

Report No.:

Test Time: 2022/8/29 16:04

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: PPNP23030MMWH

Lamp Catalog: Downside

Luminous Width (mm): 24

Voltage: 24.0 V

Power: 22.50 W

Luminaire Description: PPNP23030MMWH

Luminous Length (mm): 613

Luminous Height (mm): 100

Current: 0.938 A

Power Factor: 1.000

## Photometric Results

CIE Class: Direct

Measurement Flux: 1020.1 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(10%,50%): H154,H102.8

Vertical Diffuse Angle(10%,50%): V156.4,V104.7

Luminaire Efficacy Rating (LER): 45

Max. Intensity: 399.9 cd

Total Rated Lamp Lumens: 1020.1 lm

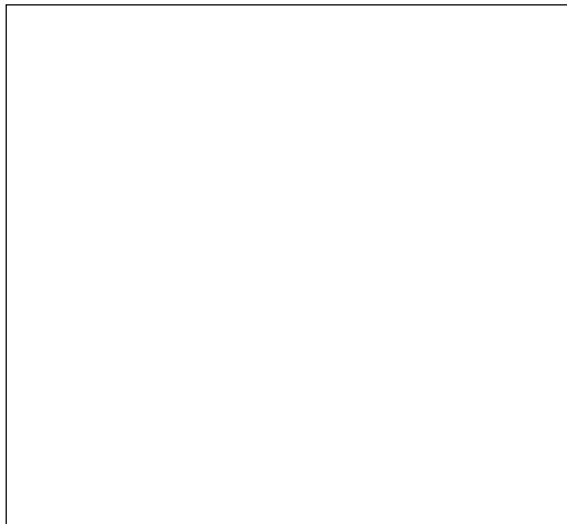
Efficiency: 100%

Upward Ratio: 1%

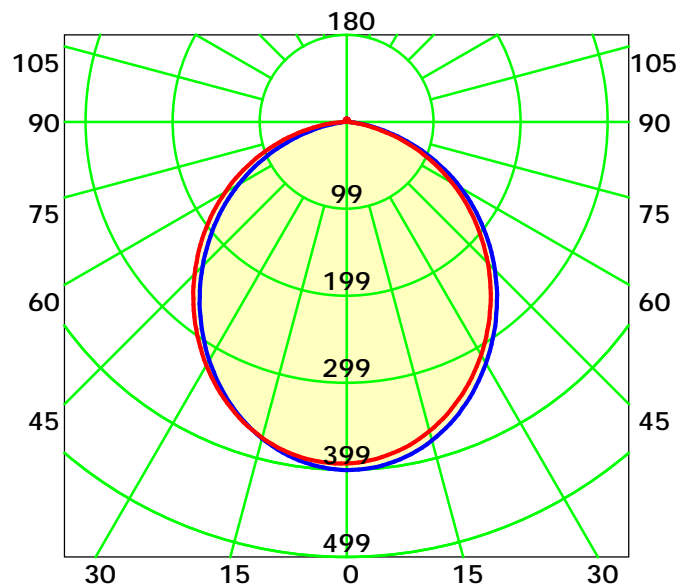
Central Intensity: 399.89 cd

Pos of Max. Intensity: H0 V0

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 103.86° Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Jacky

Gamma Plane (°):0.0-180.0: 1.0

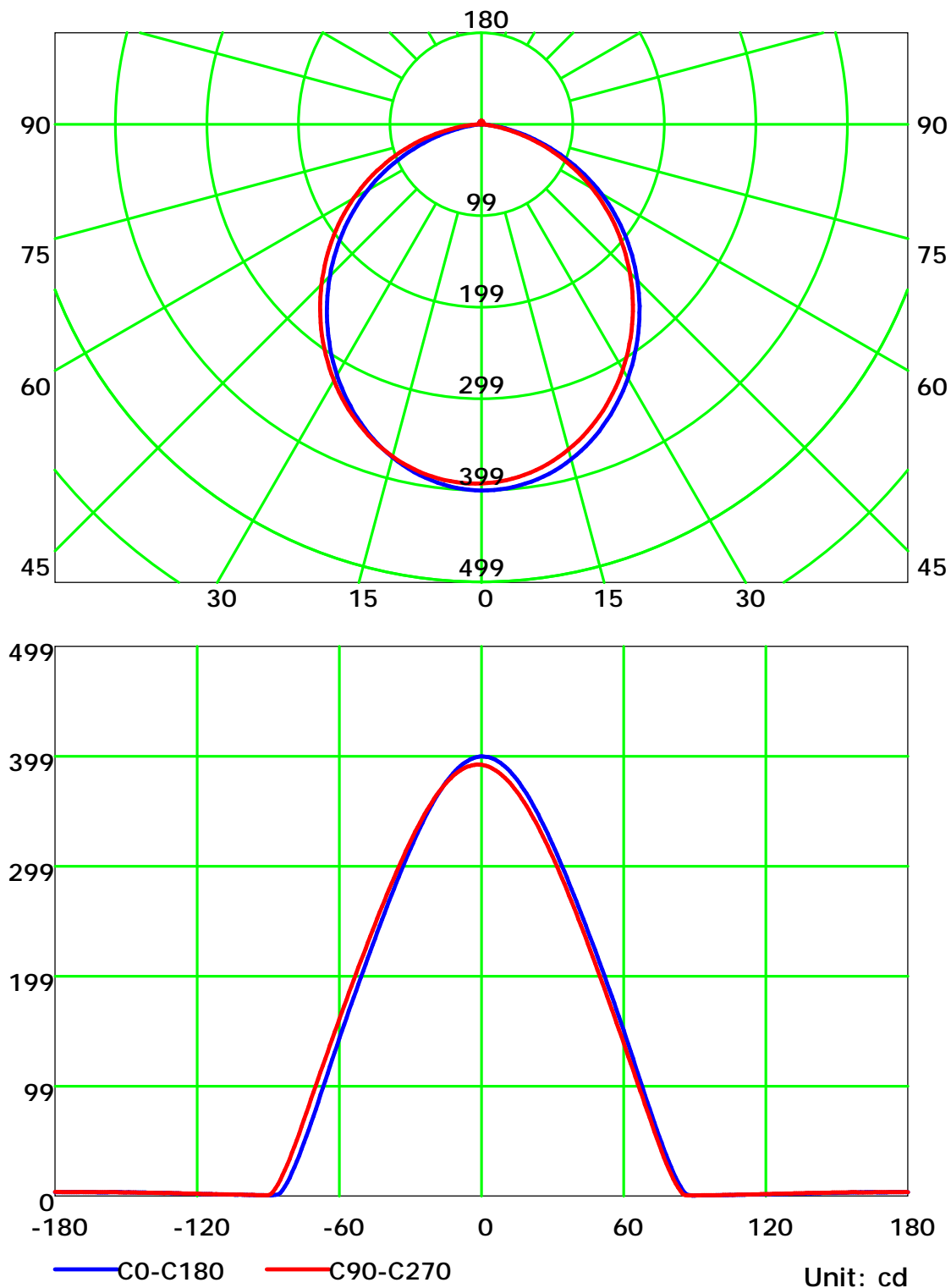
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

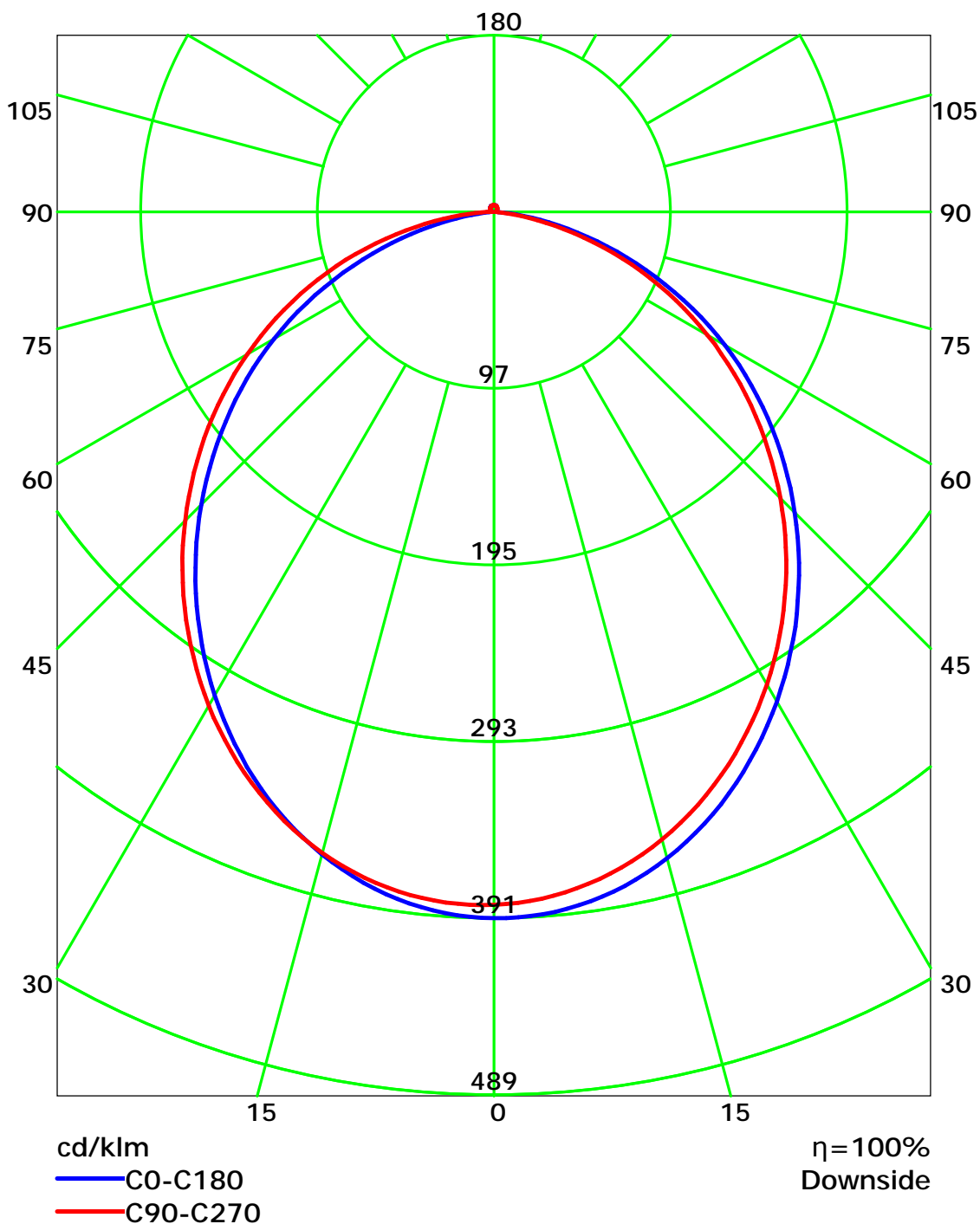
## Luminous Intensity Distribution Curve



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

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

## Luminous Intensity Distribution Curve(cd/klm)



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

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

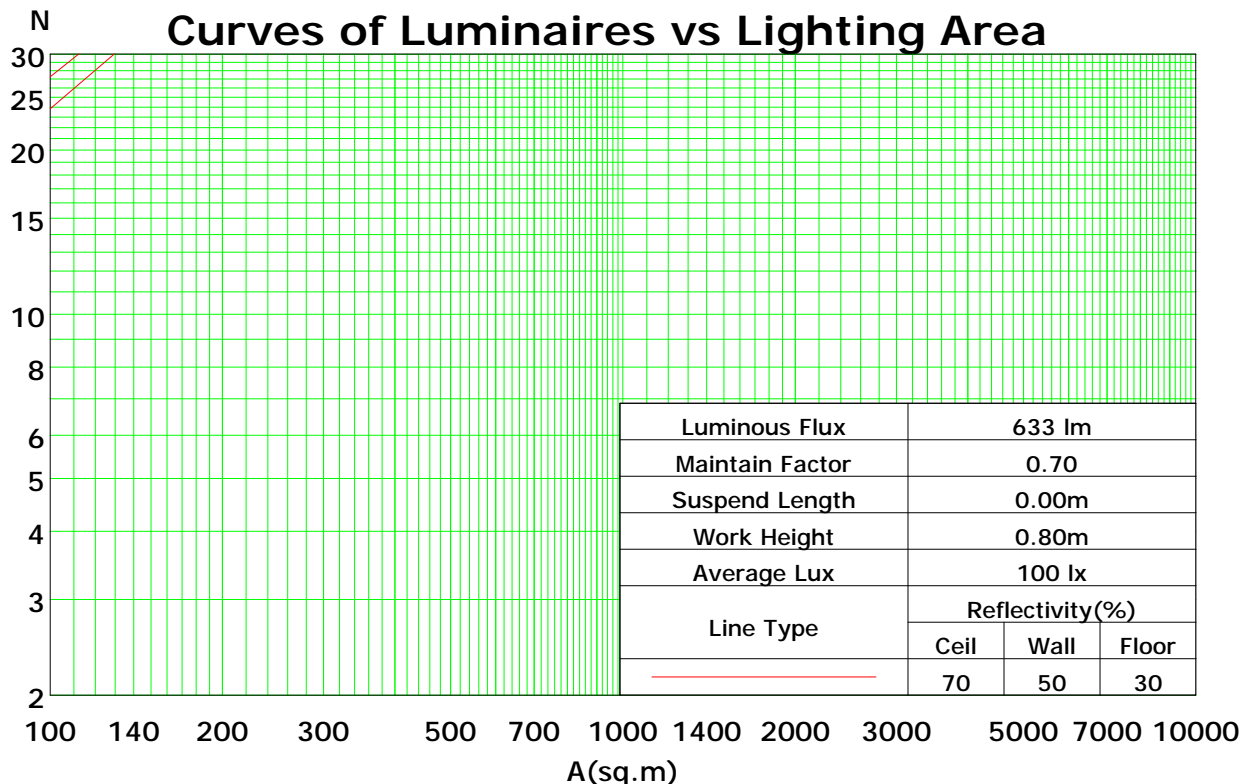
## Coefficients Of Utilization - Zonal Cavity Method

RC	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.3	0.3	0.3	0.1	0.1	0.1	0
RW	0.7	0.5	0.3	0.1	0.7	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0
RCR	RF = 0.2																	
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	99
1	109	105	100	97	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	92	85	80	97	90	84	78	86	81	76	82	78	74	79	76	73	70
3	91	81	73	67	88	79	72	66	76	70	64	73	68	63	70	66	62	60
4	83	72	63	57	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	51	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	33	45	38	33	43	37	33	31
9	57	44	36	31	56	44	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	28	38	32	27	37	31	27	25

Spacing Criteria (0-180): 1.19

Spacing Criteria (90-270): 1.20

Spacing Criteria (Diagonal): 1.30



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Jacky

Gamma Plane (°):0.0-180.0: 1.0

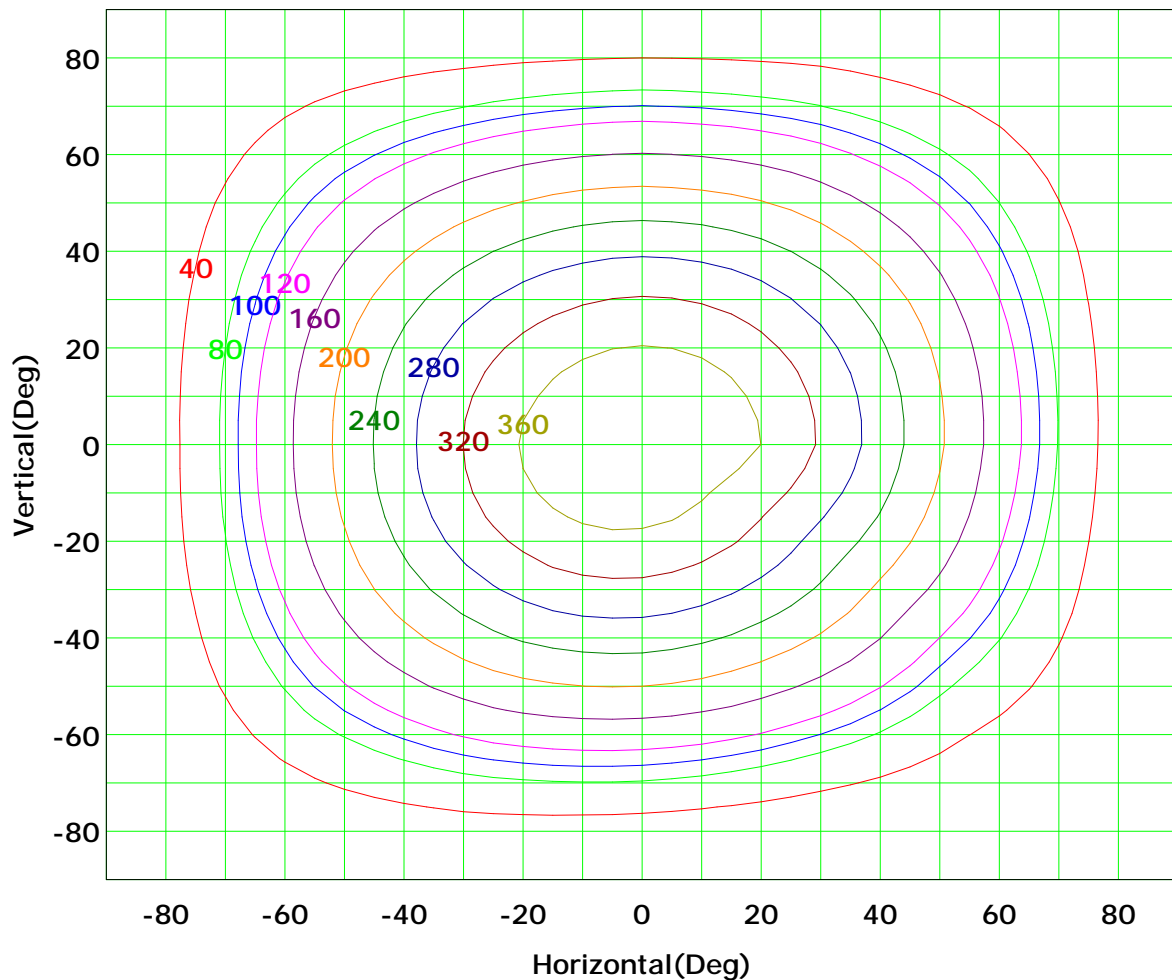
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Isocandela (rectangle)



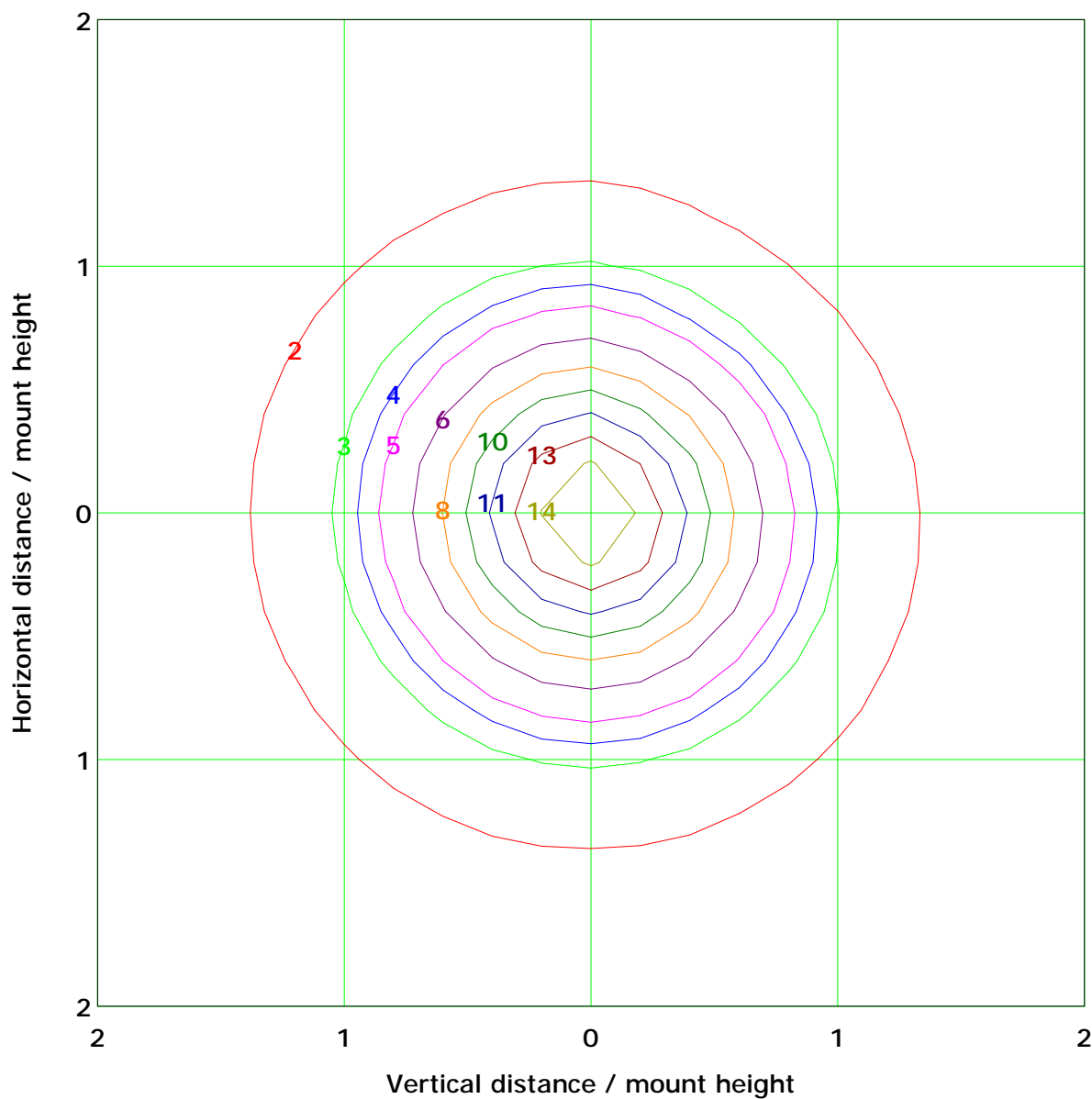
I<sub>max</sub> (100%): 400 cd

( 10%): 40 cd	( 20%): 80 cd
( 25%): 100 cd	( 30%): 120 cd
( 40%): 160 cd	( 50%): 200 cd
( 60%): 240 cd	( 70%): 280 cd
( 80%): 320 cd	( 90%): 360 cd

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

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

## IsoLux Plot



Mounting Height: 5.0m		Max Lux(100%): 16.0 lx	
( 10%):	1.6 lx	( 20%):	3.2 lx
( 25%):	4.0 lx	( 30%):	4.8 lx
( 40%):	6.4 lx	( 50%):	8.0 lx
( 60%):	9.6 lx	( 70%):	11.2 lx
( 80%):	12.8 lx	( 90%):	14.4 lx

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

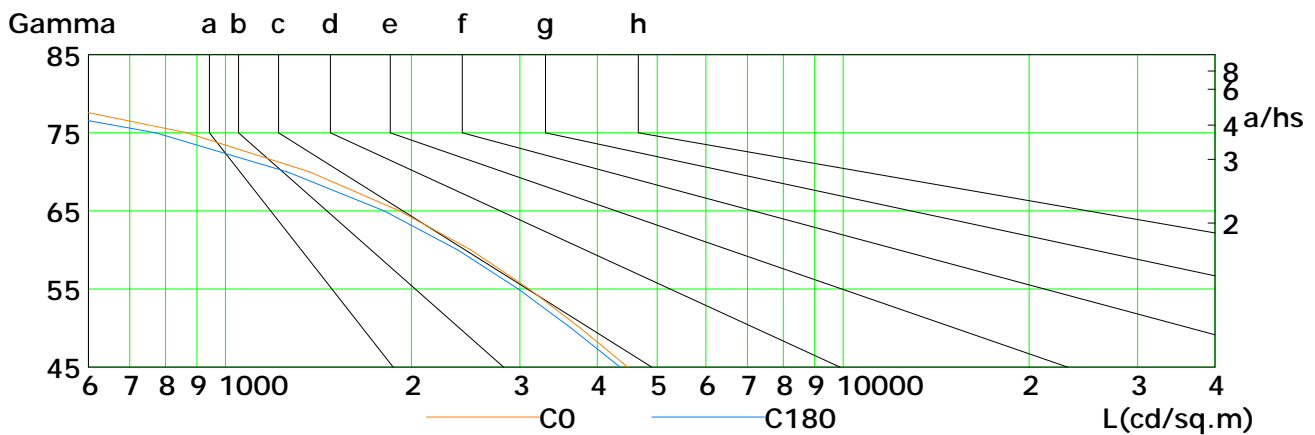
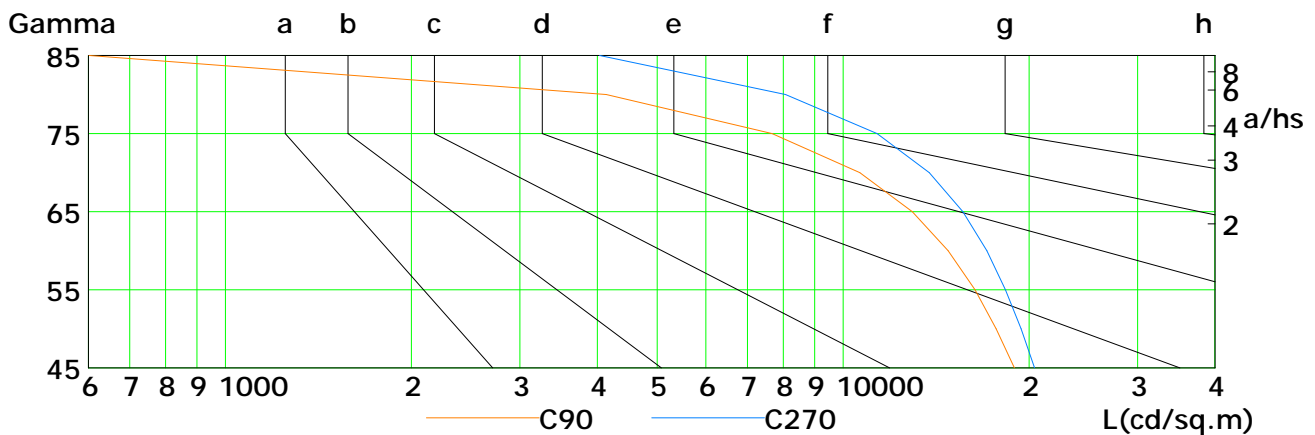
Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:



## Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300

a b c d e f g h



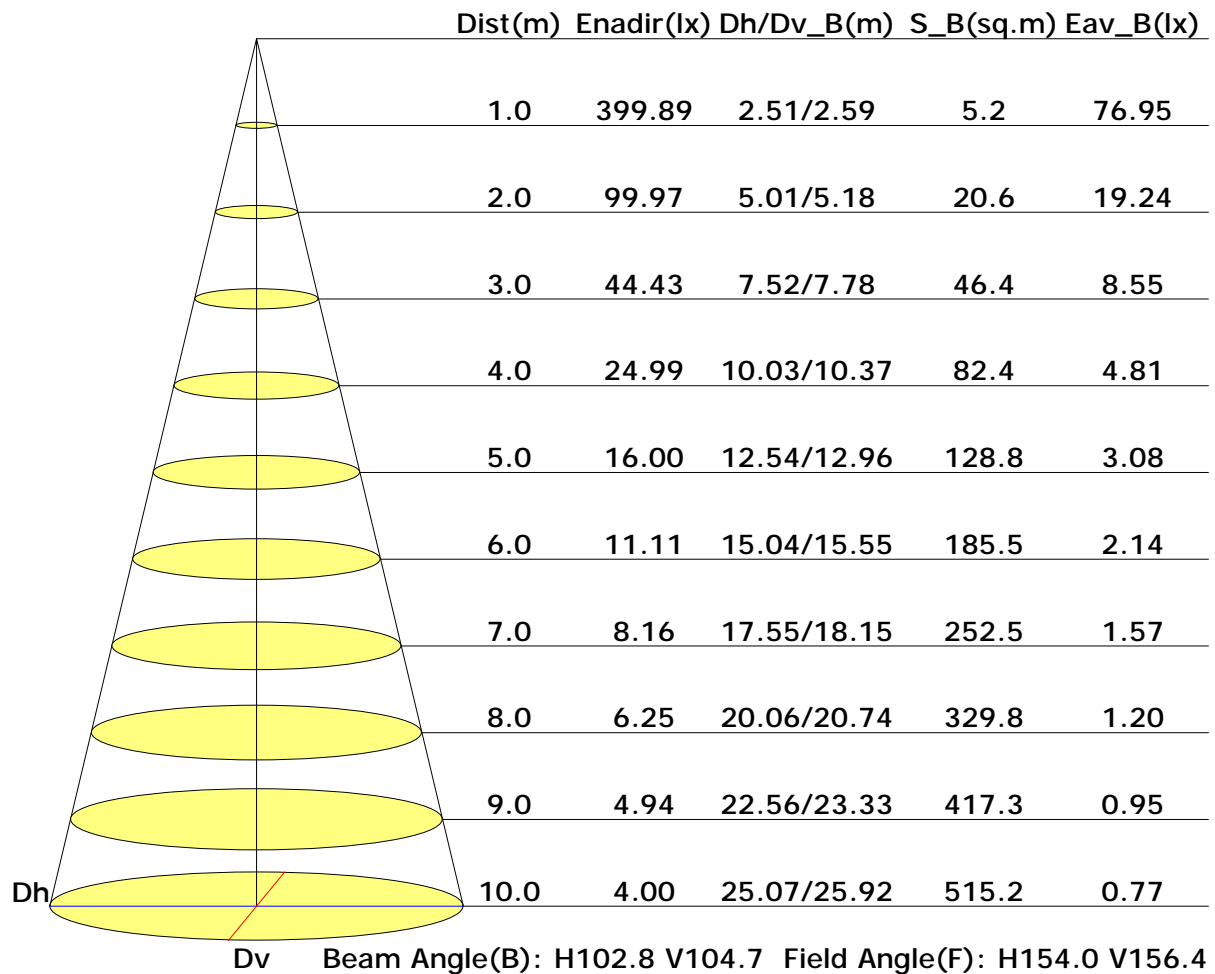
L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	4480	3757	3103	2499	1915	1369	867	426	88
C90	18951	17704	16353	14788	12947	10652	7679	4140	602
C180	4358	3630	2979	2379	1808	1259	771	345	48
C270	20433	19421	18330	17088	15637	13793	11350	8072	4035

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

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

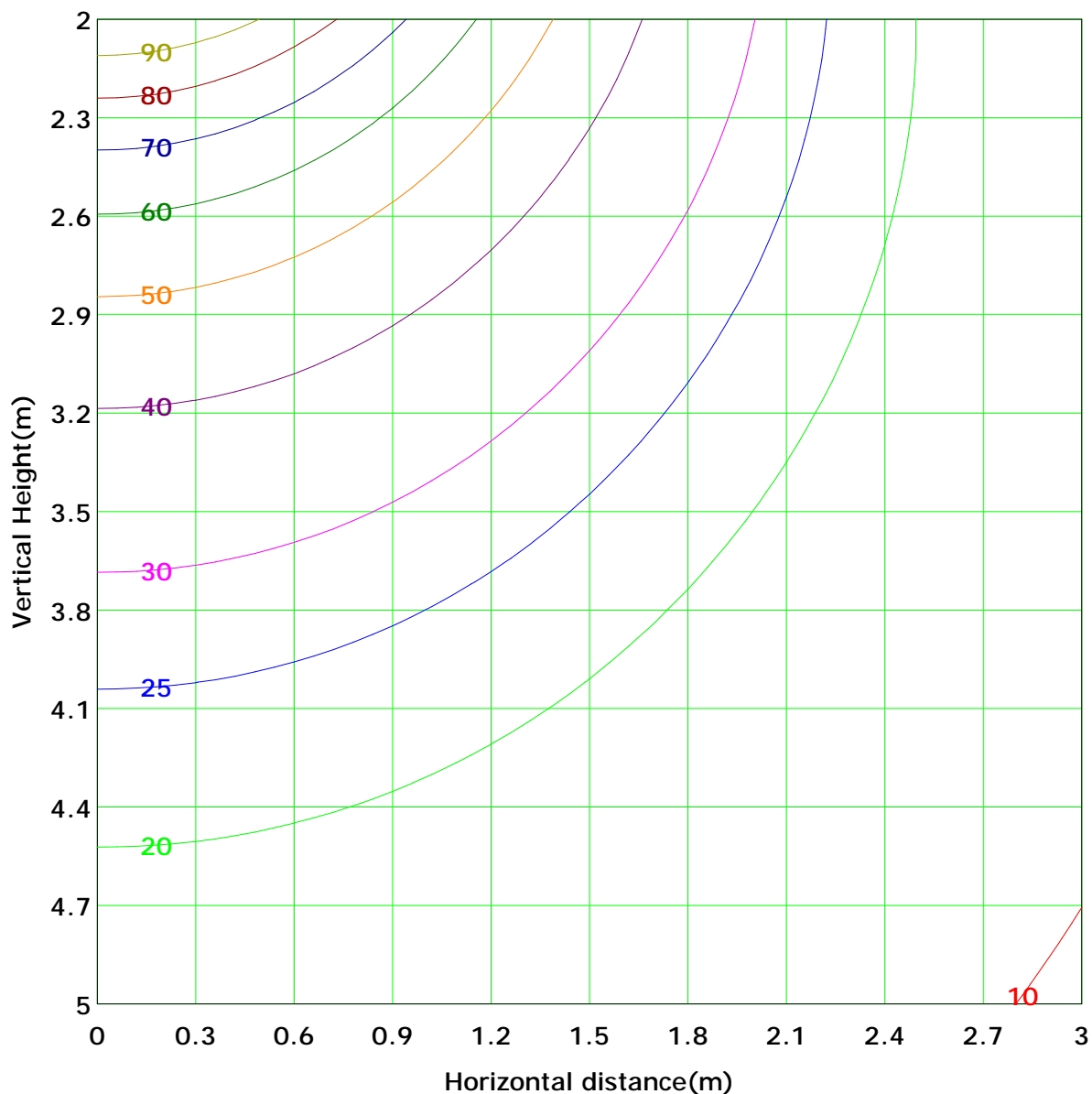


## Illuminance at a Distance





## Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 100.0 lx
( 10%): 10.0 lx	( 20%): 20.0 lx	
( 25%): 25.0 lx	( 30%): 30.0 lx	
( 40%): 40.0 lx	( 50%): 50.0 lx	
( 60%): 60.0 lx	( 70%): 70.0 lx	
( 80%): 80.0 lx	( 90%): 90.0 lx	

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

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

## Area Flux Table

Unit: lm

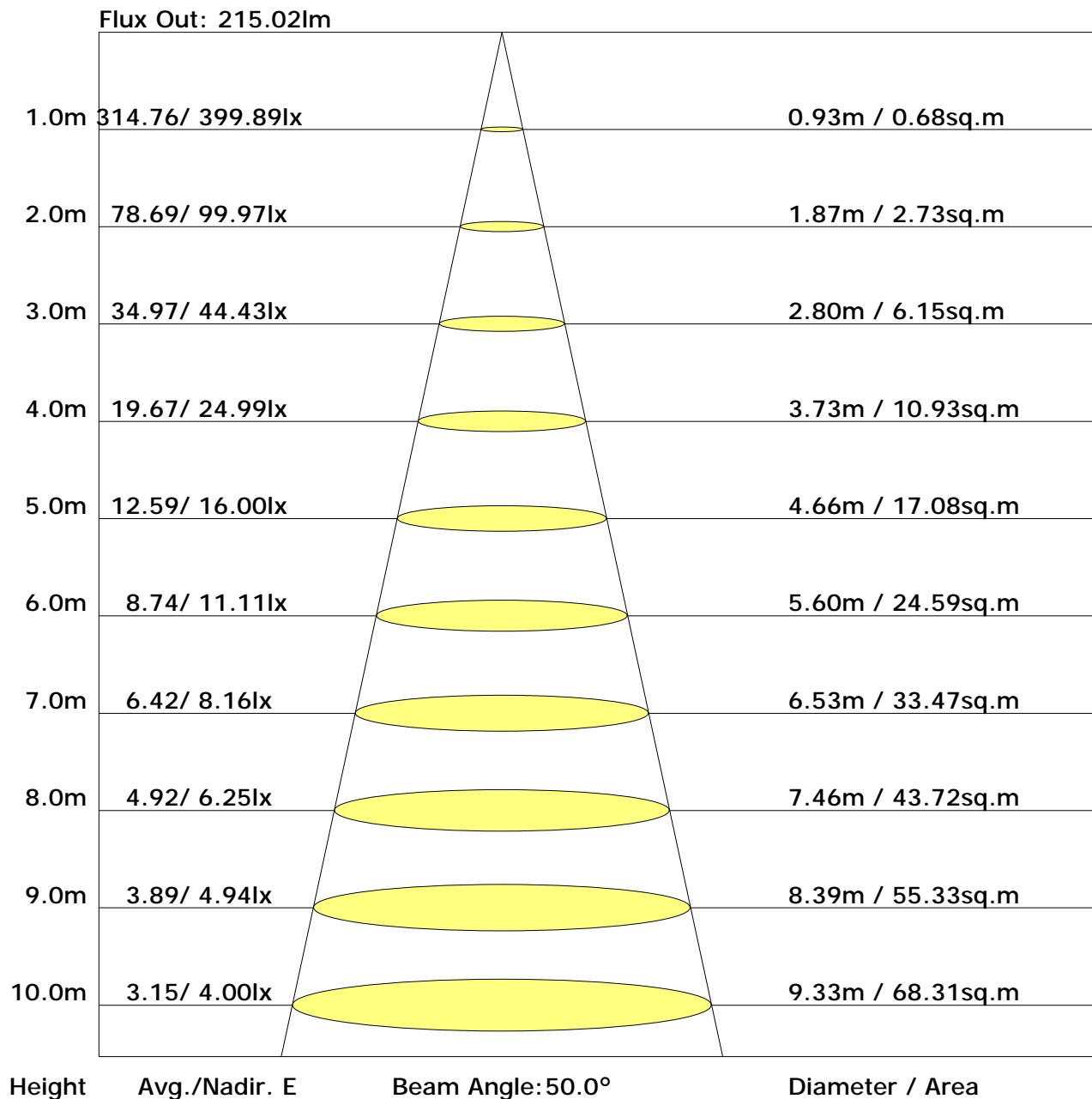
Flux(E)	Vertical plane																	Flux(T)	Flux(E)
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90
0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.2	0.4	0.8	1.2	1.6	1.9	2.1	2.1	1.9	1.6	1.2	0.8	0.5	0.2	0.0	0.0	0.0
0.0	0.1	0.4	1.0	1.7	2.4	3.1	3.6	3.9	3.9	3.6	3.1	2.4	1.7	1.0	0.5	0.2	0.0	0.0	0.0
0.0	0.2	0.7	1.5	2.5	3.6	4.6	5.3	5.7	5.7	5.3	4.6	3.6	2.5	1.5	0.8	0.4	0.2	0.0	0.0
0.0	0.2	0.9	2.0	3.3	4.7	6.0	6.9	7.4	7.4	6.9	6.0	4.7	3.3	2.0	1.0	0.5	0.2	0.0	0.0
0.0	0.3	1.1	2.4	4.0	5.6	7.2	8.4	9.0	9.0	8.3	7.2	6.0	4.0	2.4	1.1	0.4	0.2	0.0	0.0
0.0	0.4	1.3	2.7	4.5	6.4	8.2	9.6	10.3	10.3	9.6	8.2	6.4	4.5	2.7	1.3	0.7	0.4	0.2	0.0
0.0	0.4	1.4	3.0	4.9	7.0	8.9	10.5	11.3	11.3	10.5	9.0	7.0	4.9	3.0	1.4	0.9	0.4	0.2	0.0
0.0	0.4	1.5	3.1	5.0	7.2	9.3	11.0	11.8	11.8	11.0	9.4	7.2	5.0	3.1	1.5	0.9	0.4	0.2	0.0
0.0	0.4	1.4	3.0	4.9	7.1	9.1	10.7	11.6	11.6	11.0	9.4	7.1	4.9	3.0	1.4	0.9	0.4	0.2	0.0
0.0	0.4	1.3	2.8	4.6	6.5	8.3	9.9	10.9	11.1	10.4	8.9	7.0	4.6	2.8	1.3	0.7	0.4	0.2	0.0
0.0	0.3	1.1	2.5	4.0	5.7	7.5	8.9	9.9	10.0	9.4	8.1	6.4	4.0	2.5	1.1	0.6	0.3	0.1	0.0
0.0	0.2	0.9	2.0	3.4	4.9	6.4	7.7	8.4	8.6	8.1	7.0	5.6	4.0	2.5	1.2	0.7	0.4	0.2	0.0
0.0	0.2	0.7	1.5	2.6	4.0	5.2	6.2	6.8	7.0	6.6	5.8	4.6	3.3	2.0	0.9	0.5	0.3	0.1	0.0
0.0	0.1	0.4	1.0	1.8	2.8	3.8	4.6	5.0	5.2	4.9	4.3	3.4	2.5	1.5	0.7	0.4	0.2	0.1	0.0
0.0	0.0	0.2	0.5	1.0	1.6	2.3	2.8	3.2	3.3	3.2	2.8	2.2	1.6	0.9	0.4	0.2	0.1	0.0	0.0
0.0	0.0	0.0	0.1	0.3	0.5	0.8	1.1	1.4	1.5	1.4	1.3	1.0	0.7	0.4	0.2	0.1	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0
0.2	3.7	13.6	29.5	49.6	71.7	92.8	109.7	119.6	120.7	112.8	97.2	76.6	54.4	33.3	15.8	4.5	0.3	0.0	0.0
0.0	2.1	12.4	28.4	48.5	70.6	91.7	108.6	118.5	119.7	111.8	96.1	75.6	53.3	32.2	14.7	3.0	0.0	0.0	0.0
987																			

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

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



## The Average Illuminance Effective Figure



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

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

## UGR Table

Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	18.6	20.1	19.0	20.5	20.8	15.2	16.8	15.6	17.1	17.5
3H	20.1	21.5	20.5	21.9	22.3	16.2	17.6	16.6	18.0	18.4
4H	20.6	21.9	21.0	22.3	22.7	16.4	17.7	16.8	18.1	18.5
6H	20.8	22.1	21.3	22.5	22.9	16.5	17.7	16.9	18.1	18.5
8H	20.9	22.0	21.3	22.5	22.9	16.5	17.6	16.9	18.0	18.5
12H	20.9	22.0	21.3	22.4	22.9	16.4	17.5	16.9	18.0	18.4
X=4H Y=2H	18.8	20.1	19.2	20.5	20.9	15.7	17.1	16.2	17.4	17.8
3H	20.4	21.5	20.9	22.0	22.4	16.9	18.0	17.3	18.4	18.8
4H	21.0	22.0	21.4	22.4	22.9	17.1	18.1	17.6	18.6	19.1
6H	21.3	22.1	21.8	22.6	23.1	17.2	18.1	17.7	18.6	19.1
8H	21.3	22.1	21.8	22.6	23.1	17.2	18.0	17.7	18.5	19.0
12H	21.3	22.0	21.8	22.5	23.0	17.2	17.9	17.7	18.4	18.9
X=8H Y=4H	21.0	21.8	21.5	22.3	22.8	17.3	18.1	17.8	18.6	19.1
6H	21.3	22.0	21.8	22.5	23.0	17.4	18.1	17.9	18.6	19.1
8H	21.4	22.0	21.9	22.5	23.0	17.4	18.0	17.9	18.5	19.0
12H	21.4	21.9	21.9	22.4	23.0	17.4	17.9	17.9	18.4	19.0
X=12H Y=4H	21.0	21.7	21.5	22.2	22.7	17.3	18.0	17.8	18.5	19.0
6H	21.3	21.9	21.8	22.4	23.0	17.4	18.0	17.9	18.5	19.1
8H	21.4	21.9	21.9	22.4	23.0	17.4	17.9	17.9	18.4	19.0

Calculate in accordance with CIE 190:2010

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

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

## Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.25								
Room Reflectance			Room Index(RI)								
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.58	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	1.01
	0.20		0.45	0.56	0.63	0.69	0.78	0.84	0.88	0.94	0.98
0.50	0.50	0.20	0.57	0.66	0.73	0.78	0.85	0.90	0.93	0.97	0.99
	0.30		0.50	0.60	0.67	0.73	0.80	0.85	0.89	0.94	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	0.64	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	0.83	0.86	0.90	0.93
	0.20		0.44	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: 23W 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	0.58	0.46	0.38	0.32	0.25	0.20	
	0.30		0.81	0.68	0.58	0.52	0.42	0.35	0.30	0.24	0.19	
	0.20		0.69	0.59	0.52	0.46	0.38	0.32	0.28	0.22	0.18	
0.50	0.50	0.20	0.93	0.76	0.64	0.56	0.44	0.40	0.31	0.24	0.19	
	0.30		0.79	0.66	0.57	0.50	0.40	0.34	0.29	0.22	0.18	
	0.20		0.68	0.58	0.51	0.45	0.37	0.31	0.27	0.21	0.18	
0.30	0.50	0.20	0.90	0.73	0.61	0.53	0.42	0.34	0.29	0.22	0.18	
	0.30		0.77	0.64	0.55	0.48	0.39	0.32	0.28	0.21	0.18	
	0.20		0.67	0.57	0.50	0.44	0.36	0.30	0.26	0.20	0.17	
0.00	0.00	0.00	0.57	0.47	0.40	0.35	0.28	0.23	0.20	0.15	0.13	
Rating: 23W 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	0.20	0.20	0.21	0.22	0.22	0.23	0.23
	0.30		0.11	0.12	0.14	0.15	0.16	0.18	0.18	0.20	0.21
	0.20		0.06	0.08	0.09	0.11	0.13	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		0.11	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20
	0.20		0.06	0.08	0.09	0.10	0.12	0.14	0.15	0.17	0.18
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	0.17	0.17	0.18	0.19
	0.20		0.06	0.08	0.09	0.10	0.12	0.14	0.15	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: 23W 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	393.9	0.4	0.4	0.04	0.04
1.0-2.0	393.7	1.1	1.5	0.11	0.15
2.0-3.0	393.3	1.9	3.4	0.18	0.33
3.0-4.0	392.7	2.6	6.0	0.26	0.59
4.0-5.0	392.0	3.4	9.4	0.33	0.92
5.0-6.0	391.0	4.1	13.5	0.40	1.32
6.0-7.0	389.8	4.8	18.3	0.47	1.80
7.0-8.0	388.5	5.6	23.9	0.55	2.34
8.0-9.0	387.0	6.3	30.2	0.61	2.96
9.0-10.0	385.3	7.0	37.1	0.68	3.64
10.0-11.0	383.4	7.7	44.8	0.75	4.39
11.0-12.0	381.3	8.3	53.1	0.82	5.21
12.0-13.0	379.1	9.0	62.1	0.88	6.09
13.0-14.0	376.6	9.6	71.8	0.95	7.04
14.0-15.0	374.0	10.3	82.1	1.01	8.04
15.0-16.0	371.3	10.9	92.9	1.07	9.11
16.0-17.0	368.4	11.5	104.4	1.12	10.23
17.0-18.0	365.3	12.0	116.5	1.18	11.42
18.0-19.0	362.1	12.6	129.1	1.24	12.65
19.0-20.0	358.7	13.1	142.2	1.29	13.94
20.0-21.0	355.2	13.6	155.8	1.34	15.27
21.0-22.0	351.5	14.1	170.0	1.38	16.66
22.0-23.0	347.7	14.6	184.5	1.43	18.09
23.0-24.0	343.8	15.0	199.6	1.47	19.56
24.0-25.0	339.7	15.4	215.0	1.51	21.08
25.0-26.0	335.5	15.8	230.9	1.55	22.63
26.0-27.0	331.2	16.2	247.1	1.59	24.22
27.0-28.0	326.8	16.5	263.6	1.62	25.84
28.0-29.0	322.3	16.9	280.5	1.65	27.49
29.0-30.0	317.7	17.2	297.6	1.68	29.18
30.0-31.0	313.1	17.4	315.1	1.71	30.88
31.0-32.0	308.2	17.7	332.7	1.73	32.62
32.0-33.0	303.4	17.9	350.6	1.75	34.37
33.0-34.0	298.4	18.1	368.7	1.77	36.14
34.0-35.0	293.4	18.2	386.9	1.79	37.92
35.0-36.0	288.3	18.4	405.2	1.80	39.72

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

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



## Zonal Lumen (Continue 1)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	283.1	18.5	423.7	1.81	41.53
37.0-38.0	277.8	18.5	442.3	1.82	43.35
38.0-39.0	272.5	18.6	460.9	1.82	45.18
39.0-40.0	267.2	18.6	479.5	1.83	47.00
40.0-41.0	261.7	18.6	498.1	1.83	48.83
41.0-42.0	256.3	18.6	516.8	1.83	50.66
42.0-43.0	250.8	18.6	535.3	1.82	52.48
43.0-44.0	245.2	18.5	553.8	1.81	54.29
44.0-45.0	239.6	18.4	572.3	1.80	56.10
45.0-46.0	233.9	18.3	590.5	1.79	57.89
46.0-47.0	228.2	18.2	608.7	1.78	59.67
47.0-48.0	222.5	18.0	626.7	1.76	61.43
48.0-49.0	216.7	17.8	644.5	1.74	63.18
49.0-50.0	210.9	17.6	662.1	1.72	64.90
50.0-51.0	205.1	17.4	679.4	1.70	66.60
51.0-52.0	199.2	17.1	696.5	1.68	68.28
52.0-53.0	193.3	16.8	713.4	1.65	69.93
53.0-54.0	187.4	16.5	729.9	1.62	71.55
54.0-55.0	181.5	16.2	746.1	1.59	73.13
55.0-56.0	175.4	15.9	761.9	1.55	74.69
56.0-57.0	169.4	15.5	777.4	1.52	76.21
57.0-58.0	163.3	15.1	792.5	1.48	77.69
58.0-59.0	157.2	14.7	807.2	1.44	79.13
59.0-60.0	151.0	14.3	821.5	1.40	80.53
60.0-61.0	144.9	13.8	835.3	1.36	81.88
61.0-62.0	138.6	13.4	848.7	1.31	83.19
62.0-63.0	132.4	12.9	861.6	1.26	84.45
63.0-64.0	126.1	12.4	873.9	1.21	85.67
64.0-65.0	119.8	11.9	885.8	1.16	86.83
65.0-66.0	113.5	11.3	897.1	1.11	87.94
66.0-67.0	107.1	10.8	907.9	1.06	89.00
67.0-68.0	100.9	10.2	918.1	1.00	90.00
68.0-69.0	94.6	9.7	927.7	0.95	90.94
69.0-70.0	88.3	9.1	936.8	0.89	91.83
70.0-71.0	82.1	8.5	945.3	0.83	92.66
71.0-72.0	76.0	7.9	953.2	0.77	93.44

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

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

## Zonal Lumen (Continue 2)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	69.9	7.3	960.5	0.72	94.16
73.0-74.0	63.8	6.7	967.2	0.66	94.81
74.0-75.0	57.8	6.1	973.3	0.60	95.41
75.0-76.0	51.9	5.5	978.8	0.54	95.95
76.0-77.0	46.2	4.9	983.8	0.48	96.43
77.0-78.0	40.6	4.3	988.1	0.43	96.86
78.0-79.0	35.2	3.8	991.9	0.37	97.23
79.0-80.0	30.0	3.2	995.1	0.32	97.55
80.0-81.0	25.1	2.7	997.8	0.27	97.81
81.0-82.0	20.5	2.2	1000.1	0.22	98.03
82.0-83.0	16.2	1.8	1001.8	0.17	98.20
83.0-84.0	12.5	1.4	1003.2	0.13	98.34
84.0-85.0	9.2	1.0	1004.2	0.10	98.44
85.0-86.0	6.4	0.7	1004.9	0.07	98.50
86.0-87.0	4.2	0.5	1005.3	0.04	98.55
87.0-88.0	2.6	0.3	1005.6	0.03	98.58
88.0-89.0	1.6	0.2	1005.8	0.02	98.59
89.0-90.0	1.1	0.1	1005.9	0.01	98.61
90.0-91.0	1.0	0.1	1006.0	0.01	98.62
91.0-92.0	1.0	0.1	1006.1	0.01	98.63
92.0-93.0	1.0	0.1	1006.3	0.01	98.64
93.0-94.0	1.0	0.1	1006.4	0.01	98.65
94.0-95.0	1.1	0.1	1006.5	0.01	98.66
95.0-96.0	1.1	0.1	1006.6	0.01	98.67
96.0-97.0	1.2	0.1	1006.7	0.01	98.69
97.0-98.0	1.2	0.1	1006.9	0.01	98.70
98.0-99.0	1.2	0.1	1007.0	0.01	98.71
99.0-100.0	1.2	0.1	1007.1	0.01	98.72
100.0-101.0	1.3	0.1	1007.3	0.01	98.74
101.0-102.0	1.3	0.1	1007.4	0.01	98.75
102.0-103.0	1.4	0.1	1007.6	0.01	98.77
103.0-104.0	1.4	0.1	1007.7	0.01	98.78
104.0-105.0	1.4	0.2	1007.9	0.02	98.80
105.0-106.0	1.5	0.2	1008.0	0.02	98.81
106.0-107.0	1.5	0.2	1008.2	0.02	98.83
107.0-108.0	1.6	0.2	1008.3	0.02	98.84

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

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

## Zonal Lumen (Continue 3)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	1.6	0.2	1008.5	0.02	98.86
109.0-110.0	1.6	0.2	1008.7	0.02	98.88
110.0-111.0	1.7	0.2	1008.8	0.02	98.89
111.0-112.0	1.7	0.2	1009.0	0.02	98.91
112.0-113.0	1.8	0.2	1009.2	0.02	98.93
113.0-114.0	1.8	0.2	1009.4	0.02	98.95
114.0-115.0	1.9	0.2	1009.6	0.02	98.96
115.0-116.0	1.9	0.2	1009.8	0.02	98.98
116.0-117.0	2.0	0.2	1010.0	0.02	99.00
117.0-118.0	2.0	0.2	1010.2	0.02	99.02
118.0-119.0	2.1	0.2	1010.4	0.02	99.04
119.0-120.0	2.1	0.2	1010.6	0.02	99.06
120.0-121.0	2.2	0.2	1010.8	0.02	99.08
121.0-122.0	2.2	0.2	1011.0	0.02	99.10
122.0-123.0	2.3	0.2	1011.2	0.02	99.12
123.0-124.0	2.3	0.2	1011.4	0.02	99.14
124.0-125.0	2.4	0.2	1011.6	0.02	99.16
125.0-126.0	2.4	0.2	1011.8	0.02	99.19
126.0-127.0	2.5	0.2	1012.0	0.02	99.21
127.0-128.0	2.5	0.2	1012.3	0.02	99.23
128.0-129.0	2.6	0.2	1012.5	0.02	99.25
129.0-130.0	2.6	0.2	1012.7	0.02	99.27
130.0-131.0	2.7	0.2	1012.9	0.02	99.29
131.0-132.0	2.7	0.2	1013.2	0.02	99.32
132.0-133.0	2.8	0.2	1013.4	0.02	99.34
133.0-134.0	2.8	0.2	1013.6	0.02	99.36
134.0-135.0	2.9	0.2	1013.8	0.02	99.38
135.0-136.0	2.9	0.2	1014.1	0.02	99.40
136.0-137.0	3.0	0.2	1014.3	0.02	99.43
137.0-138.0	3.0	0.2	1014.5	0.02	99.45
138.0-139.0	3.0	0.2	1014.7	0.02	99.47
139.0-140.0	3.1	0.2	1014.9	0.02	99.49
140.0-141.0	3.1	0.2	1015.2	0.02	99.51
141.0-142.0	3.2	0.2	1015.4	0.02	99.53
142.0-143.0	3.2	0.2	1015.6	0.02	99.55
143.0-144.0	3.2	0.2	1015.8	0.02	99.57

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

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

## Zonal Lumen (Continue 4)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	3.3	0.2	1016.0	0.02	99.60
145.0-146.0	3.3	0.2	1016.2	0.02	99.62
146.0-147.0	3.4	0.2	1016.4	0.02	99.64
147.0-148.0	3.4	0.2	1016.6	0.02	99.65
148.0-149.0	3.4	0.2	1016.8	0.02	99.67
149.0-150.0	3.4	0.2	1017.0	0.02	99.69
150.0-151.0	3.5	0.2	1017.2	0.02	99.71
151.0-152.0	3.5	0.2	1017.4	0.02	99.73
152.0-153.0	3.6	0.2	1017.6	0.02	99.75
153.0-154.0	3.6	0.2	1017.7	0.02	99.76
154.0-155.0	3.6	0.2	1017.9	0.02	99.78
155.0-156.0	3.7	0.2	1018.1	0.02	99.80
156.0-157.0	3.7	0.2	1018.2	0.02	99.81
157.0-158.0	3.7	0.2	1018.4	0.02	99.83
158.0-159.0	3.7	0.1	1018.5	0.01	99.84
159.0-160.0	3.7	0.1	1018.7	0.01	99.86
160.0-161.0	3.8	0.1	1018.8	0.01	99.87
161.0-162.0	3.8	0.1	1019.0	0.01	99.88
162.0-163.0	3.8	0.1	1019.1	0.01	99.90
163.0-164.0	3.8	0.1	1019.2	0.01	99.91
164.0-165.0	3.8	0.1	1019.3	0.01	99.92
165.0-166.0	3.9	0.1	1019.4	0.01	99.93
166.0-167.0	3.9	0.1	1019.5	0.01	99.94
167.0-168.0	3.9	0.1	1019.6	0.01	99.95
168.0-169.0	3.9	0.1	1019.7	0.01	99.96
169.0-170.0	3.8	0.1	1019.8	0.01	99.96
170.0-171.0	3.8	0.1	1019.8	0.01	99.97
171.0-172.0	3.9	0.1	1019.9	0.01	99.98
172.0-173.0	3.9	0.1	1020.0	0.01	99.98
173.0-174.0	3.9	0.0	1020.0	0.00	99.99
174.0-175.0	3.9	0.0	1020.0	0.00	99.99
175.0-176.0	3.9	0.0	1020.1	0.00	99.99
176.0-177.0	3.9	0.0	1020.1	0.00	100.00
177.0-178.0	3.9	0.0	1020.1	0.00	100.00
178.0-179.0	3.9	0.0	1020.1	0.00	100.00
179.0-180.0	3.9	0.0	1020.1	0.00	100.00

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

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