

Report No.: ARK-2-40K-010-20

Test Time: 2020/9/12 12:55

## Luminaire Property

Luminaire Manufacturer: Rayhil

Luminaire Category: Anchor

Luminaire Description:

Luminous Length (mm): 605

Luminous Height (mm): 34

Current: 0.739 A

Power Factor: 1.000

Luminous Width (mm): 50

Voltage: 110 V

Power: 17.74 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 2070.4 lm

Downward Ratio: 96%

Horizontal Diffuse Angle(10%,50%): H35.9,H18.1

Vertical Diffuse Angle(10%,50%): V35.6,V18

Luminaire Efficacy Rating (LER): 117

Max. Intensity: 13836.1 cd

Total Rated Lamp Lumens: 2070.4 lm

Efficiency: 100%

Upward Ratio: 4%

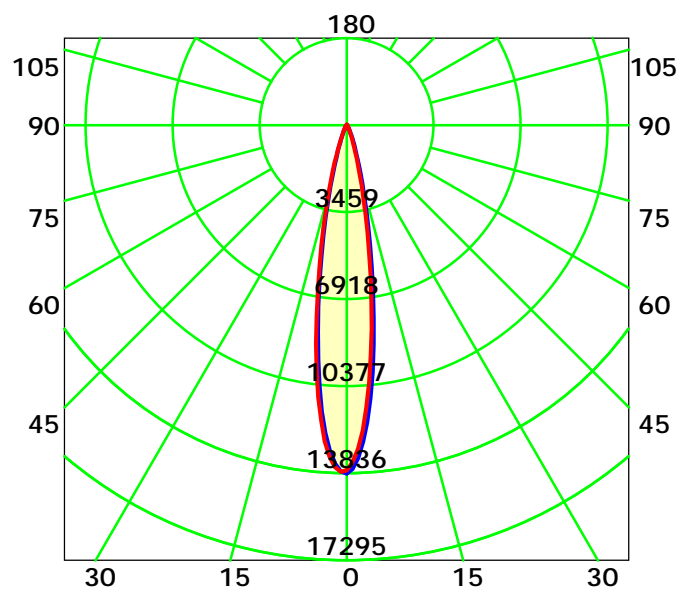
Central Intensity: 13836.1 cd

Pos of Max. Intensity: H0 V0

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 18.1°

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

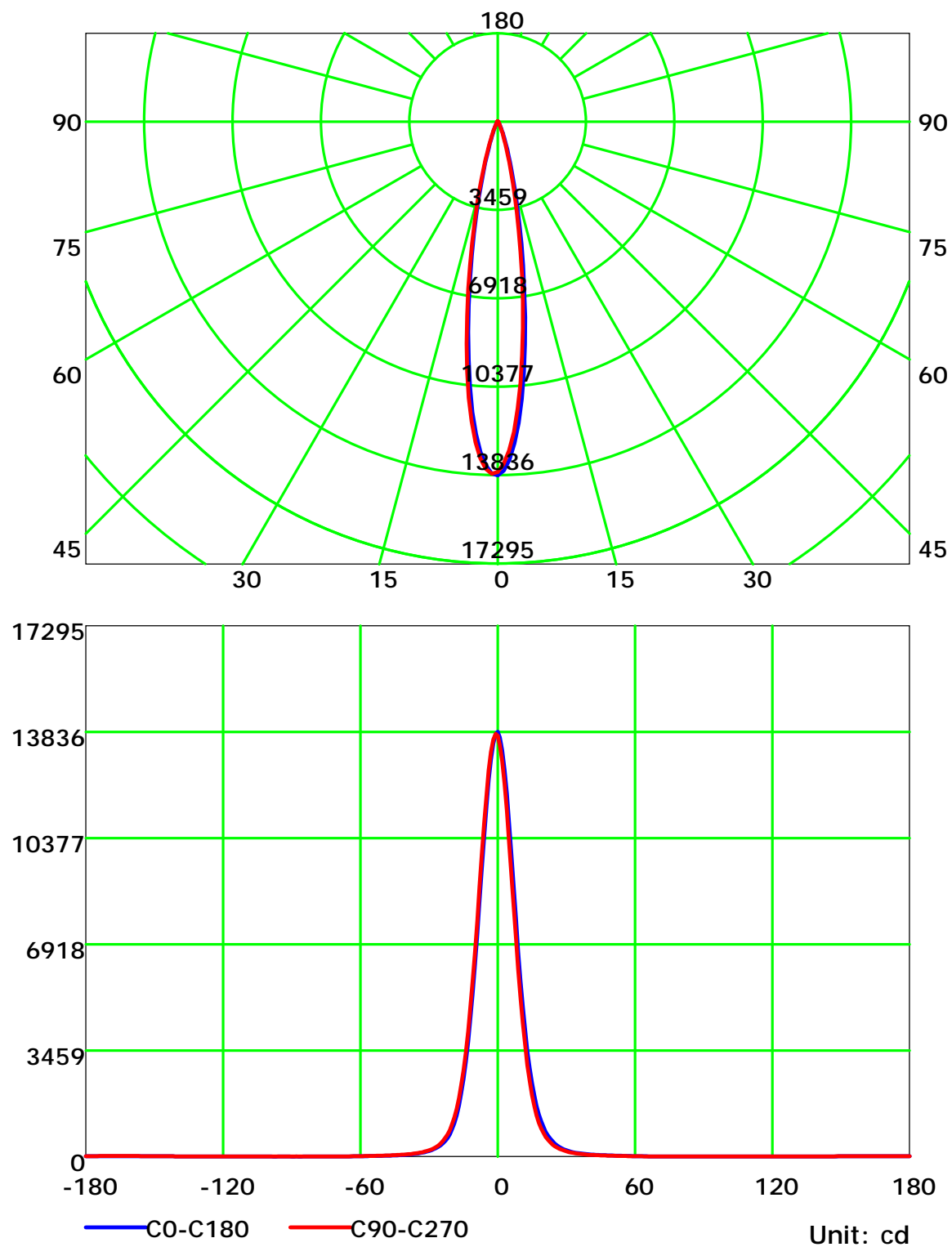
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

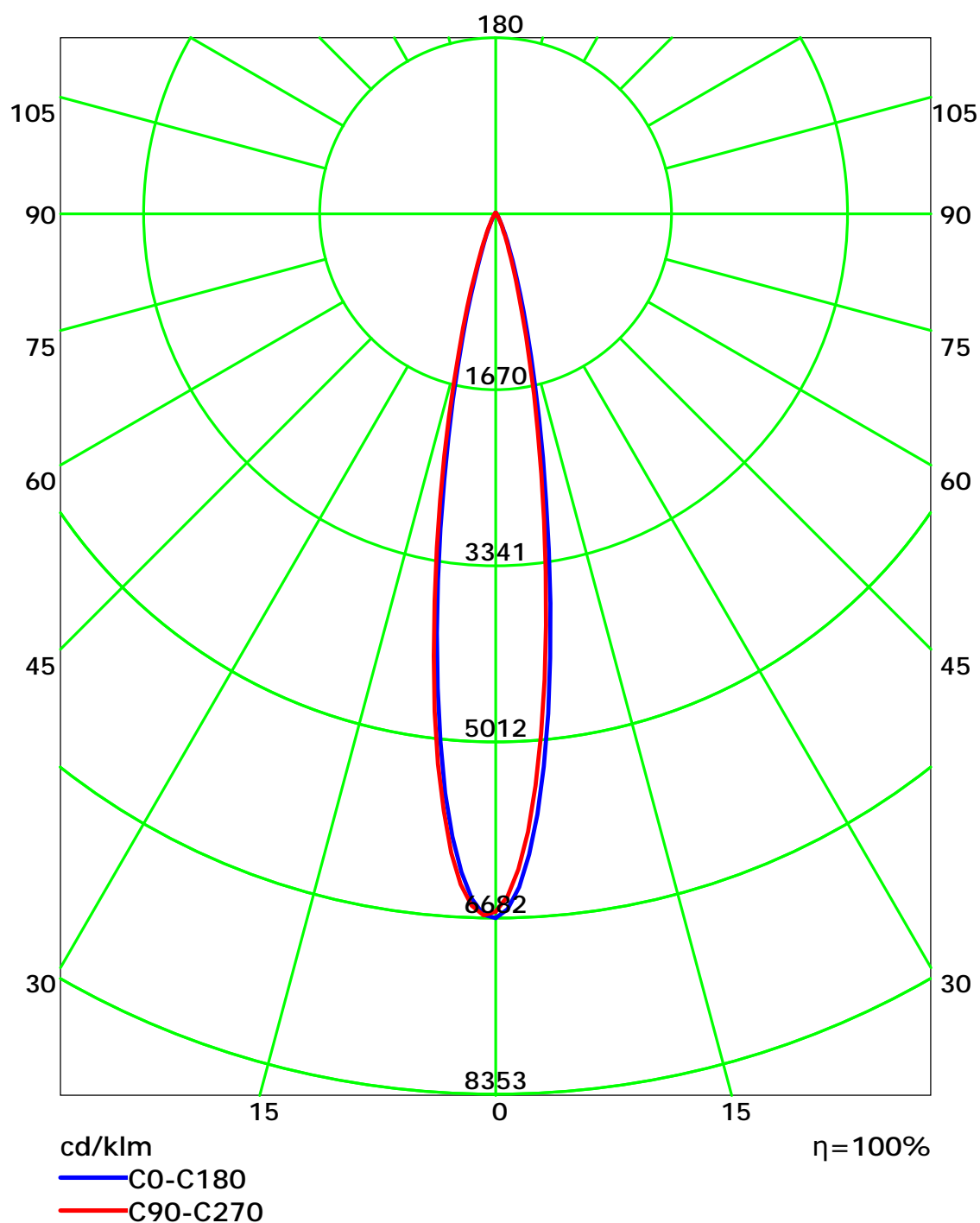
## Luminous Intensity Distribution Curve



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:

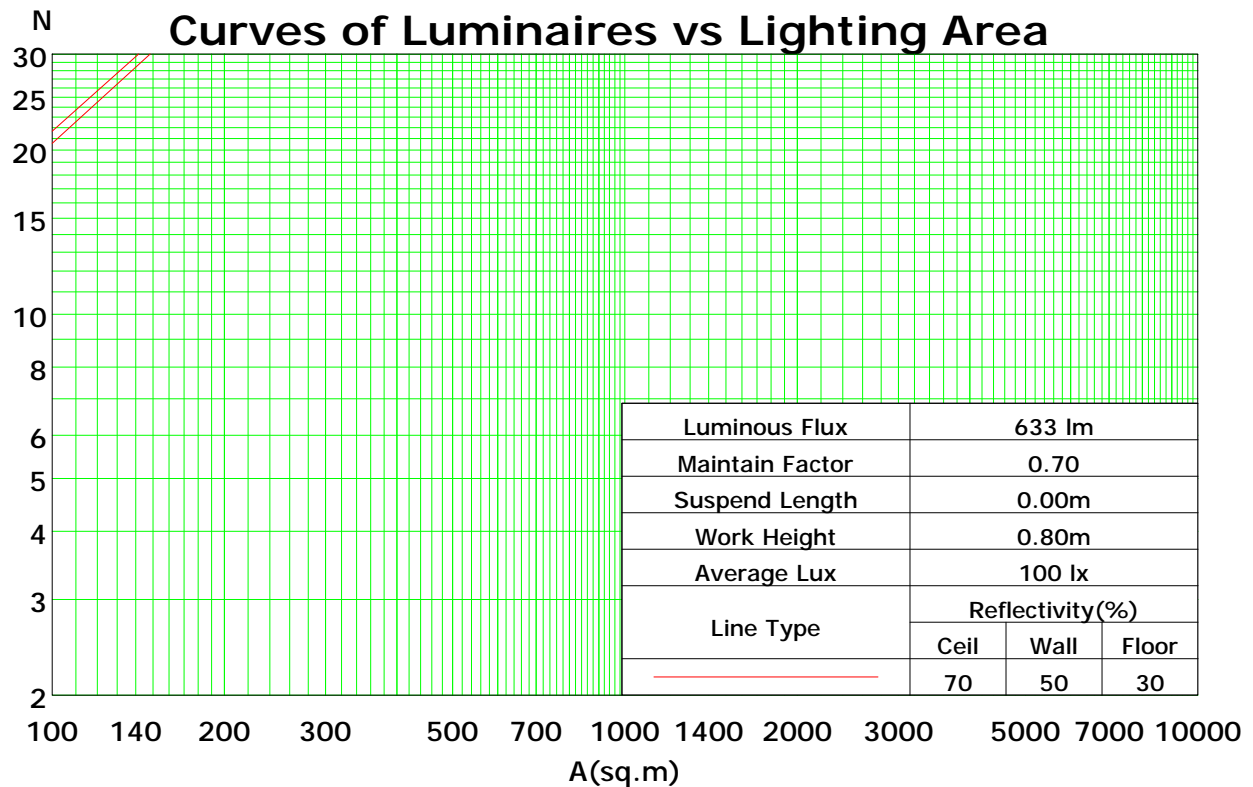
## Coefficients Of Utilization - Zonal Cavity Method

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	114	111	109	107	111	109	107	105	104	103	101	100	99	98	96	95	94	92
2	110	106	103	100	107	104	101	98	100	98	96	96	95	93	93	92	91	89
3	106	101	97	94	104	99	96	93	96	94	91	93	91	89	91	89	88	86
4	103	97	93	90	101	96	92	89	93	90	87	91	88	86	89	87	85	83
5	99	93	89	86	98	92	88	85	90	87	84	88	86	83	87	84	82	81
6	97	90	86	83	95	89	85	82	88	84	82	86	83	81	85	82	80	79
7	94	87	83	80	93	87	83	80	85	82	79	84	81	79	83	80	78	77
8	92	85	81	78	90	84	80	78	83	80	77	82	79	77	81	78	76	75
9	89	83	79	76	88	82	78	76	81	78	75	80	77	75	79	76	74	73
10	87	81	77	74	86	80	76	74	79	76	73	78	75	73	77	75	73	72

Spacing Criteria (0-180): 0.31

Spacing Criteria (90-270): 0.31

Spacing Criteria (Diagonal): 0.32



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

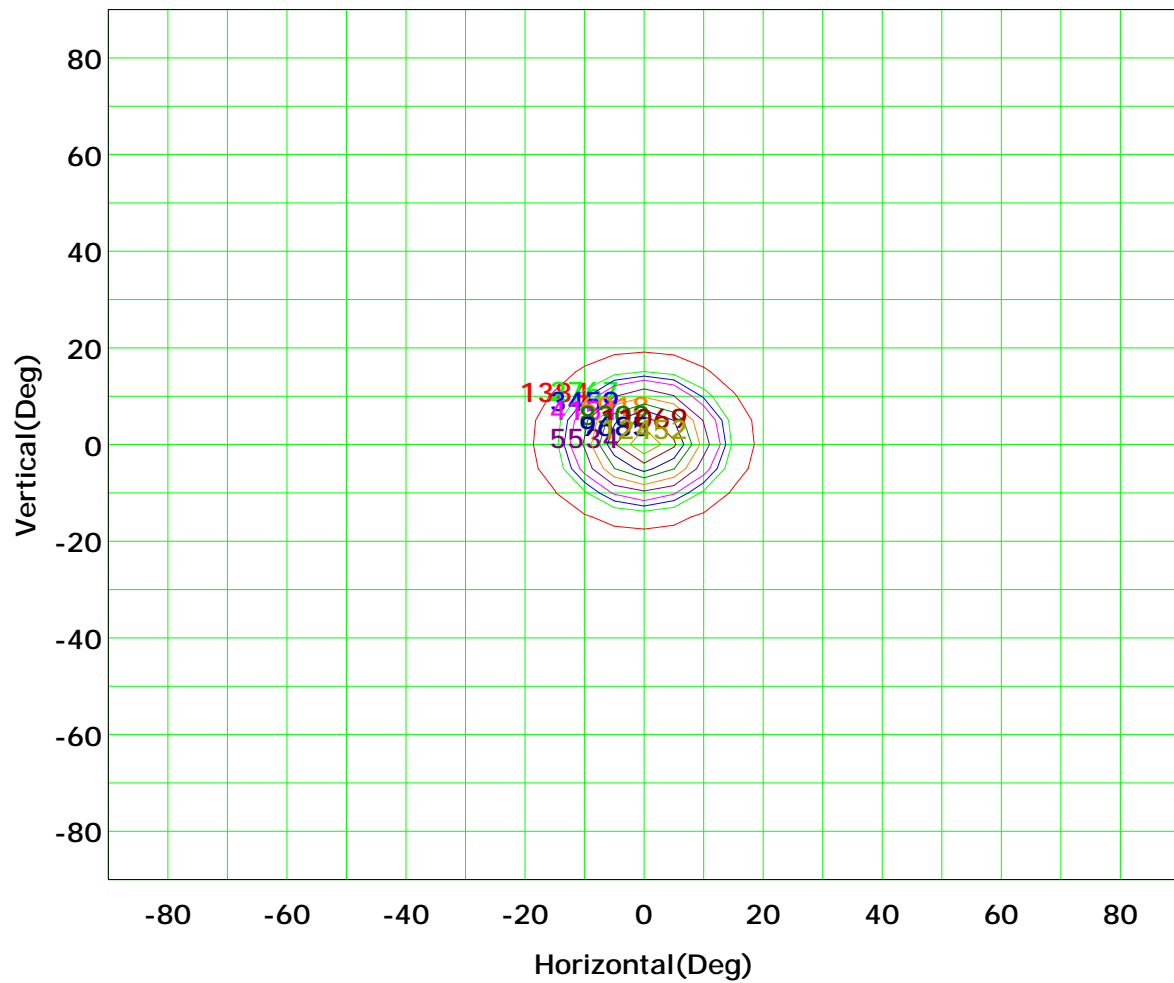
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Isocandela (rectangle)



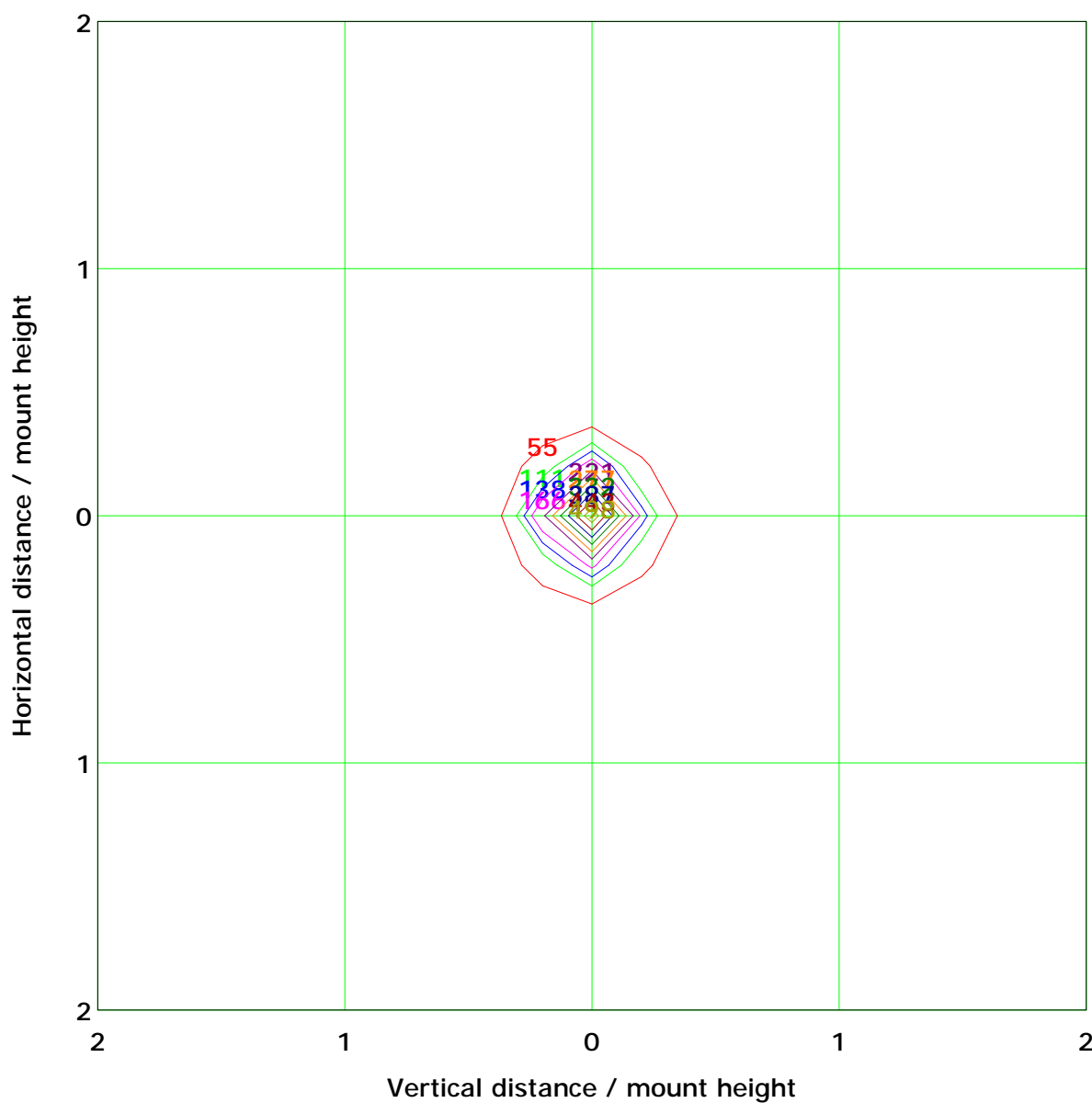
Imax (100%): 13836 cd

( 10%): 1384 cd	( 20%): 2767 cd
( 25%): 3459 cd	( 30%): 4151 cd
( 40%): 5534 cd	( 50%): 6918 cd
( 60%): 8302 cd	( 70%): 9685 cd
( 80%): 11069 cd	( 90%): 12452 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%): 553.4 lx	
( 10%): 55.3 lx	( 20%): 110.7 lx
( 25%): 138.4 lx	( 30%): 166.0 lx
( 40%): 221.4 lx	( 50%): 276.7 lx
( 60%): 332.1 lx	( 70%): 387.4 lx
( 80%): 442.8 lx	( 90%): 498.1 lx

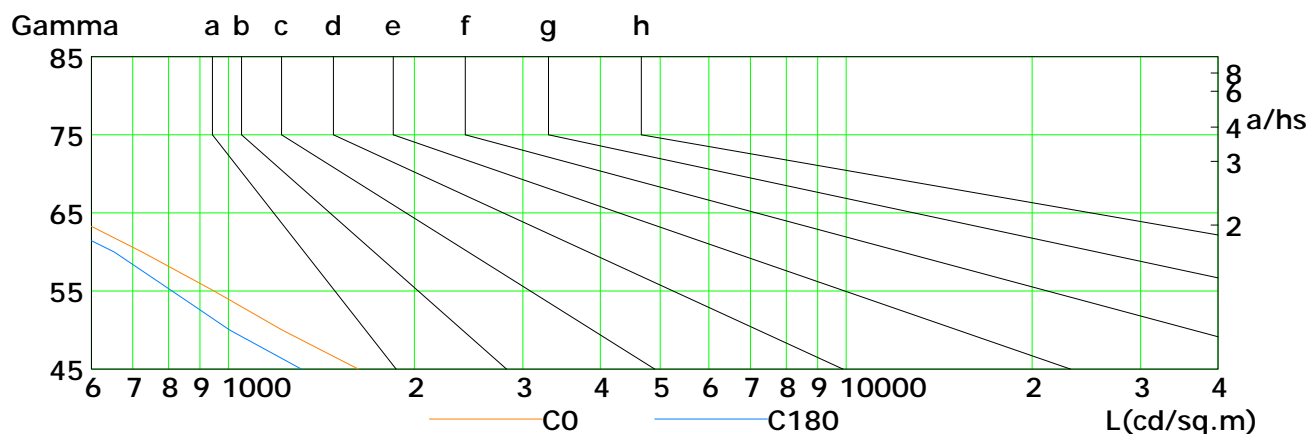
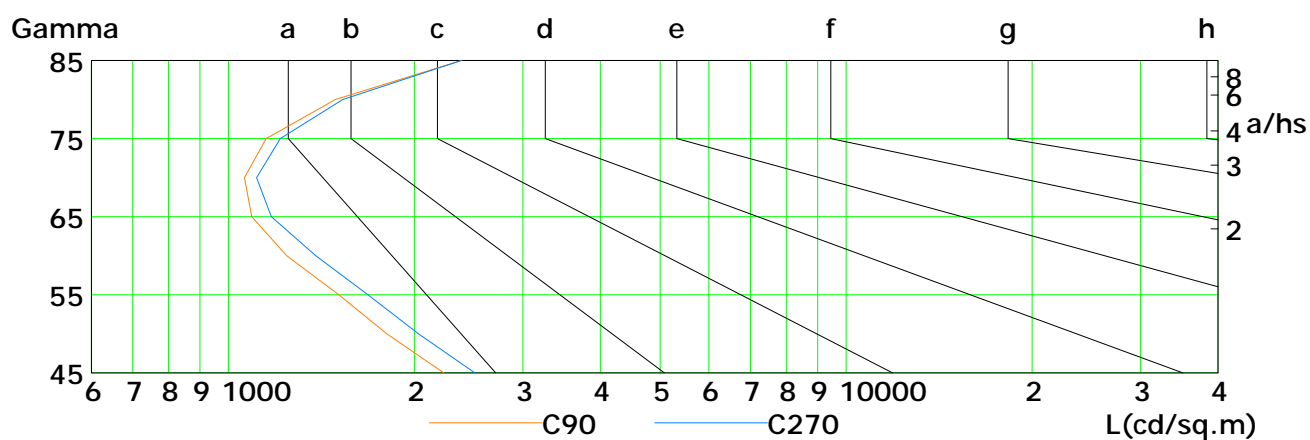
C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature: 25  
 Operator: Kerr

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

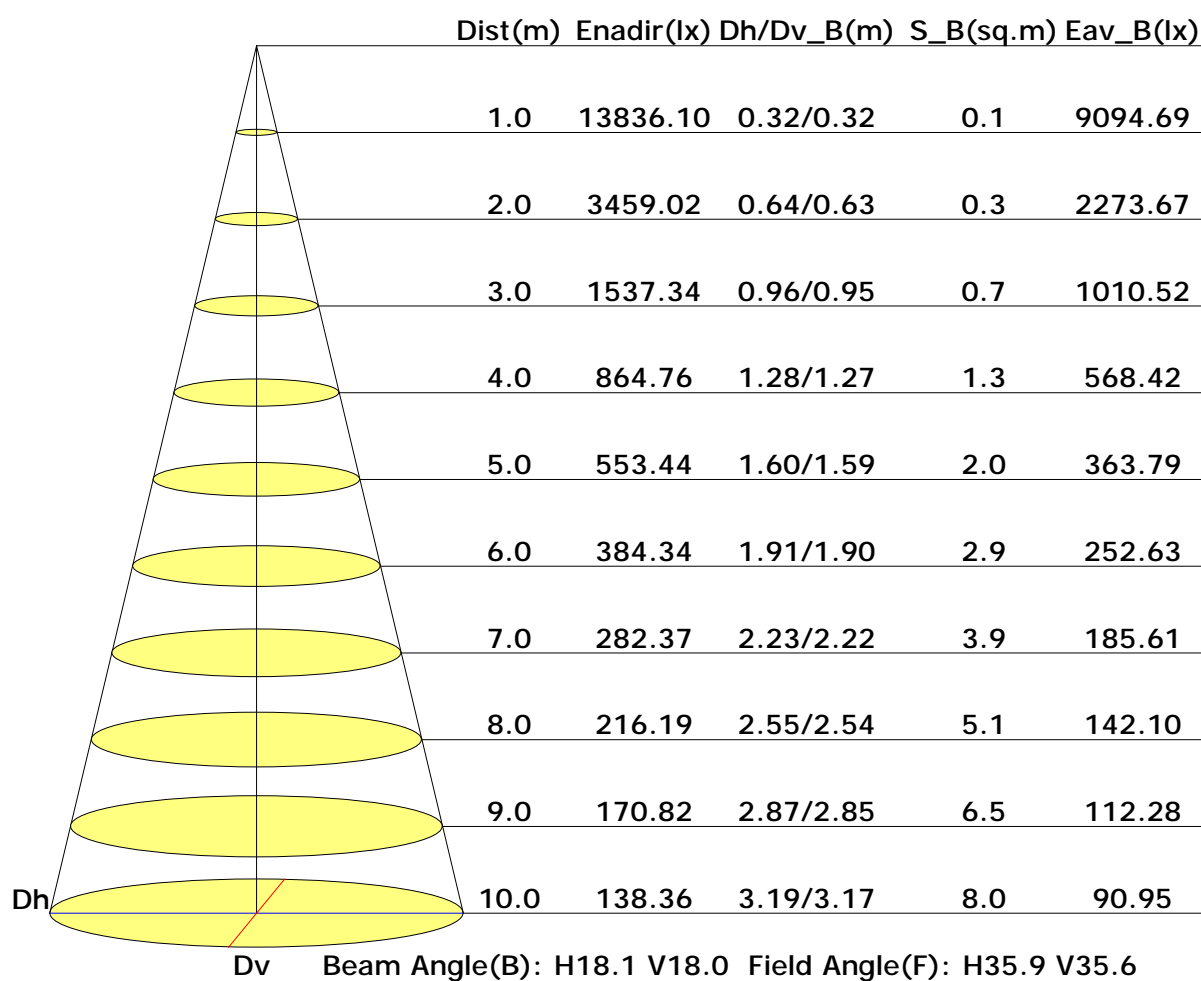


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	1625	1223	948	725	544	427	383	393	395
C90	2232	1805	1510	1244	1091	1062	1152	1490	2383
C180	1313	1005	811	653	488	397	362	358	370
C270	2506	2032	1683	1386	1173	1111	1214	1532	2383

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:

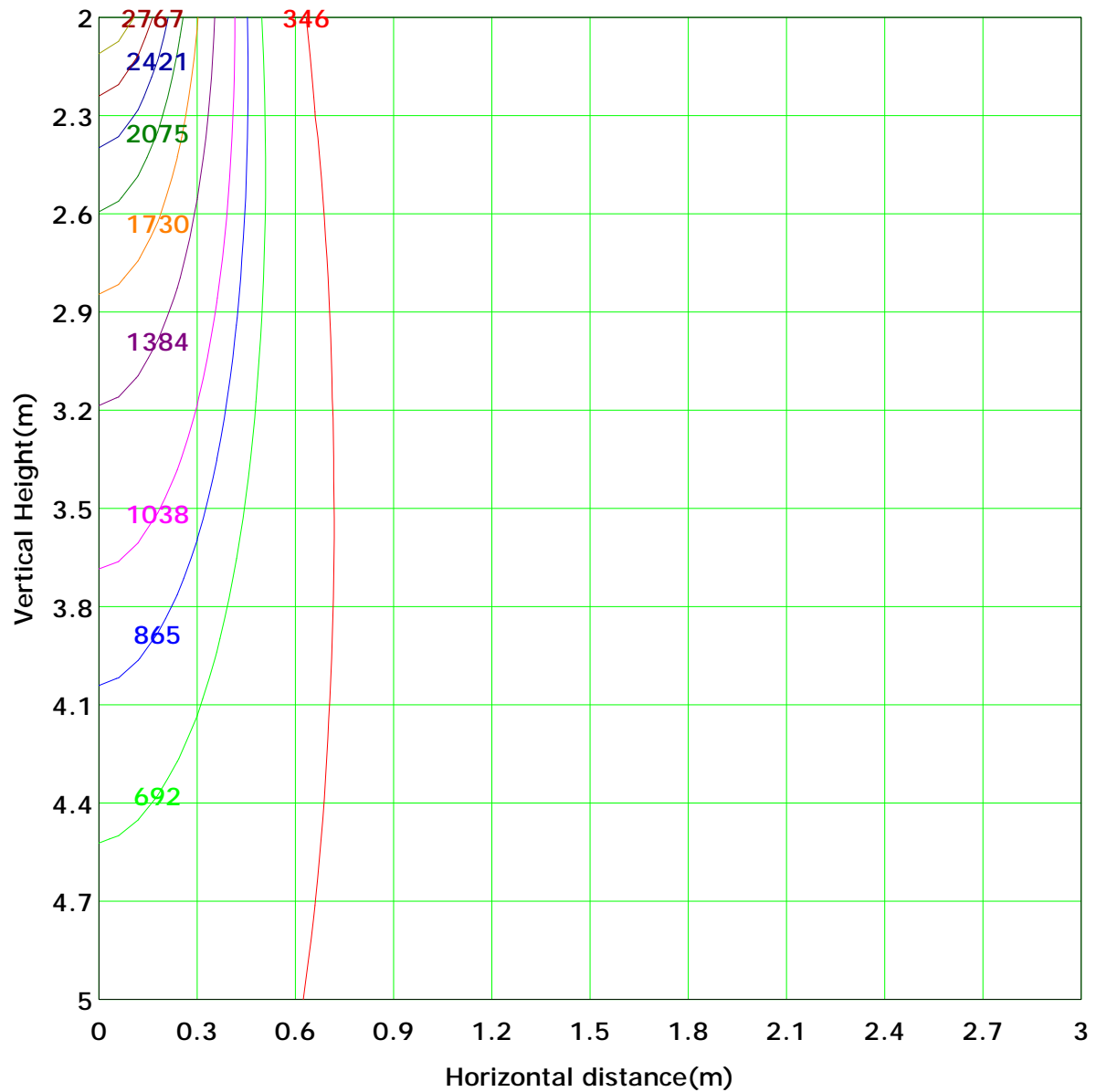
## Illuminance at a Distance



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: 3459.0 lx

( 10%): 345.9 lx	( 20%): 691.8 lx
( 25%): 864.8 lx	( 30%): 1037.7 lx
( 40%): 1383.6 lx	( 50%): 1729.5 lx
( 60%): 2075.4 lx	( 70%): 2421.3 lx
( 80%): 2767.2 lx	( 90%): 3113.1 lx

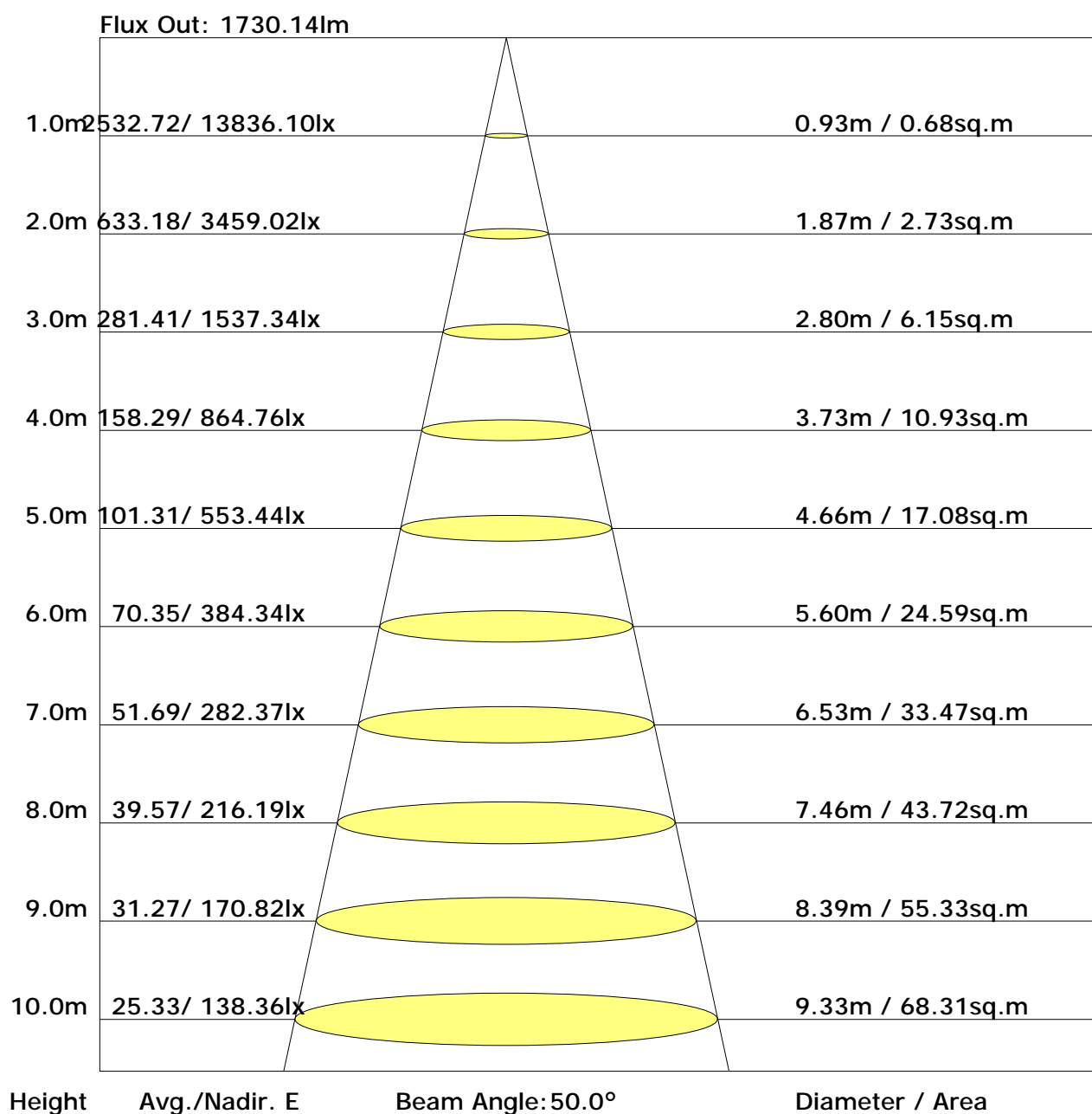
C Plane (°): 0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature: 25  
 Operator: Kerr

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

## Unit: lm

C Plane (°):0.0-360.0: 30.0	Gamma Plane (°):0.0-180.0: 1.0
Test Lab:	Test Device: GPM-1800B
Test Type: TYPE C	Distance: 9.028 m
Temperature: 25	Humidity: 60%
Operator: Kerr	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	1.8	2.8	2.3	3.2	3.6	-0.2	0.7	0.2	1.1	1.5
3H	3.0	3.8	3.5	4.2	4.7	0.9	1.7	1.3	2.1	2.6
4H	3.6	4.4	4.1	4.8	5.3	1.4	2.2	1.9	2.6	3.1
6H	4.5	5.2	5.0	5.6	6.1	2.0	2.7	2.5	3.2	3.7
8H	5.0	5.6	5.5	6.1	6.6	2.4	3.0	2.9	3.5	4.0
12H	5.6	6.2	6.1	6.6	7.2	2.7	3.4	3.2	3.8	4.3
X=4H Y=2H	1.9	2.7	2.4	3.1	3.6	0.1	0.9	0.6	1.3	1.8
3H	3.3	3.9	3.8	4.4	4.9	1.5	2.1	2.0	2.6	3.1
4H	4.1	4.7	4.6	5.2	5.7	2.2	2.7	2.7	3.2	3.8
6H	5.2	5.6	5.7	6.2	6.7	3.0	3.5	3.5	4.0	4.6
8H	5.8	6.2	6.3	6.7	7.3	3.4	3.9	4.0	4.4	5.0
12H	6.5	6.9	7.0	7.4	8.0	3.9	4.3	4.5	4.8	5.4
X=8H Y=4H	4.2	4.7	4.8	5.2	5.8	2.5	3.0	3.1	3.5	4.0
6H	5.5	5.8	6.0	6.4	7.0	3.6	3.9	4.1	4.5	5.1
8H	6.2	6.5	6.8	7.1	7.7	4.2	4.5	4.8	5.1	5.6
12H	7.1	7.4	7.7	8.0	8.6	4.8	5.1	5.4	5.7	6.3
X=12H Y=4H	4.2	4.6	4.8	5.2	5.7	2.6	3.0	3.2	3.5	4.1
6H	5.5	5.8	6.1	6.4	7.0	3.7	4.0	4.3	4.6	5.2
8H	6.3	6.6	6.9	7.2	7.8	4.4	4.7	5.0	5.3	5.9

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 = 0.50								
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	0.96	1.01	1.04	1.06	1.09	1.11	1.13	1.15	1.16
	0.30		0.93	0.97	1.00	1.03	1.06	1.09	1.10	1.13	1.14
	0.20		0.90	0.94	0.98	1.00	1.04	1.06	1.08	1.11	1.13
0.50	0.50	0.20	0.95	0.99	1.01	1.03	1.06	1.07	1.09	1.10	1.11
	0.30		0.91	0.96	0.98	1.00	1.03	1.05	1.07	1.09	1.10
	0.20		0.89	0.93	0.96	0.98	1.01	1.03	1.05	1.07	1.09
0.30	0.50	0.20	0.93	0.97	0.99	1.00	1.03	1.04	1.05	1.06	1.07
	0.30		0.90	0.94	0.97	0.98	1.01	1.02	1.03	1.05	1.06
	0.20		0.88	0.92	0.95	0.96	0.99	1.01	1.02	1.04	1.05
0.00	0.00	0.00	0.86	0.90	0.92	0.93	0.95	0.96	0.97	0.98	0.99
<p>Rating: 18W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>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:

## Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 0.50								
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	0.48	0.40	0.34	0.30	0.24	0.20	0.17	0.13	0.11
	0.30		0.40	0.34	0.30	0.26	0.22	0.18	0.16	0.13	0.10
	0.20		0.34	0.30	0.26	0.24	0.20	0.17	0.15	0.12	0.10
0.50	0.50	0.20	0.45	0.37	0.31	0.27	0.21	0.22	0.15	0.12	0.10
	0.30		0.38	0.32	0.27	0.24	0.20	0.16	0.14	0.11	0.09
	0.20		0.33	0.28	0.25	0.22	0.18	0.15	0.13	0.11	0.09
0.30	0.50	0.20	0.42	0.34	0.28	0.24	0.19	0.16	0.14	0.10	0.09
	0.30		0.36	0.30	0.25	0.22	0.18	0.15	0.13	0.10	0.08
	0.20		0.31	0.26	0.23	0.20	0.16	0.14	0.12	0.10	0.08
0.00	0.00	0.00	0.16	0.12	0.10	0.09	0.07	0.06	0.05	0.04	0.03
<p>Rating: 18W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>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:

## Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 0.50								
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	0.16	0.18	0.19	0.21	0.22	0.23	0.24	0.25	0.26
	0.30		0.13	0.15	0.17	0.18	0.20	0.21	0.22	0.23	0.24
	0.20		0.11	0.13	0.14	0.16	0.18	0.19	0.20	0.22	0.23
0.50	0.50	0.20	0.16	0.17	0.19	0.20	0.21	0.22	0.23	0.24	0.24
	0.30		0.13	0.15	0.16	0.17	0.19	0.20	0.21	0.22	0.23
	0.20		0.10	0.12	0.14	0.15	0.17	0.19	0.20	0.21	0.22
0.30	0.50	0.20	0.15	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.23
	0.30		0.12	0.14	0.16	0.17	0.19	0.20	0.21	0.22	0.22
	0.20		0.10	0.12	0.14	0.15	0.17	0.18	0.19	0.21	0.22
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: 18W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>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	13670.0	13.1	13.1	0.63	0.63
1.0-2.0	13430.9	38.6	51.6	1.86	2.49
2.0-3.0	12966.7	62.0	113.7	3.00	5.49
3.0-4.0	12313.1	82.4	196.1	3.98	9.47
4.0-5.0	11496.2	98.9	295.0	4.78	14.25
5.0-6.0	10553.1	110.9	405.9	5.36	19.61
6.0-7.0	9534.9	118.4	524.3	5.72	25.32
7.0-8.0	8478.5	121.4	645.6	5.86	31.18
8.0-9.0	7430.5	120.4	766.1	5.82	37.00
9.0-10.0	6431.9	116.4	882.5	5.62	42.62
10.0-11.0	5505.1	110.0	992.5	5.31	47.94
11.0-12.0	4664.5	102.0	1094.5	4.93	52.86
12.0-13.0	3917.2	93.0	1187.5	4.49	57.35
13.0-14.0	3269.5	83.7	1271.2	4.04	61.40
14.0-15.0	2709.4	74.4	1345.6	3.59	64.99
15.0-16.0	2232.5	65.4	1411.0	3.16	68.15
16.0-17.0	1840.1	57.3	1468.3	2.77	70.92
17.0-18.0	1514.5	49.9	1518.2	2.41	73.33
18.0-19.0	1247.6	43.4	1561.6	2.10	75.43
19.0-20.0	1033.6	37.8	1599.5	1.83	77.25
20.0-21.0	860.9	33.1	1632.5	1.60	78.85
21.0-22.0	722.5	29.0	1661.6	1.40	80.25
22.0-23.0	611.2	25.7	1687.2	1.24	81.49
23.0-24.0	519.7	22.7	1710.0	1.10	82.59
24.0-25.0	443.8	20.2	1730.1	0.97	83.56
25.0-26.0	381.3	18.0	1748.1	0.87	84.43
26.0-27.0	329.6	16.1	1764.3	0.78	85.21
27.0-28.0	286.1	14.5	1778.8	0.70	85.91
28.0-29.0	250.0	13.1	1791.8	0.63	86.54
29.0-30.0	220.3	11.9	1803.7	0.57	87.12
30.0-31.0	194.8	10.8	1814.6	0.52	87.64
31.0-32.0	172.8	9.9	1824.5	0.48	88.12
32.0-33.0	153.9	9.1	1833.6	0.44	88.56
33.0-34.0	137.7	8.3	1841.9	0.40	88.96
34.0-35.0	123.6	7.7	1849.6	0.37	89.33
35.0-36.0	111.7	7.1	1856.7	0.34	89.68

C Plane (°): 0.0-360.0: 30.0  
 Test Lab:  
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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	101.5	6.6	1863.3	0.32	90.00
37.0-38.0	92.6	6.2	1869.5	0.30	90.29
38.0-39.0	84.9	5.8	1875.3	0.28	90.57
39.0-40.0	78.4	5.5	1880.7	0.26	90.84
40.0-41.0	72.7	5.2	1885.9	0.25	91.09
41.0-42.0	67.7	4.9	1890.8	0.24	91.33
42.0-43.0	63.4	4.7	1895.5	0.23	91.55
43.0-44.0	59.4	4.5	1900.0	0.22	91.77
44.0-45.0	55.7	4.3	1904.3	0.21	91.98
45.0-46.0	52.3	4.1	1908.4	0.20	92.17
46.0-47.0	49.1	3.9	1912.3	0.19	92.36
47.0-48.0	46.2	3.7	1916.0	0.18	92.54
48.0-49.0	43.6	3.6	1919.6	0.17	92.72
49.0-50.0	41.1	3.4	1923.0	0.17	92.88
50.0-51.0	38.7	3.3	1926.3	0.16	93.04
51.0-52.0	36.6	3.1	1929.5	0.15	93.19
52.0-53.0	34.5	3.0	1932.5	0.15	93.34
53.0-54.0	32.5	2.9	1935.3	0.14	93.47
54.0-55.0	30.7	2.7	1938.1	0.13	93.61
55.0-56.0	28.9	2.6	1940.7	0.13	93.73
56.0-57.0	27.2	2.5	1943.2	0.12	93.85
57.0-58.0	25.5	2.4	1945.5	0.11	93.97
58.0-59.0	24.0	2.2	1947.8	0.11	94.07
59.0-60.0	22.6	2.1	1949.9	0.10	94.18
60.0-61.0	21.2	2.0	1951.9	0.10	94.28
61.0-62.0	19.9	1.9	1953.8	0.09	94.37
62.0-63.0	18.8	1.8	1955.7	0.09	94.46
63.0-64.0	17.8	1.7	1957.4	0.08	94.54
64.0-65.0	16.7	1.7	1959.1	0.08	94.62
65.0-66.0	15.8	1.6	1960.6	0.08	94.70
66.0-67.0	15.0	1.5	1962.2	0.07	94.77
67.0-68.0	14.4	1.5	1963.6	0.07	94.84
68.0-69.0	13.8	1.4	1965.0	0.07	94.91
69.0-70.0	13.2	1.4	1966.4	0.07	94.97
70.0-71.0	12.6	1.3	1967.7	0.06	95.04
71.0-72.0	12.2	1.3	1968.9	0.06	95.10

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	11.8	1.2	1970.2	0.06	95.16
73.0-74.0	11.5	1.2	1971.4	0.06	95.22
74.0-75.0	11.2	1.2	1972.6	0.06	95.27
75.0-76.0	11.0	1.2	1973.7	0.06	95.33
76.0-77.0	10.8	1.2	1974.9	0.06	95.39
77.0-78.0	10.7	1.1	1976.0	0.06	95.44
78.0-79.0	10.5	1.1	1977.2	0.05	95.49
79.0-80.0	10.4	1.1	1978.3	0.05	95.55
80.0-81.0	10.3	1.1	1979.4	0.05	95.60
81.0-82.0	10.2	1.1	1980.5	0.05	95.66
82.0-83.0	10.0	1.1	1981.6	0.05	95.71
83.0-84.0	9.9	1.1	1982.7	0.05	95.76
84.0-85.0	9.9	1.1	1983.7	0.05	95.81
85.0-86.0	9.8	1.1	1984.8	0.05	95.86
86.0-87.0	9.8	1.1	1985.9	0.05	95.92
87.0-88.0	9.7	1.1	1987.0	0.05	95.97
88.0-89.0	9.7	1.1	1988.0	0.05	96.02
89.0-90.0	9.7	1.1	1989.1	0.05	96.07
90.0-91.0	9.7	1.1	1990.2	0.05	96.12
91.0-92.0	9.8	1.1	1991.2	0.05	96.17
92.0-93.0	9.8	1.1	1992.3	0.05	96.23
93.0-94.0	9.8	1.1	1993.4	0.05	96.28
94.0-95.0	9.8	1.1	1994.4	0.05	96.33
95.0-96.0	9.8	1.1	1995.5	0.05	96.38
96.0-97.0	9.8	1.1	1996.6	0.05	96.43
97.0-98.0	9.8	1.1	1997.6	0.05	96.48
98.0-99.0	9.8	1.1	1998.7	0.05	96.54
99.0-100.0	9.8	1.1	1999.8	0.05	96.59
100.0-101.0	9.8	1.1	2000.8	0.05	96.64
101.0-102.0	9.9	1.1	2001.9	0.05	96.69
102.0-103.0	9.9	1.1	2002.9	0.05	96.74
103.0-104.0	9.9	1.1	2004.0	0.05	96.79
104.0-105.0	9.9	1.1	2005.1	0.05	96.84
105.0-106.0	9.9	1.0	2006.1	0.05	96.89
106.0-107.0	9.9	1.0	2007.1	0.05	96.94
107.0-108.0	10.0	1.0	2008.2	0.05	96.99

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	9.9	1.0	2009.2	0.05	97.04
109.0-110.0	9.9	1.0	2010.3	0.05	97.09
110.0-111.0	10.0	1.0	2011.3	0.05	97.14
111.0-112.0	10.0	1.0	2012.3	0.05	97.19
112.0-113.0	10.0	1.0	2013.3	0.05	97.24
113.0-114.0	10.1	1.0	2014.3	0.05	97.29
114.0-115.0	10.0	1.0	2015.3	0.05	97.34
115.0-116.0	10.0	1.0	2016.3	0.05	97.39
116.0-117.0	10.1	1.0	2017.3	0.05	97.43
117.0-118.0	10.1	1.0	2018.3	0.05	97.48
118.0-119.0	10.2	1.0	2019.3	0.05	97.53
119.0-120.0	10.2	1.0	2020.2	0.05	97.58
120.0-121.0	10.2	1.0	2021.2	0.05	97.62
121.0-122.0	10.3	1.0	2022.2	0.05	97.67
122.0-123.0	10.3	1.0	2023.1	0.05	97.71
123.0-124.0	10.4	1.0	2024.1	0.05	97.76
124.0-125.0	10.5	1.0	2025.0	0.05	97.81
125.0-126.0	10.6	0.9	2026.0	0.05	97.85
126.0-127.0	10.7	0.9	2026.9	0.05	97.90
127.0-128.0	10.8	0.9	2027.8	0.05	97.94
128.0-129.0	11.0	0.9	2028.8	0.05	97.99
129.0-130.0	11.1	0.9	2029.7	0.05	98.03
130.0-131.0	11.3	0.9	2030.7	0.05	98.08
131.0-132.0	11.5	0.9	2031.6	0.05	98.12
132.0-133.0	11.7	0.9	2032.6	0.05	98.17
133.0-134.0	11.9	0.9	2033.5	0.05	98.22
134.0-135.0	12.3	1.0	2034.5	0.05	98.26
135.0-136.0	12.6	1.0	2035.4	0.05	98.31
136.0-137.0	13.0	1.0	2036.4	0.05	98.36
137.0-138.0	13.4	1.0	2037.4	0.05	98.40
138.0-139.0	13.9	1.0	2038.4	0.05	98.45
139.0-140.0	14.4	1.0	2039.4	0.05	98.50
140.0-141.0	14.9	1.0	2040.5	0.05	98.55
141.0-142.0	15.5	1.1	2041.5	0.05	98.60
142.0-143.0	16.1	1.1	2042.6	0.05	98.66
143.0-144.0	16.7	1.1	2043.7	0.05	98.71

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	17.3	1.1	2044.8	0.05	98.76
145.0-146.0	17.9	1.1	2045.9	0.05	98.82
146.0-147.0	18.6	1.1	2047.0	0.05	98.87
147.0-148.0	19.2	1.1	2048.2	0.05	98.92
148.0-149.0	19.9	1.1	2049.3	0.05	98.98
149.0-150.0	20.4	1.1	2050.4	0.05	99.03
150.0-151.0	21.0	1.1	2051.6	0.05	99.09
151.0-152.0	21.5	1.1	2052.7	0.05	99.14
152.0-153.0	22.0	1.1	2053.8	0.05	99.20
153.0-154.0	22.5	1.1	2054.9	0.05	99.25
154.0-155.0	22.9	1.1	2056.0	0.05	99.30
155.0-156.0	23.3	1.1	2057.1	0.05	99.35
156.0-157.0	23.7	1.0	2058.1	0.05	99.40
157.0-158.0	24.0	1.0	2059.1	0.05	99.45
158.0-159.0	24.3	1.0	2060.1	0.05	99.50
159.0-160.0	24.6	0.9	2061.0	0.05	99.55
160.0-161.0	24.8	0.9	2061.9	0.04	99.59
161.0-162.0	25.0	0.9	2062.8	0.04	99.63
162.0-163.0	25.1	0.8	2063.6	0.04	99.67
163.0-164.0	25.1	0.8	2064.4	0.04	99.71
164.0-165.0	25.2	0.7	2065.1	0.04	99.74
165.0-166.0	25.2	0.7	2065.8	0.03	99.78
166.0-167.0	25.1	0.6	2066.5	0.03	99.81
167.0-168.0	25.1	0.6	2067.1	0.03	99.84
168.0-169.0	25.0	0.5	2067.6	0.03	99.86
169.0-170.0	24.8	0.5	2068.1	0.02	99.89
170.0-171.0	24.7	0.4	2068.6	0.02	99.91
171.0-172.0	24.5	0.4	2069.0	0.02	99.93
172.0-173.0	24.4	0.3	2069.3	0.02	99.95
173.0-174.0	24.3	0.3	2069.6	0.01	99.96
174.0-175.0	24.1	0.3	2069.9	0.01	99.97
175.0-176.0	24.0	0.2	2070.1	0.01	99.98
176.0-177.0	23.9	0.2	2070.2	0.01	99.99
177.0-178.0	23.8	0.1	2070.4	0.01	100.00
178.0-179.0	23.9	0.1	2070.4	0.00	100.00
179.0-180.0	23.9	0.0	2070.4	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: