

Report No.:

Test Time: 2020/11/26 12:56

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: FOB RIBBON

Luminaire Description: DC24V 360LEDS 10MM 14W/M

Lamp Catalog: 2700K RA>90

Number of Lamps: 360

Luminous Width (mm): 10

Voltage: 24.0 V

Power: 14.34 W

Lamp Description: FOB 2700K

Luminous Length (mm): 1000

Luminous Height (mm): 2

Current: 0.597 A

Power Factor: 1.000

## Photometric Results

CIE Class: Direct

Measurement Flux: 871.4 lm

Downward Ratio: 96%

Horizontal Diffuse Angle(10%,50%): H159.7,H113.1

Vertical Diffuse Angle(10%,50%): V197.9,V158.3

Luminaire Efficacy Rating (LER): 61

Max. Intensity: 231.15 cd

Total Rated Lamp Lumens: 871.4 lm

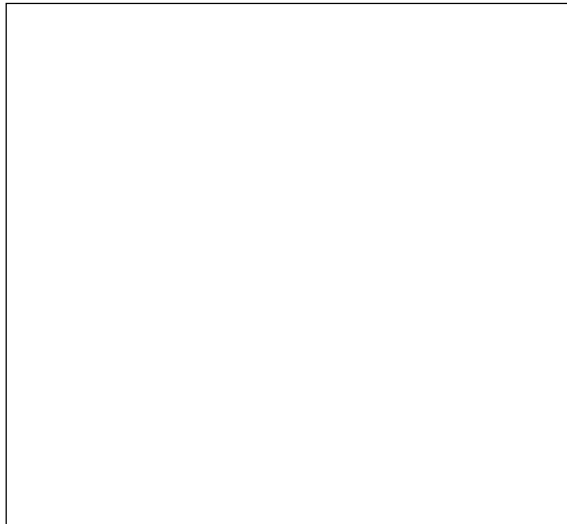
Efficiency: 100%

Upward Ratio: 4%

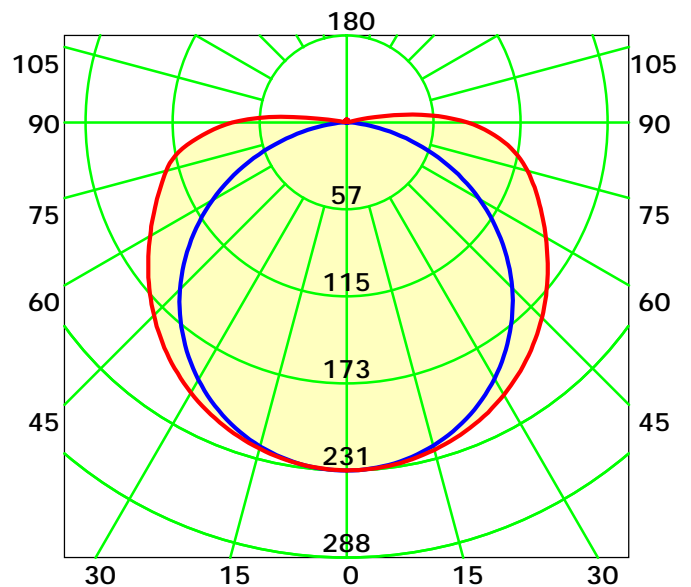
Central Intensity: 231.1 cd

Pos of Max. Intensity: H150 V0

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 135.7° 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

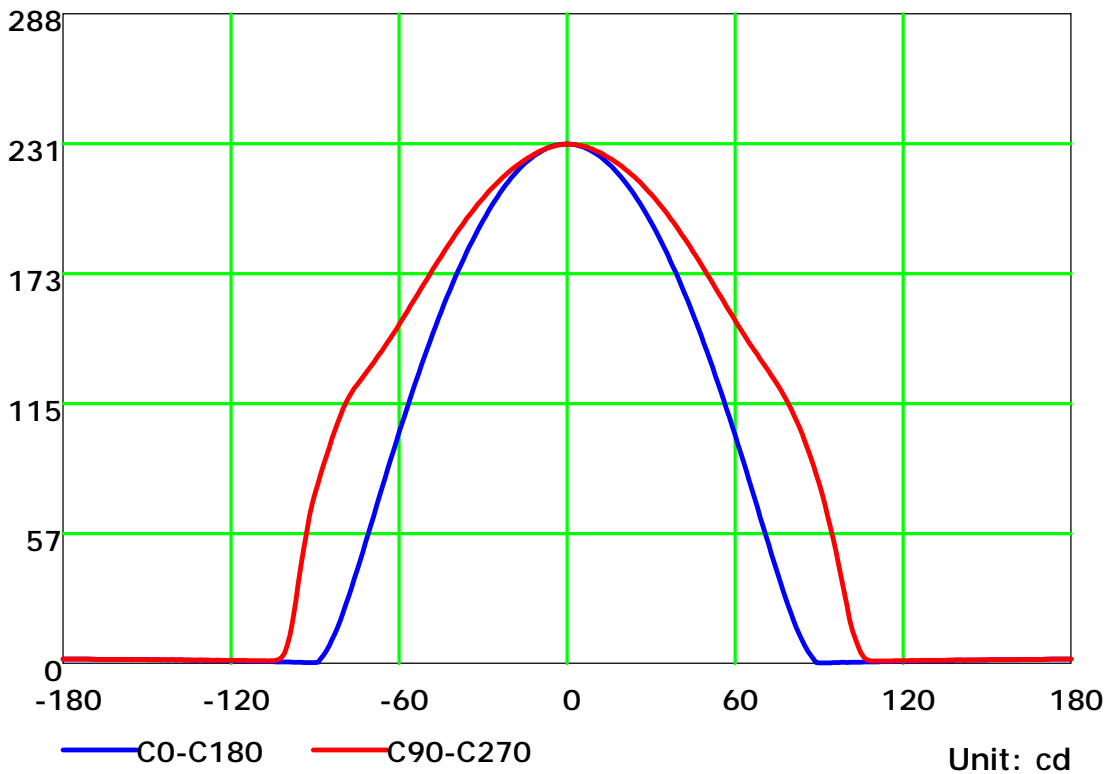
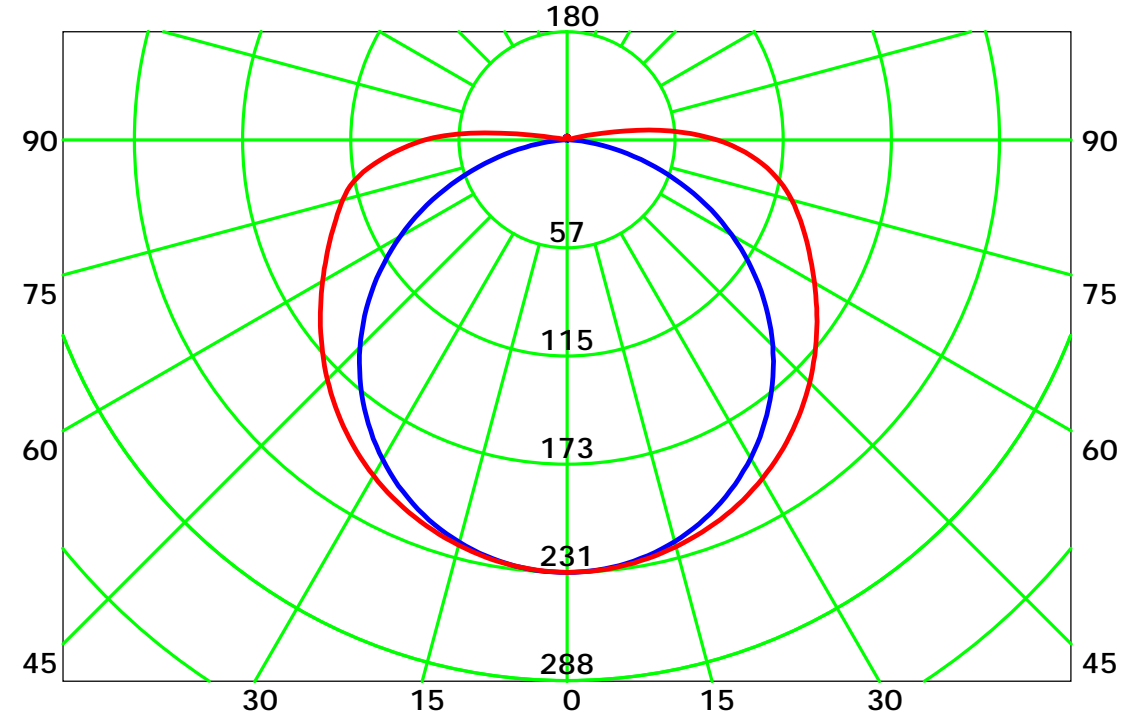
Distance: 9.028 m

Humidity: 60%

Inspector:



## Luminous Intensity Distribution Curve

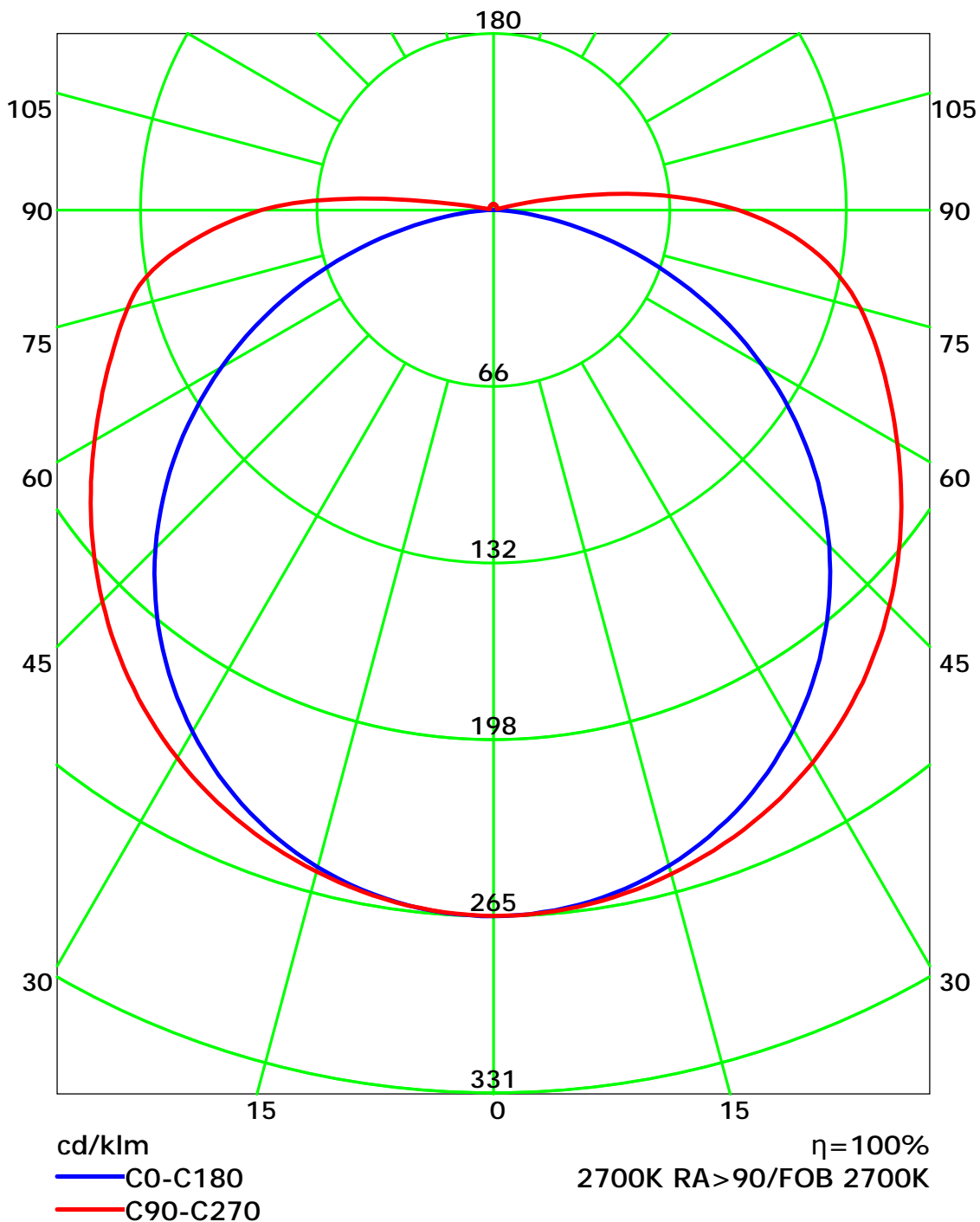


C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: Kerr

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:

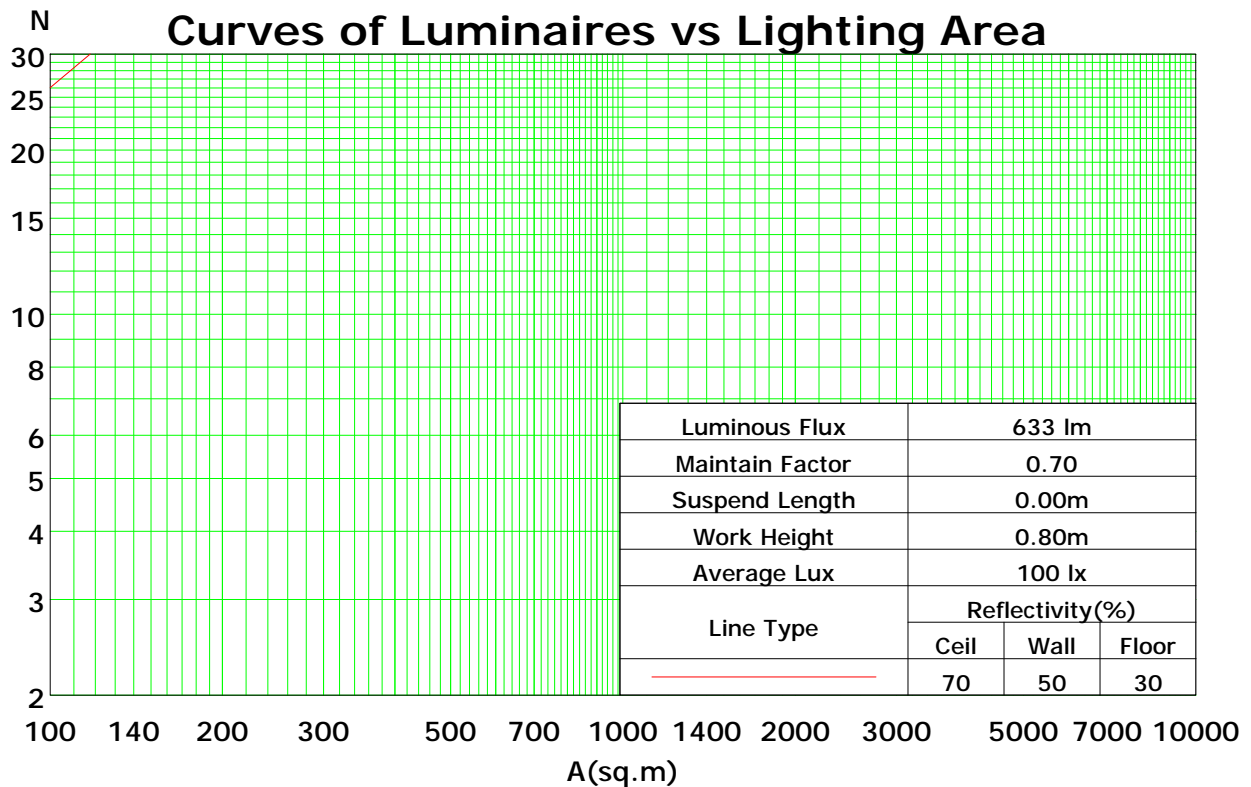
## Coefficients Of Utilization - Zonal Cavity Method

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	103	103	103	98	98	98	96
1	105	99	93	88	101	96	91	86	91	87	83	86	83	79	82	79	76	74
2	94	84	76	69	91	82	74	68	78	71	66	74	68	64	70	66	62	59
3	85	73	64	56	82	71	63	56	67	60	54	64	58	53	61	56	51	49
4	77	64	54	47	75	63	53	46	59	52	45	57	50	44	54	48	43	41
5	71	57	47	40	68	56	46	40	53	45	39	50	43	38	48	42	37	35
6	65	51	42	35	63	50	41	34	48	40	34	46	38	33	44	37	32	30
7	61	46	37	30	58	45	36	30	43	35	30	41	34	29	40	33	29	26
8	56	42	33	27	54	41	33	27	39	32	26	38	31	26	36	30	25	23
9	53	38	30	24	51	38	30	24	36	29	24	35	28	23	34	27	23	21
10	49	35	27	22	48	35	27	22	33	26	21	32	26	21	31	25	21	19

Spacing Criteria (0-180): 1.26

Spacing Criteria (90-270): 1.34

Spacing Criteria (Diagonal): 1.44



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

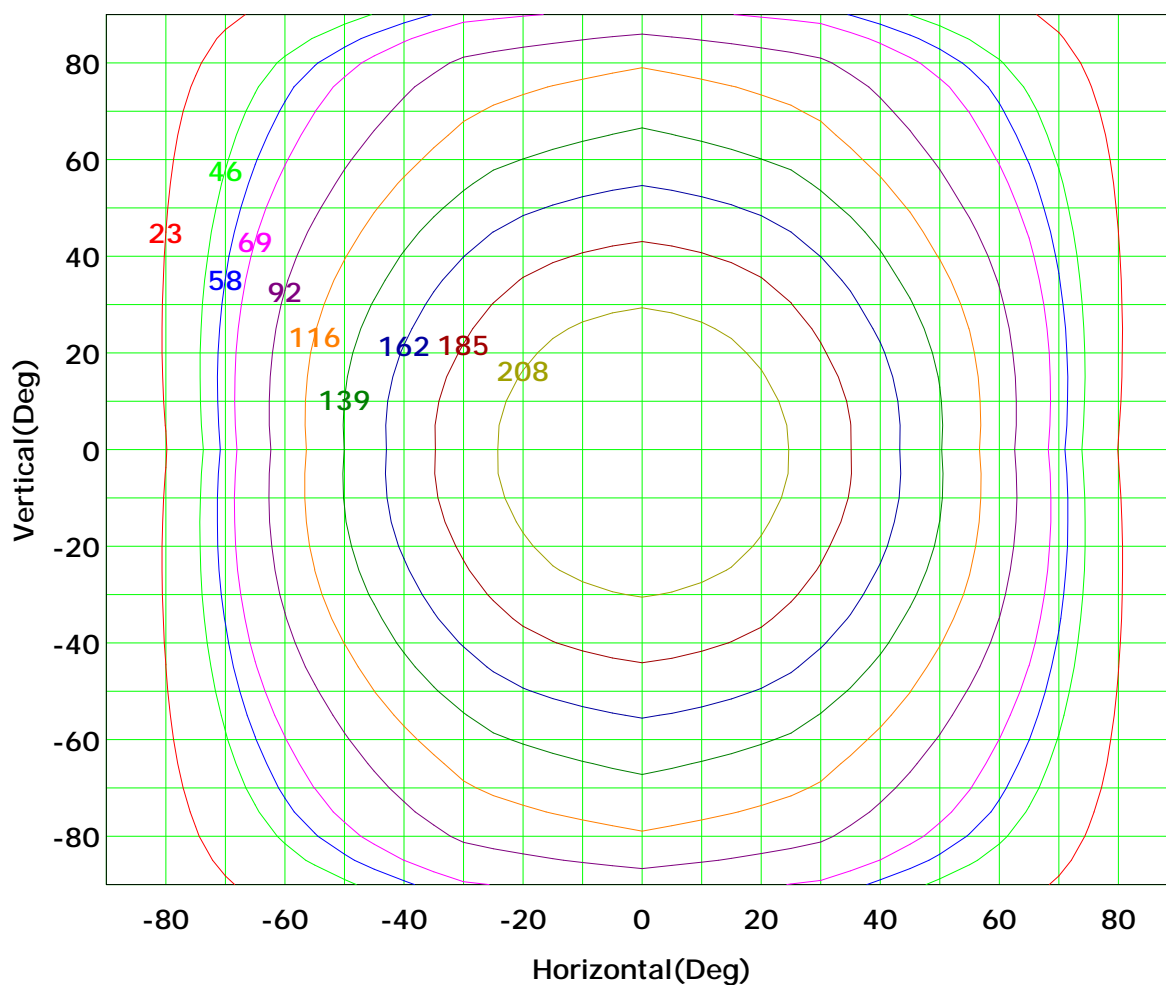
Distance: 9.028 m

Humidity: 60%

Inspector:



## Isocandela (rectangle)



Imax (100%): 231 cd

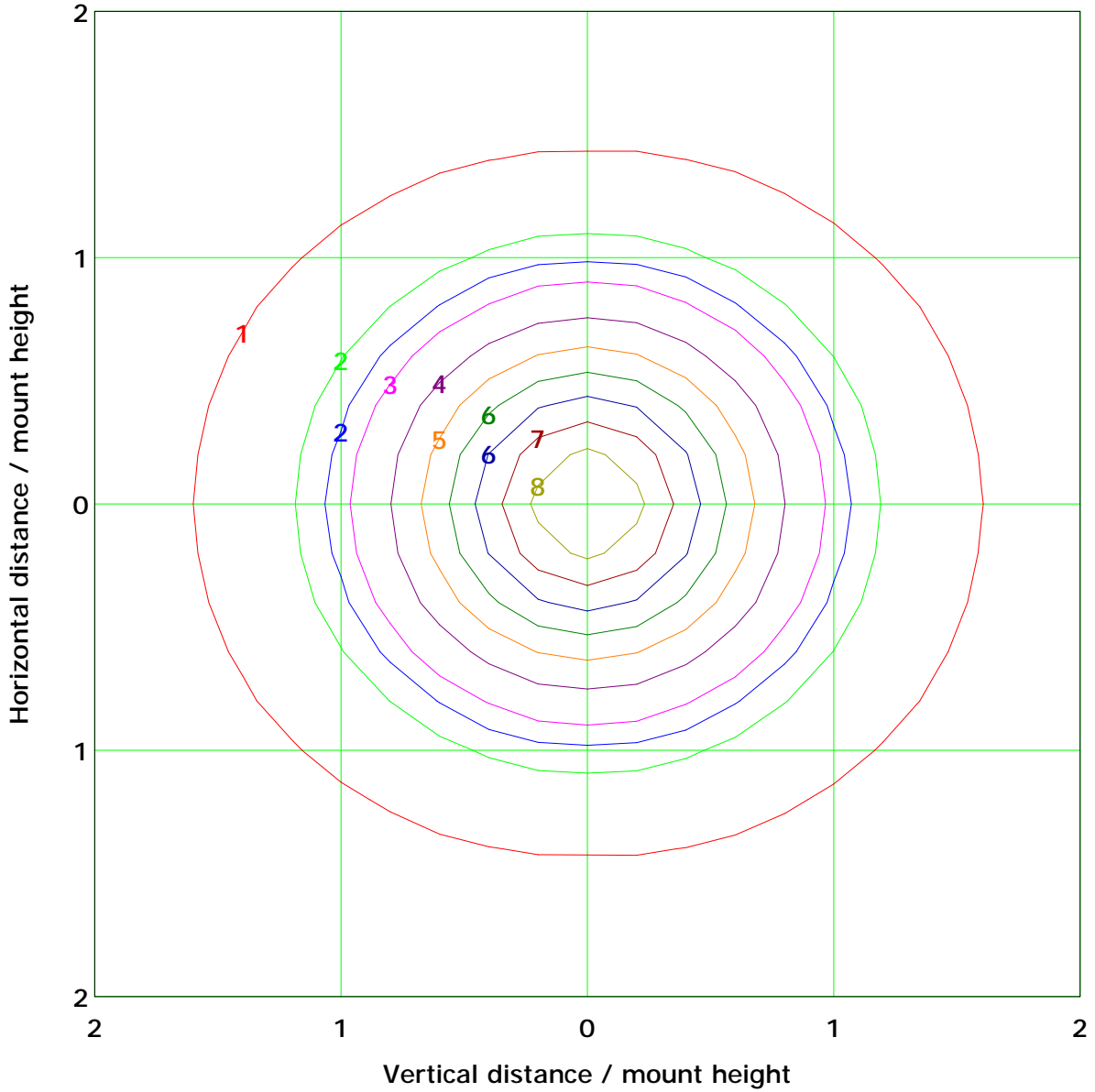
— ( 10%):	23 cd	— ( 20%):	46 cd
— ( 25%):	58 cd	— ( 30%):	69 cd
— ( 40%):	92 cd	— ( 50%):	116 cd
— ( 60%):	139 cd	— ( 70%):	162 cd
— ( 80%):	185 cd	— ( 90%):	208 cd

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%): 9.2 lx	
( 10%):	0.9 lx	( 20%):	1.8 lx
( 25%):	2.3 lx	( 30%):	2.8 lx
( 40%):	3.7 lx	( 50%):	4.6 lx
( 60%):	5.5 lx	( 70%):	6.5 lx
( 80%):	7.4 lx	( 90%):	8.3 lx

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

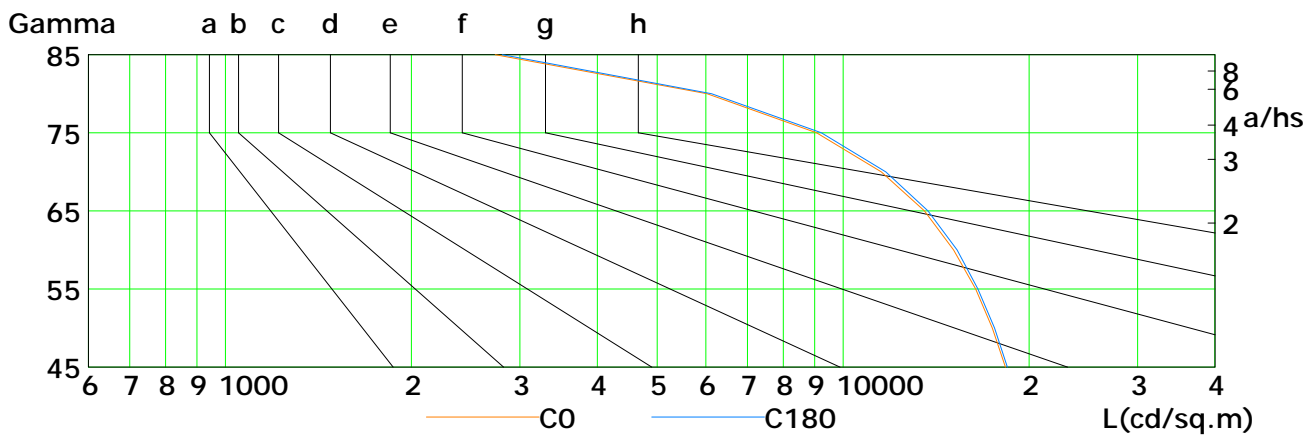
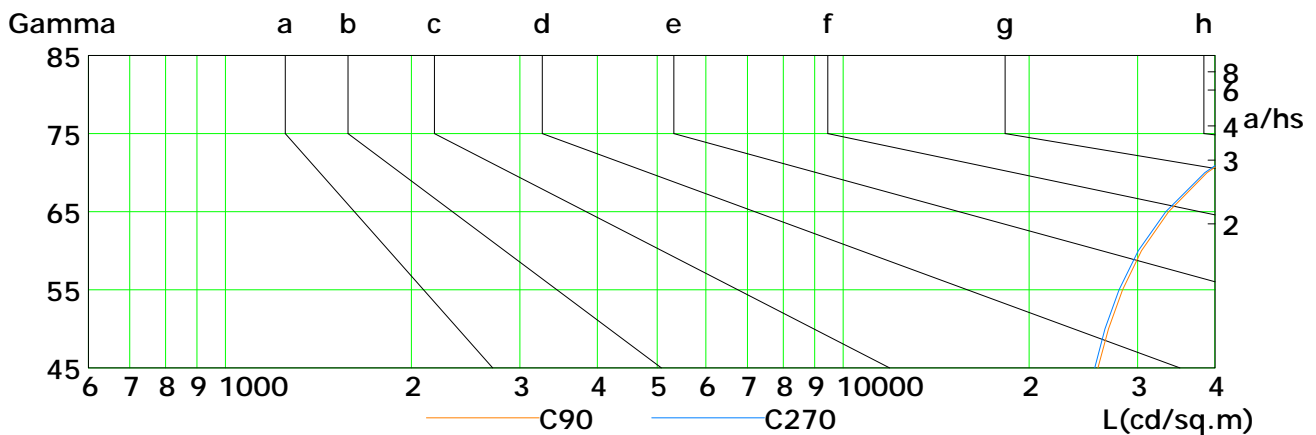
Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:



## Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
		2000	1000	500	<=300				
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



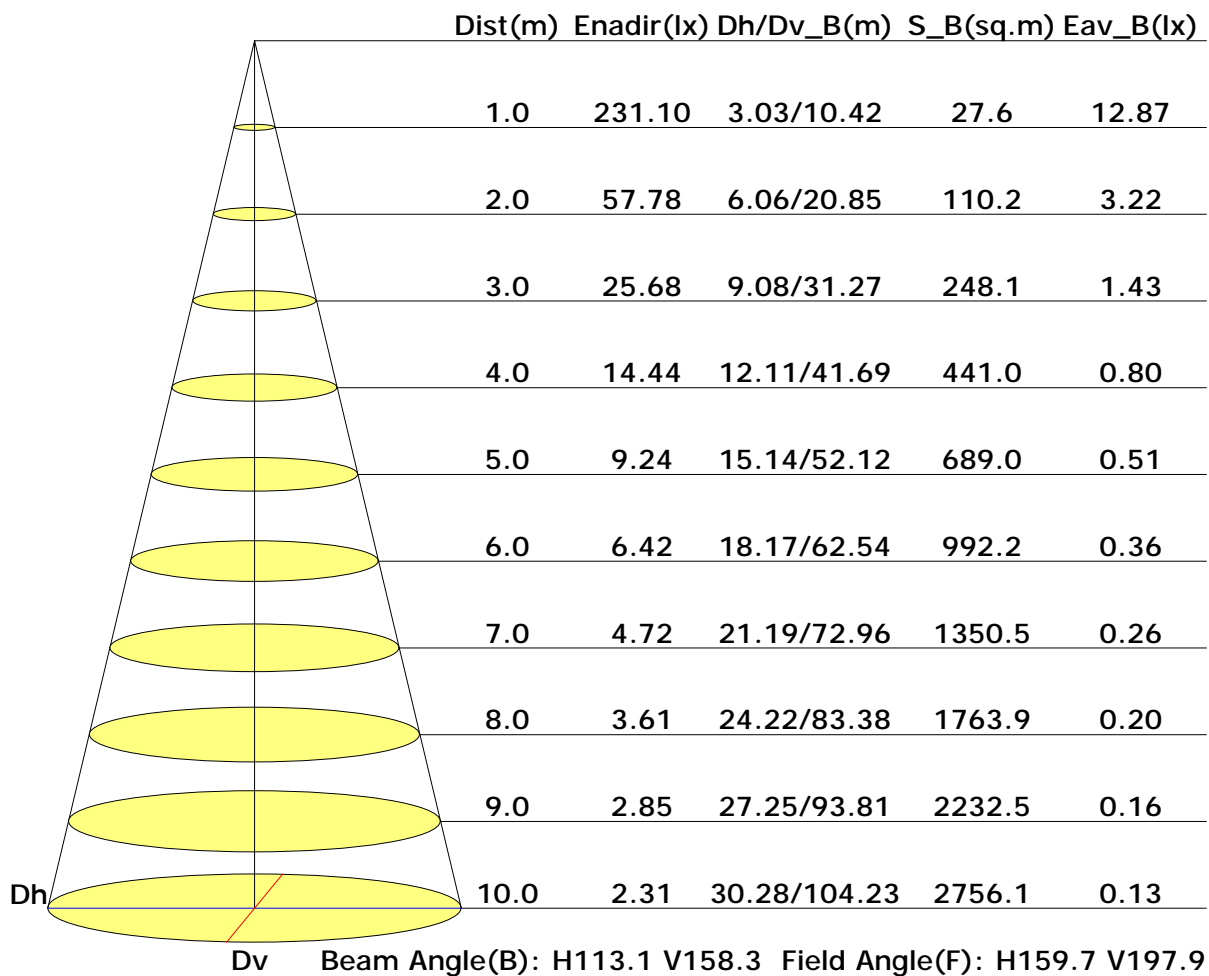
L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	18326	17440	16387	15107	13549	11531	9057	6025	2734
C90	25871	26897	28337	30433	33662	38866	47701	64475	110748
C180	18455	17583	16543	15295	13723	11722	9221	6128	2807
C270	25569	26560	27988	30070	33301	38514	47593	64521	107798

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



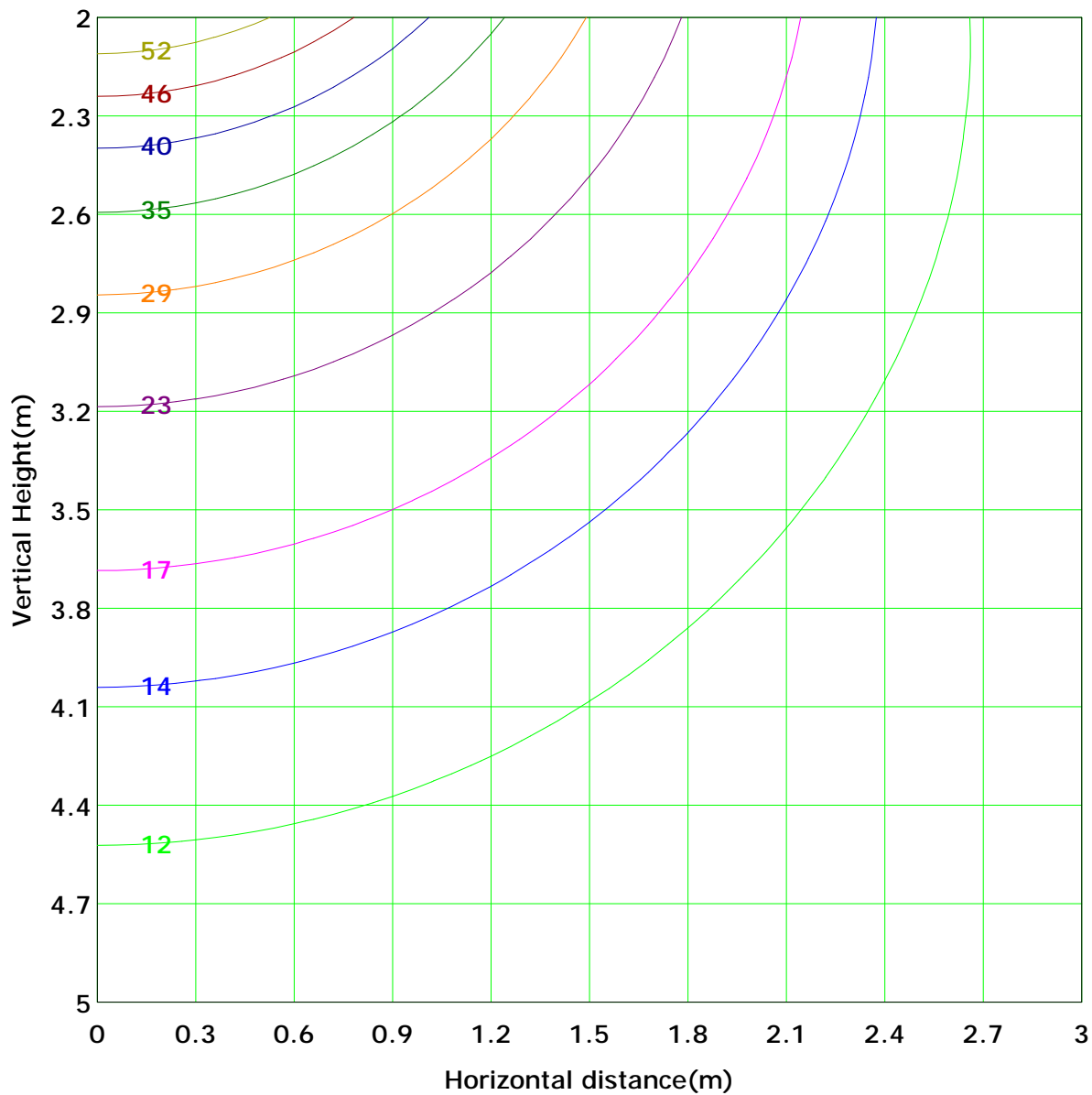
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: Kerr

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





### Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 57.8 lx
( 10%): 5.8 lx	( 20%): 11.6 lx	( 30%): 17.3 lx
( 25%): 14.4 lx	( 40%): 23.1 lx	( 50%): 28.9 lx
( 60%): 34.7 lx	( 70%): 40.4 lx	( 90%): 52.0 lx
( 80%): 46.2 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

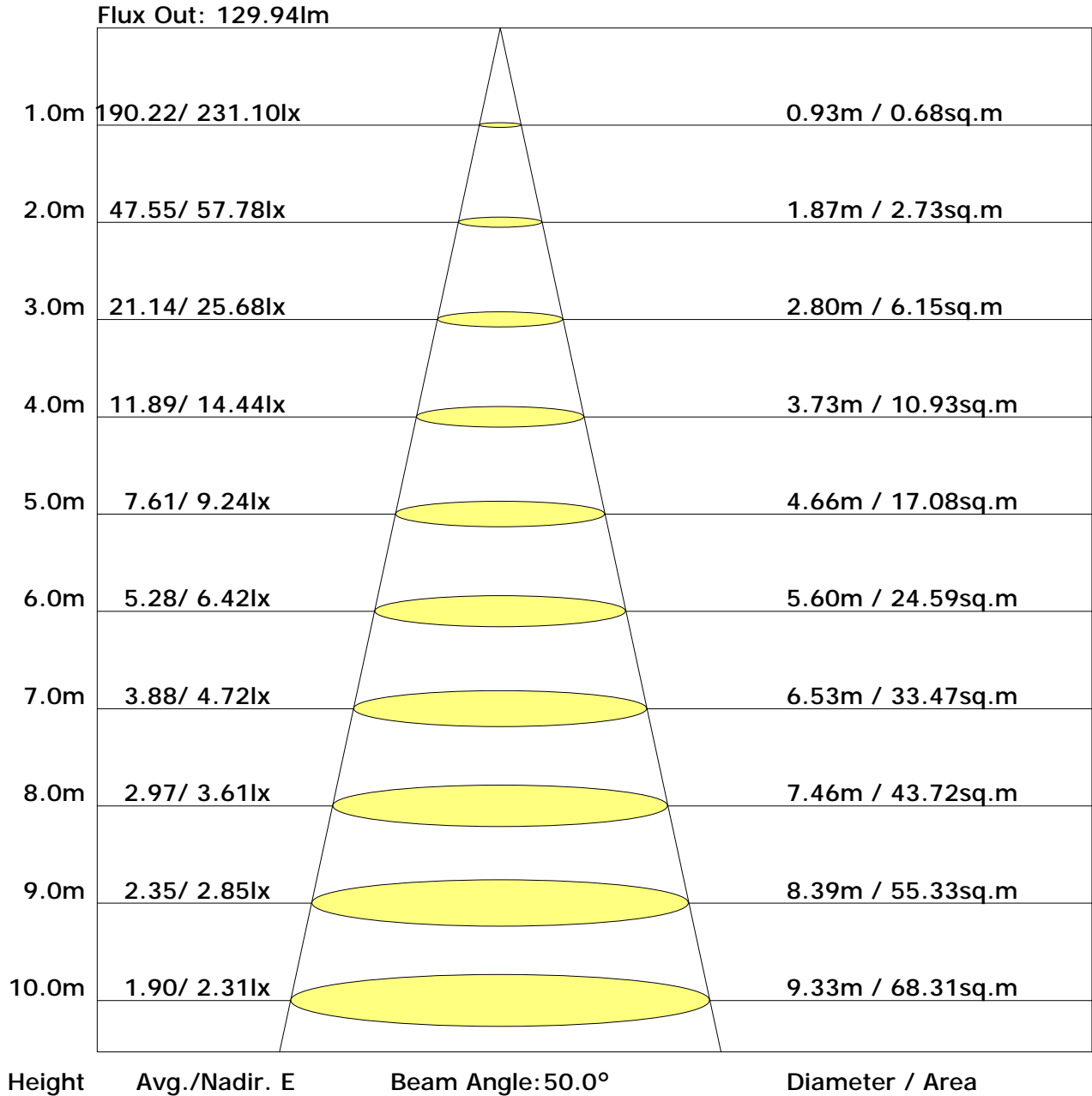
		Vertical plane																				
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)
Horizontal plane	-90	0.0	0.1	0.4	0.8	1.3	1.8	2.3	2.6	2.8	2.8	2.6	2.3	2.3	1.8	1.3	0.8	0.4	0.1	0.0	24.5	24.2
	-80	0.0	0.2	0.6	1.1	1.7	2.4	3.0	3.4	3.7	3.7	3.4	3.0	3.0	2.4	1.7	1.1	0.6	0.2	0.0	32.3	32.2
	-70	0.0	0.2	0.7	1.3	2.0	2.8	3.5	3.9	4.2	4.2	3.9	3.5	3.5	2.8	2.0	1.3	0.7	0.2	0.0	37.3	37.2
	-60	0.0	0.3	0.8	1.5	2.3	3.2	4.0	4.5	4.8	4.8	4.5	4.0	4.0	3.2	2.3	1.5	0.8	0.3	0.0	42.7	42.6
	-50	0.0	0.3	0.9	1.7	2.6	3.6	4.5	5.1	5.4	5.4	5.1	4.5	4.5	3.6	2.6	1.7	0.9	0.3	0.0	48.1	48.1
	-40	0.0	0.3	1.0	1.9	2.9	4.0	4.9	5.6	6.0	6.0	6.0	5.6	4.9	4.0	2.9	1.9	1.0	0.3	0.0	53.1	53.0
	-30	0.0	0.4	1.0	2.0	3.1	4.3	5.3	6.0	6.4	6.4	6.4	6.0	5.3	4.3	3.1	2.0	1.0	0.4	0.0	57.1	57.1
	-20	0.0	0.4	1.1	2.1	3.3	4.5	5.5	6.3	6.7	6.7	6.7	6.3	5.5	4.5	3.3	2.1	1.1	0.4	0.0	60.0	59.9
	-10	0.0	0.4	1.1	2.1	3.4	4.6	5.7	6.5	6.9	6.9	6.9	6.5	5.7	4.6	3.4	2.1	1.1	0.3	0.0	61.4	61.3
	0	0.0	0.4	1.1	2.2	3.4	4.6	5.7	6.5	6.9	6.9	6.9	6.5	5.7	4.6	3.4	2.1	1.1	0.3	0.0	61.4	61.4
	10	0.0	0.4	1.1	2.1	3.3	4.5	5.6	6.4	6.8	6.8	6.8	6.3	5.6	4.5	3.3	2.1	1.1	0.4	0.0	60.2	60.1
	20	0.0	0.4	1.1	2.0	3.2	4.3	5.3	6.1	6.5	6.5	6.5	6.1	5.3	4.3	3.1	2.0	1.0	0.4	0.0	57.5	57.5
	30	0.0	0.3	1.0	1.9	2.9	4.0	5.0	5.7	6.0	6.0	6.0	5.7	4.9	4.0	2.9	1.9	1.0	0.3	0.0	53.6	53.6
	40	0.0	0.3	0.9	1.7	2.7	3.6	4.5	5.1	5.5	5.5	5.1	4.5	3.6	2.6	1.7	0.9	0.3	0.0	48.7	48.6	
	50	0.0	0.3	0.8	1.5	2.3	3.2	4.0	4.5	4.9	4.9	4.5	4.0	3.2	2.3	1.5	0.8	0.3	0.0	43.2	43.1	
	60	0.0	0.2	0.7	1.3	2.0	2.8	3.5	4.0	4.3	4.3	4.0	3.5	2.8	2.0	1.3	0.7	0.2	0.0	37.7	37.6	
	70	0.0	0.2	0.6	1.1	1.7	2.4	3.0	3.4	3.7	3.7	3.4	3.0	2.4	1.7	1.1	0.6	0.2	0.0	32.4	32.3	
	80	0.0	0.2	0.4	0.8	1.3	1.9	2.4	2.7	2.9	2.9	2.7	2.4	1.9	1.3	0.8	0.4	0.2	0.0	25.2	25.0	
90	0.6	5.2	15.2	29.2	45.6	62.5	77.5	88.3	94.5	94.5	88.2	77.4	62.4	45.5	29.1	15.1	5.2	0.6	837			
	0.1	4.8	15.2	29.2	45.6	62.5	77.5	88.3	94.5	94.5	88.2	77.4	62.4	45.5	29.1	15.1	4.8	0.0		835		

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	22.2	23.9	22.6	24.3	24.7	23.3	24.9	23.7	25.3	25.7
3H	24.0	25.6	24.5	26.0	26.4	26.0	27.5	26.4	27.9	28.3
4H	24.7	26.2	25.2	26.6	27.1	27.3	28.7	27.7	29.2	29.6
6H	25.2	26.6	25.7	27.0	27.5	28.6	30.0	29.1	30.4	30.9
8H	25.4	26.7	25.9	27.1	27.6	29.3	30.6	29.7	31.0	31.5
12H	25.5	26.7	25.9	27.2	27.7	29.9	31.2	30.4	31.6	32.1
X=4H Y=2H	23.1	24.6	23.6	25.0	25.4	23.9	25.4	24.4	25.8	26.3
3H	25.2	26.5	25.7	27.0	27.5	26.9	28.2	27.4	28.6	29.1
4H	26.1	27.3	26.6	27.8	28.3	28.4	29.6	28.9	30.1	30.6
6H	26.9	27.9	27.4	28.4	28.9	30.0	31.0	30.5	31.5	32.0
8H	27.1	28.1	27.6	28.6	29.1	30.7	31.7	31.2	32.2	32.7
12H	27.3	28.2	27.8	28.7	29.2	31.4	32.3	32.0	32.9	33.4
X=8H Y=4H	27.0	27.9	27.5	28.5	29.0	28.9	29.8	29.4	30.3	30.9
6H	28.0	28.8	28.5	29.4	29.9	30.6	31.5	31.2	32.0	32.6
8H	28.4	29.2	29.0	29.7	30.3	31.5	32.3	32.1	32.9	33.4
12H	28.8	29.4	29.3	30.0	30.6	32.5	33.2	33.0	33.7	34.3
X=12H Y=4H	27.2	28.1	27.7	28.6	29.2	28.9	29.8	29.4	30.3	30.9
6H	28.4	29.1	28.9	29.7	30.3	30.8	31.5	31.3	32.1	32.7
8H	28.9	29.6	29.5	30.2	30.8	31.8	32.5	32.3	33.0	33.6

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	0.52	0.60	0.68	0.73	0.80	0.85	0.89	0.94	0.97	
	0.30		0.44	0.52	0.60	0.65	0.73	0.79	0.83	0.89	0.93	
	0.20		0.38	0.46	0.53	0.59	0.67	0.73	0.77	0.84	0.89	
0.50	0.50	0.20	0.51	0.58	0.65	0.70	0.76	0.81	0.85	0.89	0.92	
	0.30		0.43	0.50	0.58	0.63	0.70	0.75	0.79	0.85	0.89	
	0.20		0.38	0.45	0.52	0.57	0.65	0.71	0.75	0.81	0.85	
0.30	0.50	0.20	0.49	0.56	0.62	0.66	0.73	0.77	0.80	0.85	0.88	
	0.30		0.42	0.49	0.56	0.61	0.68	0.73	0.76	0.81	0.85	
	0.20		0.37	0.44	0.51	0.56	0.63	0.68	0.72	0.78	0.82	
0.00	0.00	0.00	0.35	0.41	0.47	0.52	0.59	0.64	0.68	0.73	0.76	
<p>Rating: 14W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												



## 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	0.49	0.42	0.34	0.28	
	0.30		0.87	0.77	0.68	0.61	0.52	0.45	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	1.00	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	
<p>Rating: 14W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												



## 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	0.20	0.22	0.23	0.23	0.24	0.25	0.25	0.26	0.26
	0.30		0.13	0.15	0.16	0.17	0.19	0.20	0.21	0.22	0.23
	0.20		0.08	0.09	0.11	0.12	0.14	0.15	0.17	0.18	0.20
0.50	0.50	0.20	0.20	0.21	0.22	0.23	0.23	0.24	0.24	0.25	0.25
	0.30		0.13	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22
	0.20		0.08	0.09	0.11	0.12	0.14	0.15	0.16	0.18	0.19
0.30	0.50	0.20	0.19	0.20	0.21	0.22	0.23	0.23	0.23	0.24	0.24
	0.30		0.13	0.14	0.15	0.16	0.18	0.19	0.19	0.20	0.21
	0.20		0.08	0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18
0.00	0.00	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
<p>Rating: 14W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											

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

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	231.0	0.2	0.2	0.03	0.03
1.0-2.0	230.9	0.7	0.9	0.08	0.10
2.0-3.0	230.8	1.1	2.0	0.13	0.23
3.0-4.0	230.6	1.5	3.5	0.18	0.41
4.0-5.0	230.3	2.0	5.5	0.23	0.63
5.0-6.0	230.0	2.4	7.9	0.28	0.91
6.0-7.0	229.5	2.8	10.8	0.33	1.24
7.0-8.0	229.1	3.3	14.1	0.38	1.61
8.0-9.0	228.5	3.7	17.8	0.43	2.04
9.0-10.0	227.9	4.1	21.9	0.47	2.51
10.0-11.0	227.2	4.5	26.4	0.52	3.03
11.0-12.0	226.5	5.0	31.4	0.57	3.60
12.0-13.0	225.7	5.4	36.7	0.61	4.22
13.0-14.0	224.8	5.8	42.5	0.66	4.88
14.0-15.0	223.9	6.1	48.6	0.71	5.58
15.0-16.0	222.9	6.5	55.2	0.75	6.33
16.0-17.0	221.9	6.9	62.1	0.79	7.12
17.0-18.0	220.8	7.3	69.4	0.84	7.96
18.0-19.0	219.6	7.6	77.0	0.88	8.84
19.0-20.0	218.4	8.0	85.0	0.92	9.75
20.0-21.0	217.1	8.3	93.3	0.96	10.71
21.0-22.0	215.8	8.7	102.0	1.00	11.71
22.0-23.0	214.4	9.0	111.0	1.03	12.74
23.0-24.0	213.0	9.3	120.3	1.07	13.81
24.0-25.0	211.5	9.6	129.9	1.10	14.91
25.0-26.0	209.9	9.9	139.9	1.14	16.05
26.0-27.0	208.3	10.2	150.0	1.17	17.22
27.0-28.0	206.7	10.5	160.5	1.20	18.42
28.0-29.0	205.0	10.7	171.2	1.23	19.65
29.0-30.0	203.2	11.0	182.2	1.26	20.91
30.0-31.0	201.4	11.2	193.4	1.29	22.20
31.0-32.0	199.5	11.4	204.8	1.31	23.51
32.0-33.0	197.5	11.6	216.5	1.34	24.84
33.0-34.0	195.6	11.8	228.3	1.36	26.20
34.0-35.0	193.5	12.0	240.3	1.38	27.58
35.0-36.0	191.5	12.2	252.5	1.40	28.98

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 <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	189.3	12.4	264.9	1.42	30.40
37.0-38.0	187.2	12.5	277.4	1.43	31.83
38.0-39.0	185.0	12.6	290.0	1.45	33.28
39.0-40.0	182.7	12.7	302.8	1.46	34.74
40.0-41.0	180.4	12.8	315.6	1.47	36.22
41.0-42.0	178.0	12.9	328.5	1.48	37.70
42.0-43.0	175.7	13.0	341.6	1.49	39.20
43.0-44.0	173.2	13.1	354.6	1.50	40.70
44.0-45.0	170.7	13.1	367.8	1.51	42.20
45.0-46.0	168.3	13.2	380.9	1.51	43.71
46.0-47.0	165.7	13.2	394.1	1.51	45.23
47.0-48.0	163.1	13.2	407.3	1.51	46.74
48.0-49.0	160.5	13.2	420.5	1.51	48.25
49.0-50.0	157.8	13.2	433.6	1.51	49.76
50.0-51.0	155.2	13.1	446.7	1.51	51.27
51.0-52.0	152.5	13.1	459.8	1.50	52.77
52.0-53.0	149.7	13.0	472.9	1.50	54.26
53.0-54.0	147.0	13.0	485.8	1.49	55.75
54.0-55.0	144.2	12.9	498.7	1.48	57.23
55.0-56.0	141.5	12.8	511.5	1.47	58.70
56.0-57.0	138.7	12.7	524.2	1.46	60.15
57.0-58.0	135.9	12.6	536.7	1.44	61.59
58.0-59.0	133.1	12.4	549.2	1.43	63.02
59.0-60.0	130.3	12.3	561.5	1.41	64.43
60.0-61.0	127.5	12.2	573.6	1.40	65.83
61.0-62.0	124.7	12.0	585.7	1.38	67.21
62.0-63.0	121.9	11.9	597.5	1.36	68.57
63.0-64.0	119.1	11.7	609.2	1.34	69.91
64.0-65.0	116.3	11.5	620.7	1.32	71.23
65.0-66.0	113.6	11.3	632.0	1.30	72.53
66.0-67.0	110.8	11.1	643.2	1.28	73.81
67.0-68.0	108.2	11.0	654.1	1.26	75.07
68.0-69.0	105.5	10.8	664.9	1.24	76.30
69.0-70.0	102.8	10.6	675.5	1.21	77.51
70.0-71.0	100.2	10.4	685.8	1.19	78.70
71.0-72.0	97.7	10.2	696.0	1.17	79.87

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 <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	95.2	10.0	705.9	1.14	81.01
73.0-74.0	92.7	9.7	715.7	1.12	82.13
74.0-75.0	90.2	9.5	725.2	1.09	83.23
75.0-76.0	87.8	9.3	734.6	1.07	84.30
76.0-77.0	85.4	9.1	743.7	1.05	85.34
77.0-78.0	83.0	8.9	752.5	1.02	86.36
78.0-79.0	80.5	8.7	761.2	0.99	87.35
79.0-80.0	78.0	8.4	769.6	0.96	88.32
80.0-81.0	75.3	8.1	777.8	0.94	89.25
81.0-82.0	72.6	7.9	785.6	0.90	90.16
82.0-83.0	69.7	7.6	793.2	0.87	91.03
83.0-84.0	66.7	7.3	800.5	0.83	91.86
84.0-85.0	63.6	6.9	807.4	0.80	92.66
85.0-86.0	60.3	6.6	814.0	0.76	93.41
86.0-87.0	57.0	6.2	820.2	0.72	94.13
87.0-88.0	53.7	5.9	826.1	0.67	94.80
88.0-89.0	50.2	5.5	831.6	0.63	95.44
89.0-90.0	46.8	5.1	836.8	0.59	96.03
90.0-91.0	43.2	4.7	841.5	0.54	96.57
91.0-92.0	39.2	4.3	845.8	0.49	97.06
92.0-93.0	34.7	3.8	849.6	0.44	97.50
93.0-94.0	29.9	3.3	852.9	0.38	97.87
94.0-95.0	25.2	2.7	855.6	0.32	98.19
95.0-96.0	20.6	2.3	857.9	0.26	98.45
96.0-97.0	16.5	1.8	859.7	0.21	98.65
97.0-98.0	12.8	1.4	861.1	0.16	98.81
98.0-99.0	9.6	1.0	862.1	0.12	98.93
99.0-100.0	7.1	0.8	862.9	0.09	99.02
100.0-101.0	5.1	0.6	863.4	0.06	99.09
101.0-102.0	3.7	0.4	863.8	0.05	99.13
102.0-103.0	2.8	0.3	864.1	0.03	99.17
103.0-104.0	2.1	0.2	864.4	0.03	99.19
104.0-105.0	1.6	0.2	864.5	0.02	99.21
105.0-106.0	1.3	0.1	864.7	0.02	99.23
106.0-107.0	1.1	0.1	864.8	0.01	99.24
107.0-108.0	1.1	0.1	864.9	0.01	99.25

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 <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	1.1	0.1	865.0	0.01	99.27
109.0-110.0	1.1	0.1	865.1	0.01	99.28
110.0-111.0	1.1	0.1	865.2	0.01	99.29
111.0-112.0	1.1	0.1	865.4	0.01	99.31
112.0-113.0	1.1	0.1	865.5	0.01	99.32
113.0-114.0	1.2	0.1	865.6	0.01	99.33
114.0-115.0	1.2	0.1	865.7	0.01	99.35
115.0-116.0	1.2	0.1	865.8	0.01	99.36
116.0-117.0	1.2	0.1	865.9	0.01	99.37
117.0-118.0	1.2	0.1	866.1	0.01	99.39
118.0-119.0	1.3	0.1	866.2	0.01	99.40
119.0-120.0	1.3	0.1	866.3	0.01	99.41
120.0-121.0	1.3	0.1	866.4	0.01	99.43
121.0-122.0	1.3	0.1	866.6	0.01	99.44
122.0-123.0	1.3	0.1	866.7	0.01	99.46
123.0-124.0	1.4	0.1	866.8	0.01	99.47
124.0-125.0	1.4	0.1	866.9	0.01	99.49
125.0-126.0	1.4	0.1	867.1	0.01	99.50
126.0-127.0	1.4	0.1	867.2	0.01	99.51
127.0-128.0	1.4	0.1	867.3	0.01	99.53
128.0-129.0	1.5	0.1	867.4	0.01	99.54
129.0-130.0	1.5	0.1	867.6	0.01	99.56
130.0-131.0	1.5	0.1	867.7	0.01	99.57
131.0-132.0	1.5	0.1	867.8	0.01	99.59
132.0-133.0	1.5	0.1	867.9	0.01	99.60
133.0-134.0	1.5	0.1	868.0	0.01	99.61
134.0-135.0	1.5	0.1	868.2	0.01	99.63
135.0-136.0	1.6	0.1	868.3	0.01	99.64
136.0-137.0	1.6	0.1	868.4	0.01	99.66
137.0-138.0	1.6	0.1	868.5	0.01	99.67
138.0-139.0	1.6	0.1	868.6	0.01	99.68
139.0-140.0	1.6	0.1	868.8	0.01	99.70
140.0-141.0	1.6	0.1	868.9	0.01	99.71
141.0-142.0	1.7	0.1	869.0	0.01	99.72
142.0-143.0	1.7	0.1	869.1	0.01	99.73
143.0-144.0	1.7	0.1	869.2	0.01	99.75

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 <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	1.7	0.1	869.3	0.01	99.76
145.0-146.0	1.7	0.1	869.4	0.01	99.77
146.0-147.0	1.7	0.1	869.5	0.01	99.78
147.0-148.0	1.7	0.1	869.6	0.01	99.80
148.0-149.0	1.8	0.1	869.7	0.01	99.81
149.0-150.0	1.8	0.1	869.8	0.01	99.82
150.0-151.0	1.8	0.1	869.9	0.01	99.83
151.0-152.0	1.8	0.1	870.0	0.01	99.84
152.0-153.0	1.8	0.1	870.1	0.01	99.85
153.0-154.0	1.8	0.1	870.2	0.01	99.86
154.0-155.0	1.8	0.1	870.3	0.01	99.87
155.0-156.0	1.8	0.1	870.4	0.01	99.88
156.0-157.0	1.8	0.1	870.4	0.01	99.89
157.0-158.0	1.9	0.1	870.5	0.01	99.90
158.0-159.0	1.9	0.1	870.6	0.01	99.91
159.0-160.0	1.9	0.1	870.7	0.01	99.92
160.0-161.0	1.9	0.1	870.7	0.01	99.92
161.0-162.0	1.9	0.1	870.8	0.01	99.93
162.0-163.0	1.9	0.1	870.9	0.01	99.94
163.0-164.0	1.9	0.1	870.9	0.01	99.95
164.0-165.0	1.9	0.1	871.0	0.01	99.95
165.0-166.0	1.9	0.1	871.0	0.01	99.96
166.0-167.0	1.9	0.0	871.1	0.01	99.96
167.0-168.0	1.9	0.0	871.1	0.01	99.97
168.0-169.0	2.0	0.0	871.2	0.00	99.97
169.0-170.0	2.0	0.0	871.2	0.00	99.98
170.0-171.0	2.0	0.0	871.3	0.00	99.98
171.0-172.0	2.0	0.0	871.3	0.00	99.99
172.0-173.0	2.0	0.0	871.3	0.00	99.99
173.0-174.0	2.0	0.0	871.3	0.00	99.99
174.0-175.0	2.0	0.0	871.4	0.00	99.99
175.0-176.0	2.0	0.0	871.4	0.00	100.00
176.0-177.0	2.0	0.0	871.4	0.00	100.00
177.0-178.0	2.0	0.0	871.4	0.00	100.00
178.0-179.0	2.0	0.0	871.4	0.00	100.00
179.0-180.0	2.0	0.0	871.4	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: