

Report No.:

Test Time: 2021/11/16 11:01

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: COB RIBBONLYTE

Lamp Catalog: FCOB-24V-D480-4000-8W-6MM-IP20 RA>90

Lamp Description: 4000K

Luminous Length (mm): 500

Luminous Height (mm): 1.5

Current: 0.159 A

Power Factor: 1.000

Luminaire Description: RB90LINEA202.440

Number of Lamps: 480/M

Luminous Width (mm): 6

Voltage: 24.0 V

Power: 3.81 W

Photometric Results

CIE Class: Direct

Measurement Flux: 301.8 lm

Downward Ratio: 97%

Horizontal Diffuse Angle(10%,50%): H160.1,H113.8

Vertical Diffuse Angle(10%,50%): V193.4,V155.3

Luminaire Efficacy Rating (LER): 79

Max. Intensity: 82.07 cd

Total Rated Lamp Lumens: 301.8 lm

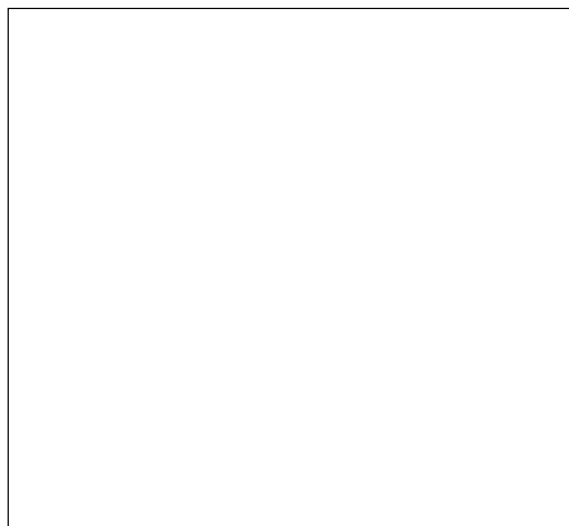
Efficiency: 100%

Upward Ratio: 3%

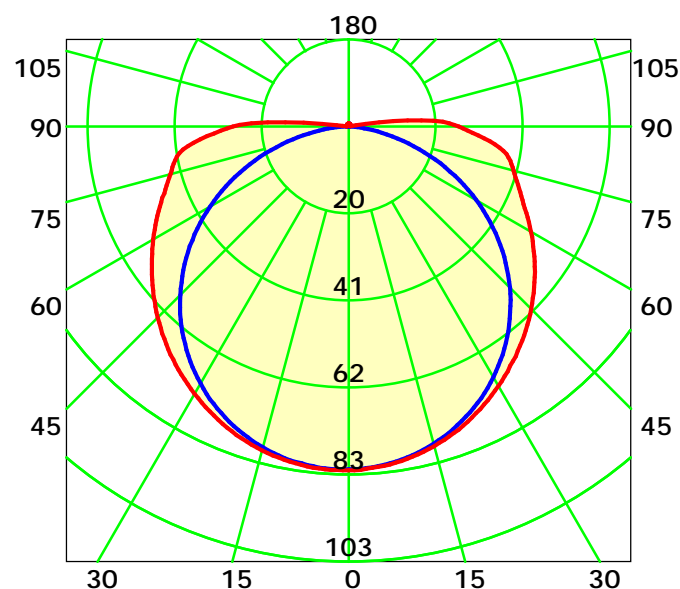
Central Intensity: 81.84 cd

Pos of Max. Intensity: H270 V3

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 134.5° Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Kerr

Gamma Plane (°):0.0-180.0: 1.0

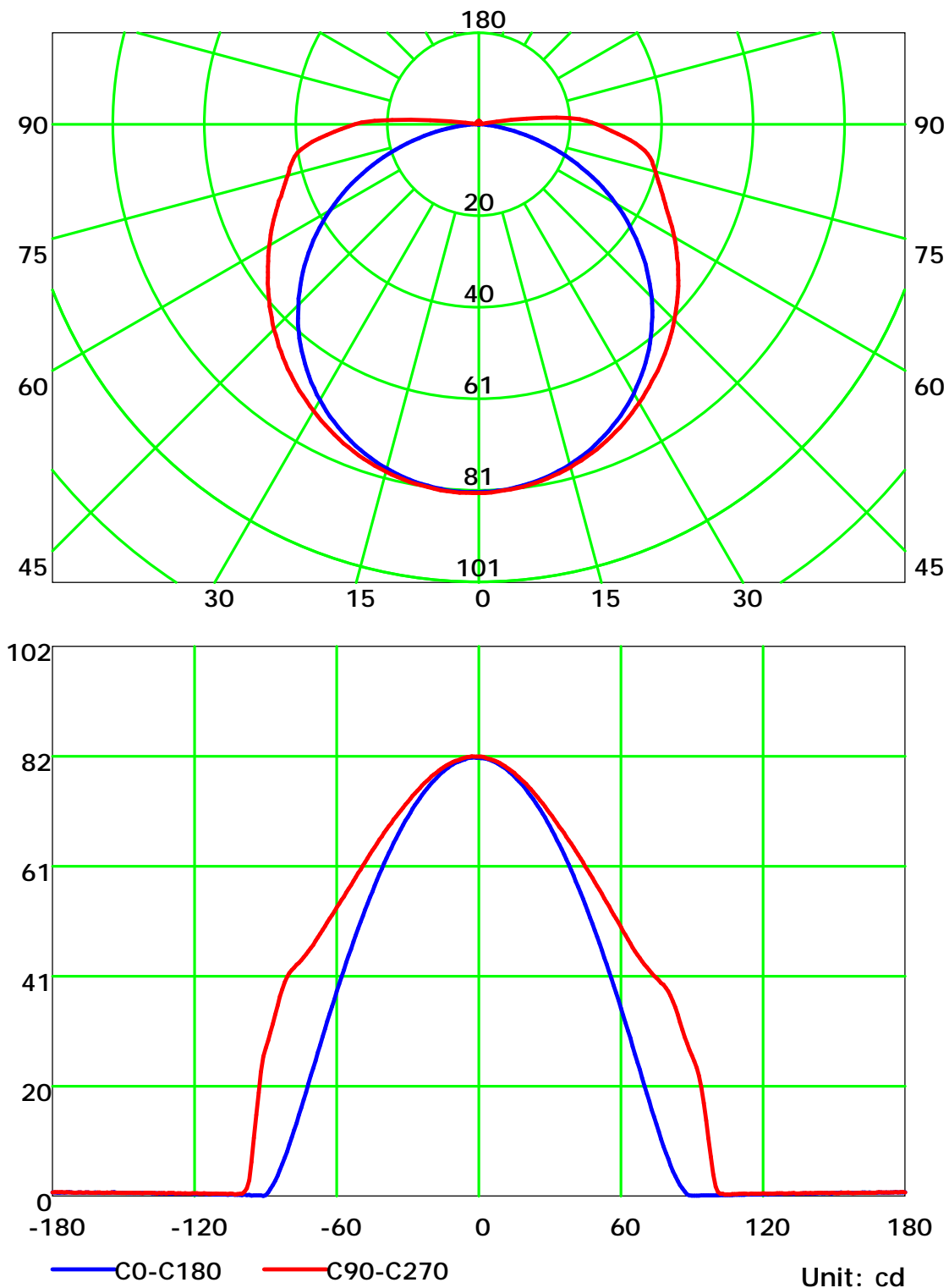
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

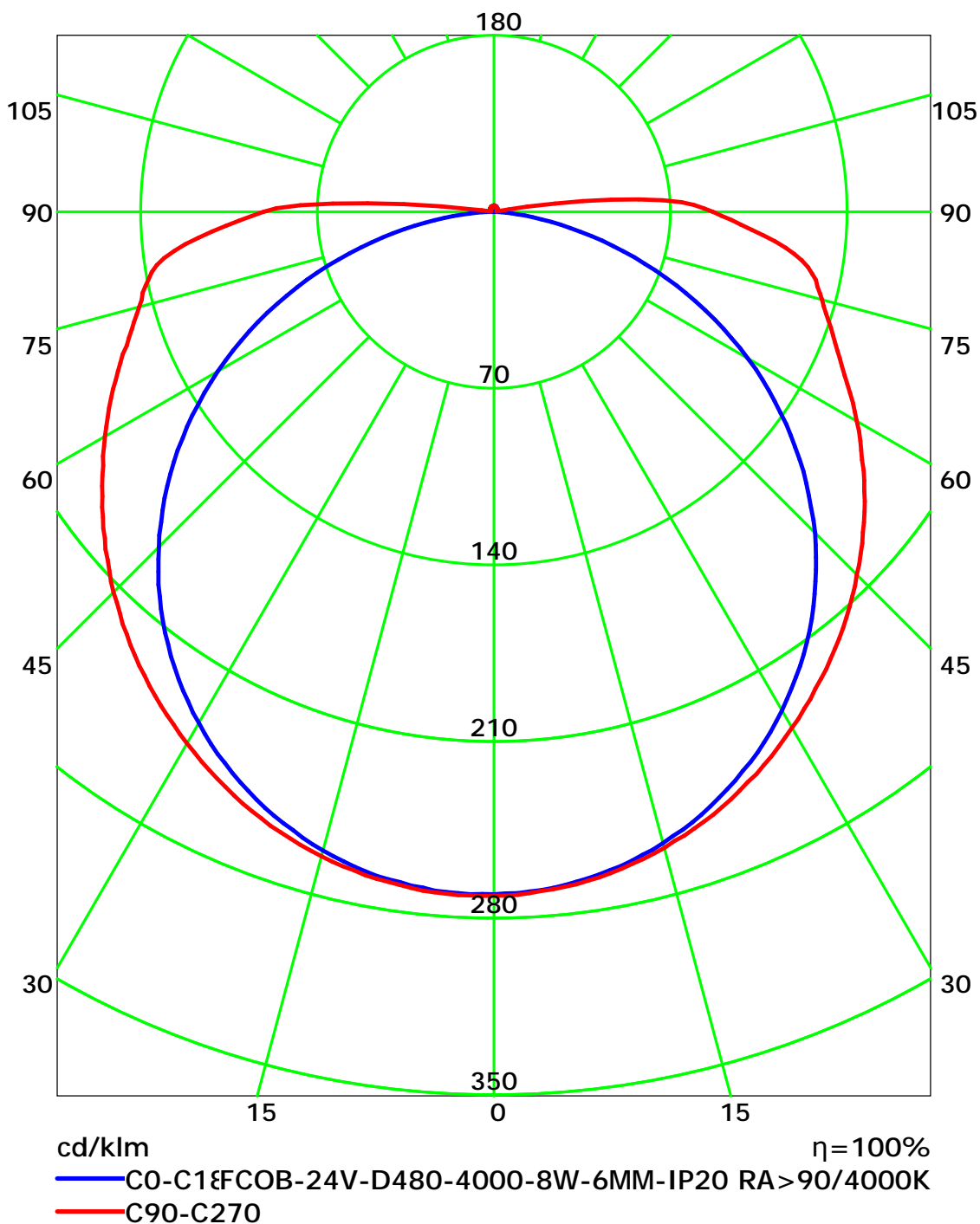
Luminous Intensity Distribution Curve



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

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: Kerr

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

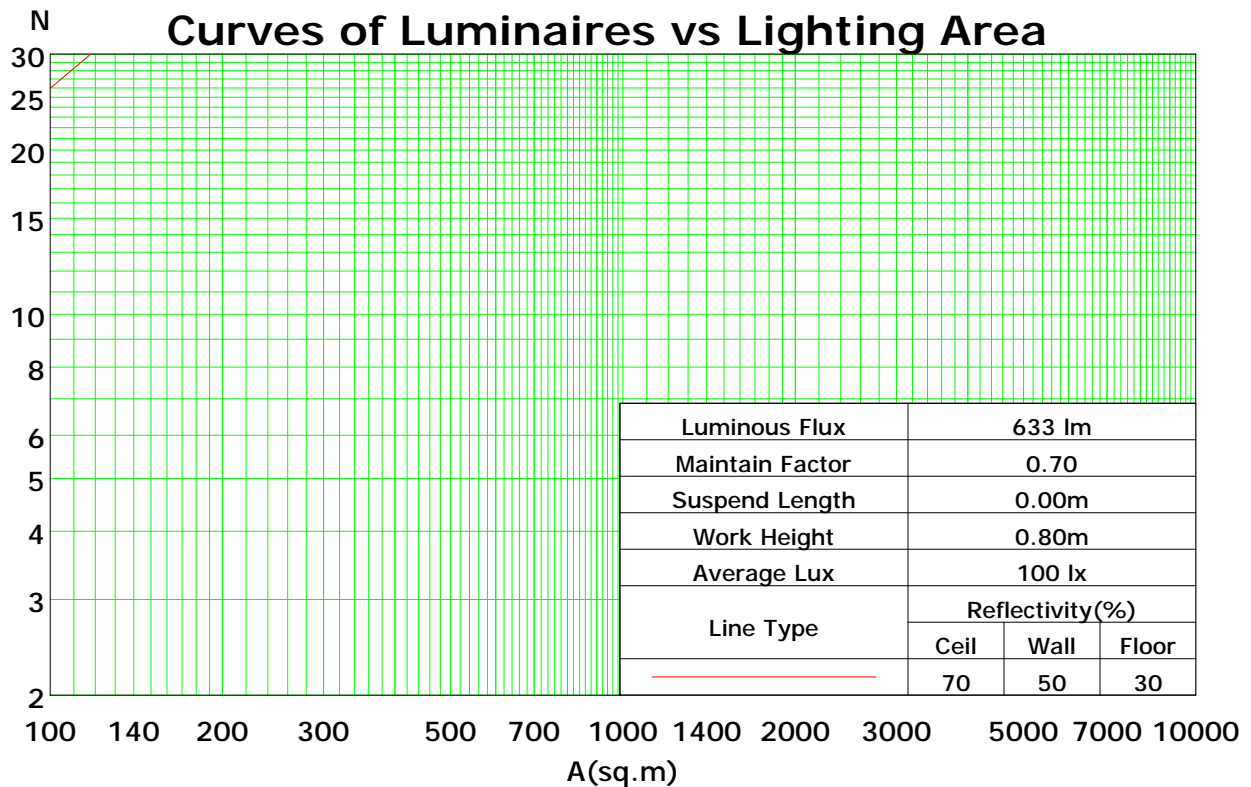
Coefficients Of Utilization - Zonal Cavity Method

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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	105	99	93	88	102	96	91	87	91	87	83	86	83	80	82	80	77	74
2	94	84	76	70	91	82	75	69	78	72	66	74	69	64	70	66	62	60
3	85	73	64	57	82	71	63	56	68	60	54	64	58	53	61	56	52	49
4	78	64	55	47	75	63	54	47	60	52	46	57	50	45	54	49	44	41
5	71	57	48	40	69	56	47	40	53	45	39	51	44	38	49	43	38	35
6	66	51	42	35	63	50	41	35	48	40	34	46	39	33	44	38	33	31
7	61	46	37	31	59	45	37	30	44	36	30	42	35	29	40	34	29	27
8	57	42	33	27	55	41	33	27	40	32	27	38	31	26	37	31	26	24
9	53	39	30	24	51	38	30	24	37	29	24	35	28	24	34	28	23	21
10	49	36	27	22	48	35	27	22	34	27	22	33	26	21	32	25	21	19

Spacing Criteria (0-180): 1.27

Spacing Criteria (90-270): 1.32

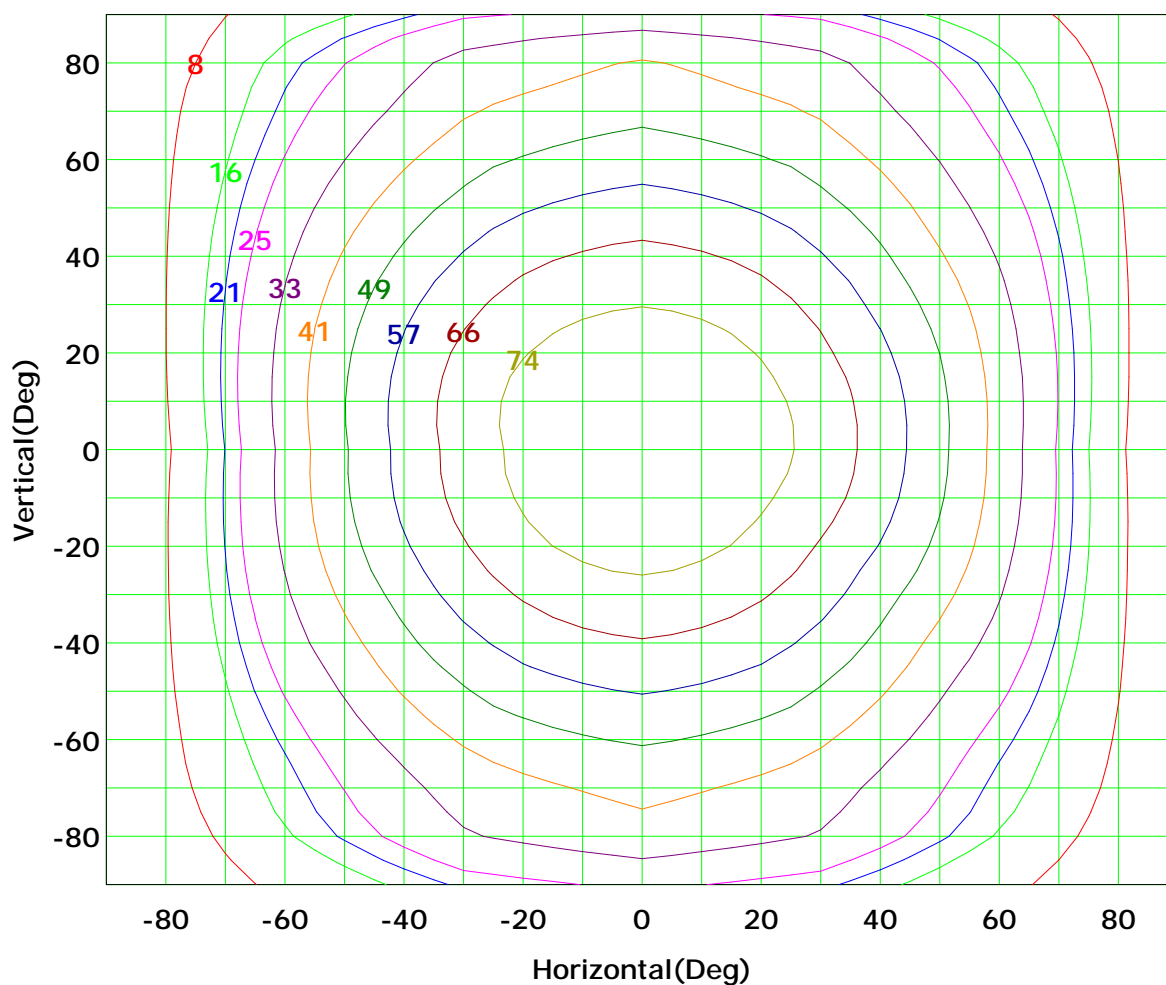
Spacing Criteria (Diagonal): 1.43



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

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

Isocandela (rectangle)



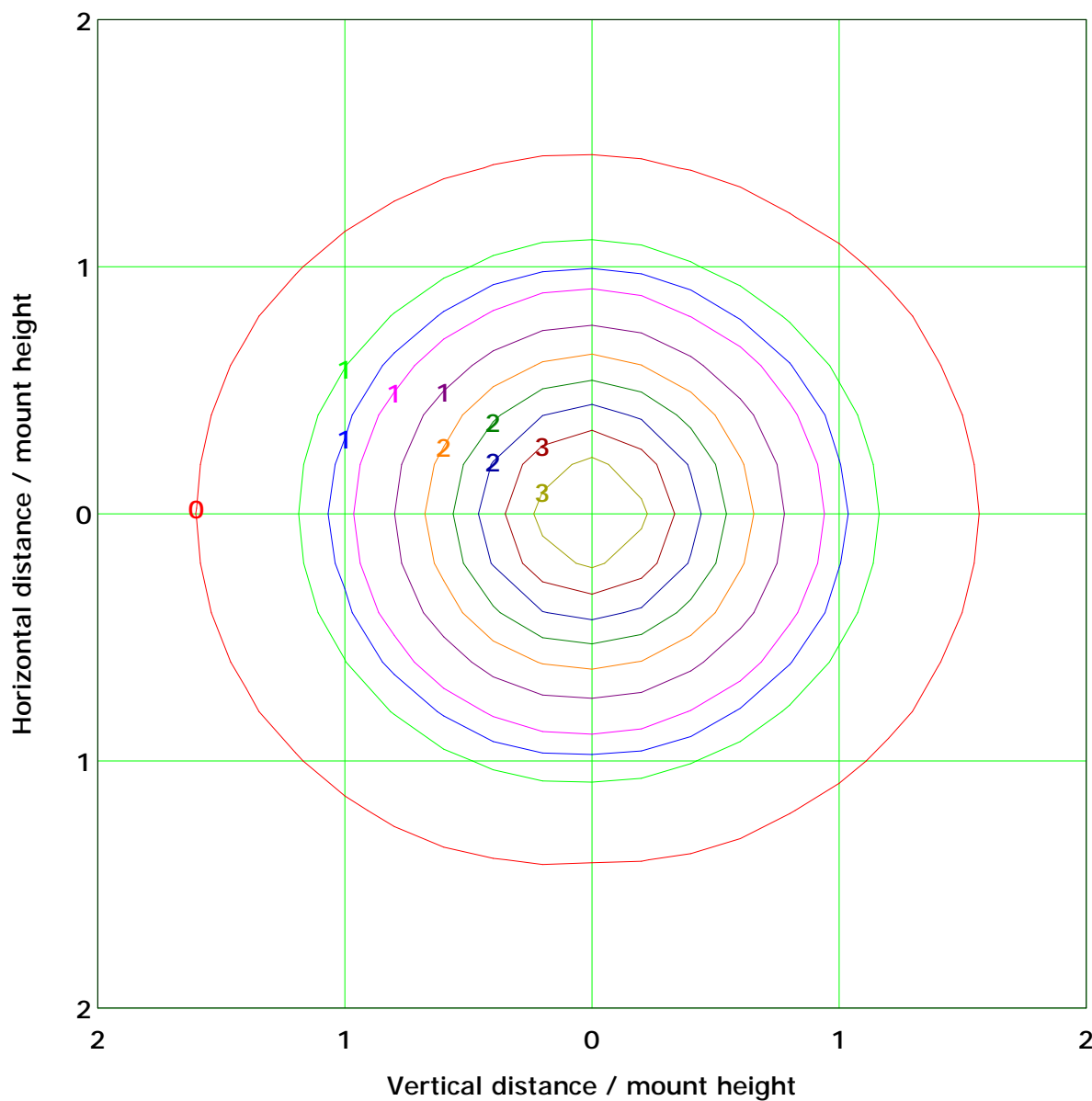
Imax (100%): 82 cd

(10%):	8 cd	(20%):	16 cd
(25%):	21 cd	(30%):	25 cd
(40%):	33 cd	(50%):	41 cd
(60%):	49 cd	(70%):	57 cd
(80%):	66 cd	(90%):	74 cd

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

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%): 3.3 lx

(10%): 0.3 lx	(20%): 0.7 lx
(25%): 0.8 lx	(30%): 1.0 lx
(40%): 1.3 lx	(50%): 1.6 lx
(60%): 2.0 lx	(70%): 2.3 lx
(80%): 2.6 lx	(90%): 3.0 lx

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

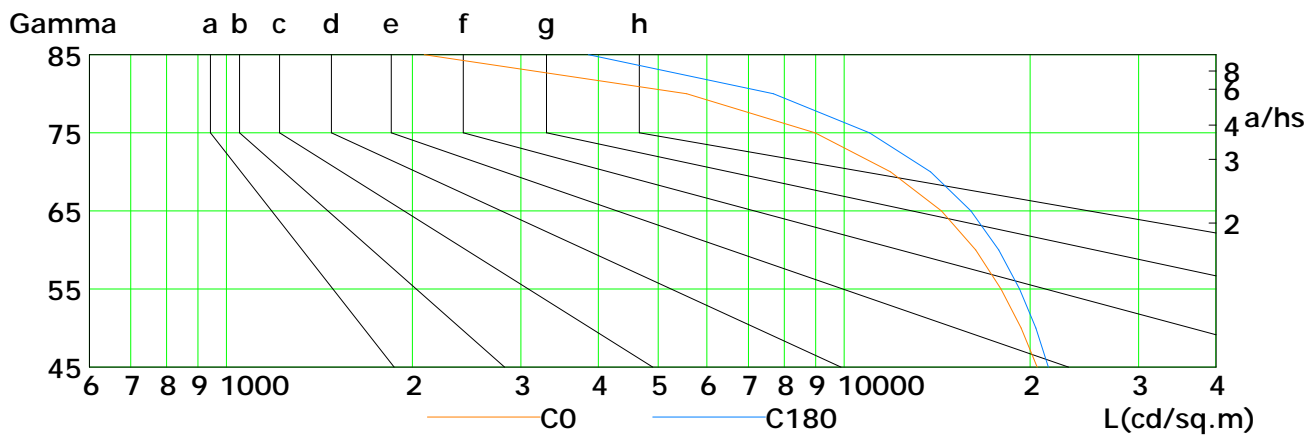
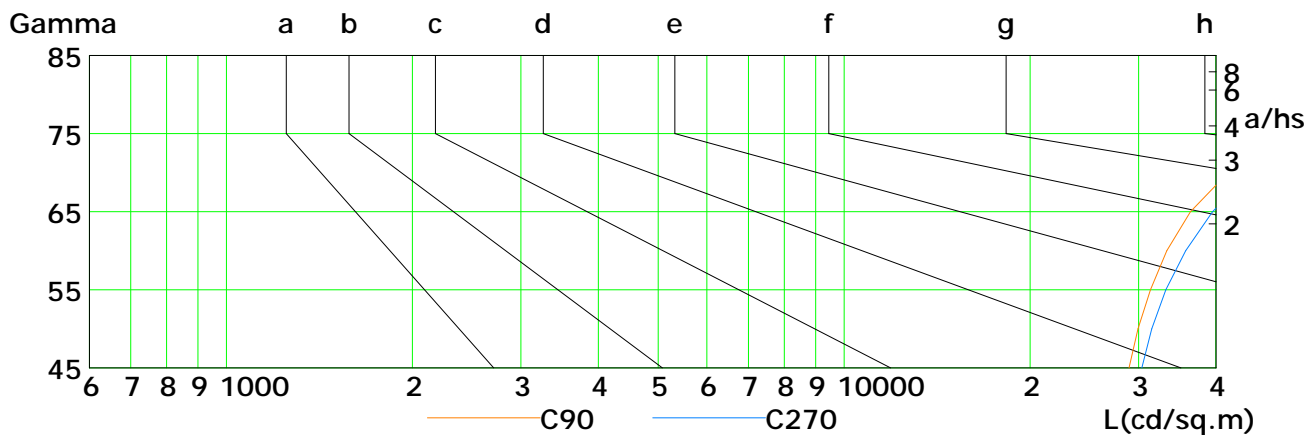
Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 9.028 m
Humidity: 60%
Inspector:



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

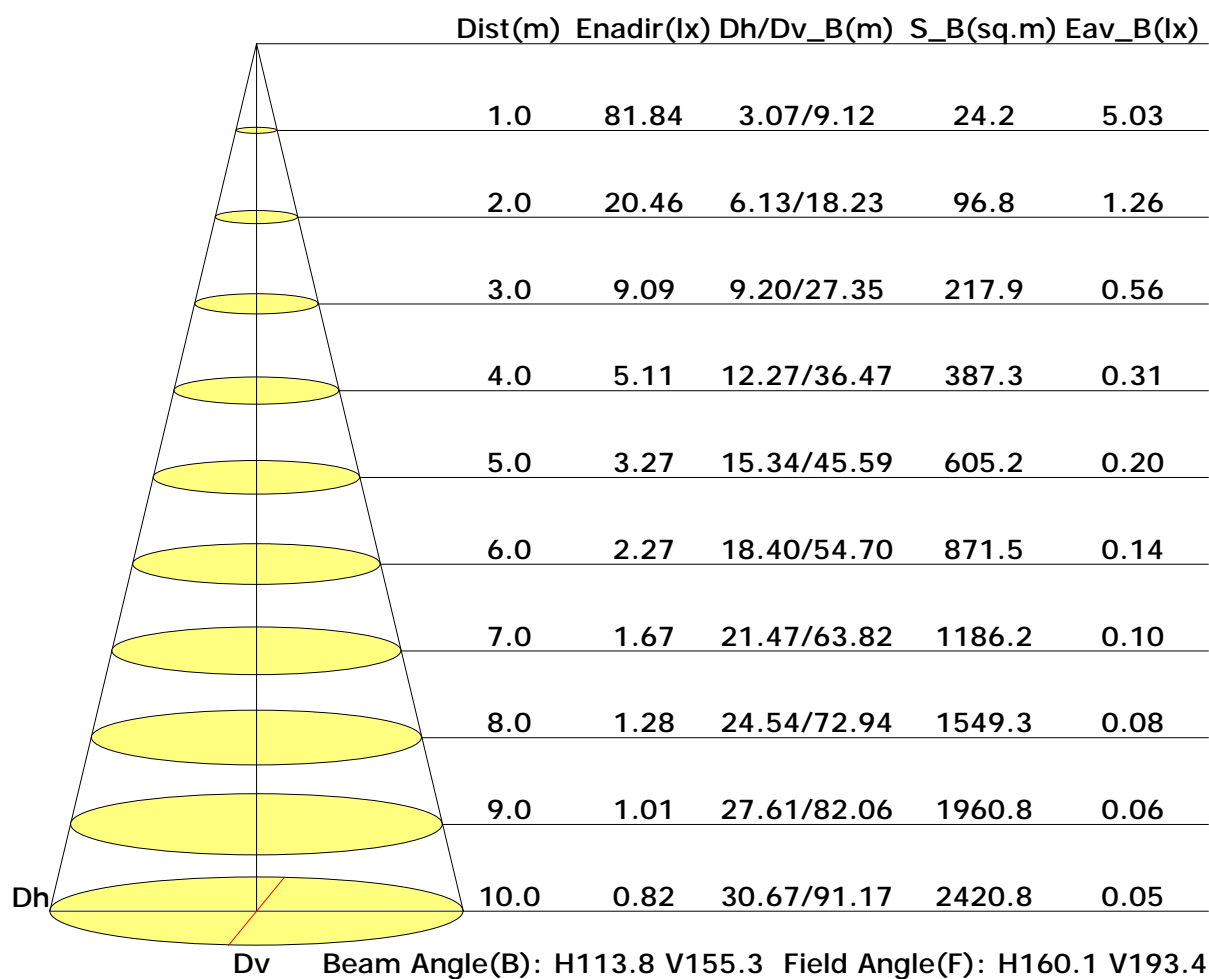


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	20542	19362	17952	16329	14372	11902	8975	5565	2092
C90	28928	29924	31329	33320	36363	41807	51888	72158	119993
C180	21432	20440	19250	17795	16046	13808	11000	7685	3857
C270	30333	31484	33198	35741	39506	45296	56104	78689	131567

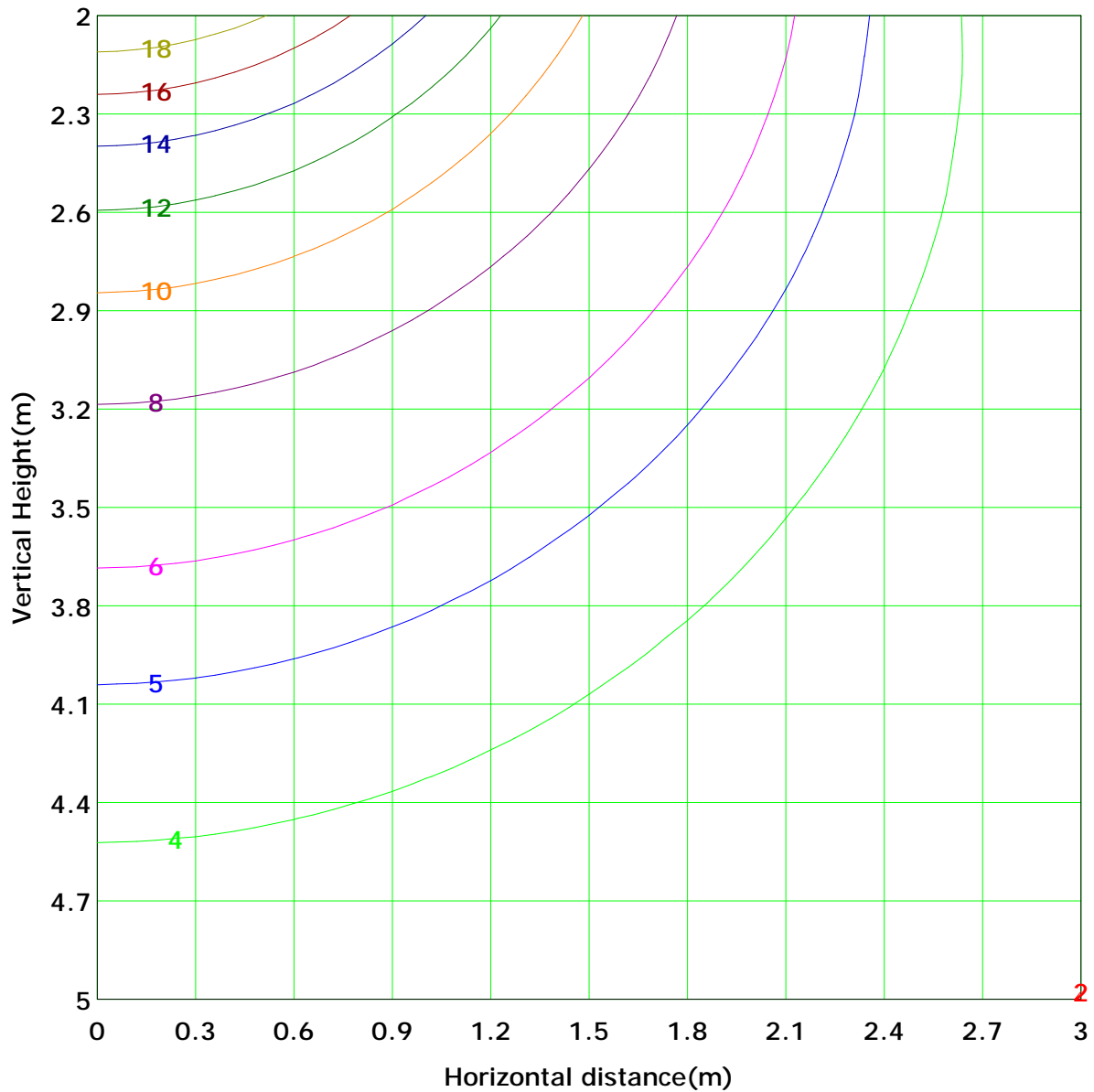
C Plane (°):0.0-360.0: 30.0
Test Lab:
Test Type: TYPE C
Temperature: 25
Operator: Kerr

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: 20.5 lx
(10%): 2.0 lx	(20%): 4.1 lx	(30%): 6.1 lx
(25%): 5.1 lx	(40%): 8.2 lx	(50%): 10.2 lx
(60%): 12.3 lx	(70%): 14.3 lx	(80%): 16.4 lx
(90%): 18.4 lx		

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

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

Area Flux Table

Unit: lm

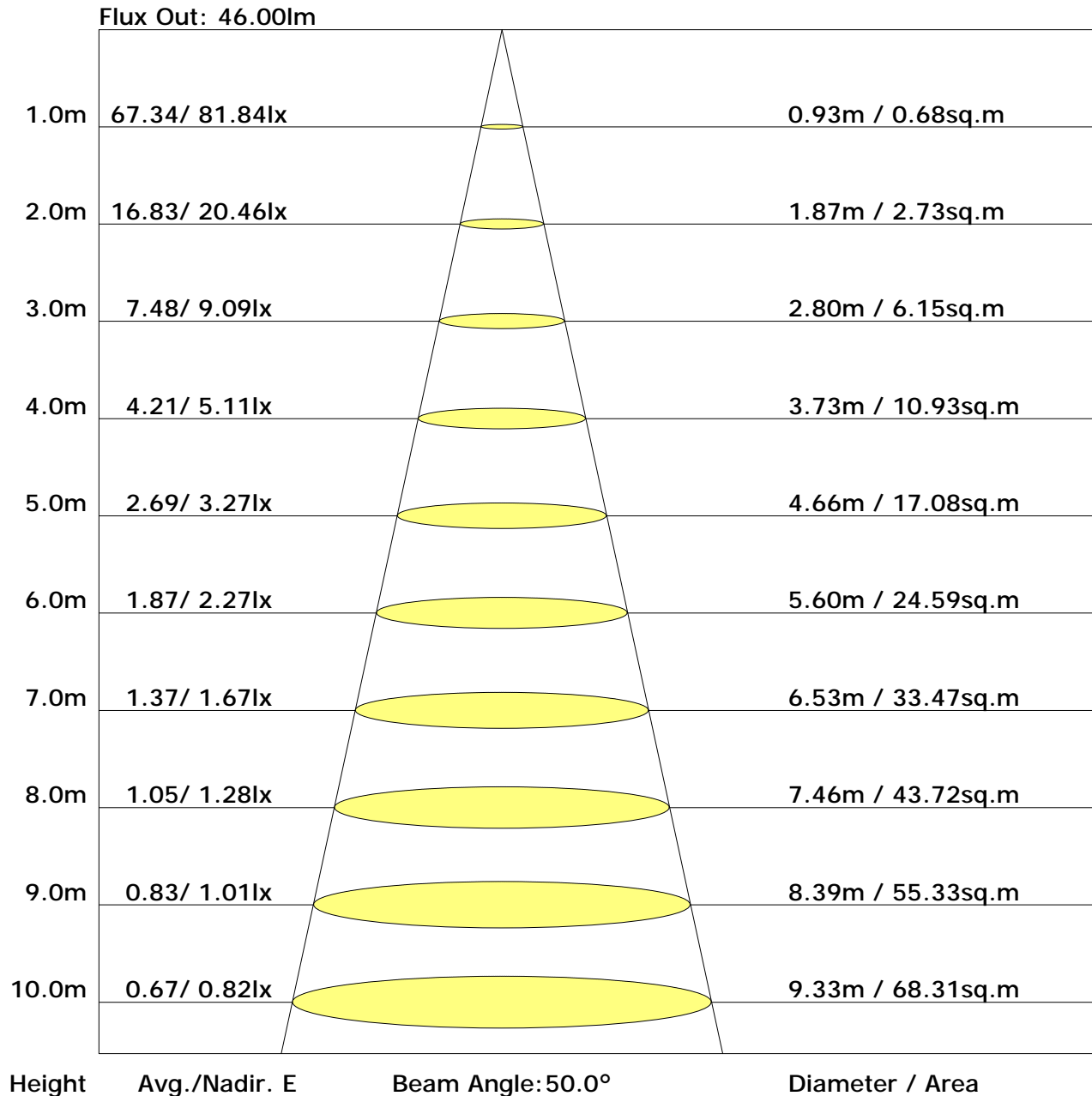
Flux(E)	Vertical plane																	Flux(T)	Flux(E)
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90
0.1	0.0	0.1	0.2	0.3	0.5	0.7	0.9	1.0	1.0	1.0	1.0	0.9	0.7	0.5	0.3	0.2	0.1	0.0	0.0
0.3	0.0	0.1	0.2	0.4	0.6	0.9	1.1	1.2	1.3	1.3	1.2	1.1	0.9	0.6	0.4	0.2	0.1	0.0	0.0
2.0	0.0	0.1	0.3	0.5	0.7	1.0	1.2	1.4	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5
5.5	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
10.3	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
16.0	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
21.8	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
27.0	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
30.8	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
32.9	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
32.9	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
32.9	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
30.7	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
27.0	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
21.7	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
15.8	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
10.0	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
5.1	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
1.6	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
0.0	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
0.2	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
292	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5
291	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5

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

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: Kerr

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	26.3	28.0	26.8	28.4	28.8	27.0	28.7	27.4	29.0	29.4
3H	28.2	29.7	28.6	30.1	30.5	29.5	31.1	29.9	31.5	31.9
4H	28.8	30.3	29.2	30.7	31.1	30.8	32.3	31.2	32.7	33.1
6H	29.2	30.6	29.7	31.0	31.5	32.2	33.5	32.6	34.0	34.4
8H	29.4	30.7	29.8	31.1	31.6	32.8	34.1	33.3	34.6	35.0
12H	29.4	30.7	29.9	31.1	31.6	33.4	34.7	33.9	35.1	35.6
X=4H Y=2H	27.2	28.7	27.6	29.1	29.5	27.6	29.1	28.0	29.5	29.9
3H	29.3	30.6	29.8	31.0	31.5	30.4	31.7	30.9	32.2	32.6
4H	30.2	31.3	30.6	31.8	32.3	31.9	33.1	32.4	33.6	34.1
6H	30.8	31.9	31.3	32.3	32.9	33.5	34.5	34.0	35.0	35.5
8H	31.0	32.0	31.5	32.5	33.0	34.2	35.2	34.7	35.7	36.2
12H	31.2	32.1	31.7	32.6	33.1	34.9	35.8	35.5	36.4	36.9
X=8H Y=4H	30.9	31.9	31.4	32.4	32.9	32.3	33.3	32.8	33.8	34.3
6H	31.9	32.7	32.4	33.3	33.8	34.1	35.0	34.7	35.5	36.1
8H	32.3	33.1	32.8	33.6	34.2	35.1	35.8	35.6	36.4	36.9
12H	32.6	33.3	33.2	33.9	34.5	36.0	36.7	36.5	37.2	37.8
X=12H Y=4H	31.2	32.1	31.7	32.6	33.1	32.4	33.3	32.9	33.8	34.3
6H	32.3	33.0	32.8	33.6	34.1	34.3	35.1	34.8	35.6	36.2
8H	32.8	33.5	33.4	34.0	34.7	35.3	36.0	35.8	36.5	37.1

Calculate in accordance with CIE 190:2010

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

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	0.53	0.61	0.68	0.73	0.80	0.86	0.89	0.94	0.98
	0.30		0.45	0.52	0.60	0.65	0.73	0.79	0.83	0.89	0.93
	0.20		0.39	0.46	0.54	0.59	0.67	0.73	0.78	0.84	0.89
0.50	0.50	0.20	0.51	0.58	0.65	0.70	0.77	0.81	0.85	0.90	0.93
	0.30		0.44	0.51	0.58	0.63	0.71	0.76	0.80	0.85	0.89
	0.20		0.38	0.45	0.52	0.58	0.65	0.71	0.75	0.81	0.85
0.30	0.50	0.20	0.49	0.56	0.63	0.67	0.73	0.78	0.81	0.85	0.88
	0.30		0.43	0.50	0.56	0.61	0.68	0.73	0.77	0.82	0.85
	0.20		0.38	0.45	0.51	0.56	0.64	0.69	0.73	0.78	0.82
0.00	0.00	0.00	0.35	0.42	0.48	0.53	0.60	0.65	0.68	0.73	0.77
Rating: 4W 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	1.04	0.90	0.78	0.69	0.57	0.48	0.42	0.34	0.28	
	0.30		0.86	0.77	0.68	0.61	0.51	0.44	0.39	0.32	0.27	
	0.20		0.74	0.67	0.60	0.55	0.47	0.41	0.37	0.30	0.26	
0.50	0.50	0.20	0.99	0.86	0.74	0.66	0.54	0.49	0.41	0.33	0.27	
	0.30		0.84	0.75	0.66	0.59	0.50	0.43	0.38	0.31	0.26	
	0.20		0.73	0.66	0.59	0.54	0.46	0.40	0.36	0.29	0.25	
0.30	0.50	0.20	0.96	0.82	0.71	0.63	0.52	0.44	0.39	0.31	0.26	
	0.30		0.82	0.73	0.64	0.57	0.48	0.41	0.37	0.30	0.25	
	0.20		0.72	0.65	0.58	0.52	0.45	0.39	0.35	0.28	0.24	
0.00	0.00	0.00	0.62	0.55	0.49	0.44	0.37	0.32	0.29	0.24	0.20	
Rating: 4W 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	0.19	0.21	0.22	0.23	0.24	0.24	0.24	0.25	0.25
	0.30		0.12	0.14	0.15	0.16	0.18	0.19	0.20	0.21	0.22
	0.20		0.07	0.09	0.10	0.11	0.13	0.15	0.16	0.17	0.19
0.50	0.50	0.20	0.19	0.20	0.21	0.22	0.23	0.23	0.23	0.24	0.24
	0.30		0.12	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21
	0.20		0.07	0.09	0.10	0.11	0.13	0.14	0.15	0.17	0.18
0.30	0.50	0.20	0.18	0.20	0.20	0.21	0.22	0.22	0.23	0.23	0.23
	0.30		0.12	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.20
	0.20		0.07	0.08	0.10	0.11	0.13	0.14	0.15	0.16	0.18
0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Rating: 4W 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 _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	81.9	0.1	0.1	0.03	0.03
1.0-2.0	81.9	0.2	0.3	0.08	0.10
2.0-3.0	81.9	0.4	0.7	0.13	0.23
3.0-4.0	81.8	0.5	1.3	0.18	0.42
4.0-5.0	81.7	0.7	2.0	0.23	0.65
5.0-6.0	81.6	0.9	2.8	0.28	0.93
6.0-7.0	81.4	1.0	3.8	0.33	1.27
7.0-8.0	81.2	1.2	5.0	0.39	1.65
8.0-9.0	81.0	1.3	6.3	0.44	2.09
9.0-10.0	80.8	1.5	7.8	0.48	2.57
10.0-11.0	80.6	1.6	9.4	0.53	3.11
11.0-12.0	80.3	1.8	11.1	0.58	3.69
12.0-13.0	80.0	1.9	13.0	0.63	4.32
13.0-14.0	79.7	2.0	15.1	0.68	4.99
14.0-15.0	79.3	2.2	17.2	0.72	5.71
15.0-16.0	79.0	2.3	19.6	0.77	6.48
16.0-17.0	78.6	2.4	22.0	0.81	7.29
17.0-18.0	78.2	2.6	24.6	0.85	8.15
18.0-19.0	77.7	2.7	27.3	0.90	9.04
19.0-20.0	77.3	2.8	30.1	0.94	9.98
20.0-21.0	76.8	2.9	33.1	0.98	10.96
21.0-22.0	76.3	3.1	36.1	1.02	11.97
22.0-23.0	75.8	3.2	39.3	1.05	13.03
23.0-24.0	75.2	3.3	42.6	1.09	14.12
24.0-25.0	74.7	3.4	46.0	1.13	15.24
25.0-26.0	74.1	3.5	49.5	1.16	16.40
26.0-27.0	73.5	3.6	53.1	1.19	17.59
27.0-28.0	72.9	3.7	56.8	1.22	18.82
28.0-29.0	72.2	3.8	60.6	1.25	20.07
29.0-30.0	71.5	3.9	64.4	1.28	21.35
30.0-31.0	70.9	3.9	68.4	1.31	22.65
31.0-32.0	70.1	4.0	72.4	1.33	23.99
32.0-33.0	69.4	4.1	76.5	1.36	25.34
33.0-34.0	68.7	4.2	80.6	1.38	26.72
34.0-35.0	67.9	4.2	84.9	1.40	28.12
35.0-36.0	67.2	4.3	89.1	1.42	29.53

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

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 _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	66.4	4.3	93.5	1.44	30.97
37.0-38.0	65.6	4.4	97.8	1.45	32.42
38.0-39.0	64.8	4.4	102.3	1.47	33.89
39.0-40.0	64.0	4.5	106.7	1.48	35.37
40.0-41.0	63.1	4.5	111.2	1.49	36.86
41.0-42.0	62.3	4.5	115.8	1.50	38.36
42.0-43.0	61.4	4.6	120.3	1.51	39.87
43.0-44.0	60.6	4.6	124.9	1.51	41.38
44.0-45.0	59.7	4.6	129.5	1.52	42.90
45.0-46.0	58.8	4.6	134.1	1.52	44.42
46.0-47.0	57.8	4.6	138.7	1.52	45.95
47.0-48.0	56.9	4.6	143.3	1.52	47.47
48.0-49.0	55.9	4.6	147.9	1.52	48.99
49.0-50.0	55.0	4.6	152.4	1.52	50.51
50.0-51.0	54.1	4.6	157.0	1.52	52.03
51.0-52.0	53.1	4.6	161.6	1.51	53.54
52.0-53.0	52.1	4.5	166.1	1.50	55.04
53.0-54.0	51.1	4.5	170.6	1.49	56.53
54.0-55.0	50.1	4.5	175.1	1.48	58.02
55.0-56.0	49.1	4.4	179.5	1.47	59.49
56.0-57.0	48.1	4.4	183.9	1.46	60.94
57.0-58.0	47.1	4.4	188.3	1.44	62.39
58.0-59.0	46.1	4.3	192.6	1.43	63.82
59.0-60.0	45.1	4.3	196.9	1.41	65.23
60.0-61.0	44.1	4.2	201.1	1.40	66.63
61.0-62.0	43.1	4.2	205.2	1.38	68.00
62.0-63.0	42.1	4.1	209.3	1.36	69.36
63.0-64.0	41.1	4.0	213.4	1.34	70.70
64.0-65.0	40.1	4.0	217.3	1.32	72.02
65.0-66.0	39.1	3.9	221.2	1.29	73.31
66.0-67.0	38.1	3.8	225.1	1.27	74.58
67.0-68.0	37.2	3.8	228.8	1.25	75.83
68.0-69.0	36.2	3.7	232.5	1.22	77.05
69.0-70.0	35.2	3.6	236.1	1.20	78.25
70.0-71.0	34.3	3.5	239.7	1.17	79.42
71.0-72.0	33.4	3.5	243.2	1.15	80.57

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

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 _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	32.5	3.4	246.6	1.13	81.70
73.0-74.0	31.6	3.3	249.9	1.10	82.80
74.0-75.0	30.8	3.3	253.1	1.08	83.88
75.0-76.0	30.0	3.2	256.3	1.06	84.94
76.0-77.0	29.2	3.1	259.4	1.03	85.97
77.0-78.0	28.5	3.0	262.5	1.01	86.98
78.0-79.0	27.8	3.0	265.5	0.99	87.97
79.0-80.0	27.0	2.9	268.4	0.97	88.93
80.0-81.0	26.3	2.8	271.2	0.94	89.87
81.0-82.0	25.5	2.8	274.0	0.92	90.79
82.0-83.0	24.6	2.7	276.7	0.89	91.68
83.0-84.0	23.6	2.6	279.2	0.85	92.53
84.0-85.0	22.5	2.5	281.7	0.81	93.34
85.0-86.0	21.2	2.3	284.0	0.77	94.11
86.0-87.0	19.9	2.2	286.2	0.72	94.83
87.0-88.0	18.5	2.0	288.2	0.67	95.50
88.0-89.0	17.3	1.9	290.1	0.63	96.13
89.0-90.0	16.2	1.8	291.9	0.59	96.72
90.0-91.0	15.0	1.6	293.5	0.55	97.26
91.0-92.0	13.5	1.5	295.0	0.49	97.75
92.0-93.0	11.3	1.2	296.2	0.41	98.16
93.0-94.0	8.8	1.0	297.2	0.32	98.48
94.0-95.0	6.5	0.7	297.9	0.24	98.72
95.0-96.0	4.6	0.5	298.4	0.17	98.88
96.0-97.0	3.0	0.3	298.8	0.11	98.99
97.0-98.0	1.8	0.2	299.0	0.07	99.06
98.0-99.0	1.0	0.1	299.1	0.04	99.10
99.0-100.0	0.6	0.1	299.1	0.02	99.12
100.0-101.0	0.4	0.0	299.2	0.01	99.13
101.0-102.0	0.3	0.0	299.2	0.01	99.15
102.0-103.0	0.3	0.0	299.3	0.01	99.16
103.0-104.0	0.3	0.0	299.3	0.01	99.17
104.0-105.0	0.4	0.0	299.3	0.01	99.18
105.0-106.0	0.4	0.0	299.4	0.01	99.20
106.0-107.0	0.4	0.0	299.4	0.01	99.21
107.0-108.0	0.4	0.0	299.4	0.01	99.22

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

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 _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	0.4	0.0	299.5	0.01	99.24
109.0-110.0	0.4	0.0	299.5	0.01	99.25
110.0-111.0	0.4	0.0	299.6	0.01	99.26
111.0-112.0	0.4	0.0	299.6	0.01	99.28
112.0-113.0	0.4	0.0	299.6	0.01	99.29
113.0-114.0	0.4	0.0	299.7	0.01	99.30
114.0-115.0	0.4	0.0	299.7	0.01	99.32
115.0-116.0	0.4	0.0	299.8	0.01	99.33
116.0-117.0	0.4	0.0	299.8	0.01	99.35
117.0-118.0	0.4	0.0	299.9	0.01	99.36
118.0-119.0	0.4	0.0	299.9	0.01	99.37
119.0-120.0	0.5	0.0	299.9	0.01	99.39
120.0-121.0	0.5	0.0	300.0	0.01	99.40
121.0-122.0	0.5	0.0	300.0	0.01	99.42
122.0-123.0	0.5	0.0	300.1	0.01	99.43
123.0-124.0	0.5	0.0	300.1	0.01	99.45
124.0-125.0	0.5	0.0	300.2	0.02	99.46
125.0-126.0	0.5	0.0	300.2	0.01	99.48
126.0-127.0	0.5	0.0	300.3	0.02	99.49
127.0-128.0	0.5	0.0	300.3	0.01	99.51
128.0-129.0	0.5	0.0	300.4	0.01	99.52
129.0-130.0	0.5	0.0	300.4	0.02	99.54
130.0-131.0	0.5	0.0	300.4	0.02	99.55
131.0-132.0	0.5	0.0	300.5	0.01	99.57
132.0-133.0	0.5	0.0	300.5	0.01	99.58
133.0-134.0	0.6	0.0	300.6	0.01	99.60
134.0-135.0	0.6	0.0	300.6	0.01	99.61
135.0-136.0	0.6	0.0	300.7	0.01	99.63
136.0-137.0	0.6	0.0	300.7	0.01	99.64
137.0-138.0	0.6	0.0	300.7	0.01	99.65
138.0-139.0	0.6	0.0	300.8	0.01	99.67
139.0-140.0	0.6	0.0	300.8	0.01	99.68
140.0-141.0	0.6	0.0	300.9	0.01	99.70
141.0-142.0	0.6	0.0	300.9	0.01	99.71
142.0-143.0	0.6	0.0	301.0	0.01	99.72
143.0-144.0	0.6	0.0	301.0	0.01	99.74

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

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 _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	0.6	0.0	301.0	0.01	99.75
145.0-146.0	0.6	0.0	301.1	0.01	99.76
146.0-147.0	0.6	0.0	301.1	0.01	99.77
147.0-148.0	0.6	0.0	301.2	0.01	99.79
148.0-149.0	0.6	0.0	301.2	0.01	99.80
149.0-150.0	0.6	0.0	301.2	0.01	99.81
150.0-151.0	0.6	0.0	301.3	0.01	99.82
151.0-152.0	0.6	0.0	301.3	0.01	99.83
152.0-153.0	0.6	0.0	301.3	0.01	99.84
153.0-154.0	0.7	0.0	301.4	0.01	99.85
154.0-155.0	0.7	0.0	301.4	0.01	99.87
155.0-156.0	0.7	0.0	301.4	0.01	99.88
156.0-157.0	0.7	0.0	301.4	0.01	99.88
157.0-158.0	0.7	0.0	301.5	0.01	99.89
158.0-159.0	0.7	0.0	301.5	0.01	99.90
159.0-160.0	0.7	0.0	301.5	0.01	99.91
160.0-161.0	0.7	0.0	301.6	0.01	99.92
161.0-162.0	0.7	0.0	301.6	0.01	99.93
162.0-163.0	0.7	0.0	301.6	0.01	99.94
163.0-164.0	0.7	0.0	301.6	0.01	99.94
164.0-165.0	0.7	0.0	301.6	0.01	99.95
165.0-166.0	0.7	0.0	301.7	0.01	99.96
166.0-167.0	0.7	0.0	301.7	0.01	99.96
167.0-168.0	0.7	0.0	301.7	0.01	99.97
168.0-169.0	0.7	0.0	301.7	0.01	99.97
169.0-170.0	0.7	0.0	301.7	0.00	99.98
170.0-171.0	0.7	0.0	301.7	0.00	99.98
171.0-172.0	0.7	0.0	301.7	0.00	99.99
172.0-173.0	0.7	0.0	301.8	0.00	99.99
173.0-174.0	0.7	0.0	301.8	0.00	99.99
174.0-175.0	0.7	0.0	301.8	0.00	99.99
175.0-176.0	0.7	0.0	301.8	0.00	100.00
176.0-177.0	0.7	0.0	301.8	0.00	100.00
177.0-178.0	0.7	0.0	301.8	0.00	100.00
178.0-179.0	0.7	0.0	301.8	0.00	100.00
179.0-180.0	0.7	0.0	301.8	0.00	100.00

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

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