

Report No.:

Test Time: 2023/9/26 16:01

## Luminaire Property

Luminaire Manufacturer: ACOLYTE

Luminaire Category: CHANNEL

Luminaire Description: CHAS30MRB90SWDR2012.030

Luminous Length (mm): 500

Luminous Width (mm): 33.4

Luminous Height (mm): 29.6

Voltage: 24.0 V

Current: 0.816 A

Power: 19.73 W

Power Factor: 1.000

## Photometric Results

CIE Class: Direct

Measurement Flux: 774 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(10%,50%): H160.6,H111.5

Vertical Diffuse Angle(10%,50%): V162.4,V111.6

Luminaire Efficacy Rating (LER): 39

Max. Intensity: 271.24 cd

Total Rated Lamp Lumens: 774.0 lm

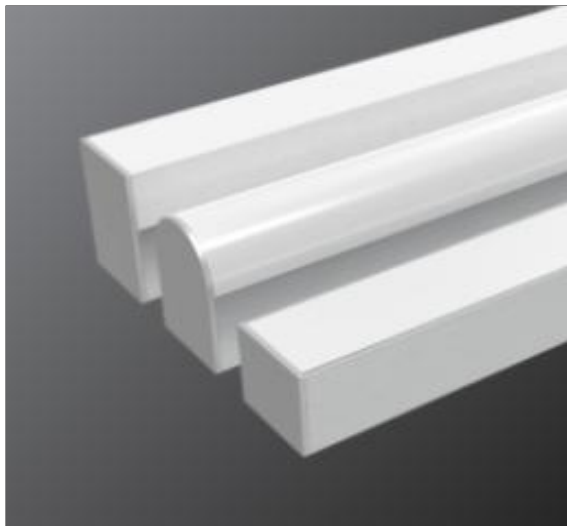
Efficiency: 100%

Upward Ratio: 1%

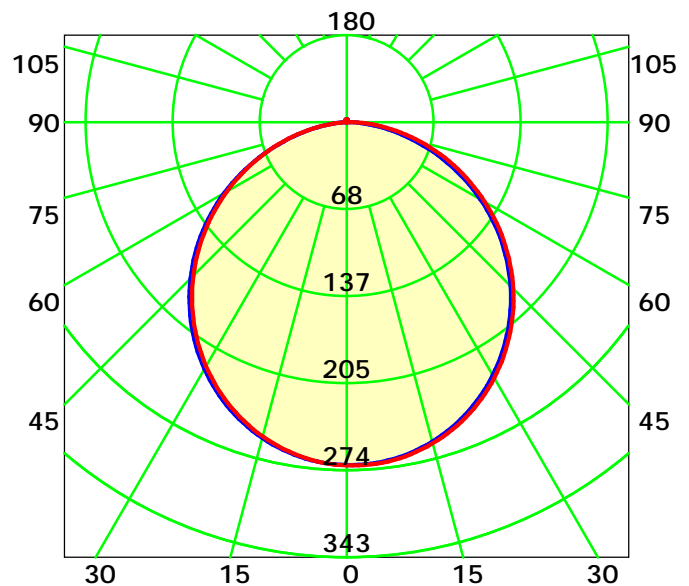
Central Intensity: 270.42 cd

Pos of Max. Intensity: H150 V3

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 111.6° 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

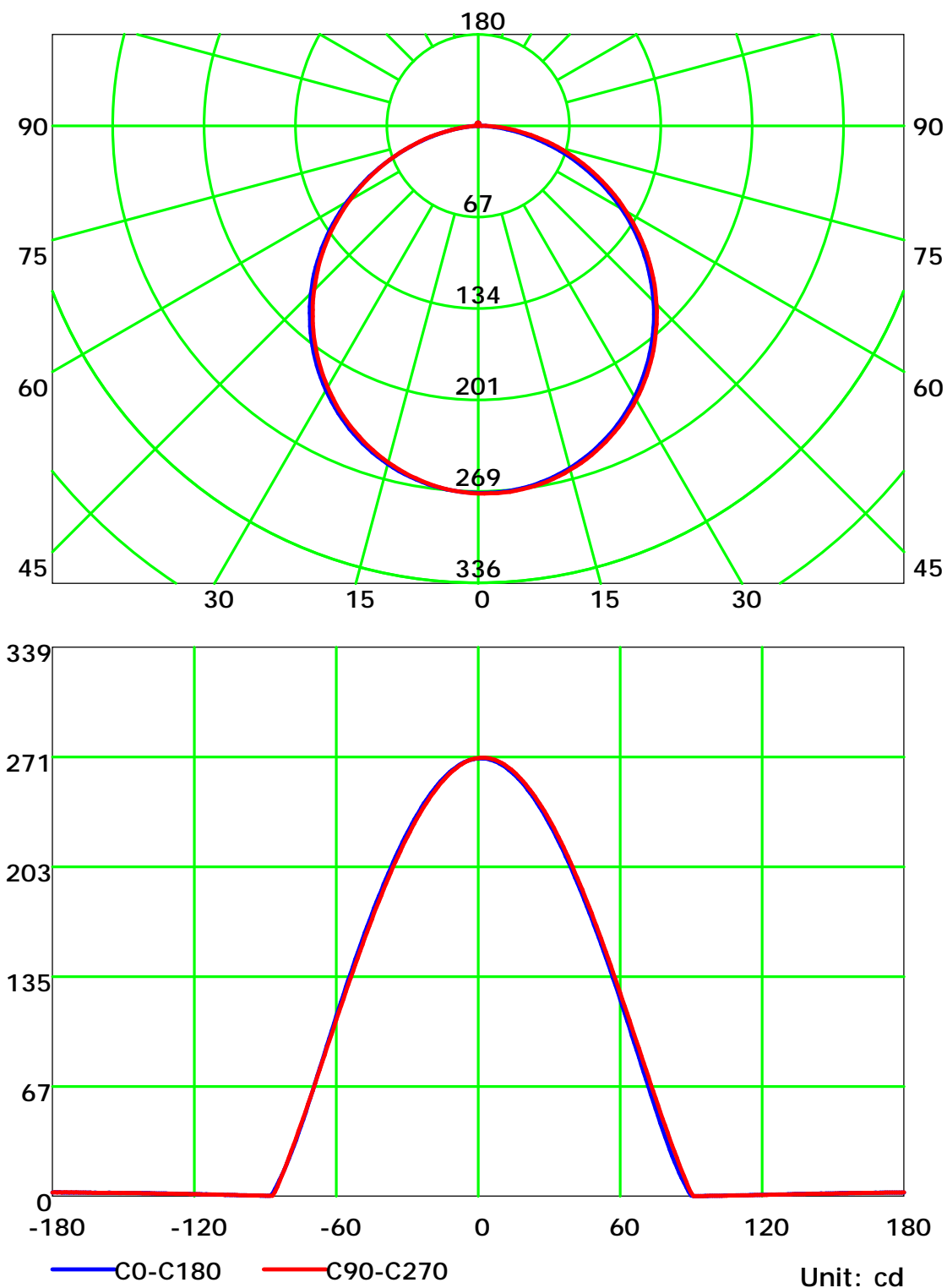
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

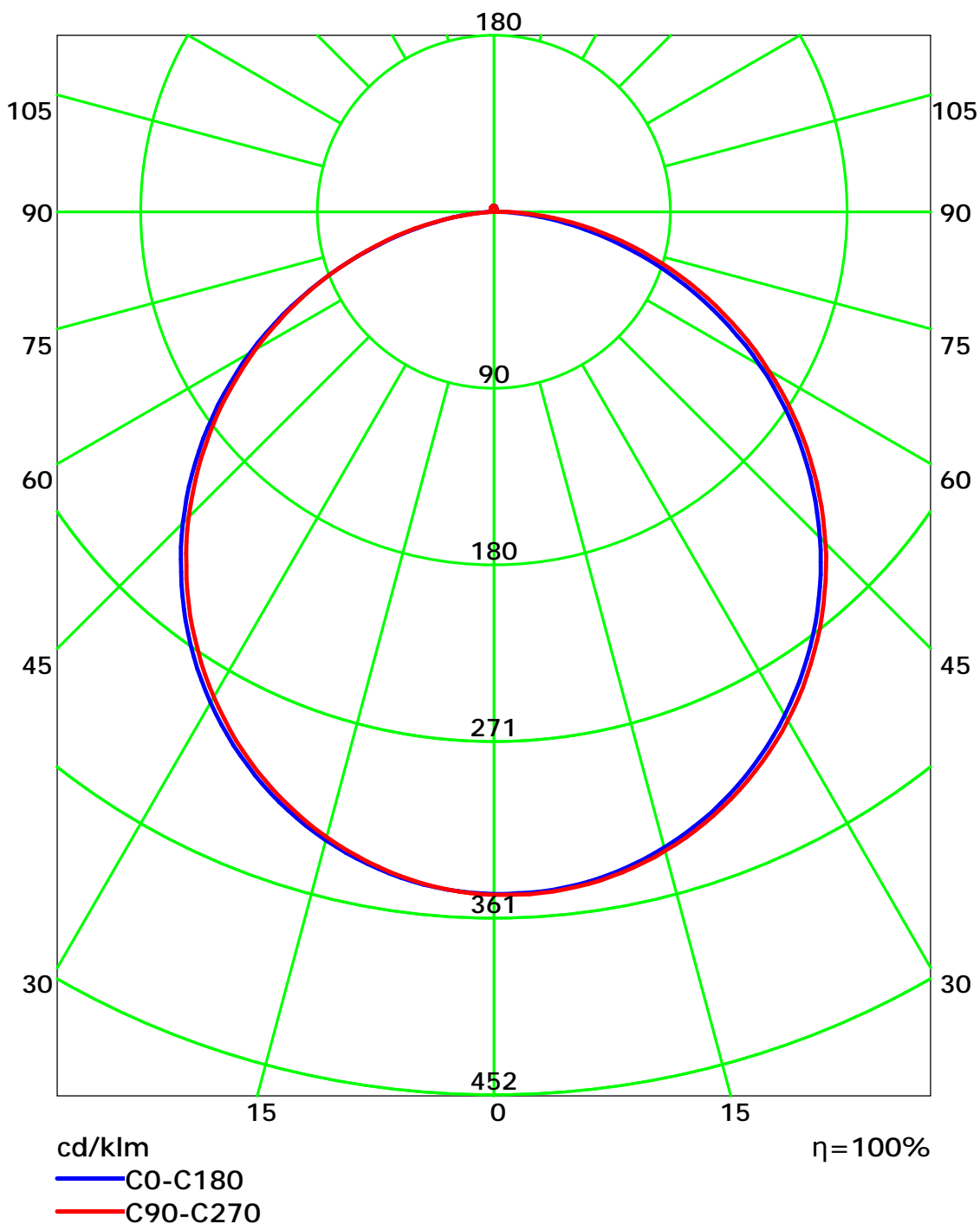
## Luminous Intensity Distribution Curve



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:

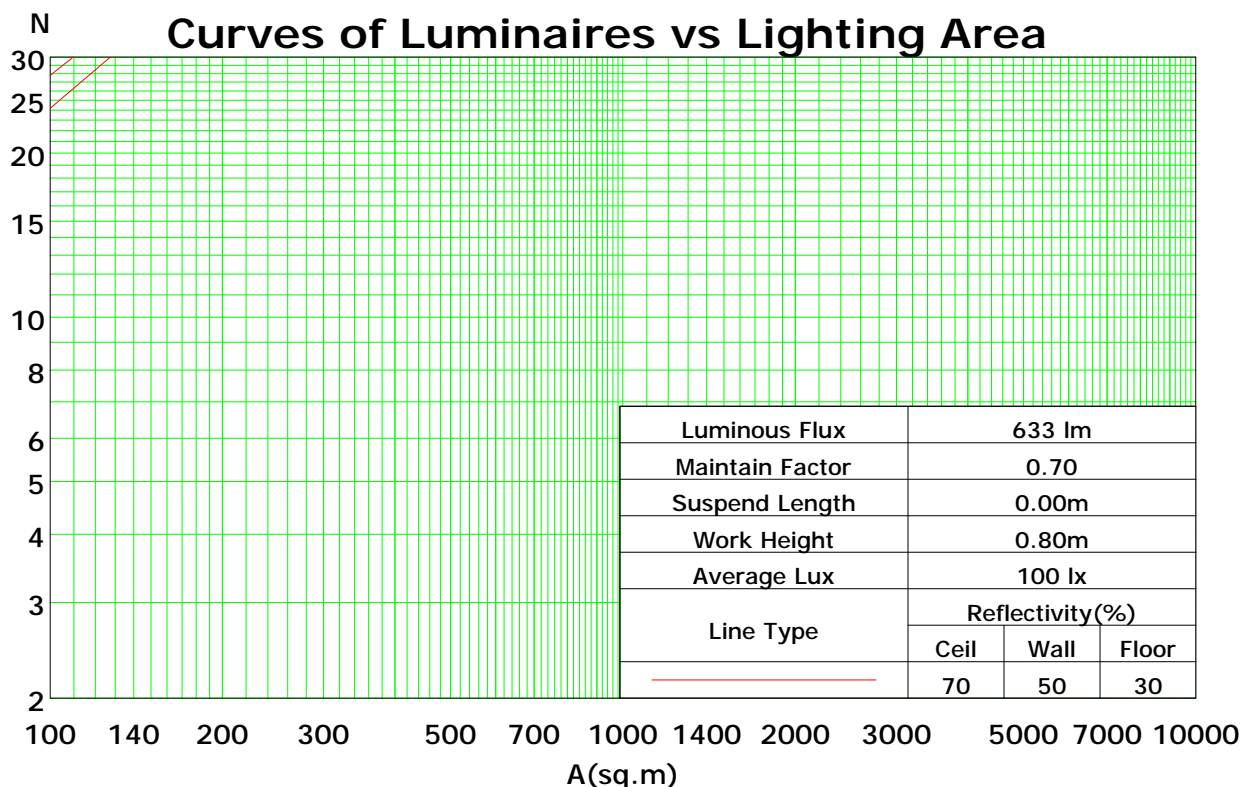
## Coefficients Of Utilization - Zonal Cavity Method

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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	78	96	88	82	77	85	79	75	81	77	73	78	74	71	69
3	90	79	71	64	87	78	70	64	74	68	63	72	66	61	69	64	60	58
4	82	70	61	55	80	69	61	54	66	59	53	64	57	52	61	56	52	49
5	76	63	54	47	73	61	53	47	59	52	46	57	51	45	55	49	45	43
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	40	35	33
8	60	47	38	32	59	46	38	32	44	37	32	43	36	32	42	36	31	29
9	56	43	35	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	32	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

Spacing Criteria (0-180): 1.25

Spacing Criteria (90-270): 1.25

Spacing Criteria (Diagonal): 1.37



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

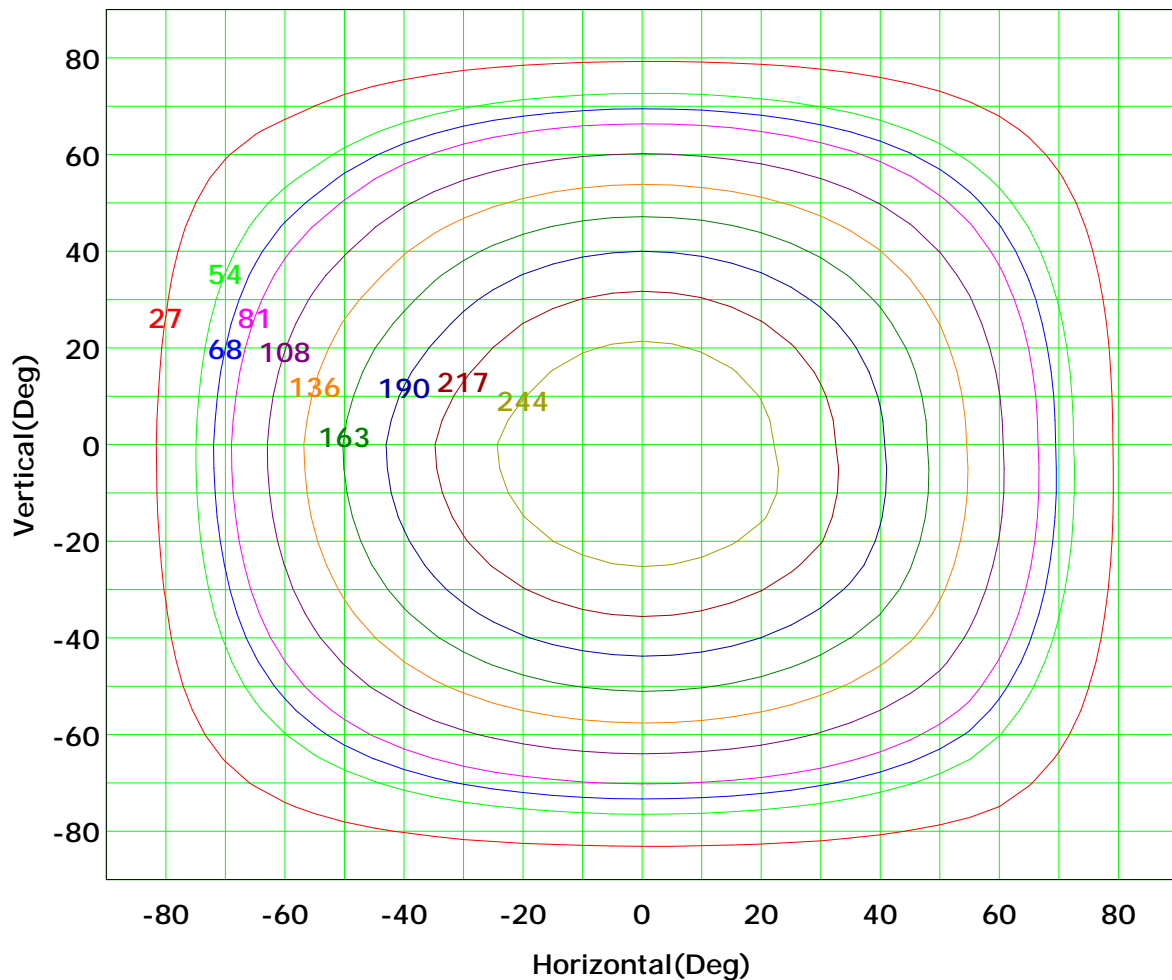
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Isocandela (rectangle)



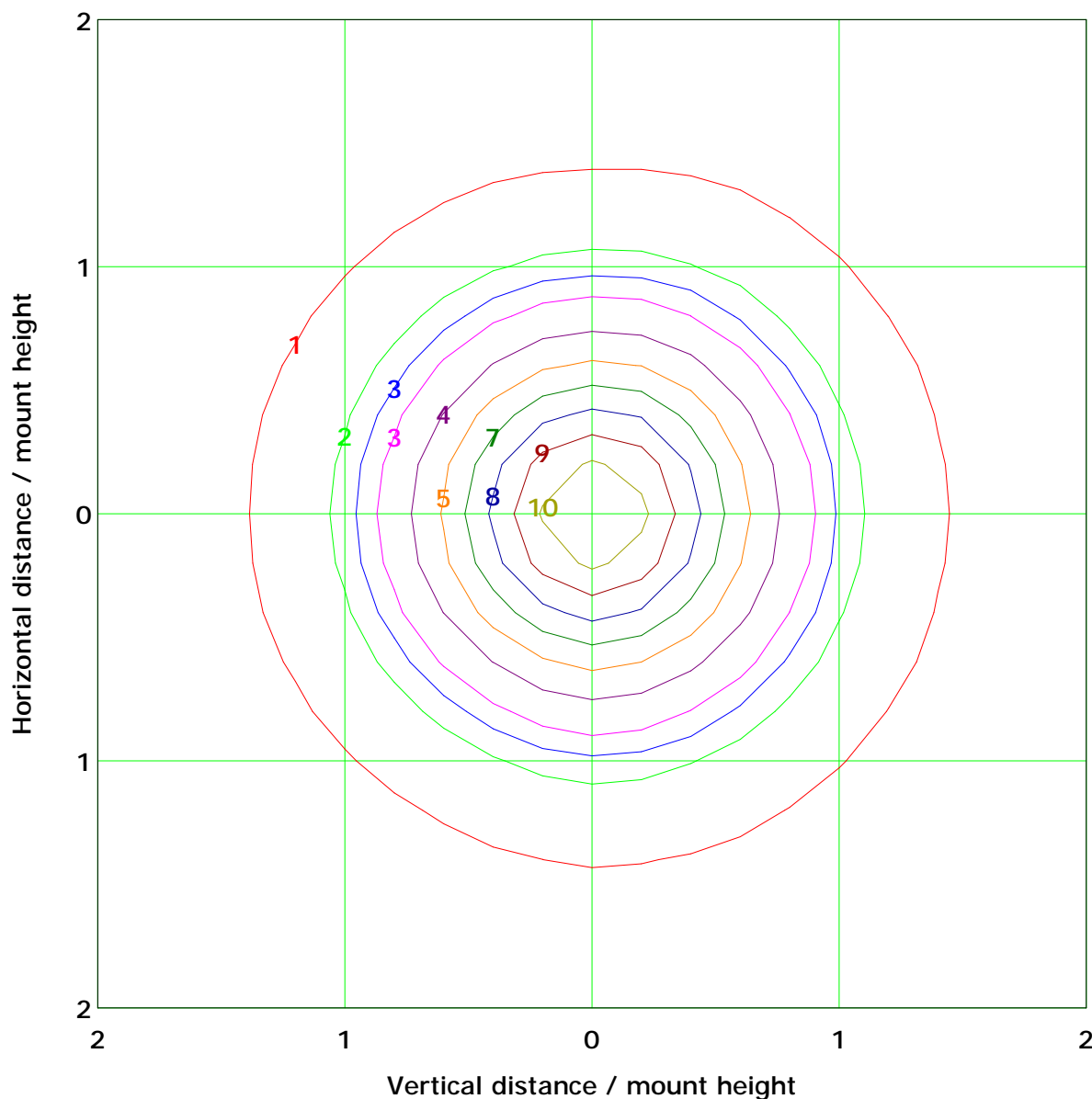
I<sub>max</sub> (100%): 271 cd

( 10%): 27 cd	( 20%): 54 cd
( 25%): 68 cd	( 30%): 81 cd
( 40%): 108 cd	( 50%): 136 cd
( 60%): 163 cd	( 70%): 190 cd
( 80%): 217 cd	( 90%): 244 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%): 10.8 lx	
( 10%):	1.1 lx	( 20%):	2.2 lx
( 25%):	2.7 lx	( 30%):	3.3 lx
( 40%):	4.3 lx	( 50%):	5.4 lx
( 60%):	6.5 lx	( 70%):	7.6 lx
( 80%):	8.7 lx	( 90%):	9.8 lx

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

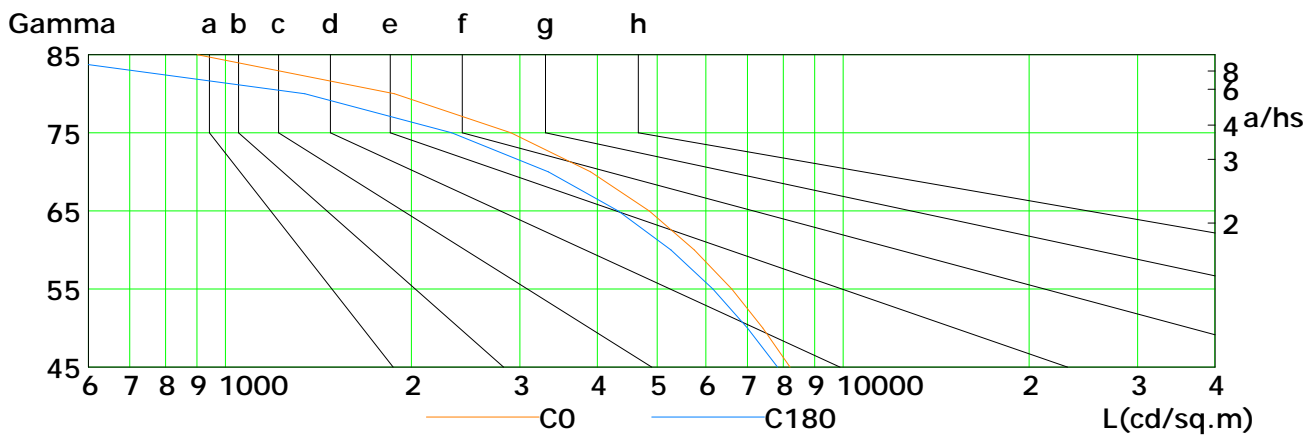
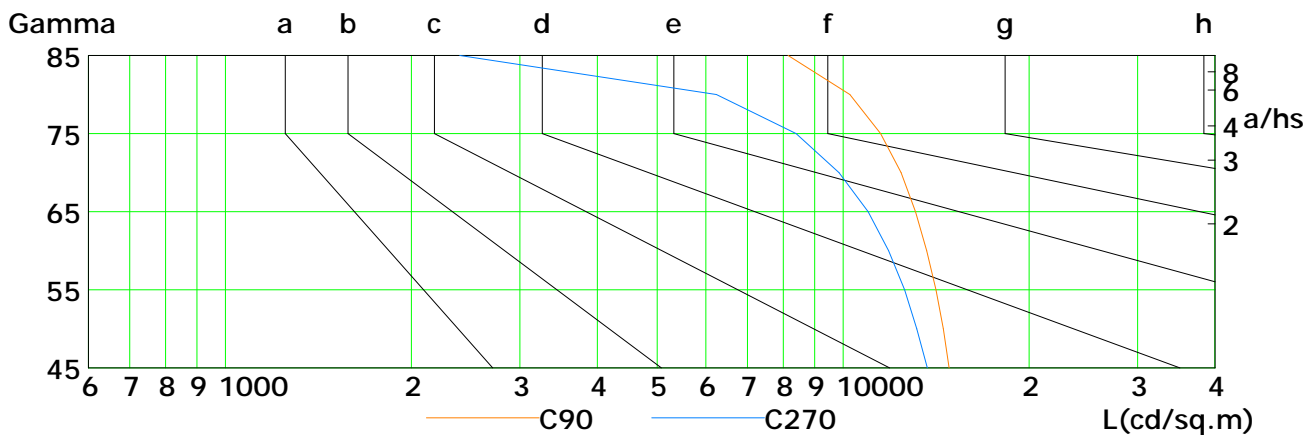
Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:



## 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

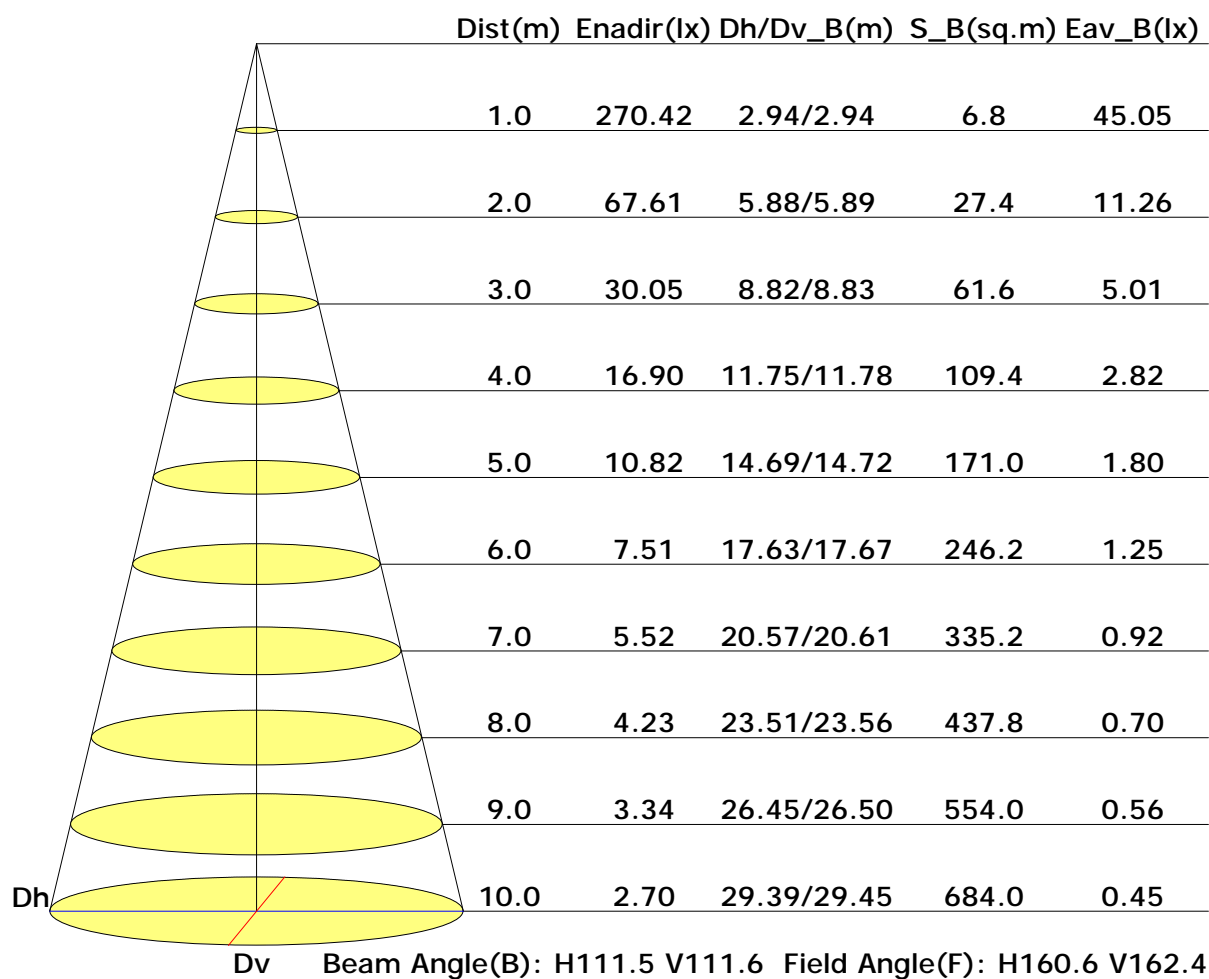


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	8204	7416	6603	5748	4854	3903	2898	1879	901
C90	14853	14535	14146	13658	13107	12416	11504	10262	8146
C180	7832	7006	6158	5267	4326	3334	2326	1345	457
C270	13686	13170	12580	11856	10975	9851	8400	6240	2397

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:

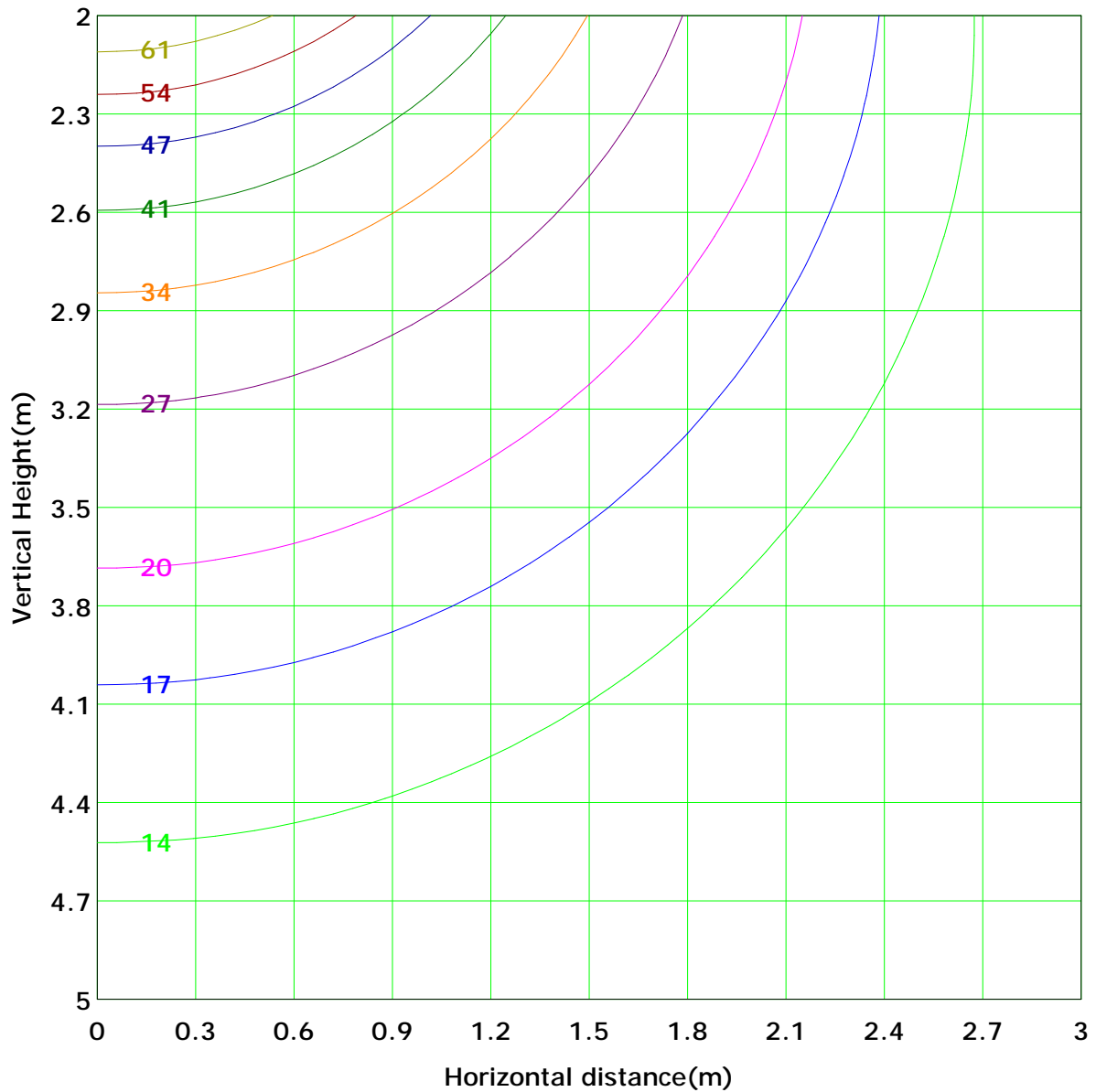
## Illuminance at a Distance







## Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 67.6 lx
( 10%): 6.8 lx	( 20%): 13.5 lx	
( 25%): 16.9 lx	( 30%): 20.3 lx	
( 40%): 27.0 lx	( 50%): 33.8 lx	
( 60%): 40.6 lx	( 70%): 47.3 lx	
( 80%): 54.1 lx	( 90%): 60.8 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

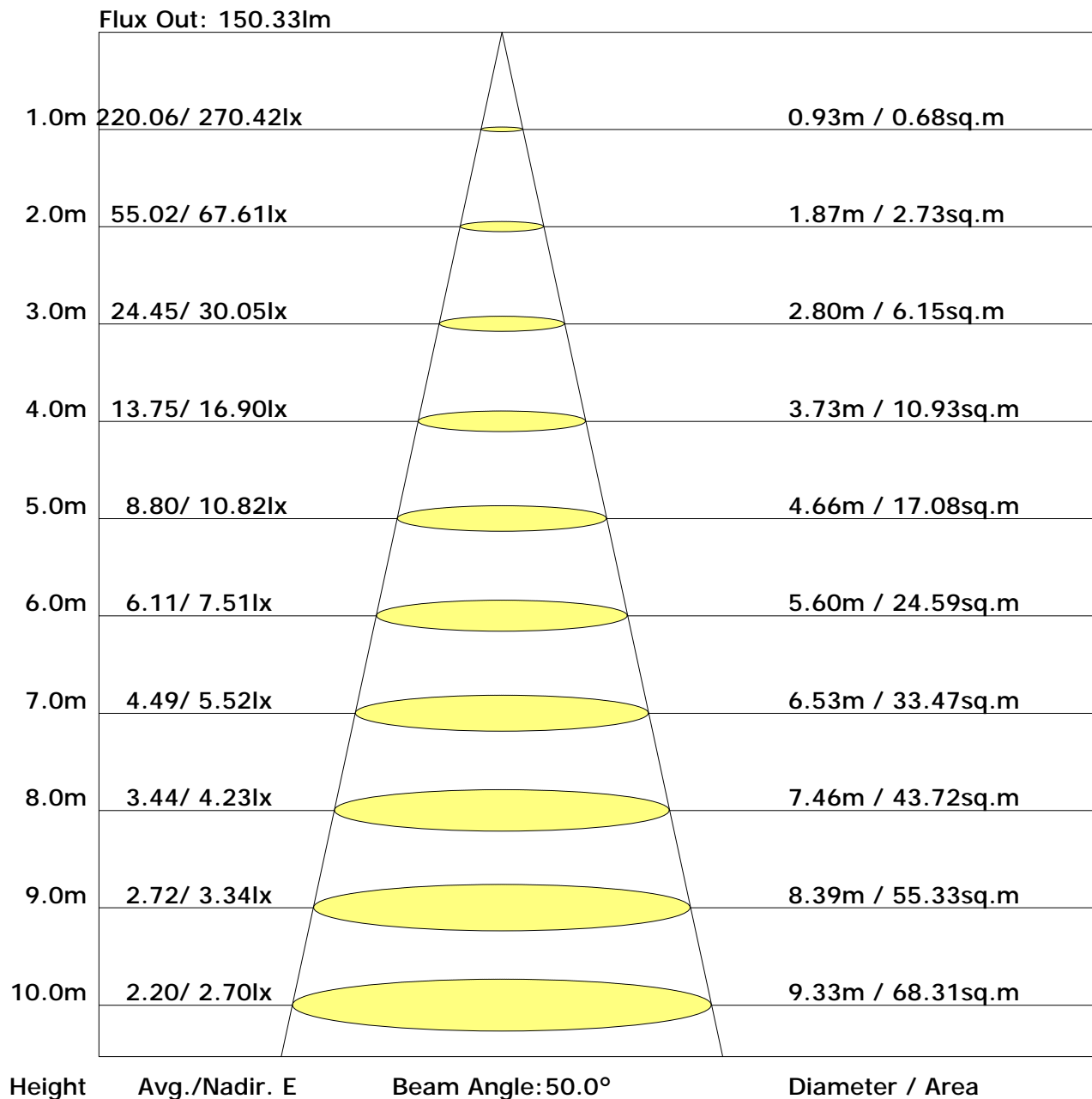
Vertical plane		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)
Horizontal plane	-90	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.3	0.0
	-80	0.0	0.0	0.1	0.3	0.6	0.8	1.1	1.2	1.3	1.3	1.2	1.0	0.8	0.5	0.3	0.1	0.1	0.0	0.0	3.9	3.0
	-70	0.0	0.1	0.3	0.7	1.2	1.7	2.1	2.4	2.6	2.6	2.4	2.1	1.6	1.1	0.7	0.3	0.1	0.0	0.0	12.5	11.8
	-60	0.0	0.2	0.5	1.1	1.8	2.5	3.2	3.7	3.9	3.9	3.6	3.1	2.5	2.0	1.3	0.9	0.5	0.2	0.0	25.6	25.0
	-50	0.0	0.2	0.5	1.1	1.8	2.5	3.2	3.7	3.9	3.9	3.6	3.1	2.5	2.0	1.3	0.9	0.5	0.2	0.0	41.2	40.6
	-40	0.0	0.2	0.7	1.5	2.4	3.3	4.2	4.8	5.2	5.1	4.8	4.1	3.3	2.3	1.4	0.8	0.3	0.2	0.0	57.2	56.6
	-30	0.0	0.3	0.9	1.8	2.9	4.0	5.0	5.8	6.2	6.2	5.8	5.0	4.0	2.8	1.8	1.0	0.6	0.3	0.0	71.5	70.9
	-20	0.0	0.3	1.0	2.0	3.3	4.6	5.7	6.6	7.1	7.1	6.6	5.7	4.5	3.3	2.1	1.1	0.4	0.0	0.0	82.3	81.7
	-10	0.0	0.3	1.1	2.2	3.6	5.0	6.2	7.2	7.7	7.7	7.2	6.2	5.0	3.6	2.3	1.4	0.7	0.3	0.0	88.0	87.4
	0	0.0	0.4	1.1	2.3	3.7	5.2	6.5	7.5	8.1	8.1	7.5	6.6	5.3	3.9	2.5	1.3	0.4	0.1	0.0	87.9	87.2
	10	0.0	0.4	1.2	2.4	3.8	5.3	6.6	7.6	8.1	8.1	7.6	6.7	5.4	4.3	3.1	2.0	1.0	0.4	0.0	81.9	81.4
	20	0.0	0.4	1.1	2.3	3.7	5.2	6.5	7.4	7.9	7.9	7.4	6.4	5.2	3.8	2.4	1.2	0.4	0.1	0.0	71.2	70.5
	30	0.0	0.3	1.1	2.2	3.5	4.9	6.1	6.9	7.4	7.4	6.9	6.0	4.8	3.5	2.2	1.2	0.4	0.0	0.0	56.9	56.3
	40	0.0	0.3	1.0	2.0	3.2	4.4	5.4	6.2	6.6	6.6	6.1	5.4	4.3	3.1	2.0	1.0	0.4	0.0	0.0	41.2	40.5
	50	0.0	0.3	0.8	1.7	2.7	3.7	4.6	5.2	5.6	5.6	5.2	4.5	3.7	2.7	1.7	0.9	0.3	0.0	0.0	26.0	25.3
	60	0.0	0.2	0.7	1.3	2.1	2.9	3.6	4.1	4.4	4.4	4.1	3.6	2.9	2.1	1.3	0.7	0.2	0.0	0.0	13.3	12.7
	70	0.0	0.1	0.5	1.0	1.5	2.1	2.6	2.9	3.1	3.1	2.9	2.5	2.0	1.5	0.9	0.5	0.2	0.0	0.0	4.6	3.9
	80	0.0	0.1	0.3	0.6	0.9	1.2	1.5	1.7	1.8	1.8	1.7	1.5	1.2	0.8	0.5	0.3	0.1	0.0	0.0	0.6	0.1
	90	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.5	0.4	0.3	0.2	0.1	0.0	0.0	0.0	766	755
	Flux(E)	0.0	3.0	11.8	25.0	40.6	56.6	70.9	81.7	87.4	87.2	81.4	70.5	56.3	40.5	25.3	12.7	3.9	0.1	0.0		
	Flux(T)	0.3	3.9	12.5	25.6	41.2	57.2	71.5	82.3	88.0	87.9	81.9	71.2	56.9	41.2	26.0	13.3	4.6	0.6	0.0	766	755

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	20.8	22.4	21.2	22.8	23.1	19.7	21.3	20.1	21.7	22.0
3H	22.6	24.1	23.0	24.4	24.8	21.2	22.7	21.6	23.0	23.4
4H	23.3	24.7	23.7	25.0	25.4	21.7	23.1	22.1	23.5	23.9
6H	23.7	25.0	24.2	25.4	25.8	22.0	23.3	22.5	23.7	24.1
8H	23.9	25.1	24.3	25.5	25.9	22.1	23.3	22.6	23.8	24.2
12H	24.0	25.1	24.4	25.5	26.0	22.2	23.3	22.6	23.7	24.2
X=4H Y=2H	21.2	22.5	21.6	22.9	23.3	20.3	21.7	20.8	22.1	22.5
3H	23.1	24.2	23.5	24.7	25.1	22.0	23.2	22.5	23.6	24.0
4H	23.8	24.9	24.3	25.3	25.8	22.6	23.7	23.1	24.1	24.6
6H	24.4	25.3	24.9	25.8	26.2	23.1	24.0	23.6	24.5	24.9
8H	24.6	25.4	25.0	25.9	26.4	23.2	24.1	23.7	24.5	25.0
12H	24.7	25.5	25.2	25.9	26.4	23.3	24.0	23.8	24.5	25.0
X=8H Y=4H	23.9	24.8	24.4	25.3	25.7	22.9	23.8	23.4	24.2	24.7
6H	24.5	25.3	25.1	25.8	26.3	23.4	24.2	24.0	24.7	25.2
8H	24.8	25.4	25.3	25.9	26.4	23.6	24.3	24.2	24.8	25.3
12H	24.9	25.5	25.4	26.0	26.6	23.7	24.3	24.3	24.8	25.4
X=12H Y=4H	23.9	24.7	24.4	25.2	25.7	23.0	23.7	23.5	24.2	24.7
6H	24.6	25.2	25.1	25.7	26.2	23.5	24.2	24.0	24.6	25.2
8H	24.8	25.3	25.3	25.9	26.4	23.7	24.3	24.2	24.8	25.4

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	0.67	0.74	0.79	0.87	0.92	0.95	1.00	1.03
	0.30		0.48	0.59	0.67	0.72	0.81	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	0.55	0.64	0.71	0.76	0.83	0.88	0.91	0.96	0.99
	0.30		0.47	0.58	0.65	0.70	0.78	0.83	0.87	0.92	0.96
	0.20		0.42	0.52	0.60	0.66	0.74	0.79	0.84	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	0.95
	0.30		0.47	0.57	0.64	0.69	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	0.87	0.90
0.00	0.00	0.00	0.40	0.49	0.56	0.61	0.69	0.74	0.77	0.82	0.85
Rating: 20W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											

## Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 1.25									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	1.00	0.83	0.70	0.61	0.49	0.41	0.35	0.27	0.22	
	0.30		0.83	0.71	0.61	0.54	0.44	0.37	0.32	0.25	0.21	
	0.20		0.72	0.62	0.54	0.49	0.40	0.34	0.30	0.24	0.20	
0.50	0.50	0.20	0.96	0.79	0.67	0.59	0.47	0.42	0.33	0.26	0.21	
	0.30		0.81	0.69	0.59	0.52	0.43	0.36	0.31	0.24	0.20	
	0.20		0.71	0.61	0.53	0.48	0.39	0.33	0.29	0.23	0.19	
0.30	0.50	0.20	0.93	0.76	0.65	0.56	0.45	0.37	0.31	0.24	0.20	
	0.30		0.80	0.67	0.58	0.51	0.41	0.34	0.30	0.23	0.19	
	0.20		0.70	0.60	0.52	0.47	0.38	0.32	0.28	0.22	0.18	
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: 20W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

## Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.25									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	0.17	0.19	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	0.18	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	0.12	0.13	0.14	0.16	0.17	
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Rating: 20W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

## Zonal Lumen

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	270.6	0.3	0.3	0.03	0.03
1.0-2.0	270.5	0.8	1.0	0.10	0.13
2.0-3.0	270.3	1.3	2.3	0.17	0.30
3.0-4.0	270.1	1.8	4.1	0.23	0.53
4.0-5.0	269.7	2.3	6.5	0.30	0.83
5.0-6.0	269.2	2.8	9.3	0.37	1.20
6.0-7.0	268.6	3.3	12.6	0.43	1.63
7.0-8.0	267.9	3.8	16.5	0.50	2.13
8.0-9.0	267.1	4.3	20.8	0.56	2.69
9.0-10.0	266.1	4.8	25.6	0.62	3.31
10.0-11.0	265.1	5.3	30.9	0.68	3.99
11.0-12.0	264.1	5.8	36.7	0.75	4.74
12.0-13.0	262.8	6.2	42.9	0.81	5.54
13.0-14.0	261.6	6.7	49.6	0.87	6.41
14.0-15.0	260.2	7.1	56.7	0.92	7.33
15.0-16.0	258.7	7.6	64.3	0.98	8.31
16.0-17.0	257.2	8.0	72.3	1.03	9.35
17.0-18.0	255.5	8.4	80.8	1.09	10.43
18.0-19.0	253.7	8.8	89.6	1.14	11.58
19.0-20.0	251.9	9.2	98.8	1.19	12.77
20.0-21.0	250.0	9.6	108.4	1.24	14.01
21.0-22.0	247.9	10.0	118.4	1.29	15.29
22.0-23.0	245.9	10.3	128.7	1.33	16.63
23.0-24.0	243.7	10.7	139.4	1.38	18.00
24.0-25.0	241.4	11.0	150.3	1.42	19.42
25.0-26.0	239.1	11.3	161.6	1.46	20.88
26.0-27.0	236.6	11.6	173.2	1.50	22.38
27.0-28.0	234.1	11.9	185.0	1.53	23.91
28.0-29.0	231.5	12.1	197.2	1.56	25.47
29.0-30.0	228.8	12.4	209.5	1.60	27.07
30.0-31.0	226.1	12.6	222.1	1.63	28.69
31.0-32.0	223.3	12.8	234.9	1.65	30.35
32.0-33.0	220.4	13.0	247.9	1.68	32.03
33.0-34.0	217.4	13.2	261.0	1.70	33.73
34.0-35.0	214.4	13.3	274.4	1.72	35.45
35.0-36.0	211.3	13.5	287.8	1.74	37.18

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	208.1	13.6	301.4	1.75	38.94
37.0-38.0	204.8	13.7	315.1	1.77	40.70
38.0-39.0	201.5	13.8	328.8	1.78	42.48
39.0-40.0	198.1	13.8	342.6	1.79	44.27
40.0-41.0	194.6	13.9	356.5	1.79	46.06
41.0-42.0	191.2	13.9	370.4	1.79	47.85
42.0-43.0	187.6	13.9	384.3	1.80	49.65
43.0-44.0	184.0	13.9	398.2	1.79	51.44
44.0-45.0	180.3	13.9	412.0	1.79	53.23
45.0-46.0	176.6	13.8	425.8	1.78	55.02
46.0-47.0	172.7	13.7	439.6	1.78	56.79
47.0-48.0	168.9	13.7	453.2	1.76	58.56
48.0-49.0	165.0	13.6	466.8	1.75	60.31
49.0-50.0	161.1	13.4	480.2	1.74	62.04
50.0-51.0	157.0	13.3	493.5	1.72	63.76
51.0-52.0	153.0	13.1	506.6	1.70	65.46
52.0-53.0	148.9	13.0	519.6	1.67	67.13
53.0-54.0	144.7	12.8	532.3	1.65	68.78
54.0-55.0	140.6	12.6	544.9	1.62	70.40
55.0-56.0	136.4	12.3	557.2	1.59	71.99
56.0-57.0	132.1	12.1	569.3	1.56	73.55
57.0-58.0	127.8	11.8	581.1	1.53	75.08
58.0-59.0	123.5	11.5	592.7	1.49	76.57
59.0-60.0	119.1	11.3	603.9	1.45	78.03
60.0-61.0	114.8	11.0	614.9	1.42	79.44
61.0-62.0	110.4	10.6	625.5	1.37	80.82
62.0-63.0	106.0	10.3	635.8	1.33	82.15
63.0-64.0	101.5	10.0	645.8	1.29	83.43
64.0-65.0	97.1	9.6	655.4	1.24	84.68
65.0-66.0	92.6	9.2	664.6	1.19	85.87
66.0-67.0	88.2	8.9	673.5	1.15	87.02
67.0-68.0	83.8	8.5	682.0	1.10	88.11
68.0-69.0	79.3	8.1	690.1	1.05	89.16
69.0-70.0	74.8	7.7	697.8	0.99	90.15
70.0-71.0	70.4	7.3	705.1	0.94	91.09
71.0-72.0	66.0	6.9	711.9	0.89	91.98

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	61.7	6.4	718.4	0.83	92.81
73.0-74.0	57.3	6.0	724.4	0.78	93.59
74.0-75.0	53.0	5.6	730.0	0.72	94.31
75.0-76.0	48.8	5.2	735.2	0.67	94.98
76.0-77.0	44.6	4.8	739.9	0.61	95.60
77.0-78.0	40.5	4.3	744.3	0.56	96.16
78.0-79.0	36.4	3.9	748.2	0.51	96.66
79.0-80.0	32.4	3.5	751.7	0.45	97.11
80.0-81.0	28.5	3.1	754.7	0.40	97.51
81.0-82.0	24.7	2.7	757.4	0.35	97.86
82.0-83.0	20.9	2.3	759.7	0.29	98.15
83.0-84.0	17.3	1.9	761.6	0.24	98.39
84.0-85.0	13.8	1.5	763.1	0.19	98.59
85.0-86.0	10.4	1.1	764.2	0.15	98.74
86.0-87.0	7.3	0.8	765.0	0.10	98.84
87.0-88.0	5.0	0.5	765.6	0.07	98.91
88.0-89.0	3.3	0.4	765.9	0.05	98.96
89.0-90.0	1.8	0.2	766.1	0.03	98.98
90.0-91.0	0.7	0.1	766.2	0.01	98.99
91.0-92.0	0.4	0.0	766.3	0.01	99.00
92.0-93.0	0.4	0.0	766.3	0.01	99.00
93.0-94.0	0.4	0.0	766.3	0.01	99.01
94.0-95.0	0.4	0.0	766.4	0.01	99.01
95.0-96.0	0.4	0.0	766.4	0.01	99.02
96.0-97.0	0.5	0.1	766.5	0.01	99.03
97.0-98.0	0.5	0.1	766.5	0.01	99.03
98.0-99.0	0.5	0.1	766.6	0.01	99.04
99.0-100.0	0.6	0.1	766.7	0.01	99.05
100.0-101.0	0.6	0.1	766.7	0.01	99.06
101.0-102.0	0.6	0.1	766.8	0.01	99.07
102.0-103.0	0.6	0.1	766.9	0.01	99.08
103.0-104.0	0.7	0.1	766.9	0.01	99.09
104.0-105.0	0.7	0.1	767.0	0.01	99.09
105.0-106.0	0.7	0.1	767.1	0.01	99.10
106.0-107.0	0.8	0.1	767.2	0.01	99.12
107.0-108.0	0.8	0.1	767.2	0.01	99.13

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	0.8	0.1	767.3	0.01	99.14
109.0-110.0	0.9	0.1	767.4	0.01	99.15
110.0-111.0	0.9	0.1	767.5	0.01	99.16
111.0-112.0	0.9	0.1	767.6	0.01	99.17
112.0-113.0	1.0	0.1	767.7	0.01	99.19
113.0-114.0	1.0	0.1	767.8	0.01	99.20
114.0-115.0	1.0	0.1	767.9	0.01	99.21
115.0-116.0	1.1	0.1	768.0	0.01	99.22
116.0-117.0	1.1	0.1	768.1	0.01	99.24
117.0-118.0	1.1	0.1	768.2	0.01	99.25
118.0-119.0	1.2	0.1	768.3	0.01	99.27
119.0-120.0	1.2	0.1	768.4	0.01	99.28
120.0-121.0	1.2	0.1	768.6	0.01	99.30
121.0-122.0	1.2	0.1	768.7	0.02	99.31
122.0-123.0	1.3	0.1	768.8	0.02	99.33
123.0-124.0	1.3	0.1	768.9	0.02	99.34
124.0-125.0	1.3	0.1	769.0	0.02	99.36
125.0-126.0	1.4	0.1	769.2	0.02	99.37
126.0-127.0	1.4	0.1	769.3	0.02	99.39
127.0-128.0	1.4	0.1	769.4	0.02	99.41
128.0-129.0	1.5	0.1	769.5	0.02	99.42
129.0-130.0	1.5	0.1	769.7	0.02	99.44
130.0-131.0	1.5	0.1	769.8	0.02	99.46
131.0-132.0	1.6	0.1	769.9	0.02	99.47
132.0-133.0	1.6	0.1	770.1	0.02	99.49
133.0-134.0	1.6	0.1	770.2	0.02	99.51
134.0-135.0	1.6	0.1	770.3	0.02	99.52
135.0-136.0	1.7	0.1	770.4	0.02	99.54
136.0-137.0	1.7	0.1	770.6	0.02	99.56
137.0-138.0	1.7	0.1	770.7	0.02	99.57
138.0-139.0	1.8	0.1	770.8	0.02	99.59
139.0-140.0	1.8	0.1	770.9	0.02	99.60
140.0-141.0	1.8	0.1	771.1	0.02	99.62
141.0-142.0	1.8	0.1	771.2	0.02	99.64
142.0-143.0	1.8	0.1	771.3	0.02	99.65
143.0-144.0	1.9	0.1	771.4	0.02	99.67

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	1.9	0.1	771.6	0.02	99.68
145.0-146.0	1.9	0.1	771.7	0.02	99.70
146.0-147.0	2.0	0.1	771.8	0.02	99.72
147.0-148.0	2.0	0.1	771.9	0.02	99.73
148.0-149.0	2.0	0.1	772.0	0.01	99.75
149.0-150.0	2.0	0.1	772.1	0.01	99.76
150.0-151.0	2.0	0.1	772.3	0.01	99.77
151.0-152.0	2.1	0.1	772.4	0.01	99.79
152.0-153.0	2.1	0.1	772.5	0.01	99.80
153.0-154.0	2.1	0.1	772.6	0.01	99.82
154.0-155.0	2.1	0.1	772.7	0.01	99.83
155.0-156.0	2.1	0.1	772.8	0.01	99.84
156.0-157.0	2.1	0.1	772.9	0.01	99.85
157.0-158.0	2.2	0.1	773.0	0.01	99.86
158.0-159.0	2.2	0.1	773.0	0.01	99.88
159.0-160.0	2.2	0.1	773.1	0.01	99.89
160.0-161.0	2.2	0.1	773.2	0.01	99.90
161.0-162.0	2.2	0.1	773.3	0.01	99.91
162.0-163.0	2.2	0.1	773.4	0.01	99.92
163.0-164.0	2.3	0.1	773.4	0.01	99.93
164.0-165.0	2.3	0.1	773.5	0.01	99.93
165.0-166.0	2.3	0.1	773.6	0.01	99.94
166.0-167.0	2.3	0.1	773.6	0.01	99.95
167.0-168.0	2.3	0.1	773.7	0.01	99.96
168.0-169.0	2.4	0.1	773.7	0.01	99.96
169.0-170.0	2.4	0.0	773.8	0.01	99.97
170.0-171.0	2.4	0.0	773.8	0.01	99.98
171.0-172.0	2.4	0.0	773.9	0.01	99.98
172.0-173.0	2.4	0.0	773.9	0.00	99.99
173.0-174.0	2.4	0.0	773.9	0.00	99.99
174.0-175.0	2.5	0.0	773.9	0.00	99.99
175.0-176.0	2.5	0.0	774.0	0.00	100.00
176.0-177.0	2.5	0.0	774.0	0.00	100.00
177.0-178.0	2.5	0.0	774.0	0.00	100.00
178.0-179.0	2.5	0.0	774.0	0.00	100.00
179.0-180.0	2.5	0.0	774.0	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: