

Report No.:

Test Time: 2021/2/19 10:34

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: CHANNEL

Lamp Catalog: RIBBONLYTE

Number of Lamps: 1 ROWS

Luminous Width (mm): 24

Voltage: 24.0 V

Power: 5.39 W

Luminaire Description: AS14

Lamp Description: RB90SWS2203.030

Luminous Length (mm): 500

Luminous Height (mm): 24

Current: 0.224 A

Power Factor: 1.000

## Photometric Results

CIE Class: Semi-Direct

Measurement Flux: 432.8 lm

Downward Ratio: 76%

Horizontal Diffuse Angle(10%,50%): H159.8,H111.4

Vertical Diffuse Angle(10%,50%): V324.9,V171

Luminaire Efficacy Rating (LER): 80

Max. Intensity: 83.34 cd

Total Rated Lamp Lumens: 432.8 lm

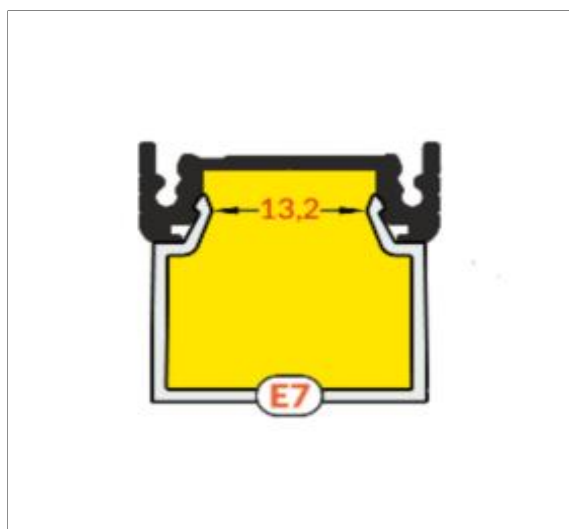
Efficiency: 100%

Upward Ratio: 24%

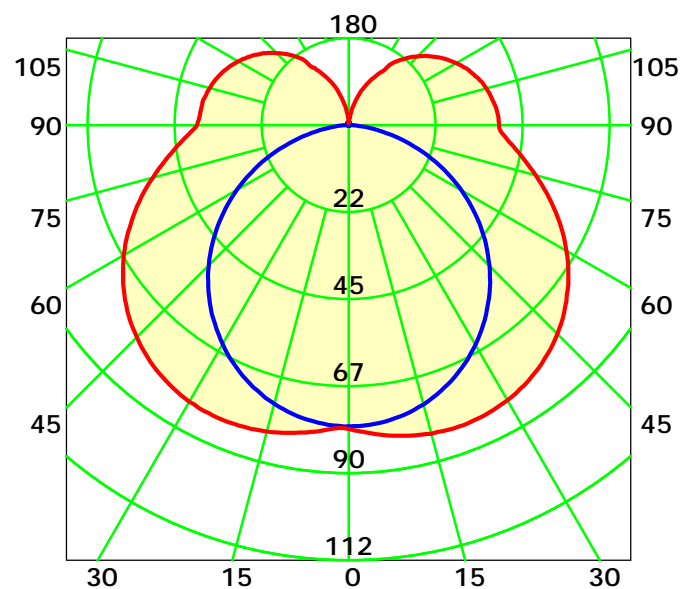
Central Intensity: 78.12 cd

Pos of Max. Intensity: H90 V21

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 141.2° 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

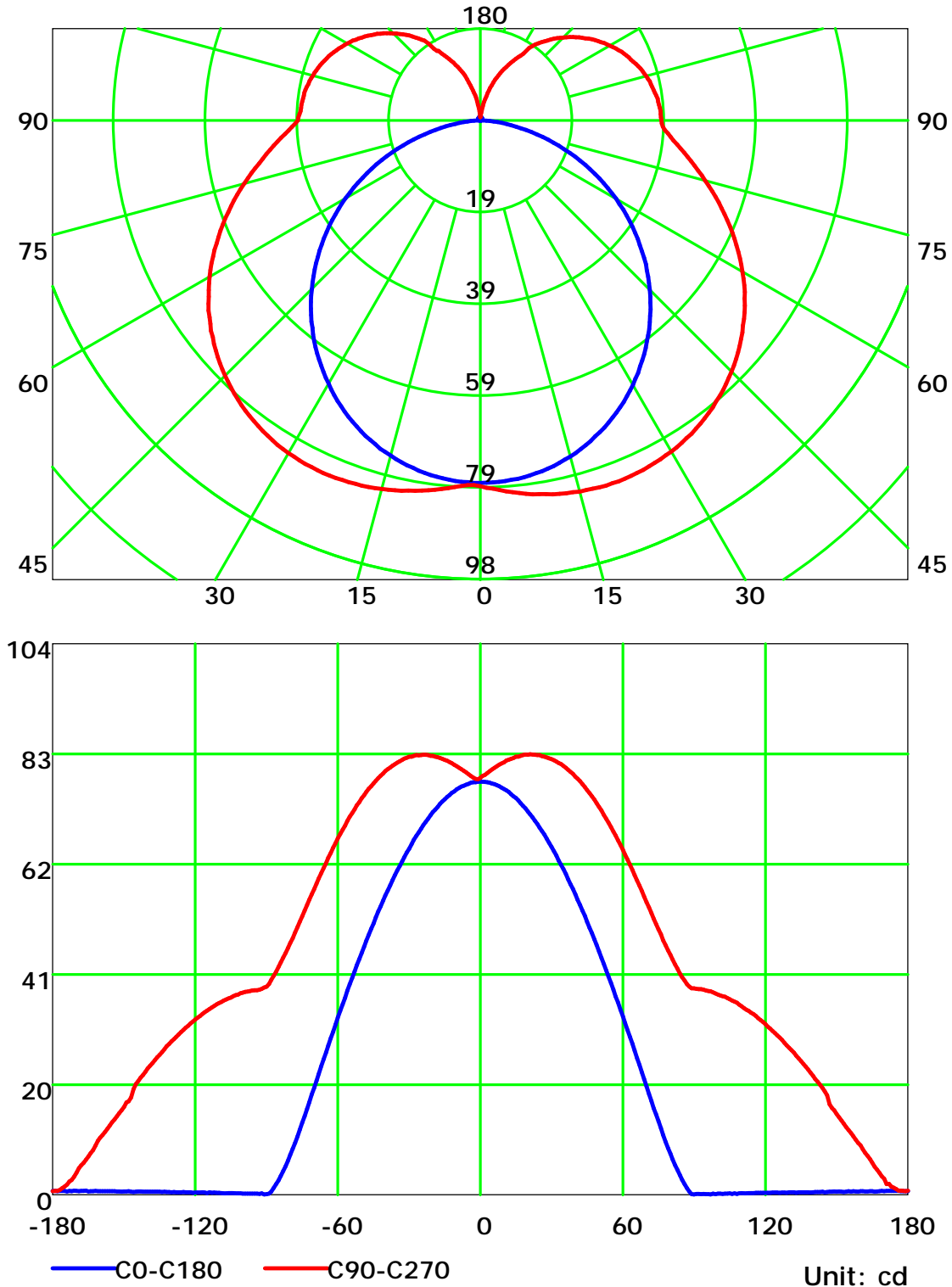
Distance: 9.028 m

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

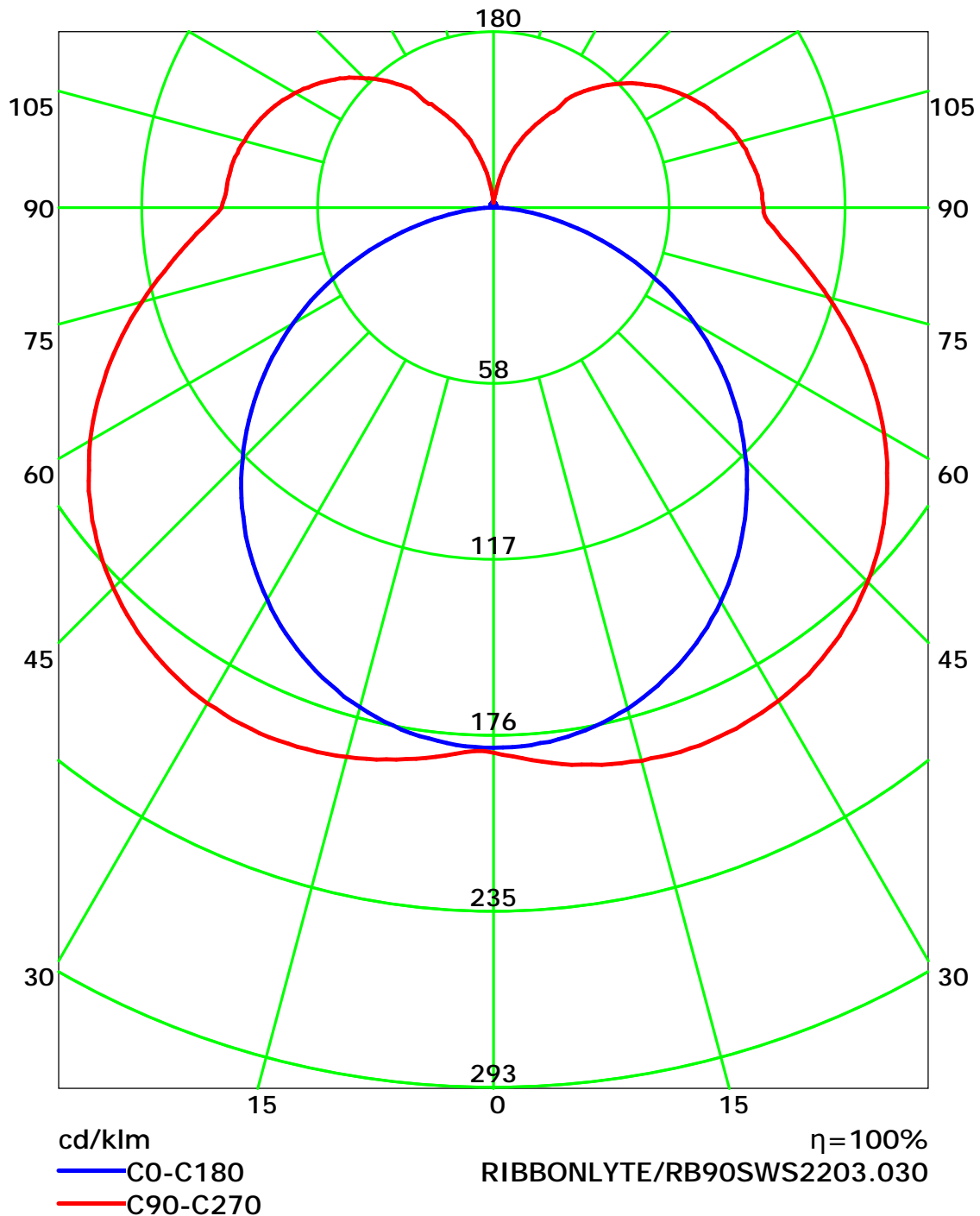
Distance: 9.028 m

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:

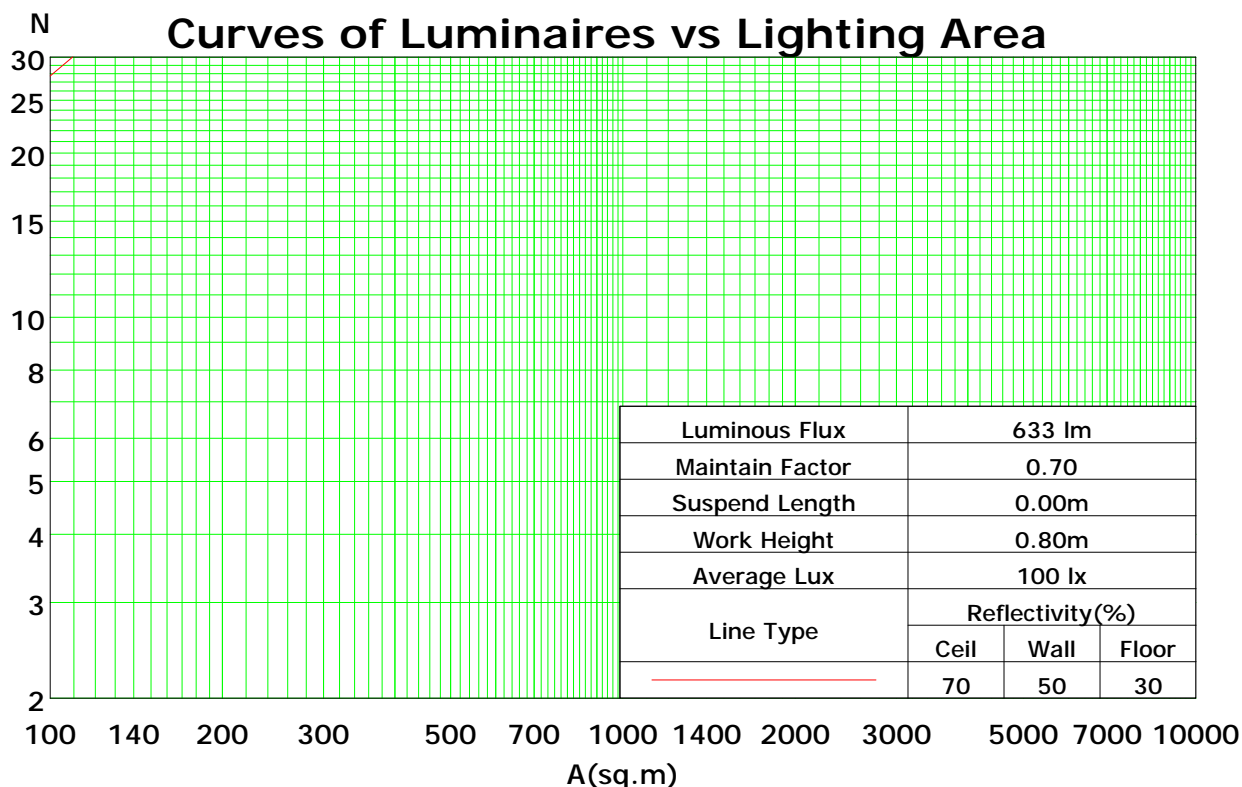
## Coefficients Of Utilization - Zonal Cavity Method

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	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80	76
1	101	95	90	85	95	90	85	81	81	78	74	73	70	68	66	64	61	58
2	90	81	73	67	85	77	70	64	69	64	59	63	58	54	56	53	49	46
3	82	70	61	54	77	67	59	52	60	54	48	54	49	44	49	44	41	37
4	74	62	52	45	70	59	50	44	53	46	40	48	42	37	43	38	34	31
5	68	55	45	38	64	52	43	37	47	40	34	43	36	32	38	33	29	26
6	63	49	39	33	59	46	38	32	42	35	30	38	32	27	34	29	25	23
7	58	44	35	29	55	42	34	28	38	31	26	35	29	24	31	26	22	20
8	54	40	31	25	51	38	30	24	35	28	23	32	26	21	29	24	20	17
9	50	36	28	22	47	35	27	22	32	25	20	29	23	19	26	21	18	16
10	47	33	25	20	44	32	24	19	29	23	18	27	21	17	24	19	16	14

Spacing Criteria (0-180): 1.25

Spacing Criteria (90-270): 1.56

Spacing Criteria (Diagonal): 1.57



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

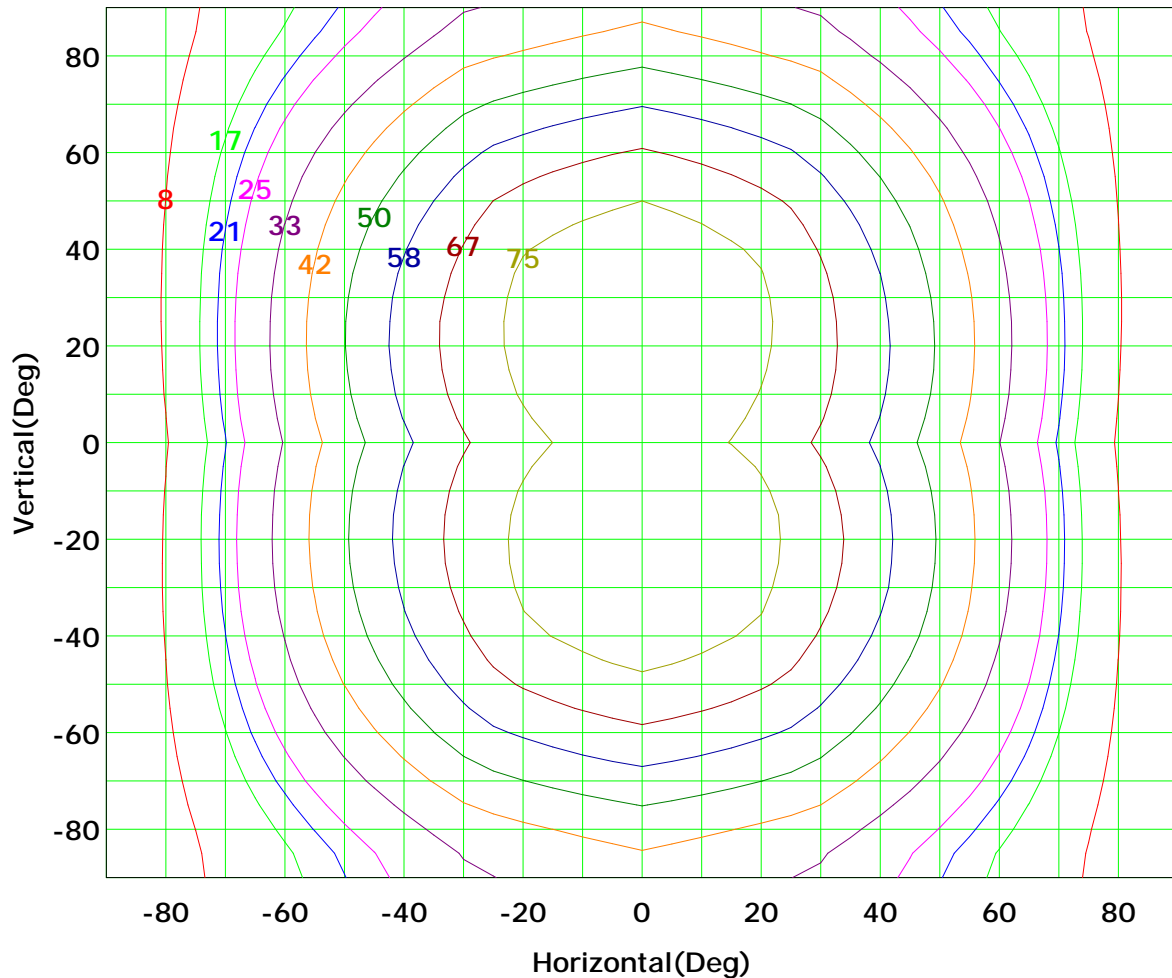
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Isocandela (rectangle)



Imax (100%): 83 cd

( 10%):	8 cd	( 20%):	17 cd
( 25%):	21 cd	( 30%):	25 cd
( 40%):	33 cd	( 50%):	42 cd
( 60%):	50 cd	( 70%):	58 cd
( 80%):	67 cd	( 90%):	75 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

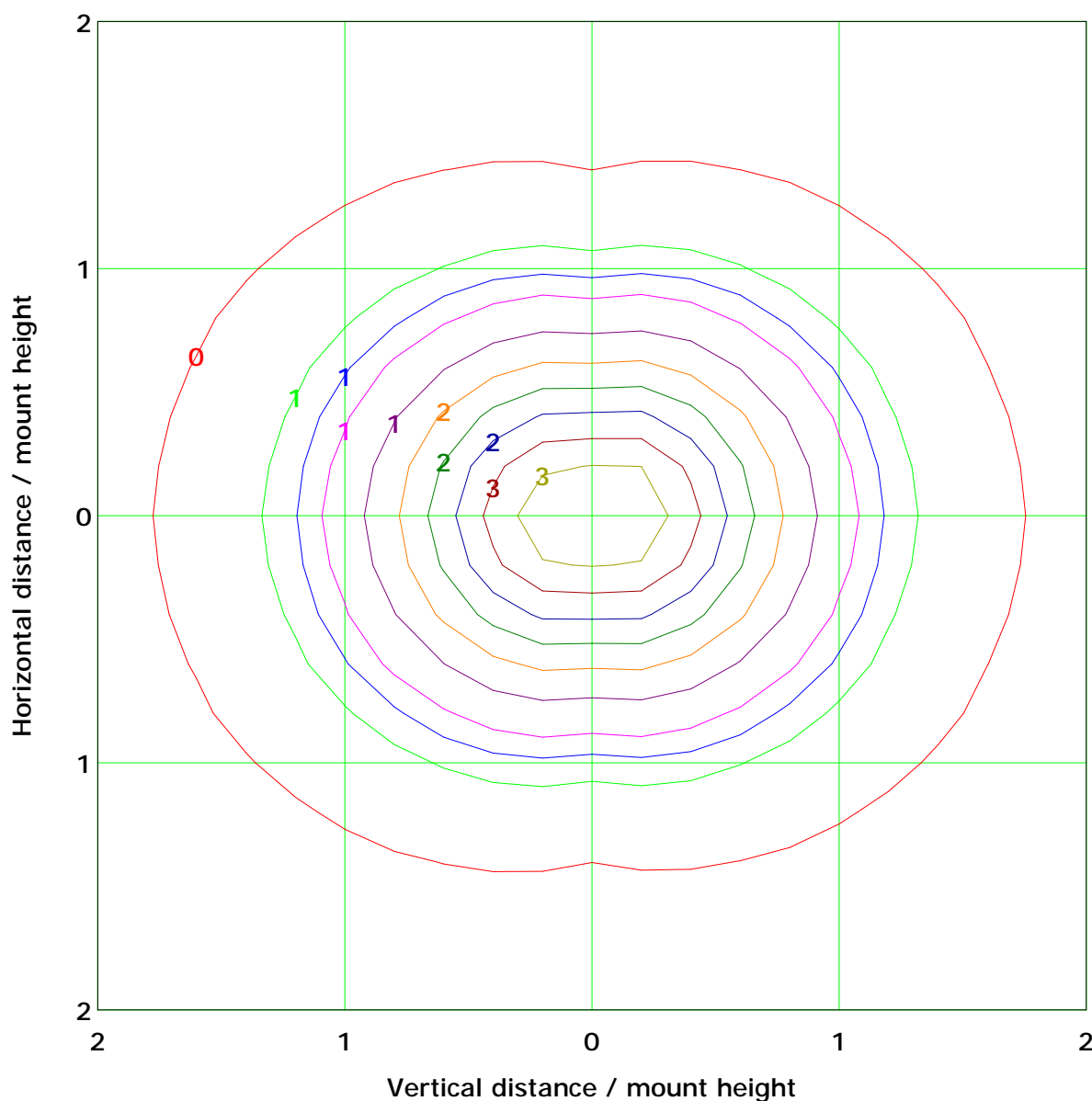
Test Device: GPM-1800B

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

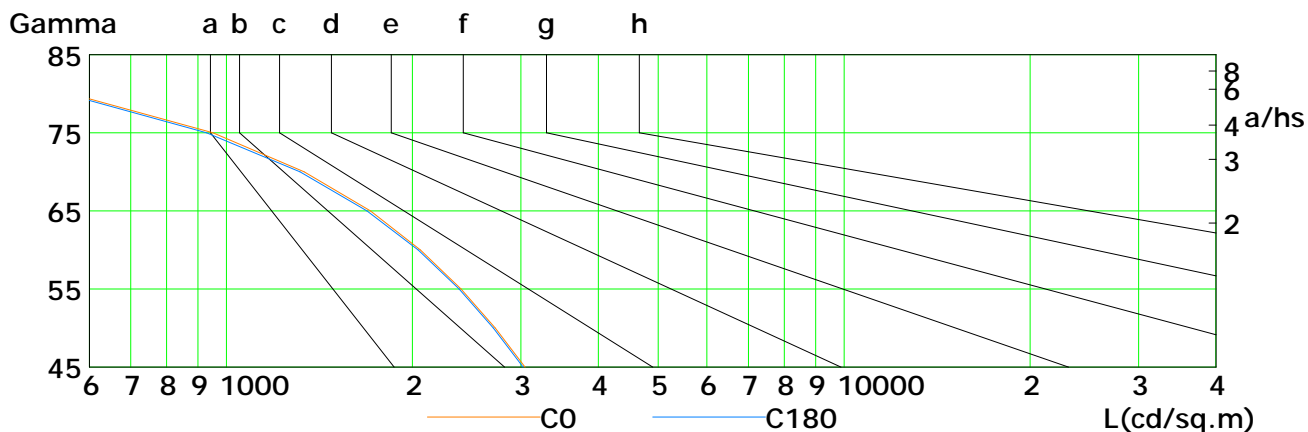
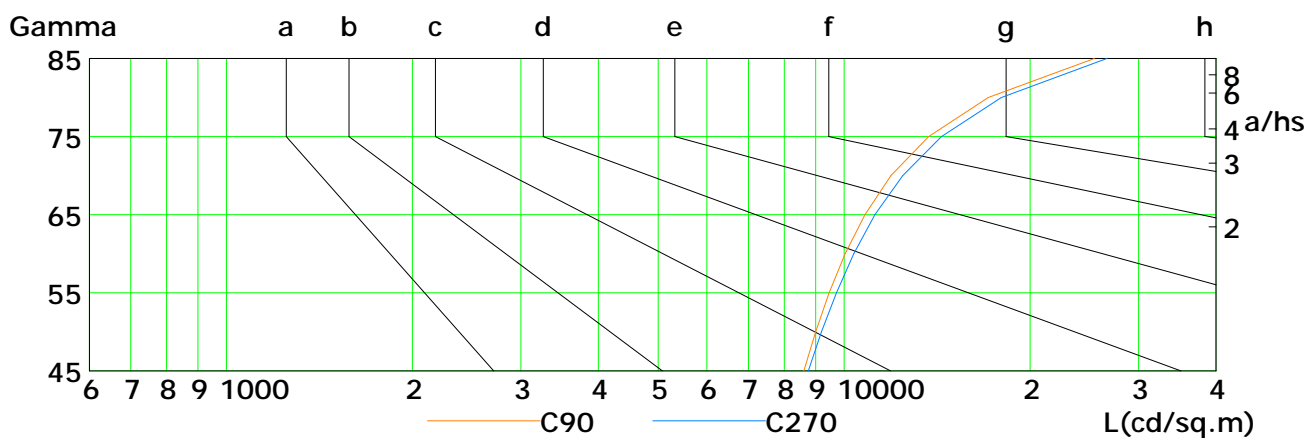
Humidity: 60%

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	3045	2724	2400	2062	1712	1337	951	561	223
C90	8608	8994	9459	10040	10807	11910	13708	17110	25425
C180	3024	2706	2383	2044	1689	1317	929	547	215
C270	8750	9195	9722	10374	11215	12446	14382	17967	26641

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

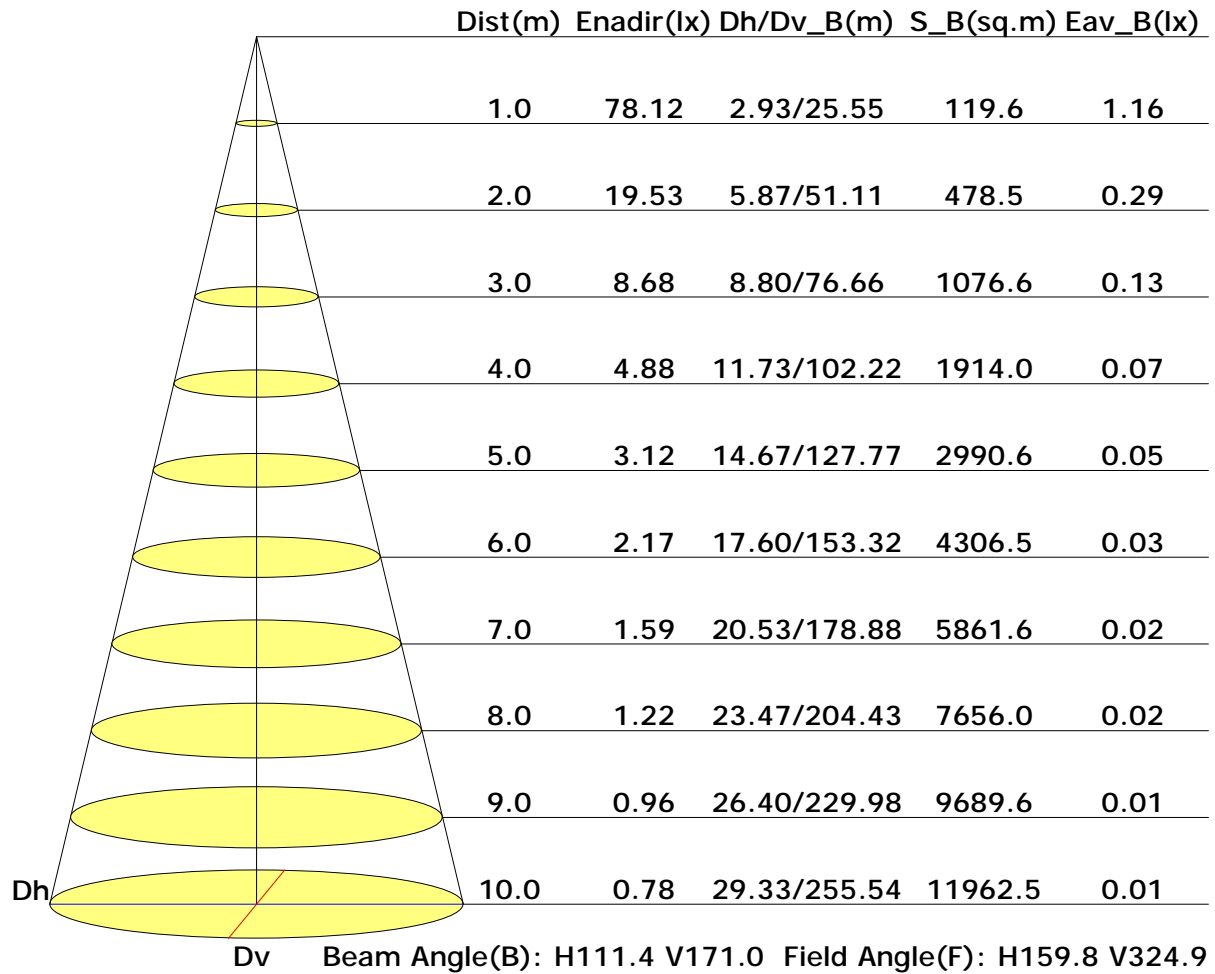
Distance: 9.028 m

Humidity: 60%

Inspector:



## Illuminance at a Distance



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

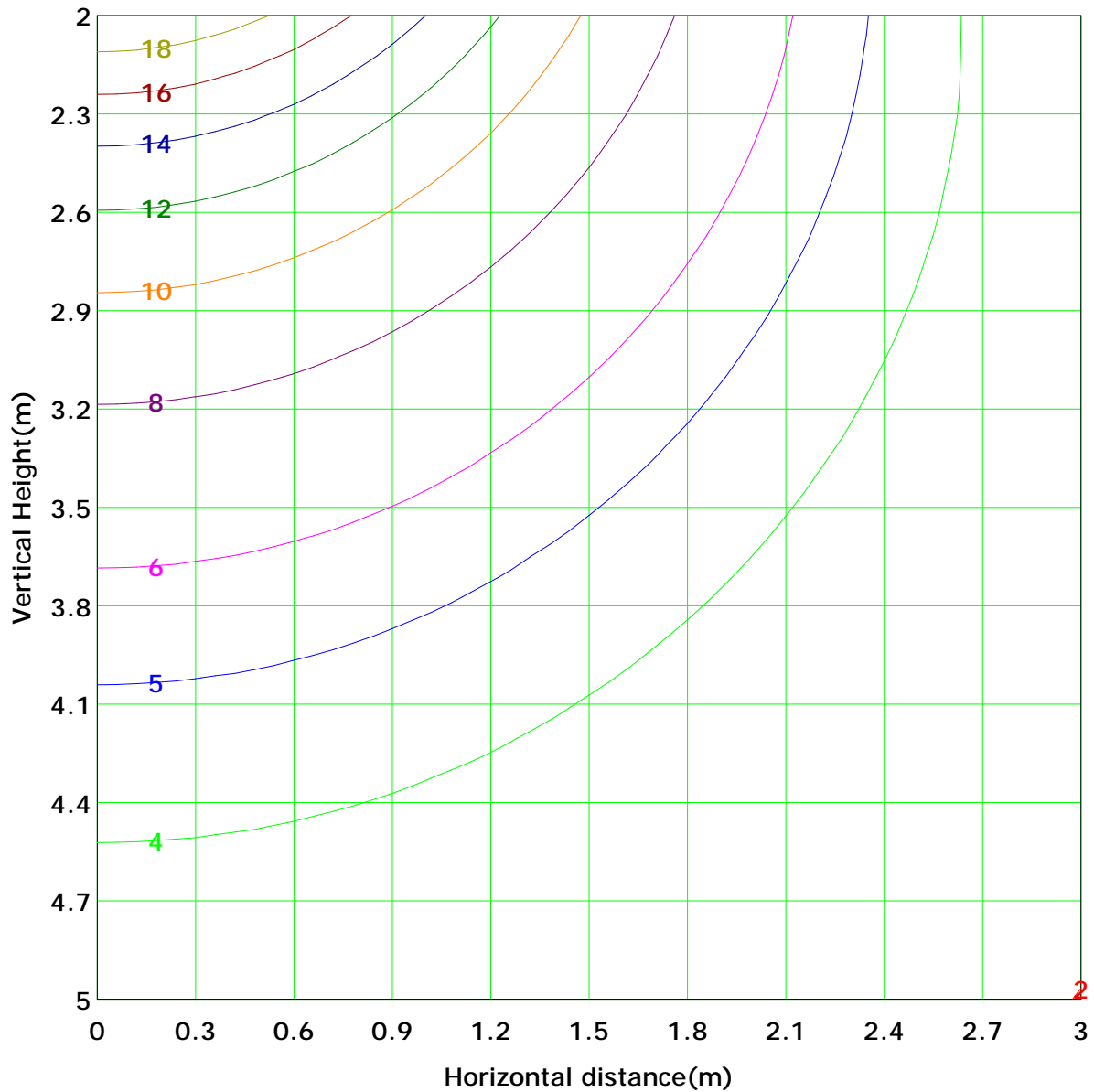
Distance: 9.028 m

Humidity: 60%

Inspector:



## Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 19.5 lx
( 10%): 2.0 lx	( 20%): 3.9 lx	
( 25%): 4.9 lx	( 30%): 5.9 lx	
( 40%): 7.8 lx	( 50%): 9.8 lx	
( 60%): 11.7 lx	( 70%): 13.7 lx	
( 80%): 15.6 lx	( 90%): 17.6 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

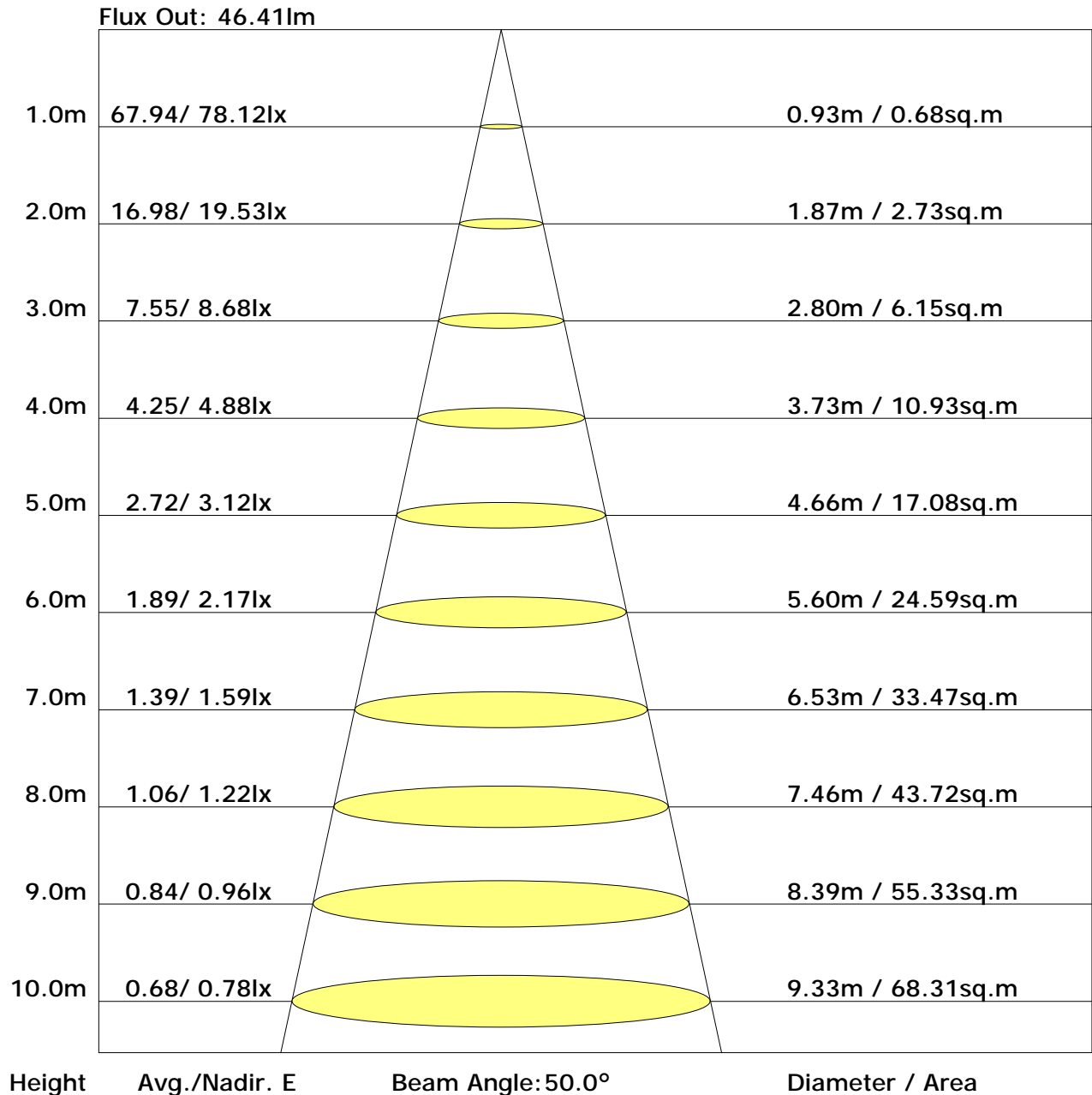
Vertical plane		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)
		0.0	0.1	0.2	0.4	0.6	0.8	1.0	1.2	1.3	1.3	1.2	1.0	0.8	0.6	0.4	0.2	0.1	0.0	0.0	0.2	0.0
		0.0	0.1	0.2	0.4	0.7	1.0	1.2	1.4	1.6	1.6	1.4	1.3	1.0	0.7	0.4	0.2	0.1	0.0	0.0	1.9	1.8
		0.0	0.1	0.3	0.5	0.8	1.2	1.5	1.7	1.9	2.1	2.3	2.5	2.7	3.0	3.4	3.8	4.2	4.6	5.0	5.6	5.6
		0.0	0.1	0.3	0.6	1.0	1.4	1.7	2.0	2.3	2.6	2.9	3.2	3.5	3.9	4.3	4.7	5.1	5.5	6.0	6.6	11.0
		0.0	0.1	0.4	0.7	1.1	1.5	1.9	2.2	2.5	2.8	3.1	3.4	3.7	4.1	4.5	4.9	5.3	5.8	6.4	7.1	17.5
		0.0	0.1	0.4	0.7	1.2	1.6	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.2	4.6	5.0	5.4	5.9	6.5	7.3	24.3
		0.0	0.1	0.4	0.7	1.2	1.6	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.2	4.6	5.0	5.4	5.9	6.5	7.3	30.5
		0.0	0.1	0.4	0.7	1.2	1.6	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.2	4.6	5.0	5.4	5.9	6.5	7.3	34.9
		0.0	0.1	0.4	0.7	1.2	1.6	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.2	4.6	5.0	5.4	5.9	6.5	7.3	37.6
		0.0	0.1	0.4	0.7	1.2	1.6	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.2	4.6	5.0	5.4	5.9	6.5	7.3	37.6
		0.0	0.1	0.4	0.7	1.2	1.6	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.2	4.6	5.0	5.4	5.9	6.5	7.3	35.0
		0.0	0.1	0.4	0.7	1.2	1.6	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.2	4.6	5.0	5.4	5.9	6.5	7.3	30.6
		0.0	0.1	0.4	0.7	1.2	1.6	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.2	4.6	5.0	5.4	5.9	6.5	7.3	24.4
		0.0	0.1	0.4	0.7	1.2	1.6	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.2	4.6	5.0	5.4	5.9	6.5	7.3	17.6
		0.0	0.1	0.4	0.7	1.2	1.6	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.2	4.6	5.0	5.4	5.9	6.5	7.3	11.1
		0.0	0.1	0.4	0.7	1.2	1.6	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.2	4.6	5.0	5.4	5.9	6.5	7.3	5.6
		0.0	0.1	0.4	0.7	1.2	1.6	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.2	4.6	5.0	5.4	5.9	6.5	7.3	1.8
		0.0	0.1	0.4	0.7	1.2	1.6	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.2	4.6	5.0	5.4	5.9	6.5	7.3	0.0
		0.0	0.1	0.4	0.7	1.2	1.6	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.2	4.6	5.0	5.4	5.9	6.5	7.3	328
		0.0	0.1	0.4	0.7	1.2	1.6	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.2	4.6	5.0	5.4	5.9	6.5	7.3	327

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



## 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	17.8	19.1	18.5	19.8	20.7	18.7	19.9	19.3	20.6	21.5
3H	19.6	20.7	20.3	21.5	22.3	20.9	22.1	21.6	22.8	23.7
4H	20.2	21.3	20.9	22.0	22.9	21.9	23.0	22.6	23.7	24.6
6H	20.6	21.6	21.3	22.4	23.3	22.9	23.9	23.6	24.7	25.6
8H	20.7	21.7	21.5	22.5	23.4	23.3	24.3	24.1	25.1	26.0
12H	20.8	21.7	21.5	22.5	23.4	23.8	24.7	24.5	25.5	26.4
X=4H Y=2H	18.6	19.7	19.3	20.5	21.3	19.2	20.3	19.9	21.1	21.9
3H	20.6	21.6	21.3	22.3	23.2	21.7	22.7	22.5	23.4	24.4
4H	21.4	22.3	22.1	23.0	24.0	22.9	23.8	23.7	24.6	25.5
6H	22.0	22.7	22.7	23.5	24.5	24.1	24.8	24.8	25.6	26.6
8H	22.1	22.9	22.9	23.7	24.6	24.6	25.3	25.4	26.1	27.1
12H	22.3	22.9	23.0	23.7	24.7	25.1	25.8	25.9	26.6	27.6
X=8H Y=4H	22.0	22.7	22.7	23.5	24.4	23.2	24.0	24.0	24.7	25.7
6H	22.7	23.4	23.5	24.2	25.2	24.6	25.2	25.4	26.0	27.0
8H	23.1	23.6	23.9	24.4	25.4	25.3	25.8	26.1	26.7	27.6
12H	23.3	23.8	24.1	24.6	25.6	26.0	26.5	26.8	27.3	28.3
X=12H Y=4H	22.1	22.8	22.9	23.6	24.5	23.3	23.9	24.0	24.7	25.7
6H	23.0	23.5	23.8	24.3	25.3	24.7	25.2	25.5	26.0	27.0
8H	23.4	23.9	24.2	24.7	25.7	25.4	25.9	26.2	26.8	27.8

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 = 1.50									
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	0.47	0.55	0.62	0.68	0.75	0.80	0.83	0.88	0.91	
	0.30		0.40	0.47	0.55	0.60	0.68	0.73	0.77	0.83	0.87	
	0.20		0.34	0.41	0.48	0.54	0.62	0.68	0.72	0.79	0.83	
0.50	0.50	0.20	0.44	0.51	0.57	0.61	0.68	0.72	0.75	0.80	0.83	
	0.30		0.37	0.44	0.50	0.55	0.62	0.67	0.71	0.76	0.79	
	0.20		0.32	0.39	0.45	0.50	0.57	0.63	0.67	0.72	0.76	
0.30	0.50	0.20	0.40	0.46	0.52	0.56	0.61	0.65	0.68	0.72	0.75	
	0.30		0.34	0.40	0.46	0.51	0.57	0.61	0.64	0.69	0.72	
	0.20		0.30	0.36	0.42	0.46	0.53	0.58	0.61	0.66	0.69	
0.00	0.00	0.00	0.26	0.31	0.36	0.40	0.45	0.49	0.52	0.57	0.59	
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 = 1.50									
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	0.86	0.75	0.66	0.54	0.46	0.40	0.32	0.27	
	0.30		0.84	0.74	0.65	0.59	0.49	0.42	0.37	0.30	0.26	
	0.20		0.72	0.65	0.58	0.53	0.45	0.39	0.35	0.29	0.24	
0.50	0.50	0.20	0.92	0.79	0.68	0.61	0.50	0.44	0.37	0.30	0.25	
	0.30		0.78	0.69	0.60	0.54	0.45	0.39	0.35	0.28	0.24	
	0.20		0.67	0.61	0.54	0.49	0.42	0.36	0.32	0.27	0.23	
0.30	0.50	0.20	0.84	0.72	0.62	0.55	0.45	0.39	0.34	0.27	0.23	
	0.30		0.72	0.64	0.56	0.50	0.42	0.36	0.32	0.26	0.22	
	0.20		0.63	0.57	0.50	0.46	0.39	0.34	0.30	0.25	0.21	
0.00	0.00	0.00	0.50	0.45	0.40	0.36	0.30	0.26	0.23	0.19	0.16	
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 = 1.50								
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	0.40	0.42	0.42	0.43	0.44	0.44	0.44	0.45	0.45
	0.30		0.33	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42
	0.20		0.28	0.29	0.31	0.32	0.34	0.35	0.36	0.38	0.39
0.50	0.50	0.20	0.39	0.40	0.41	0.41	0.42	0.42	0.43	0.43	0.43
	0.30		0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.40
	0.20		0.28	0.29	0.30	0.31	0.33	0.34	0.35	0.37	0.38
0.30	0.50	0.20	0.37	0.39	0.39	0.40	0.40	0.41	0.41	0.41	0.41
	0.30		0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.38	0.39
	0.20		0.28	0.29	0.30	0.31	0.32	0.34	0.34	0.36	0.37
0.00	0.00	0.00	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
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	78.7	0.1	0.1	0.02	0.02
1.0-2.0	78.7	0.2	0.3	0.05	0.07
2.0-3.0	78.8	0.4	0.7	0.09	0.16
3.0-4.0	78.9	0.5	1.2	0.12	0.28
4.0-5.0	79.0	0.7	1.9	0.16	0.44
5.0-6.0	79.2	0.8	2.7	0.19	0.63
6.0-7.0	79.3	1.0	3.7	0.23	0.86
7.0-8.0	79.4	1.1	4.8	0.26	1.12
8.0-9.0	79.4	1.3	6.1	0.30	1.42
9.0-10.0	79.5	1.4	7.6	0.33	1.75
10.0-11.0	79.5	1.6	9.2	0.37	2.12
11.0-12.0	79.5	1.7	10.9	0.40	2.52
12.0-13.0	79.5	1.9	12.8	0.44	2.95
13.0-14.0	79.5	2.0	14.8	0.47	3.42
14.0-15.0	79.4	2.2	17.0	0.50	3.93
15.0-16.0	79.3	2.3	19.3	0.54	4.46
16.0-17.0	79.2	2.5	21.8	0.57	5.03
17.0-18.0	79.1	2.6	24.4	0.60	5.64
18.0-19.0	79.0	2.7	27.1	0.63	6.27
19.0-20.0	78.8	2.9	30.0	0.67	6.94
20.0-21.0	78.6	3.0	33.0	0.70	7.64
21.0-22.0	78.4	3.2	36.2	0.73	8.36
22.0-23.0	78.1	3.3	39.5	0.76	9.12
23.0-24.0	77.9	3.4	42.9	0.79	9.91
24.0-25.0	77.6	3.5	46.4	0.82	10.72
25.0-26.0	77.3	3.6	50.1	0.84	11.57
26.0-27.0	76.9	3.8	53.8	0.87	12.44
27.0-28.0	76.6	3.9	57.7	0.90	13.33
28.0-29.0	76.2	4.0	61.7	0.92	14.26
29.0-30.0	75.8	4.1	65.8	0.95	15.20
30.0-31.0	75.4	4.2	70.0	0.97	16.17
31.0-32.0	74.9	4.3	74.3	0.99	17.16
32.0-33.0	74.4	4.4	78.7	1.01	18.18
33.0-34.0	73.9	4.5	83.1	1.03	19.21
34.0-35.0	73.4	4.6	87.7	1.05	20.26
35.0-36.0	72.9	4.6	92.3	1.07	21.34

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	72.3	4.7	97.0	1.09	22.43
37.0-38.0	71.7	4.8	101.8	1.11	23.53
38.0-39.0	71.1	4.9	106.7	1.12	24.65
39.0-40.0	70.5	4.9	111.6	1.14	25.79
40.0-41.0	69.8	5.0	116.6	1.15	26.94
41.0-42.0	69.2	5.0	121.6	1.16	28.10
42.0-43.0	68.5	5.1	126.7	1.17	29.27
43.0-44.0	67.7	5.1	131.8	1.18	30.46
44.0-45.0	67.0	5.1	136.9	1.19	31.65
45.0-46.0	66.2	5.2	142.1	1.20	32.84
46.0-47.0	65.4	5.2	147.3	1.20	34.04
47.0-48.0	64.6	5.2	152.6	1.21	35.25
48.0-49.0	63.8	5.2	157.8	1.21	36.46
49.0-50.0	63.0	5.2	163.0	1.21	37.68
50.0-51.0	62.1	5.3	168.3	1.21	38.89
51.0-52.0	61.2	5.3	173.5	1.21	40.10
52.0-53.0	60.3	5.2	178.8	1.21	41.32
53.0-54.0	59.4	5.2	184.0	1.21	42.52
54.0-55.0	58.4	5.2	189.2	1.21	43.73
55.0-56.0	57.5	5.2	194.4	1.20	44.93
56.0-57.0	56.5	5.2	199.6	1.19	46.12
57.0-58.0	55.5	5.1	204.7	1.19	47.31
58.0-59.0	54.4	5.1	209.8	1.18	48.48
59.0-60.0	53.4	5.0	214.9	1.17	49.65
60.0-61.0	52.3	5.0	219.9	1.15	50.80
61.0-62.0	51.3	4.9	224.8	1.14	51.95
62.0-63.0	50.2	4.9	229.7	1.13	53.07
63.0-64.0	49.1	4.8	234.5	1.11	54.19
64.0-65.0	48.0	4.7	239.2	1.10	55.28
65.0-66.0	46.8	4.7	243.9	1.08	56.36
66.0-67.0	45.7	4.6	248.5	1.06	57.43
67.0-68.0	44.5	4.5	253.0	1.04	58.47
68.0-69.0	43.4	4.4	257.4	1.02	59.49
69.0-70.0	42.2	4.3	261.8	1.00	60.49
70.0-71.0	41.0	4.2	266.0	0.98	61.47
71.0-72.0	39.9	4.1	270.2	0.96	62.43

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	38.7	4.0	274.2	0.94	63.37
73.0-74.0	37.5	3.9	278.2	0.91	64.28
74.0-75.0	36.4	3.8	282.0	0.89	65.17
75.0-76.0	35.2	3.7	285.7	0.86	66.03
76.0-77.0	34.1	3.6	289.4	0.84	66.87
77.0-78.0	32.9	3.5	292.9	0.81	67.69
78.0-79.0	31.8	3.4	296.3	0.79	68.48
79.0-80.0	30.8	3.3	299.6	0.77	69.24
80.0-81.0	29.7	3.2	302.9	0.74	69.99
81.0-82.0	28.7	3.1	306.0	0.72	70.70
82.0-83.0	27.7	3.0	309.0	0.70	71.40
83.0-84.0	26.8	2.9	311.9	0.67	72.08
84.0-85.0	25.9	2.8	314.7	0.65	72.73
85.0-86.0	25.1	2.7	317.5	0.63	73.36
86.0-87.0	24.3	2.7	320.1	0.61	73.97
87.0-88.0	23.5	2.6	322.7	0.60	74.57
88.0-89.0	23.0	2.5	325.2	0.58	75.15
89.0-90.0	22.6	2.5	327.7	0.57	75.73
90.0-91.0	22.4	2.5	330.2	0.57	76.30
91.0-92.0	22.4	2.5	332.6	0.57	76.86
92.0-93.0	22.3	2.4	335.1	0.56	77.43
93.0-94.0	22.3	2.4	337.5	0.56	77.99
94.0-95.0	22.2	2.4	339.9	0.56	78.55
95.0-96.0	22.1	2.4	342.3	0.56	79.11
96.0-97.0	22.1	2.4	344.7	0.56	79.67
97.0-98.0	22.0	2.4	347.1	0.55	80.22
98.0-99.0	22.0	2.4	349.5	0.55	80.77
99.0-100.0	21.9	2.4	351.9	0.55	81.32
100.0-101.0	21.8	2.4	354.2	0.54	81.86
101.0-102.0	21.7	2.3	356.6	0.54	82.40
102.0-103.0	21.6	2.3	358.9	0.53	82.93
103.0-104.0	21.5	2.3	361.2	0.53	83.46
104.0-105.0	21.4	2.3	363.5	0.53	83.99
105.0-106.0	21.3	2.3	365.7	0.52	84.51
106.0-107.0	21.2	2.2	367.9	0.51	85.02
107.0-108.0	21.0	2.2	370.1	0.51	85.53

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	20.9	2.2	372.3	0.50	86.03
109.0-110.0	20.8	2.1	374.5	0.50	86.53
110.0-111.0	20.6	2.1	376.6	0.49	87.02
111.0-112.0	20.4	2.1	378.7	0.48	87.50
112.0-113.0	20.3	2.1	380.7	0.47	87.98
113.0-114.0	20.1	2.0	382.7	0.47	88.44
114.0-115.0	19.9	2.0	384.7	0.46	88.90
115.0-116.0	19.7	2.0	386.7	0.45	89.35
116.0-117.0	19.5	1.9	388.6	0.44	89.80
117.0-118.0	19.3	1.9	390.5	0.43	90.23
118.0-119.0	19.1	1.8	392.3	0.43	90.66
119.0-120.0	18.9	1.8	394.1	0.42	91.08
120.0-121.0	18.7	1.8	395.9	0.41	91.48
121.0-122.0	18.5	1.7	397.6	0.40	91.88
122.0-123.0	18.3	1.7	399.3	0.39	92.27
123.0-124.0	18.0	1.6	401.0	0.38	92.65
124.0-125.0	17.8	1.6	402.6	0.37	93.02
125.0-126.0	17.5	1.6	404.1	0.36	93.39
126.0-127.0	17.2	1.5	405.6	0.35	93.74
127.0-128.0	17.0	1.5	407.1	0.34	94.08
128.0-129.0	16.7	1.4	408.6	0.33	94.41
129.0-130.0	16.4	1.4	409.9	0.32	94.73
130.0-131.0	16.0	1.3	411.3	0.31	95.04
131.0-132.0	15.7	1.3	412.6	0.30	95.34
132.0-133.0	15.4	1.2	413.8	0.29	95.62
133.0-134.0	15.0	1.2	415.0	0.28	95.90
134.0-135.0	14.7	1.2	416.1	0.27	96.16
135.0-136.0	14.4	1.1	417.3	0.26	96.42
136.0-137.0	14.1	1.1	418.3	0.25	96.67
137.0-138.0	13.8	1.0	419.3	0.24	96.90
138.0-139.0	13.5	1.0	420.3	0.23	97.13
139.0-140.0	13.2	0.9	421.3	0.22	97.35
140.0-141.0	12.9	0.9	422.2	0.21	97.55
141.0-142.0	12.4	0.8	423.0	0.20	97.75
142.0-143.0	11.9	0.8	423.8	0.18	97.93
143.0-144.0	11.5	0.7	424.6	0.17	98.11

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 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	11.1	0.7	425.3	0.16	98.27
145.0-146.0	10.8	0.7	425.9	0.16	98.43
146.0-147.0	10.3	0.6	426.6	0.14	98.57
147.0-148.0	9.9	0.6	427.1	0.13	98.70
148.0-149.0	9.5	0.5	427.7	0.13	98.83
149.0-150.0	9.2	0.5	428.2	0.12	98.95
150.0-151.0	8.8	0.5	428.7	0.11	99.06
151.0-152.0	8.4	0.4	429.1	0.10	99.16
152.0-153.0	8.1	0.4	429.5	0.09	99.26
153.0-154.0	7.7	0.4	429.9	0.09	99.34
154.0-155.0	7.3	0.3	430.2	0.08	99.42
155.0-156.0	6.9	0.3	430.6	0.07	99.50
156.0-157.0	6.6	0.3	430.9	0.07	99.56
157.0-158.0	6.3	0.3	431.1	0.06	99.62
158.0-159.0	5.9	0.2	431.3	0.05	99.68
159.0-160.0	5.5	0.2	431.6	0.05	99.73
160.0-161.0	5.1	0.2	431.7	0.04	99.77
161.0-162.0	4.8	0.2	431.9	0.04	99.81
162.0-163.0	4.4	0.1	432.1	0.03	99.84
163.0-164.0	4.0	0.1	432.2	0.03	99.87
164.0-165.0	3.7	0.1	432.3	0.02	99.90
165.0-166.0	3.3	0.1	432.4	0.02	99.92
166.0-167.0	3.0	0.1	432.5	0.02	99.93
167.0-168.0	2.7	0.1	432.5	0.01	99.95
168.0-169.0	2.4	0.1	432.6	0.01	99.96
169.0-170.0	2.1	0.0	432.6	0.01	99.97
170.0-171.0	1.8	0.0	432.7	0.01	99.98
171.0-172.0	1.6	0.0	432.7	0.01	99.98
172.0-173.0	1.4	0.0	432.7	0.00	99.99
173.0-174.0	1.3	0.0	432.7	0.00	99.99
174.0-175.0	1.1	0.0	432.7	0.00	100.00
175.0-176.0	1.0	0.0	432.7	0.00	100.00
176.0-177.0	0.9	0.0	432.7	0.00	100.00
177.0-178.0	0.8	0.0	432.7	0.00	100.00
178.0-179.0	0.8	0.0	432.7	0.00	100.00
179.0-180.0	0.8	0.0	432.7	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: