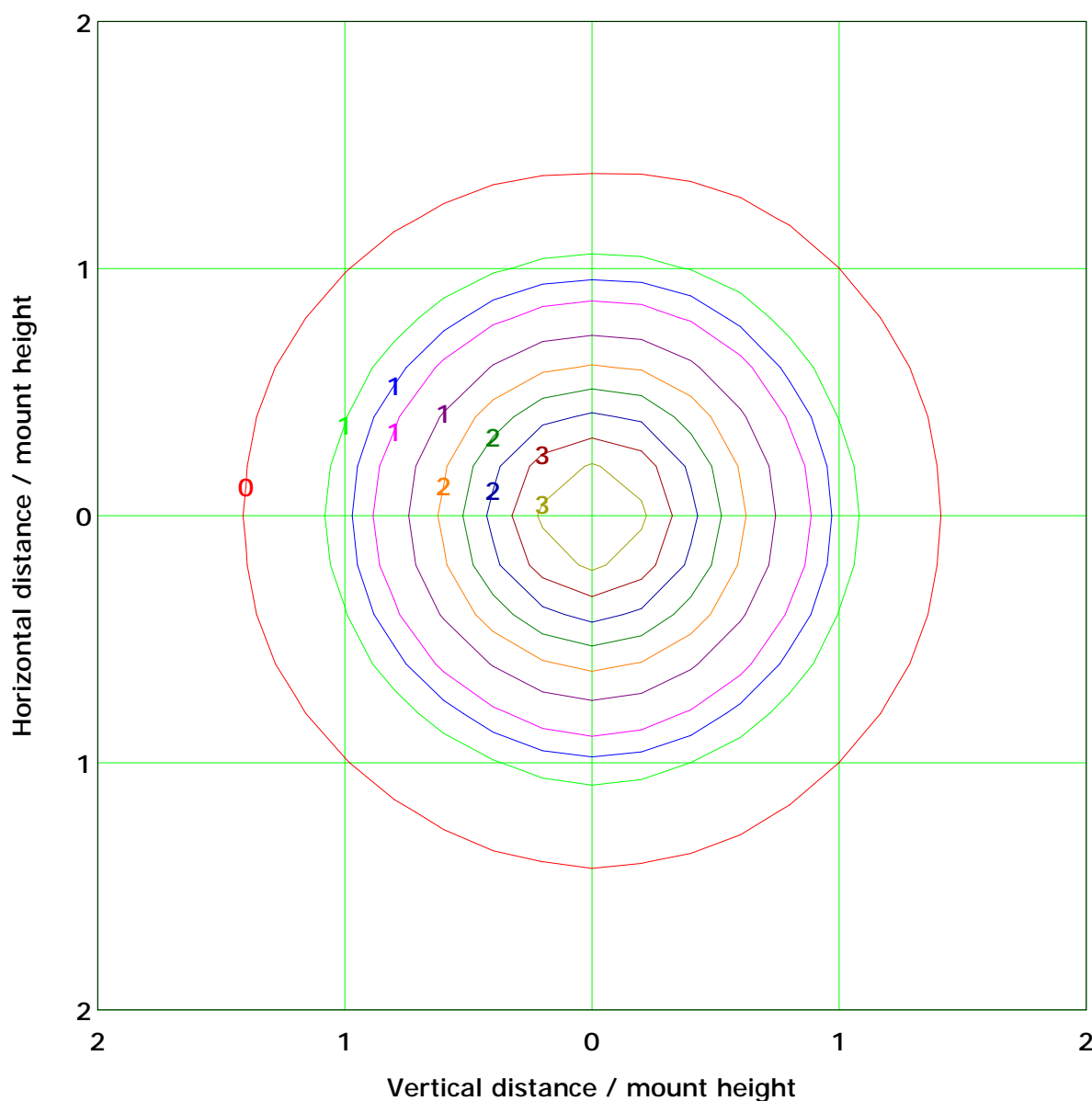
Imax (100%): 79 cd

( 10%):	8 cd	( 20%):	16 cd
( 25%):	20 cd	( 30%):	24 cd
( 40%):	32 cd	( 50%):	40 cd
( 60%):	48 cd	( 70%):	56 cd
( 80%):	63 cd	( 90%):	71 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%): 3.2 lx

( 10%): 0.3 lx	( 20%): 0.6 lx
( 25%): 0.8 lx	( 30%): 1.0 lx
( 40%): 1.3 lx	( 50%): 1.6 lx
( 60%): 1.9 lx	( 70%): 2.2 lx
( 80%): 2.5 lx	( 90%): 2.9 lx

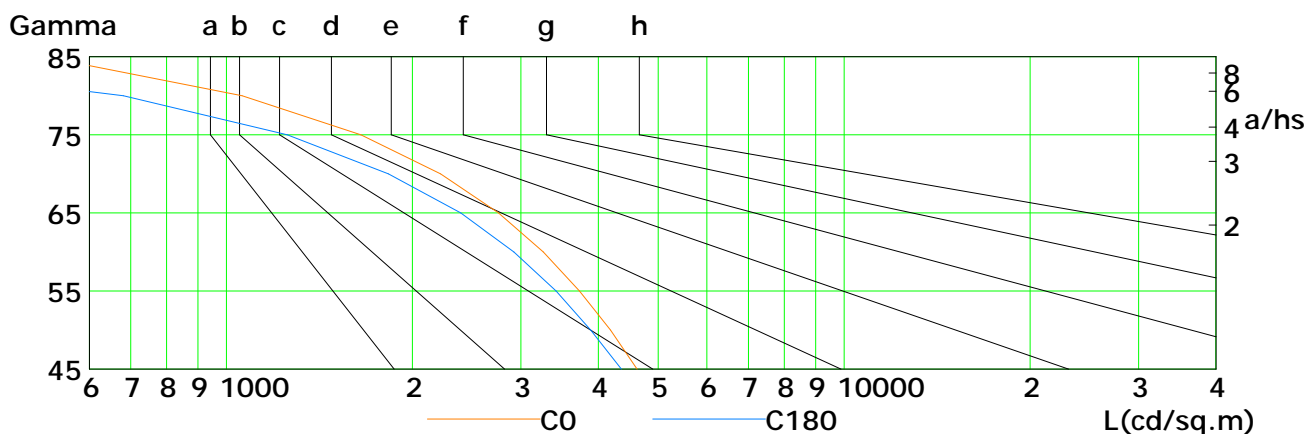
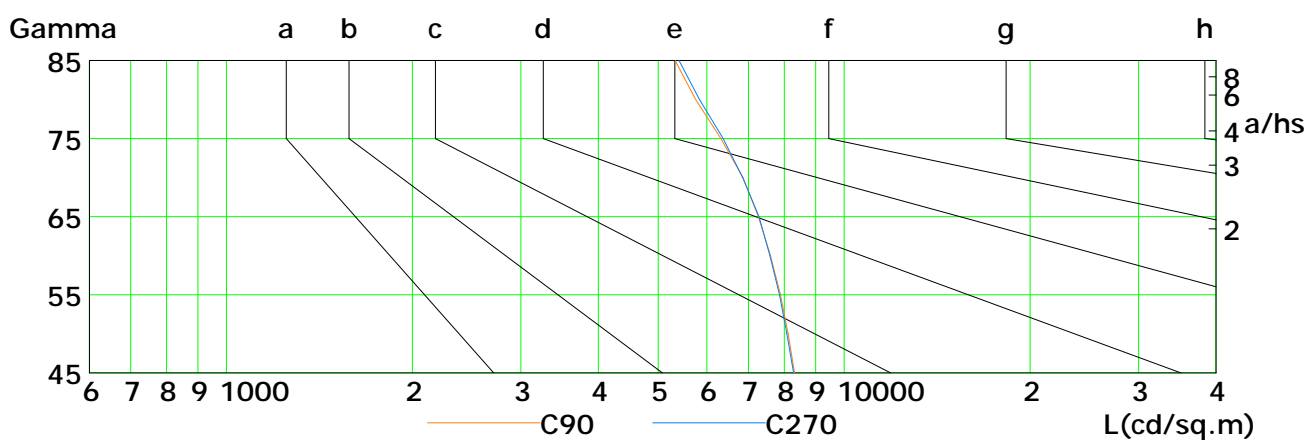
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: Nick

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

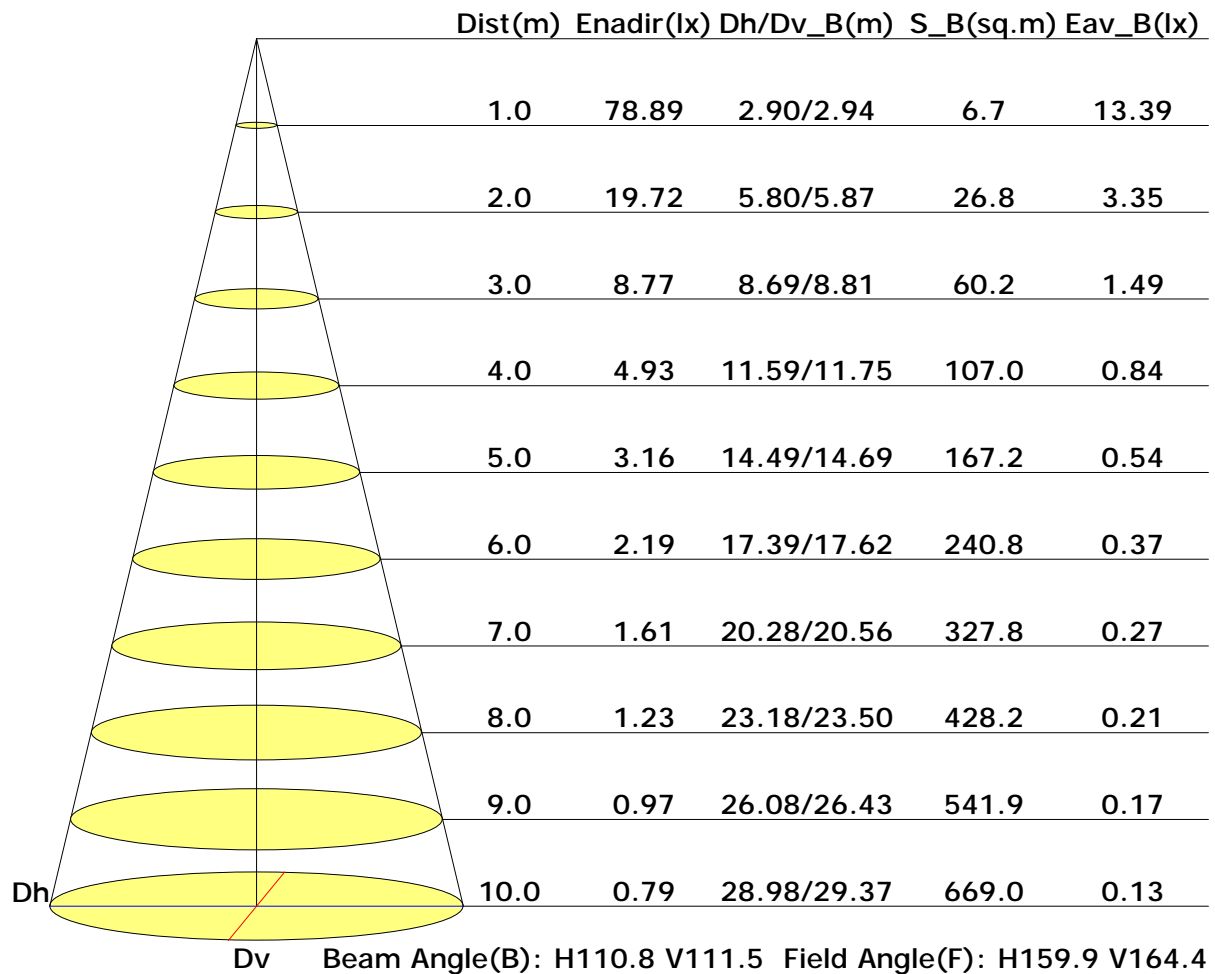


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	4624	4187	3728	3261	2759	2223	1650	1060	508
C90	8318	8118	7886	7606	7271	6862	6323	5752	5327
C180	4361	3891	3421	2921	2397	1829	1254	682	215
C270	8291	8084	7863	7584	7281	6856	6371	5831	5406

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:

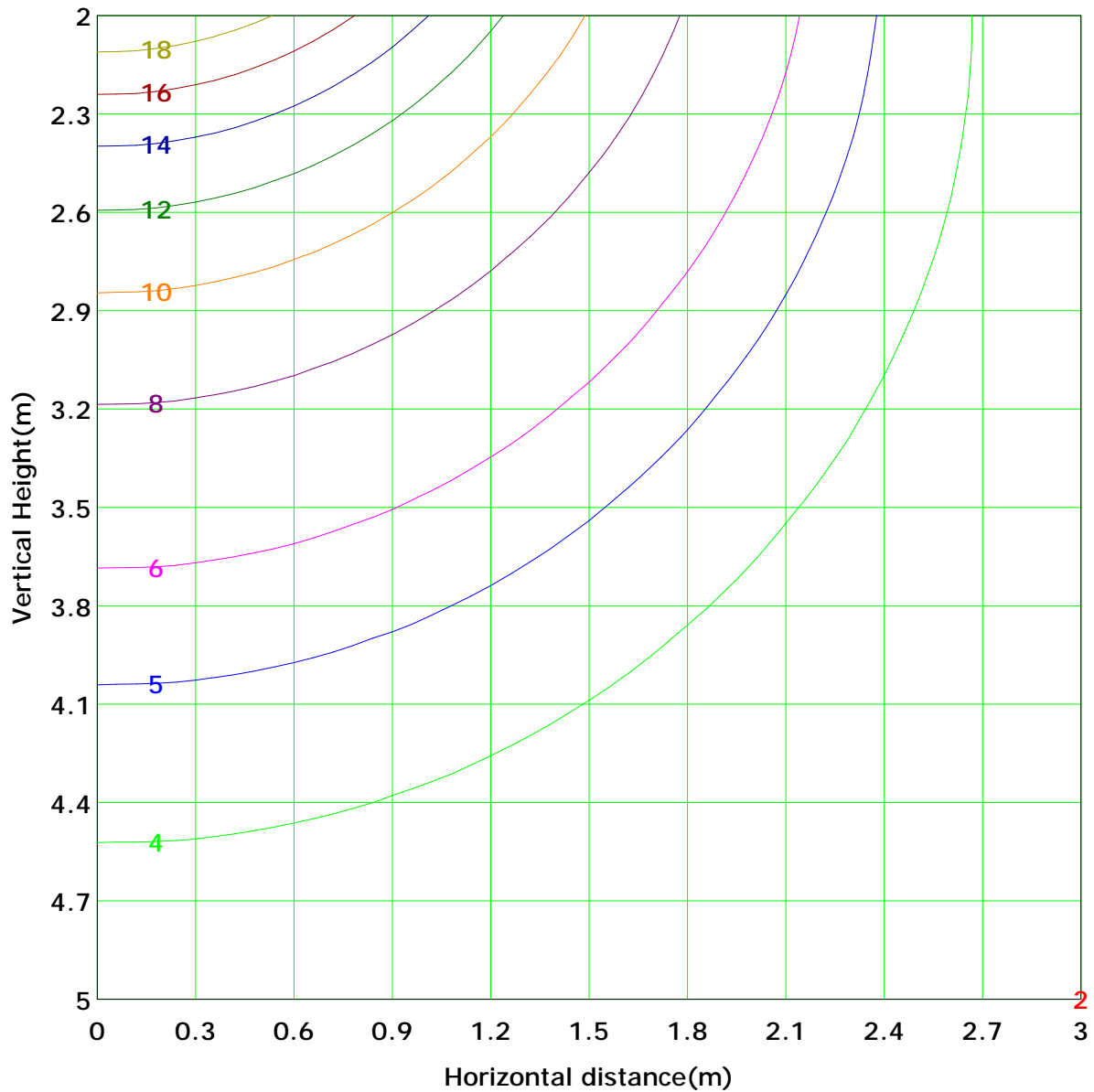
## Illuminance at a Distance







## Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 19.7 lx
( 10%): 2.0 lx	( 20%): 3.9 lx	
( 25%): 4.9 lx	( 30%): 5.9 lx	
( 40%): 7.9 lx	( 50%): 9.9 lx	
( 60%): 11.8 lx	( 70%): 13.8 lx	
( 80%): 15.8 lx	( 90%): 17.8 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:

## Area Flux Table

Unit: lm

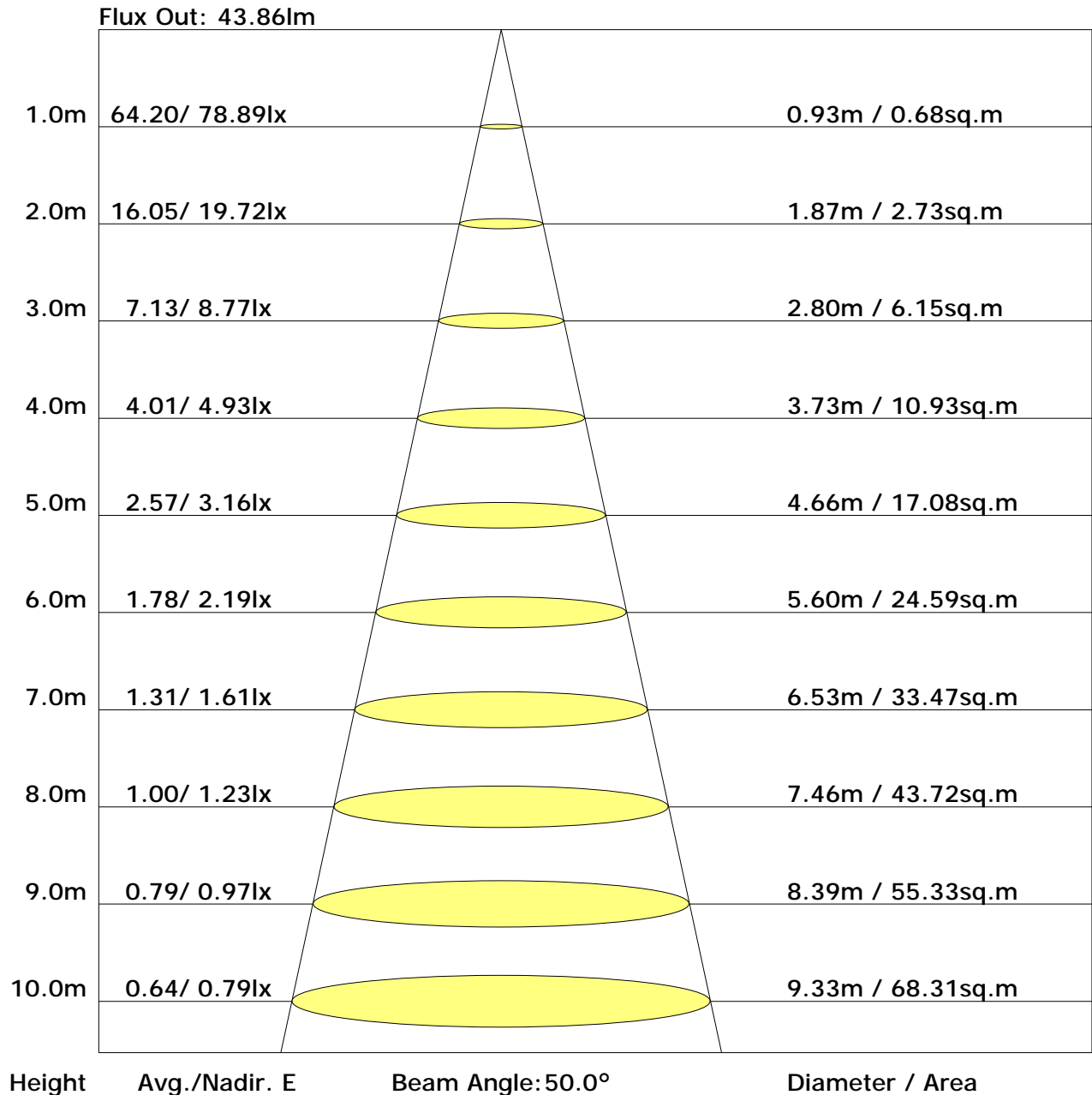
Vertical plane		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)
Horizontal plane	-90	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	1.0	1.4	1.5	1.9	2.2	2.4	2.3	2.1	2.0	1.7	1.4	1.0	0.0
	-80	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.8	1.0	1.2	1.5	1.7	1.9	1.6	1.3	1.0	0.7	0.4	0.1	0.0
	-70	0.0	0.0	0.1	0.2	0.4	0.5	0.7	0.8	1.1	1.4	1.7	2.0	2.2	2.4	2.1	1.8	1.5	1.2	0.9	0.6	0.3
	-60	0.0	0.0	0.1	0.2	0.4	0.5	0.7	0.8	1.1	1.4	1.7	2.0	2.2	2.4	2.1	1.8	1.5	1.2	0.9	0.6	0.3
	-50	0.0	0.0	0.2	0.3	0.5	0.7	0.8	1.0	1.3	1.6	1.9	2.2	2.4	2.3	2.1	1.8	1.5	1.2	0.9	0.6	0.3
	-40	0.0	0.1	0.2	0.4	0.7	1.0	1.3	1.5	1.7	1.9	2.1	2.3	2.4	2.3	2.1	1.8	1.5	1.2	0.9	0.6	0.3
	-30	0.0	0.1	0.3	0.5	0.9	1.2	1.5	1.7	2.0	2.1	2.3	2.4	2.4	2.3	2.1	1.8	1.5	1.2	0.9	0.6	0.3
	-20	0.0	0.1	0.3	0.6	1.0	1.3	1.7	2.0	2.1	2.3	2.4	2.4	2.2	2.1	1.9	1.6	1.3	1.0	0.7	0.4	0.1
	-10	0.0	0.1	0.3	0.7	1.1	1.5	1.9	2.2	2.4	2.4	2.4	2.2	2.1	1.9	1.6	1.3	1.0	0.7	0.4	0.1	0.0
	0	0.0	0.1	0.3	0.7	1.1	1.5	1.9	2.2	2.4	2.4	2.4	2.2	2.1	1.9	1.6	1.3	1.0	0.7	0.4	0.1	0.0
	10	0.0	0.1	0.3	0.7	1.1	1.5	1.9	2.2	2.4	2.4	2.4	2.2	2.1	1.9	1.6	1.3	1.0	0.7	0.4	0.1	0.0
	20	0.0	0.1	0.3	0.7	1.1	1.5	1.9	2.2	2.4	2.4	2.4	2.2	2.1	1.9	1.6	1.3	1.0	0.7	0.4	0.1	0.0
	30	0.0	0.1	0.3	0.6	1.0	1.4	1.7	2.0	2.1	2.1	2.0	1.7	1.5	1.2	0.9	0.6	0.4	0.2	0.1	0.0	0.0
	40	0.0	0.1	0.3	0.6	0.9	1.2	1.5	1.7	1.9	1.9	1.7	1.5	1.2	0.9	0.6	0.4	0.2	0.1	0.0	0.0	0.0
	50	0.0	0.1	0.2	0.5	0.8	1.0	1.3	1.5	1.6	1.6	1.5	1.3	1.0	0.7	0.5	0.2	0.1	0.0	0.0	0.0	0.0
	60	0.0	0.1	0.2	0.4	0.6	0.8	1.0	1.1	1.2	1.2	1.1	1.0	0.8	0.6	0.4	0.2	0.1	0.0	0.0	0.0	0.0
	70	0.0	0.0	0.1	0.2	0.4	0.6	0.7	0.8	0.8	0.8	0.8	0.7	0.6	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0
	80	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.5	0.4	0.4	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0
	90	0.1	1.1	3.5	7.3	11.9	16.6	20.8	24.0	25.8	25.8	24.0	20.9	16.7	12.1	7.6	3.9	1.4	0.2	224		
	Flux(E)	0.0	0.8	3.3	7.1	11.7	16.4	20.6	23.8	25.5	25.5	23.8	20.7	16.5	11.9	7.4	3.7	1.1	0.0			220

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	23.2	24.8	23.6	25.2	25.5	21.6	23.3	22.0	23.6	23.9
3H	25.0	26.5	25.4	26.9	27.2	23.0	24.5	23.4	24.9	25.2
4H	25.7	27.1	26.1	27.5	27.9	23.5	24.9	23.9	25.3	25.7
6H	26.2	27.5	26.6	27.9	28.3	23.8	25.1	24.2	25.5	25.9
8H	26.4	27.6	26.8	28.0	28.4	23.9	25.1	24.3	25.5	25.9
12H	26.5	27.6	26.9	28.0	28.5	23.9	25.1	24.4	25.5	25.9
X=4H Y=2H	23.6	24.9	24.0	25.3	25.7	22.3	23.7	22.7	24.0	24.4
3H	25.5	26.7	25.9	27.1	27.5	23.9	25.0	24.3	25.4	25.9
4H	26.3	27.3	26.7	27.8	28.2	24.4	25.5	24.9	25.9	26.4
6H	26.9	27.8	27.3	28.2	28.7	24.8	25.7	25.3	26.2	26.7
8H	27.0	27.9	27.5	28.4	28.9	24.9	25.8	25.4	26.2	26.7
12H	27.2	27.9	27.7	28.4	28.9	25.0	25.8	25.5	26.3	26.8
X=8H Y=4H	26.4	27.2	26.9	27.7	28.2	24.7	25.6	25.2	26.0	26.5
6H	27.0	27.7	27.5	28.2	28.7	25.2	25.9	25.7	26.4	26.9
8H	27.2	27.9	27.8	28.4	28.9	25.3	26.0	25.9	26.5	27.0
12H	27.4	28.0	27.9	28.5	29.1	25.4	26.0	26.0	26.5	27.1
X=12H Y=4H	26.4	27.2	26.9	27.6	28.1	24.7	25.5	25.2	26.0	26.5
6H	27.0	27.7	27.6	28.1	28.7	25.2	25.9	25.8	26.3	26.9
8H	27.3	27.8	27.8	28.3	28.9	25.4	26.0	25.9	26.5	27.1

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	0.56	0.66	0.74	0.79	0.87	0.92	0.95	1.00	1.03
	0.30		0.48	0.59	0.66	0.72	0.80	0.86	0.90	0.96	0.99
	0.20		0.43	0.53	0.61	0.67	0.75	0.81	0.86	0.92	0.96
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.88	0.91	0.96	0.98
	0.30		0.47	0.57	0.65	0.70	0.78	0.83	0.87	0.92	0.95
	0.20		0.42	0.52	0.60	0.65	0.73	0.79	0.83	0.89	0.93
0.30	0.50	0.20	0.53	0.62	0.69	0.74	0.80	0.85	0.88	0.92	0.94
	0.30		0.47	0.56	0.63	0.68	0.76	0.81	0.84	0.89	0.92
	0.20		0.42	0.52	0.59	0.64	0.72	0.77	0.81	0.86	0.90
0.00	0.00	0.00	0.39	0.49	0.56	0.61	0.68	0.73	0.77	0.82	0.85
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	1.00	0.83	0.71	0.62	0.49	0.41	0.35	0.27	0.22
	0.30		0.83	0.71	0.61	0.54	0.45	0.38	0.32	0.26	0.21
	0.20		0.72	0.62	0.55	0.49	0.41	0.35	0.30	0.24	0.20
0.50	0.50	0.20	0.96	0.79	0.68	0.59	0.47	0.42	0.33	0.26	0.21
	0.30		0.82	0.69	0.60	0.53	0.43	0.36	0.31	0.24	0.20
	0.20		0.71	0.61	0.53	0.48	0.40	0.34	0.29	0.23	0.19
0.30	0.50	0.20	0.93	0.76	0.65	0.56	0.45	0.37	0.32	0.25	0.20
	0.30		0.80	0.67	0.58	0.51	0.41	0.35	0.30	0.24	0.19
	0.20		0.70	0.60	0.52	0.47	0.38	0.33	0.28	0.22	0.19
0.00	0.00	0.00	0.60	0.50	0.43	0.38	0.31	0.26	0.22	0.17	0.14
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	0.19	0.19	0.20	0.21	0.22	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	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.17	0.19	0.19	
	0.20		0.05	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.21	0.21	
	0.30		0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.07	0.08	0.10	0.11	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	79.1	0.1	0.1	0.03	0.03
1.0-2.0	79.1	0.2	0.3	0.10	0.13
2.0-3.0	79.1	0.4	0.7	0.17	0.30
3.0-4.0	79.0	0.5	1.2	0.23	0.53
4.0-5.0	78.8	0.7	1.9	0.30	0.83
5.0-6.0	78.7	0.8	2.7	0.37	1.20
6.0-7.0	78.5	1.0	3.7	0.43	1.63
7.0-8.0	78.3	1.1	4.8	0.50	2.13
8.0-9.0	78.0	1.3	6.1	0.56	2.69
9.0-10.0	77.8	1.4	7.5	0.62	3.31
10.0-11.0	77.5	1.5	9.0	0.68	3.99
11.0-12.0	77.1	1.7	10.7	0.75	4.74
12.0-13.0	76.8	1.8	12.5	0.81	5.54
13.0-14.0	76.4	2.0	14.5	0.86	6.41
14.0-15.0	75.9	2.1	16.6	0.92	7.33
15.0-16.0	75.5	2.2	18.8	0.98	8.31
16.0-17.0	75.0	2.3	21.1	1.03	9.34
17.0-18.0	74.5	2.5	23.6	1.09	10.43
18.0-19.0	74.0	2.6	26.2	1.14	11.57
19.0-20.0	73.5	2.7	28.9	1.19	12.76
20.0-21.0	72.9	2.8	31.6	1.24	13.99
21.0-22.0	72.3	2.9	34.6	1.28	15.28
22.0-23.0	71.6	3.0	37.6	1.33	16.60
23.0-24.0	71.0	3.1	40.7	1.37	17.98
24.0-25.0	70.3	3.2	43.9	1.41	19.39
25.0-26.0	69.6	3.3	47.1	1.45	20.84
26.0-27.0	68.8	3.4	50.5	1.49	22.33
27.0-28.0	68.1	3.4	54.0	1.52	23.85
28.0-29.0	67.3	3.5	57.5	1.56	25.41
29.0-30.0	66.5	3.6	61.1	1.59	27.00
30.0-31.0	65.7	3.7	64.7	1.62	28.62
31.0-32.0	64.9	3.7	68.4	1.64	30.26
32.0-33.0	64.0	3.8	72.2	1.67	31.93
33.0-34.0	63.1	3.8	76.0	1.69	33.62
34.0-35.0	62.2	3.9	79.9	1.71	35.33
35.0-36.0	61.3	3.9	83.8	1.73	37.05

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	60.4	3.9	87.8	1.74	38.80
37.0-38.0	59.5	4.0	91.7	1.75	40.55
38.0-39.0	58.5	4.0	95.7	1.77	42.32
39.0-40.0	57.5	4.0	99.7	1.77	44.09
40.0-41.0	56.5	4.0	103.7	1.78	45.87
41.0-42.0	55.5	4.0	107.8	1.78	47.65
42.0-43.0	54.4	4.0	111.8	1.78	49.43
43.0-44.0	53.4	4.0	115.8	1.78	51.21
44.0-45.0	52.3	4.0	119.9	1.78	52.99
45.0-46.0	51.2	4.0	123.9	1.77	54.76
46.0-47.0	50.1	4.0	127.9	1.76	56.53
47.0-48.0	49.0	4.0	131.8	1.75	58.28
48.0-49.0	47.9	3.9	135.8	1.74	60.02
49.0-50.0	46.8	3.9	139.7	1.72	61.74
50.0-51.0	45.6	3.9	143.5	1.71	63.45
51.0-52.0	44.4	3.8	147.3	1.69	65.13
52.0-53.0	43.3	3.8	151.1	1.66	66.80
53.0-54.0	42.1	3.7	154.8	1.64	68.44
54.0-55.0	40.9	3.6	158.4	1.61	70.05
55.0-56.0	39.6	3.6	162.0	1.58	71.63
56.0-57.0	38.4	3.5	165.5	1.55	73.19
57.0-58.0	37.2	3.4	169.0	1.52	74.71
58.0-59.0	35.9	3.4	172.3	1.49	76.19
59.0-60.0	34.7	3.3	175.6	1.45	77.64
60.0-61.0	33.4	3.2	178.8	1.41	79.05
61.0-62.0	32.2	3.1	181.9	1.37	80.42
62.0-63.0	30.9	3.0	184.9	1.33	81.75
63.0-64.0	29.6	2.9	187.8	1.28	83.04
64.0-65.0	28.3	2.8	190.6	1.24	84.27
65.0-66.0	27.0	2.7	193.3	1.19	85.47
66.0-67.0	25.7	2.6	195.9	1.14	86.61
67.0-68.0	24.4	2.5	198.4	1.09	87.71
68.0-69.0	23.1	2.4	200.7	1.04	88.75
69.0-70.0	21.8	2.2	203.0	0.99	89.74
70.0-71.0	20.6	2.1	205.1	0.94	90.68
71.0-72.0	19.3	2.0	207.1	0.89	91.57

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	18.0	1.9	209.0	0.83	92.40
73.0-74.0	16.8	1.8	210.8	0.78	93.18
74.0-75.0	15.5	1.6	212.4	0.73	93.91
75.0-76.0	14.3	1.5	213.9	0.67	94.58
76.0-77.0	13.1	1.4	215.3	0.62	95.19
77.0-78.0	11.9	1.3	216.6	0.56	95.76
78.0-79.0	10.8	1.2	217.8	0.51	96.27
79.0-80.0	9.6	1.0	218.8	0.46	96.73
80.0-81.0	8.5	0.9	219.7	0.41	97.14
81.0-82.0	7.5	0.8	220.5	0.36	97.50
82.0-83.0	6.5	0.7	221.2	0.31	97.81
83.0-84.0	5.5	0.6	221.8	0.27	98.07
84.0-85.0	4.7	0.5	222.3	0.23	98.30
85.0-86.0	3.9	0.4	222.8	0.19	98.49
86.0-87.0	3.1	0.3	223.1	0.15	98.64
87.0-88.0	2.5	0.3	223.4	0.12	98.76
88.0-89.0	2.0	0.2	223.6	0.09	98.86
89.0-90.0	1.5	0.2	223.8	0.07	98.93
90.0-91.0	1.1	0.1	223.9	0.05	98.98
91.0-92.0	0.8	0.1	224.0	0.04	99.02
92.0-93.0	0.6	0.1	224.0	0.03	99.05
93.0-94.0	0.4	0.0	224.1	0.02	99.07
94.0-95.0	0.3	0.0	224.1	0.02	99.09
95.0-96.0	0.2	0.0	224.2	0.01	99.10
96.0-97.0	0.2	0.0	224.2	0.01	99.11
97.0-98.0	0.2	0.0	224.2	0.01	99.12
98.0-99.0	0.1	0.0	224.2	0.01	99.12
99.0-100.0	0.2	0.0	224.2	0.01	99.13
100.0-101.0	0.2	0.0	224.2	0.01	99.14
101.0-102.0	0.2	0.0	224.3	0.01	99.15
102.0-103.0	0.2	0.0	224.3	0.01	99.15
103.0-104.0	0.2	0.0	224.3	0.01	99.16
104.0-105.0	0.2	0.0	224.3	0.01	99.17
105.0-106.0	0.2	0.0	224.3	0.01	99.18
106.0-107.0	0.2	0.0	224.4	0.01	99.19
107.0-108.0	0.2	0.0	224.4	0.01	99.20

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	0.2	0.0	224.4	0.01	99.21
109.0-110.0	0.2	0.0	224.4	0.01	99.22
110.0-111.0	0.2	0.0	224.5	0.01	99.23
111.0-112.0	0.2	0.0	224.5	0.01	99.24
112.0-113.0	0.3	0.0	224.5	0.01	99.25
113.0-114.0	0.3	0.0	224.5	0.01	99.27
114.0-115.0	0.3	0.0	224.6	0.01	99.28
115.0-116.0	0.3	0.0	224.6	0.01	99.29
116.0-117.0	0.3	0.0	224.6	0.01	99.30
117.0-118.0	0.3	0.0	224.6	0.01	99.32
118.0-119.0	0.3	0.0	224.7	0.01	99.33
119.0-120.0	0.3	0.0	224.7	0.01	99.34
120.0-121.0	0.3	0.0	224.7	0.01	99.36
121.0-122.0	0.3	0.0	224.8	0.01	99.37
122.0-123.0	0.3	0.0	224.8	0.01	99.38
123.0-124.0	0.3	0.0	224.8	0.01	99.40
124.0-125.0	0.4	0.0	224.9	0.01	99.41
125.0-126.0	0.4	0.0	224.9	0.01	99.43
126.0-127.0	0.4	0.0	224.9	0.01	99.44
127.0-128.0	0.4	0.0	225.0	0.02	99.46
128.0-129.0	0.4	0.0	225.0	0.02	99.47
129.0-130.0	0.4	0.0	225.0	0.01	99.49
130.0-131.0	0.4	0.0	225.1	0.01	99.50
131.0-132.0	0.4	0.0	225.1	0.02	99.52
132.0-133.0	0.4	0.0	225.1	0.01	99.53
133.0-134.0	0.4	0.0	225.2	0.01	99.55
134.0-135.0	0.4	0.0	225.2	0.01	99.56
135.0-136.0	0.4	0.0	225.2	0.02	99.58
136.0-137.0	0.4	0.0	225.3	0.02	99.59
137.0-138.0	0.5	0.0	225.3	0.01	99.61
138.0-139.0	0.5	0.0	225.3	0.02	99.62
139.0-140.0	0.5	0.0	225.4	0.01	99.64
140.0-141.0	0.5	0.0	225.4	0.01	99.65
141.0-142.0	0.5	0.0	225.4	0.01	99.67
142.0-143.0	0.5	0.0	225.5	0.01	99.68
143.0-144.0	0.5	0.0	225.5	0.01	99.69

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	0.5	0.0	225.5	0.01	99.71
145.0-146.0	0.5	0.0	225.6	0.01	99.72
146.0-147.0	0.5	0.0	225.6	0.01	99.74
147.0-148.0	0.5	0.0	225.6	0.01	99.75
148.0-149.0	0.5	0.0	225.7	0.01	99.76
149.0-150.0	0.5	0.0	225.7	0.01	99.78
150.0-151.0	0.5	0.0	225.7	0.01	99.79
151.0-152.0	0.6	0.0	225.8	0.01	99.80
152.0-153.0	0.6	0.0	225.8	0.01	99.82
153.0-154.0	0.6	0.0	225.8	0.01	99.83
154.0-155.0	0.6	0.0	225.8	0.01	99.84
155.0-156.0	0.6	0.0	225.9	0.01	99.85
156.0-157.0	0.6	0.0	225.9	0.01	99.86
157.0-158.0	0.6	0.0	225.9	0.01	99.87
158.0-159.0	0.6	0.0	225.9	0.01	99.89
159.0-160.0	0.6	0.0	226.0	0.01	99.90
160.0-161.0	0.6	0.0	226.0	0.01	99.90
161.0-162.0	0.6	0.0	226.0	0.01	99.91
162.0-163.0	0.6	0.0	226.0	0.01	99.92
163.0-164.0	0.6	0.0	226.0	0.01	99.93
164.0-165.0	0.6	0.0	226.1	0.01	99.94
165.0-166.0	0.6	0.0	226.1	0.01	99.95
166.0-167.0	0.6	0.0	226.1	0.01	99.95
167.0-168.0	0.6	0.0	226.1	0.01	99.96
168.0-169.0	0.6	0.0	226.1	0.01	99.97
169.0-170.0	0.6	0.0	226.1	0.01	99.97
170.0-171.0	0.6	0.0	226.1	0.01	99.98
171.0-172.0	0.6	0.0	226.2	0.00	99.98
172.0-173.0	0.7	0.0	226.2	0.00	99.99
173.0-174.0	0.7	0.0	226.2	0.00	99.99
174.0-175.0	0.7	0.0	226.2	0.00	99.99
175.0-176.0	0.7	0.0	226.2	0.00	100.00
176.0-177.0	0.7	0.0	226.2	0.00	100.00
177.0-178.0	0.7	0.0	226.2	0.00	100.00
178.0-179.0	0.7	0.0	226.2	0.00	100.00
179.0-180.0	0.7	0.0	226.2	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: