

## Luminaire Property

Luminaire: 149-403

Report NO.:

Test NO.:

Lamp: CREE XPE-2300K

Sum Lumens: 177.43 lm

Number of Lamps: 1

Diameter: 200mm

Length: mm

Photometric Type: Type C

Voltage: 24.0 V

Current: 0.084 A

Power: 2.016 W

Power Factor: 1.000

Ballast Type:

Width: 200mm

Height: mm

Remark:

## Photometric Results

Lumens: 177.43 lm

Efficiency: 88.0109 lm/W

Central Intensity: 1052.187cd

Maximum Intensity: 1059.314cd

Angle of maximum intensity: C:45.0 G:1.0

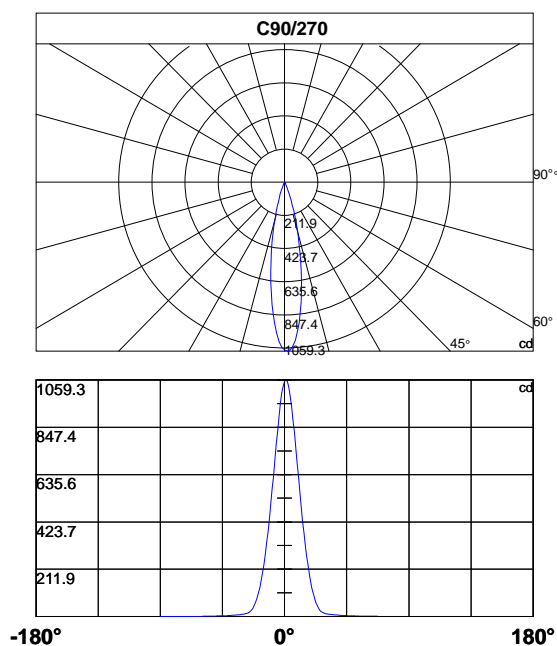
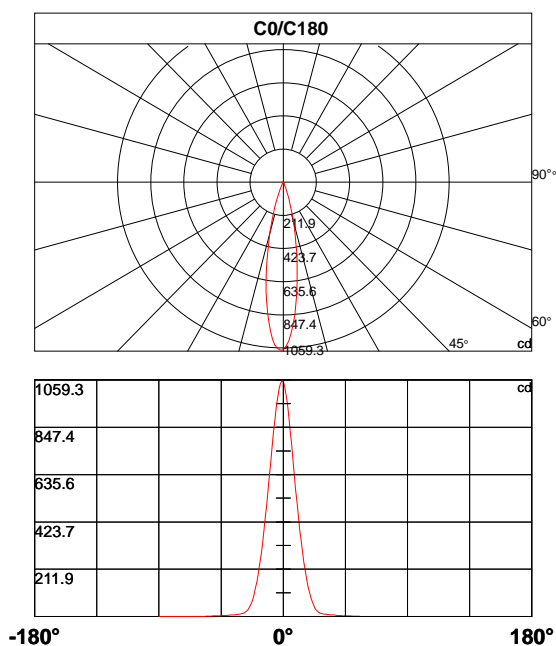
Half Peak Side Angle(50%): Left: -10.6 Right:10.4

Light Out Rate(LOR) : 100.00%

Up Flux Rate: 0.0%

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -19.9 Right:19.7



**Photometric Data Table [cd]**

C\G	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
<b>0.0</b>	1052.2	1030.7	996.0	951.4	897.0	836.6	771.1	703.3	638.2	571.3
<b>45.0</b>	1052.2	1059.3	1052.7	1029.8	993.9	943.6	885.4	825.9	759.4	692.2
<b>90.0</b>	1052.2	1059.3	1052.7	1029.8	993.9	943.6	885.4	825.9	759.4	692.2
<b>135.0</b>	1052.2	1054.9	1044.0	1020.8	986.1	938.3	883.9	825.0	760.8	695.4
<b>180.0</b>	1052.2	1054.9	1044.0	1020.8	986.1	938.3	883.9	825.0	760.8	695.4
<b>225.0</b>	1052.2	1033.0	999.8	952.8	897.1	834.8	770.5	702.0	632.5	567.6
<b>270.0</b>	1052.2	1033.0	999.8	952.8	897.1	834.8	770.5	702.0	632.5	567.6
<b>315.0</b>	1052.2	1030.7	996.0	951.4	897.0	836.6	771.1	703.3	638.2	571.3
<b>360.0</b>	1052.2	1030.7	996.0	951.4	897.0	836.6	771.1	703.3	638.2	571.3

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
<b>0.0</b>	509.7	449.6	389.6	337.2	287.8	243.5	202.2	166.1	135.0	107.0
<b>45.0</b>	624.3	558.0	492.6	429.2	372.5	318.6	270.8	226.0	186.8	152.4
<b>90.0</b>	624.3	558.0	492.6	429.2	372.5	318.6	270.8	226.0	186.8	152.4
<b>135.0</b>	627.1	562.7	498.6	437.6	380.1	325.8	279.2	234.3	195.5	158.8
<b>180.0</b>	627.1	562.7	498.6	437.6	380.1	325.8	279.2	234.3	195.5	158.8
<b>225.0</b>	502.8	439.7	382.4	330.1	278.3	235.1	194.3	161.1	129.5	103.5
<b>270.0</b>	502.8	439.7	382.4	330.1	278.3	235.1	194.3	161.1	129.5	103.5
<b>315.0</b>	509.7	449.6	389.6	337.2	287.8	243.5	202.2	166.1	135.0	107.0
<b>360.0</b>	509.7	449.6	389.6	337.2	287.8	243.5	202.2	166.1	135.0	107.0

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
<b>0.0</b>	84.2	64.0	49.4	36.2	27.8	20.9	17.6	14.8	12.7	11.9
<b>45.0</b>	122.7	97.2	76.6	58.5	44.8	32.7	25.1	19.2	16.4	14.1
<b>90.0</b>	122.7	97.2	76.6	58.5	44.8	32.7	25.1	19.2	16.4	14.1
<b>135.0</b>	128.7	101.6	79.5	61.4	47.4	36.1	26.6	20.6	16.7	14.8
<b>180.0</b>	128.7	101.6	79.5	61.4	47.4	36.1	26.6	20.6	16.7	14.8
<b>225.0</b>	81.1	61.9	48.0	35.3	27.2	20.6	17.1	14.2	12.7	11.0
<b>270.0</b>	81.1	61.9	48.0	35.3	27.2	20.6	17.1	14.2	12.7	11.0
<b>315.0</b>	84.2	64.0	49.4	36.2	27.8	20.9	17.6	14.8	12.7	11.9
<b>360.0</b>	84.2	64.0	49.4	36.2	27.8	20.9	17.6	14.8	12.7	11.9

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
<b>0.0</b>	10.3	9.8	8.4	8.1	6.9	6.7	6.3	6.3	5.5	4.9
<b>45.0</b>	11.9	11.3	9.9	9.5	8.3	8.1	7.0	6.9	6.1	5.2
<b>90.0</b>	11.9	11.3	9.9	9.5	8.3	8.1	7.0	6.9	6.1	5.2
<b>135.0</b>	12.5	11.8	9.9	9.6	8.4	7.8	7.3	6.4	6.1	5.8
<b>180.0</b>	12.5	11.8	9.9	9.6	8.4	7.8	7.3	6.4	6.1	5.8
<b>225.0</b>	9.8	9.3	8.4	7.8	6.9	6.7	5.6	5.8	5.0	4.7
<b>270.0</b>	9.8	9.3	8.4	7.8	6.9	6.7	5.6	5.8	5.0	4.7
<b>315.0</b>	10.3	9.8	8.4	8.1	6.9	6.7	6.3	6.3	5.5	4.9
<b>360.0</b>	10.3	9.8	8.4	8.1	6.9	6.7	6.3	6.3	5.5	4.9

**Photometric Data Table [cd]**

C\G	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0
0.0	4.6	4.1	4.0	3.4	3.1	2.9	2.7	2.5	2.3	2.1
45.0	5.3	4.6	4.6	4.1	4.1	3.5	3.5	2.9	3.2	2.4
90.0	5.3	4.6	4.6	4.1	4.1	3.5	3.5	2.9	3.2	2.4
135.0	5.8	4.9	4.7	3.8	4.1	3.5	3.2	3.2	2.7	2.4
180.0	5.8	4.9	4.7	3.8	4.1	3.5	3.2	3.2	2.7	2.4
225.0	4.3	3.8	3.4	3.4	3.2	2.7	2.7	2.3	2.3	2.0
270.0	4.3	3.8	3.4	3.4	3.2	2.7	2.7	2.3	2.3	2.0
315.0	4.6	4.1	4.0	3.4	3.1	2.9	2.7	2.5	2.3	2.1
360.0	4.6	4.1	4.0	3.4	3.1	2.9	2.7	2.5	2.3	2.1

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	1.5	1.4	1.2	1.2	0.9	0.8	0.5	0.5	0.4	0.3
45.0	2.4	2.1	1.8	2.0	1.7	1.7	1.6	1.5	1.3	1.1
90.0	2.4	2.1	1.8	2.0	1.7	1.7	1.6	1.5	1.3	1.1
135.0	2.0	2.0	1.7	1.4	1.2	1.0	0.8	0.6	0.6	0.6
180.0	2.0	2.0	1.7	1.4	1.2	1.0	0.8	0.6	0.6	0.6
225.0	1.8	1.7	1.2	1.2	1.2	1.2	1.1	1.0	0.9	0.8
270.0	1.8	1.7	1.2	1.2	1.2	1.2	1.1	1.0	0.9	0.8
315.0	1.5	1.4	1.2	1.2	0.9	0.8	0.5	0.5	0.4	0.3
360.0	1.5	1.4	1.2	1.2	0.9	0.8	0.5	0.5	0.4	0.3

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
45.0	0.9	0.9	0.9	0.9	0.8	0.8	0.9	0.8	0.6	0.3
90.0	0.9	0.9	0.9	0.9	0.8	0.8	0.9	0.8	0.6	0.3
135.0	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
180.0	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
225.0	0.6	0.6	0.6	0.5	0.4	0.4	0.5	0.5	0.5	0.5
270.0	0.6	0.6	0.6	0.5	0.4	0.4	0.5	0.5	0.5	0.5
315.0	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
360.0	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45.0	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.2
90.0	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.2
135.0	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
180.0	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
225.0	0.3	0.2	0.2	0.2	0.2	0.0	0.0	0.1	0.1	0.1
270.0	0.3	0.2	0.2	0.2	0.2	0.0	0.0	0.1	0.1	0.1
315.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
360.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2

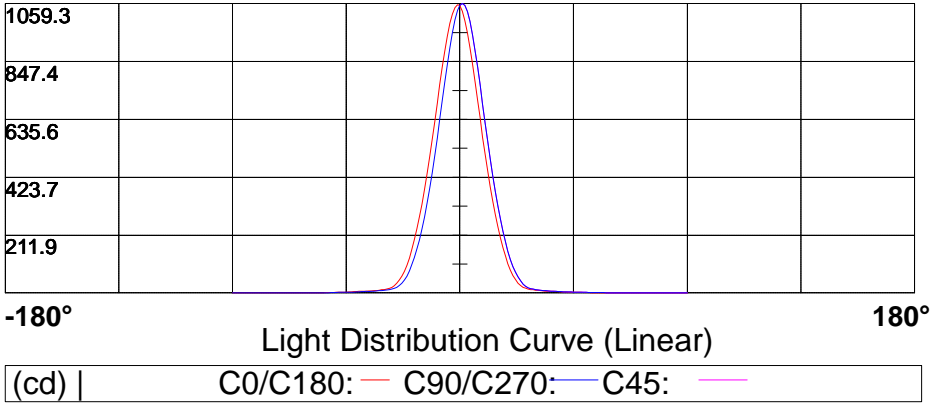
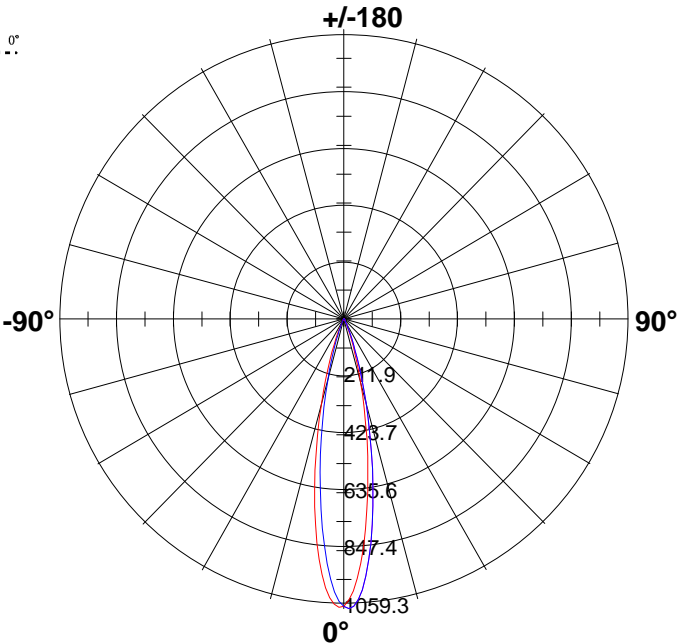
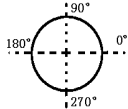
**Photometric Data Table [cd]**

<b>C\G</b>	<b>80.0</b>	<b>81.0</b>	<b>82.0</b>	<b>83.0</b>	<b>84.0</b>	<b>85.0</b>	<b>86.0</b>	<b>87.0</b>	<b>88.0</b>	<b>89.0</b>
<b>0.0</b>	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.2
<b>45.0</b>	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0
<b>90.0</b>	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0
<b>135.0</b>	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
<b>180.0</b>	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
<b>225.0</b>	0.1	0.1	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0
<b>270.0</b>	0.1	0.1	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0
<b>315.0</b>	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.2
<b>360.0</b>	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.2

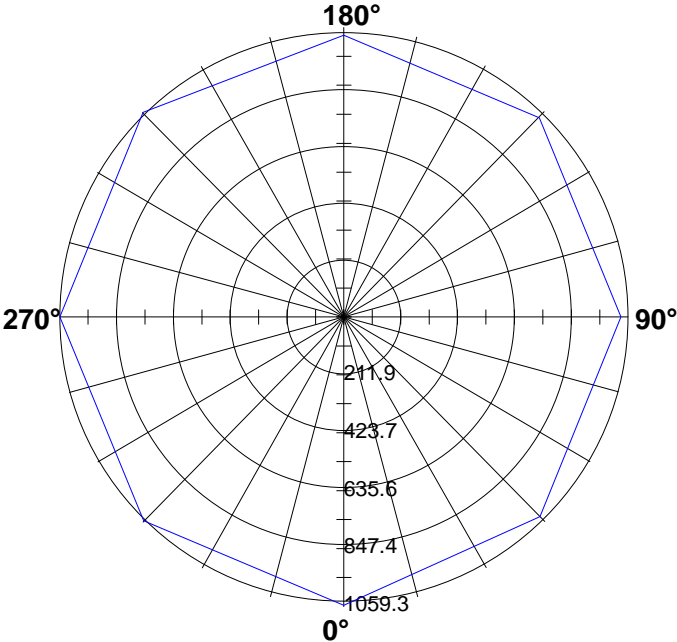
<b>C\G</b>	<b>90.0</b>
<b>0.0</b>	0.0
<b>45.0</b>	0.3
<b>90.0</b>	0.3
<b>135.0</b>	0.2
<b>180.0</b>	0.2
<b>225.0</b>	0.2
<b>270.0</b>	0.2
<b>315.0</b>	0.0
<b>360.0</b>	0.0

Light Distribution Curve [Unit: cd]

Luminaire



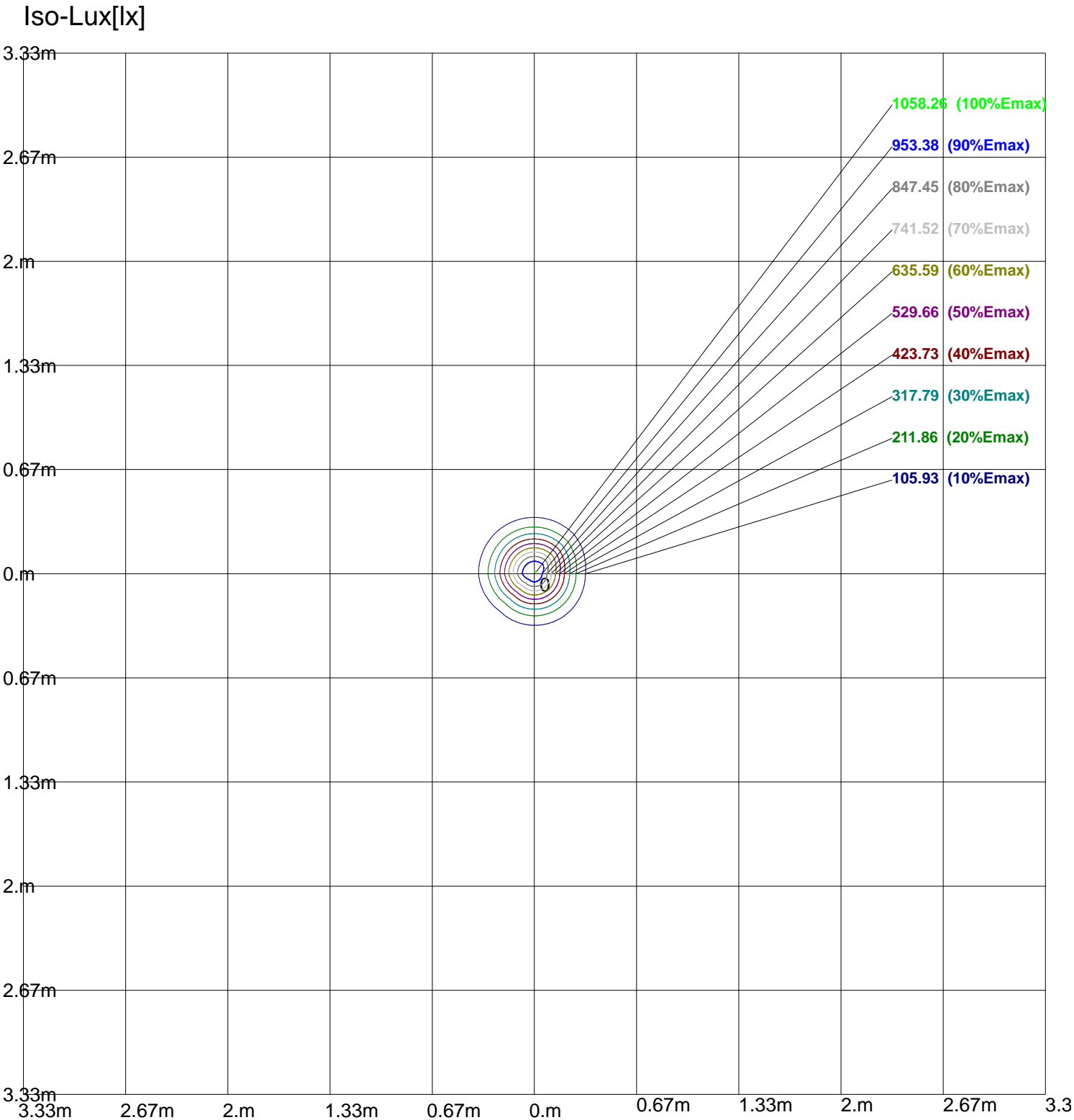
Max Plane Light Distribution Curve [Unit: cd]



1059.3						
847.4						
635.6						
423.7						
211.9						

-180° Light Distribution Curve (Linear) 180°

(cd) |  $\gamma_1$ : —



Height: 1 m  
Max Illuminance : 1059.31lx

## Luminance Limiting Curve

Diameter: 200mm

Length: mm

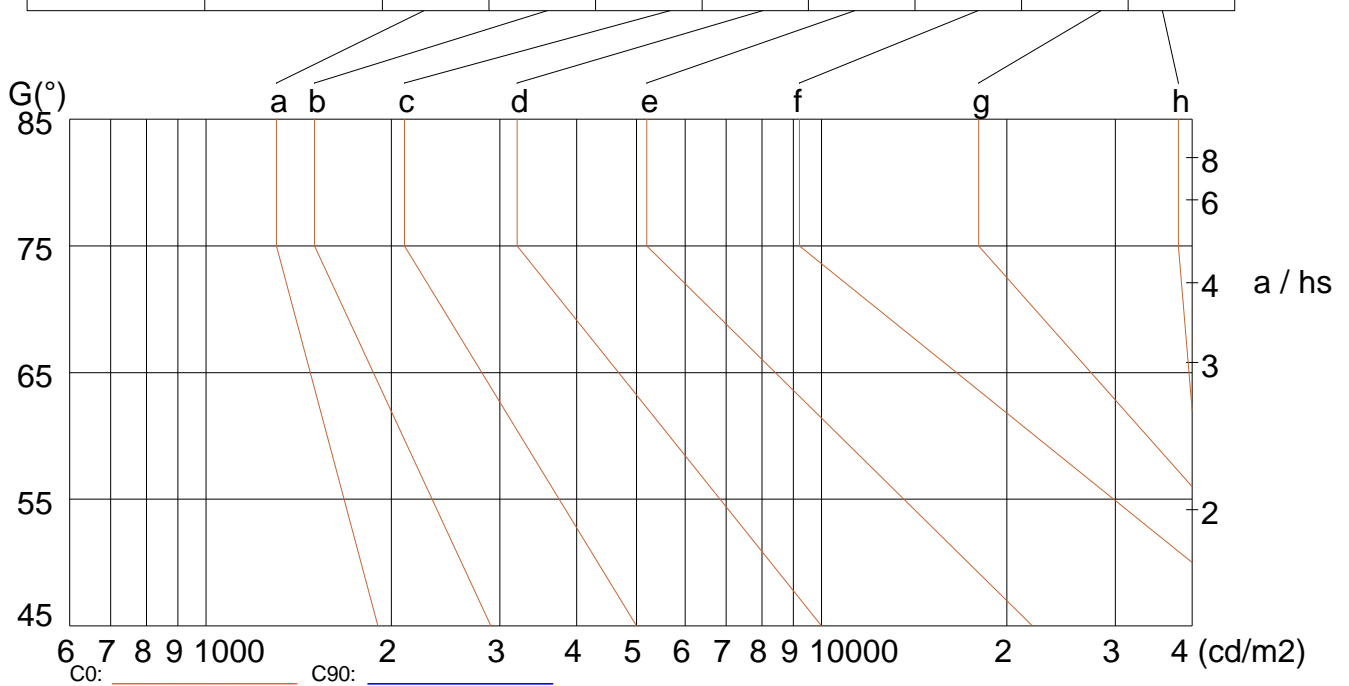
Width: 200mm

Height: mm

(cd/m<sup>2</sup>)

$\gamma$	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	158	121	93	57	63	28	40	31	67
C90	131	76	43	19	13	11	22	37	110

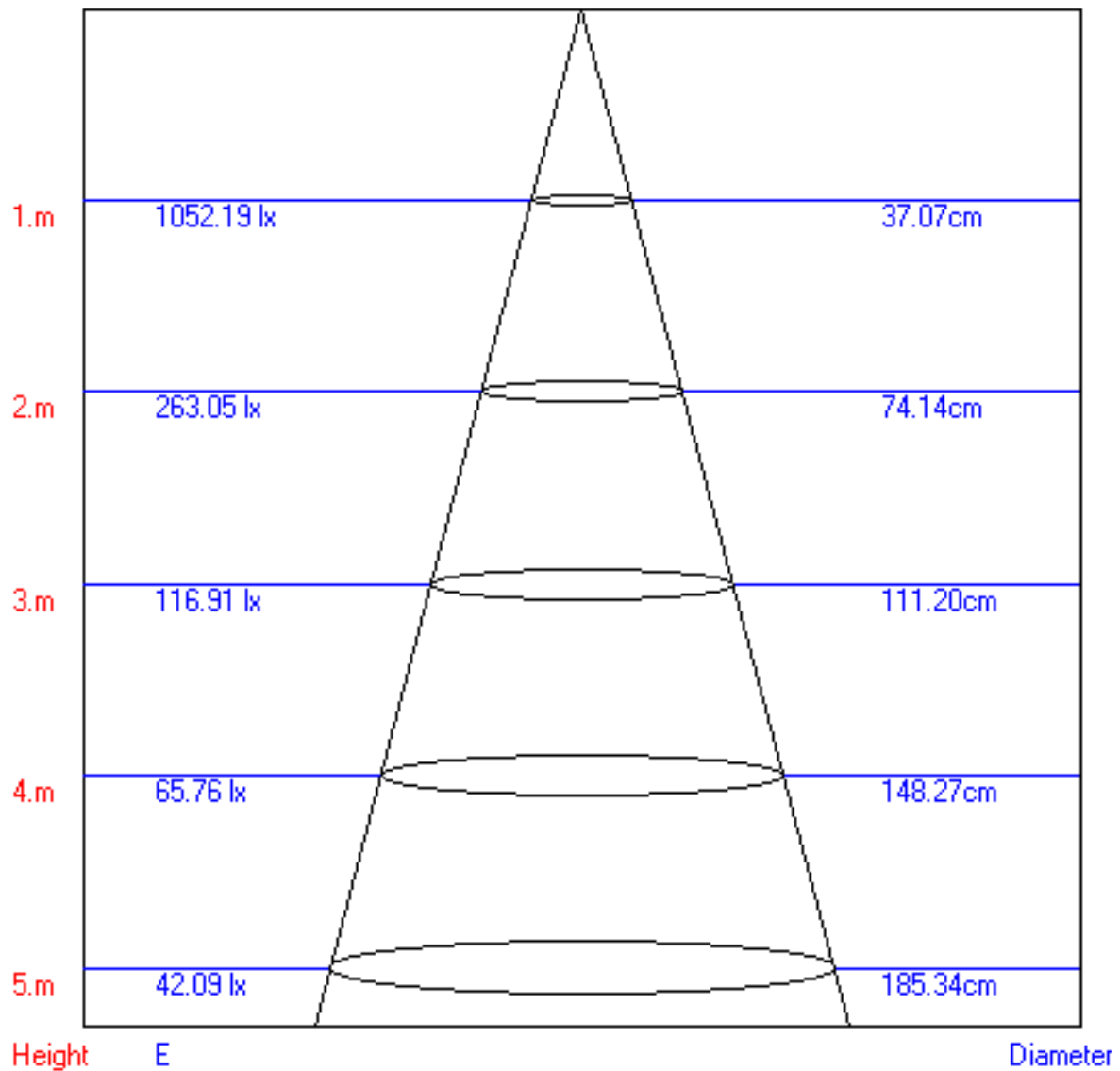
Glare	Quality	Service Values Illuminance (lx)							
1.15	A	2000	1000	500	≤300				
1.5	B		2000	1000	500	≤300			
1.85	C			2000	1000	500	≤300		
2.2	D				2000	1000	500	≤300	
2.55	E					2000	1000	500	≤300



Lum. Limiting Curve (C0/C90)



## Lux-Distance Curve



Beam Angle:21.00°

Utilization Coefficient Table

RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION FOR RHOFC=20															
0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.17	1.17	1.16	1.15	1.15	1.14	1.11	1.10	1.09	1.05	1.04	1.04	0.98	0.97	0.96	0.91
2	1.14	1.13	1.12	1.12	1.11	1.10	1.07	1.06	1.05	1.02	1.01	1.00	0.96	0.94	0.93	0.88
3	1.10	1.09	1.09	1.08	1.07	1.06	1.04	1.03	1.02	0.99	0.98	0.96	0.94	0.92	0.90	0.85
4	1.07	1.06	1.06	1.05	1.04	1.03	1.01	1.00	0.98	0.97	0.95	0.93	0.92	0.89	0.87	0.83
5	1.04	1.03	1.03	1.02	1.01	1.00	0.99	0.97	0.96	0.94	0.92	0.90	0.90	0.87	0.85	0.81
6	1.02	1.01	1.00	1.00	0.99	0.98	0.96	0.94	0.93	0.92	0.90	0.88	0.88	0.85	0.83	0.79
7	0.99	0.98	0.98	0.97	0.96	0.95	0.94	0.92	0.91	0.90	0.87	0.86	0.86	0.83	0.81	0.77
8	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.90	0.88	0.88	0.85	0.84	0.84	0.81	0.79	0.75
9	0.95	0.94	0.93	0.93	0.92	0.91	0.89	0.88	0.86	0.86	0.83	0.82	0.82	0.79	0.77	0.73
10	0.92	0.92	0.91	0.91	0.90	0.89	0.88	0.86	0.84	0.84	0.82	0.80	0.81	0.77	0.75	0.72

