

## Luminaire Property

Luminaire: RH-SOP20 20W 6500K

Report NO.:

Test NO.:

Lamp:

Sum Lumens: 1366.14 lm

Number of Lamps: 1

Diameter: mm

Length: 180mm

Photometric Type: Type C

Voltage: 220.1 V

Current: 0.15 A

Power: 12.3 W

Power Factor: 0.572

Ballast Type:

Width: 180mm

Height: 50mm

Remark:

## Photometric Results

Lumens: 1366.14 lm

Efficiency: 72.2825 lm/W

Central Intensity: 392.717cd

Maximum Intensity: 395.177cd

Angle of maximum intensity: C:135.0 G:2.0

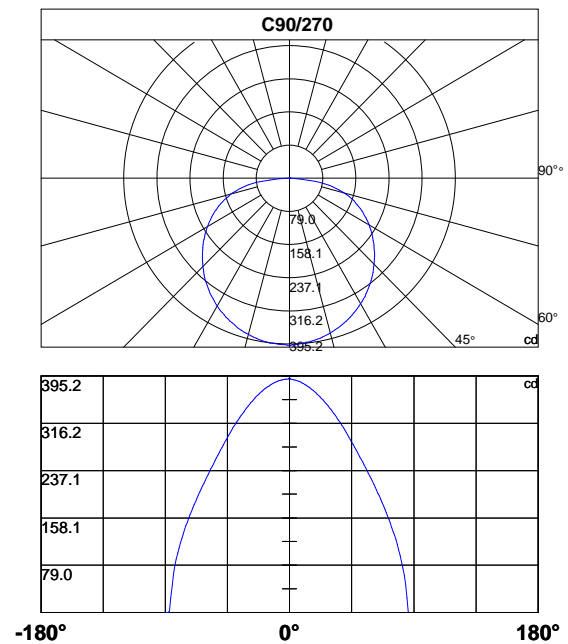
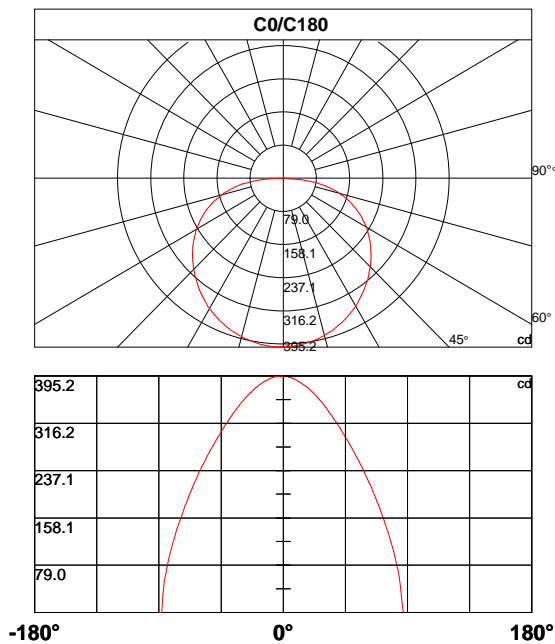
Half Peak Side Angle(50%): Left: -67.8 Right:65.7

Light Out Rate(LOR) : 100.00%

Up Flux Rate: 0.0%

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -87.1 Right:84.6



### 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
0.0	392.7	394.9	394.4	394.2	393.2	392.7	392.0	390.9	390.2	388.8
45.0	392.7	389.9	389.6	388.8	388.4	387.5	386.8	386.0	385.0	383.8
90.0	392.7	389.9	389.6	388.8	388.4	387.5	386.8	386.0	385.0	383.8
135.0	392.7	395.0	395.2	394.8	394.6	394.0	393.6	393.0	392.2	391.4
180.0	392.7	395.0	395.2	394.8	394.6	394.0	393.6	393.0	392.2	391.4
225.0	392.7	390.0	390.0	390.0	389.6	389.1	388.4	388.0	387.1	386.2
270.0	392.7	390.0	390.0	390.0	389.6	389.1	388.4	388.0	387.1	386.2
315.0	392.7	394.9	394.4	394.2	393.2	392.7	392.0	390.9	390.2	388.8
360.0	392.7	394.9	394.4	394.2	393.2	392.7	392.0	390.9	390.2	388.8

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	387.7	386.4	385.1	383.8	381.9	380.4	378.6	376.9	375.2	372.9
45.0	382.4	381.1	379.9	378.5	376.6	375.1	373.1	371.2	369.1	367.4
90.0	382.4	381.1	379.9	378.5	376.6	375.1	373.1	371.2	369.1	367.4
135.0	390.2	389.2	387.9	386.7	385.5	383.9	382.1	380.8	378.7	377.4
180.0	390.2	389.2	387.9	386.7	385.5	383.9	382.1	380.8	378.7	377.4
225.0	385.4	384.3	383.2	381.7	380.2	378.5	377.2	375.5	373.9	371.7
270.0	385.4	384.3	383.2	381.7	380.2	378.5	377.2	375.5	373.9	371.7
315.0	387.7	386.4	385.1	383.8	381.9	380.4	378.6	376.9	375.2	372.9
360.0	387.7	386.4	385.1	383.8	381.9	380.4	378.6	376.9	375.2	372.9

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	370.7	368.4	366.6	364.4	361.6	359.1	356.4	353.6	350.8	348.2
45.0	365.2	362.7	360.5	357.9	355.8	353.1	350.5	347.7	344.8	342.0
90.0	365.2	362.7	360.5	357.9	355.8	353.1	350.5	347.7	344.8	342.0
135.0	375.2	373.1	371.1	368.7	367.1	364.3	362.1	359.4	357.0	354.3
180.0	375.2	373.1	371.1	368.7	367.1	364.3	362.1	359.4	357.0	354.3
225.0	369.9	367.7	365.5	363.3	361.0	358.6	355.9	353.3	350.9	348.0
270.0	369.9	367.7	365.5	363.3	361.0	358.6	355.9	353.3	350.9	348.0
315.0	370.7	368.4	366.6	364.4	361.6	359.1	356.4	353.6	350.8	348.2
360.0	370.7	368.4	366.6	364.4	361.6	359.1	356.4	353.6	350.8	348.2

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	345.4	342.0	339.0	335.6	332.2	329.4	325.9	322.5	318.8	315.4
45.0	339.1	336.2	332.8	329.7	326.2	322.8	319.6	316.1	312.3	308.5
90.0	339.1	336.2	332.8	329.7	326.2	322.8	319.6	316.1	312.3	308.5
135.0	351.7	349.0	345.7	343.0	339.6	336.1	333.6	330.0	326.8	323.1
180.0	351.7	349.0	345.7	343.0	339.6	336.1	333.6	330.0	326.8	323.1
225.0	345.1	342.0	339.0	335.7	332.7	329.7	326.3	322.7	319.3	315.4
270.0	345.1	342.0	339.0	335.7	332.7	329.7	326.3	322.7	319.3	315.4
315.0	345.4	342.0	339.0	335.6	332.2	329.4	325.9	322.5	318.8	315.4
360.0	345.4	342.0	339.0	335.6	332.2	329.4	325.9	322.5	318.8	315.4

### 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	312.2	308.4	304.7	300.9	297.0	292.9	289.7	285.4	281.4	277.4
45.0	304.6	301.2	297.2	292.9	288.9	284.7	280.5	276.4	272.6	268.2
90.0	304.6	301.2	297.2	292.9	288.9	284.7	280.5	276.4	272.6	268.2
135.0	319.6	316.1	312.8	309.3	305.4	301.6	297.6	294.4	290.5	286.2
180.0	319.6	316.1	312.8	309.3	305.4	301.6	297.6	294.4	290.5	286.2
225.0	312.2	308.4	304.4	300.3	296.2	292.2	288.3	284.2	279.8	275.5
270.0	312.2	308.4	304.4	300.3	296.2	292.2	288.3	284.2	279.8	275.5
315.0	312.2	308.4	304.7	300.9	297.0	292.9	289.7	285.4	281.4	277.4
360.0	312.2	308.4	304.7	300.9	297.0	292.9	289.7	285.4	281.4	277.4

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	272.9	269.0	265.1	260.7	256.0	252.0	247.1	242.7	238.1	233.2
45.0	263.6	259.4	254.8	251.2	246.4	242.0	237.3	232.5	227.9	223.7
90.0	263.6	259.4	254.8	251.2	246.4	242.0	237.3	232.5	227.9	223.7
135.0	282.2	278.1	273.9	270.1	265.7	261.4	256.9	252.4	247.5	243.4
180.0	282.2	278.1	273.9	270.1	265.7	261.4	256.9	252.4	247.5	243.4
225.0	271.0	266.6	262.7	257.9	253.5	248.9	244.3	240.1	235.4	230.6
270.0	271.0	266.6	262.7	257.9	253.5	248.9	244.3	240.1	235.4	230.6
315.0	272.9	269.0	265.1	260.7	256.0	252.0	247.1	242.7	238.1	233.2
360.0	272.9	269.0	265.1	260.7	256.0	252.0	247.1	242.7	238.1	233.2

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	228.2	223.1	217.8	213.2	207.9	202.0	196.3	190.5	184.4	179.3
45.0	219.0	214.0	209.2	204.0	199.0	194.5	189.2	183.8	178.1	172.6
90.0	219.0	214.0	209.2	204.0	199.0	194.5	189.2	183.8	178.1	172.6
135.0	238.3	233.5	228.4	223.1	217.6	213.1	207.6	201.7	196.0	190.0
180.0	238.3	233.5	228.4	223.1	217.6	213.1	207.6	201.7	196.0	190.0
225.0	225.9	220.8	216.1	211.0	206.4	201.4	196.2	190.7	185.3	180.5
270.0	225.9	220.8	216.1	211.0	206.4	201.4	196.2	190.7	185.3	180.5
315.0	228.2	223.1	217.8	213.2	207.9	202.0	196.3	190.5	184.4	179.3
360.0	228.2	223.1	217.8	213.2	207.9	202.0	196.3	190.5	184.4	179.3

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	173.0	166.6	159.9	153.3	146.3	140.3	133.0	125.5	117.6	109.2
45.0	167.4	161.6	155.4	149.0	142.2	135.1	129.1	121.2	113.3	104.5
90.0	167.4	161.6	155.4	149.0	142.2	135.1	129.1	121.2	113.3	104.5
135.0	184.7	178.6	172.2	165.8	158.8	152.1	145.9	138.8	131.2	123.3
180.0	184.7	178.6	172.2	165.8	158.8	152.1	145.9	138.8	131.2	123.3
225.0	174.8	169.0	163.2	157.0	150.6	145.1	138.3	131.1	123.8	115.8
270.0	174.8	169.0	163.2	157.0	150.6	145.1	138.3	131.1	123.8	115.8
315.0	173.0	166.6	159.9	153.3	146.3	140.3	133.0	125.5	117.6	109.2
360.0	173.0	166.6	159.9	153.3	146.3	140.3	133.0	125.5	117.6	109.2

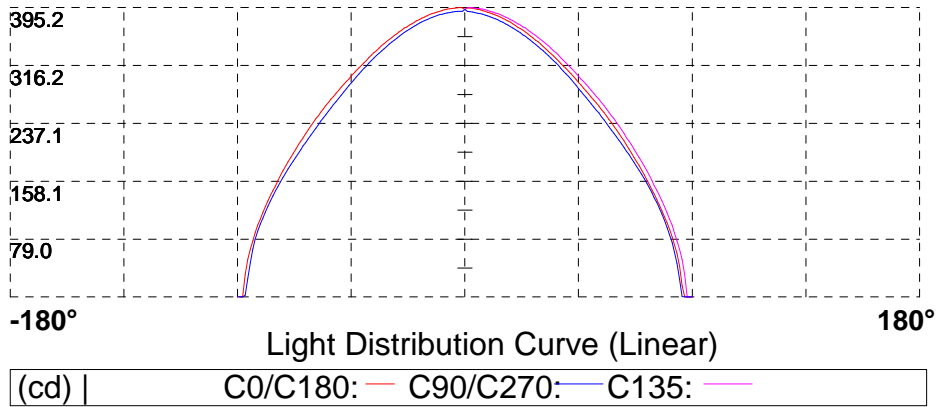
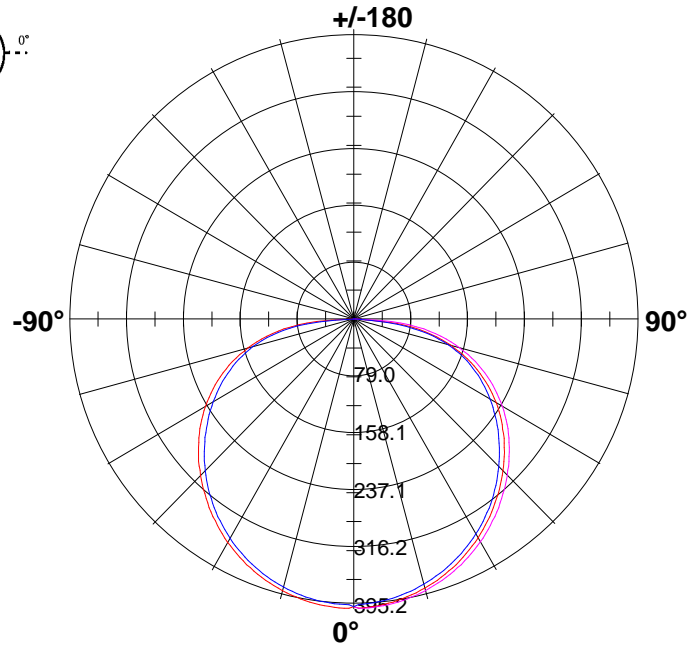
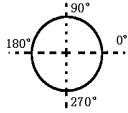
### Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	101.7	92.4	82.2	71.4	59.7	42.8	15.8	0.0	0.0	0.0
45.0	95.0	84.6	74.4	61.3	46.0	24.7	0.6	0.0	0.0	0.0
90.0	95.0	84.6	74.4	61.3	46.0	24.7	0.6	0.0	0.0	0.0
135.0	115.1	105.9	98.3	87.7	76.9	65.4	51.6	30.8	0.0	0.0
180.0	115.1	105.9	98.3	87.7	76.9	65.4	51.6	30.8	0.0	0.0
225.0	107.3	99.3	89.6	79.0	65.9	46.5	25.4	2.5	0.0	0.0
270.0	107.3	99.3	89.6	79.0	65.9	46.5	25.4	2.5	0.0	0.0
315.0	101.7	92.4	82.2	71.4	59.7	42.8	15.8	0.0	0.0	0.0
360.0	101.7	92.4	82.2	71.4	59.7	42.8	15.8	0.0	0.0	0.0

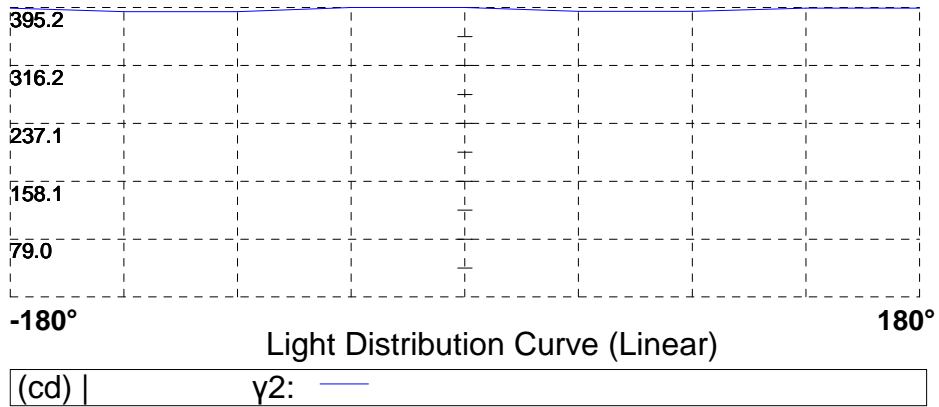
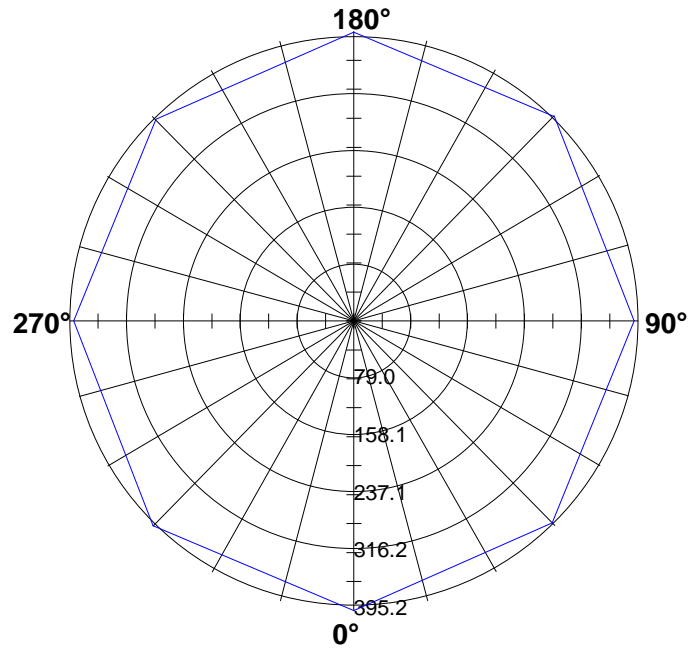
C\G	90.0
0.0	0.0
45.0	0.0
90.0	0.0
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

Light Distribution Curve [Unit: cd]

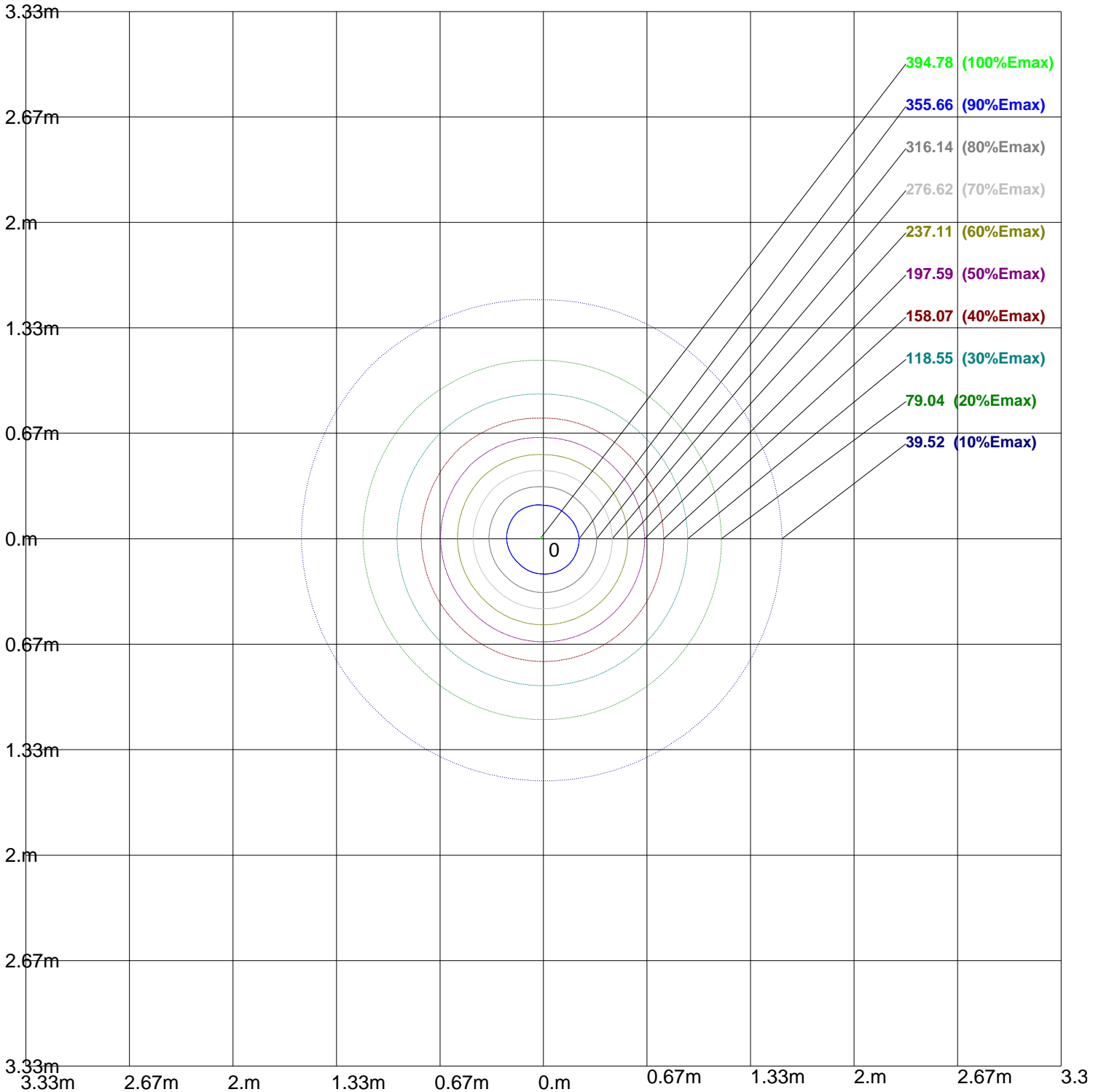
Luminaire



Max Plane Light Distribution Curve [Unit: cd]



### Iso-Lux[lx]



Height: 1 m  
Max Illuminance : 395.18lx

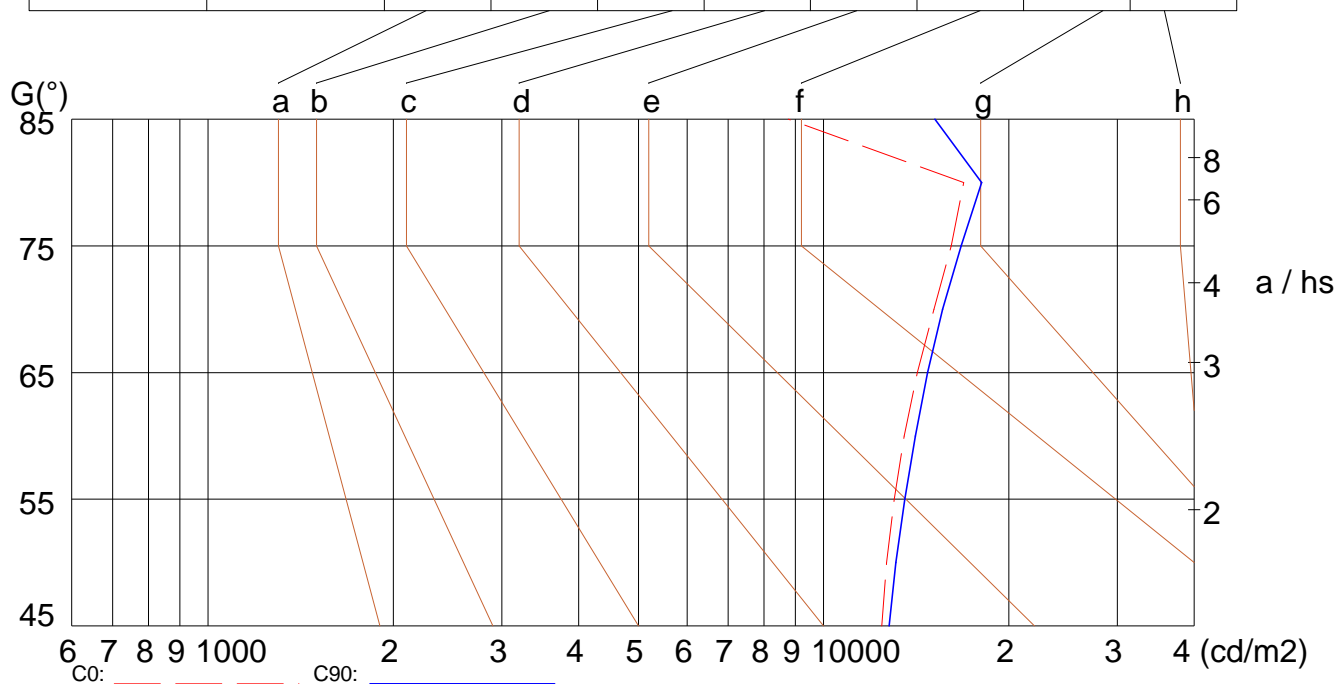
## Luminance Limiting Curve

Diameter: mm  
Length: 180mm  
Width: 180mm  
Height: 50mm

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

$\gamma$	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	12427	12659	13020	13516	14202	15104	16113	16883	8762
C90	12784	13106	13559	14087	14755	15616	16735	18073	15171

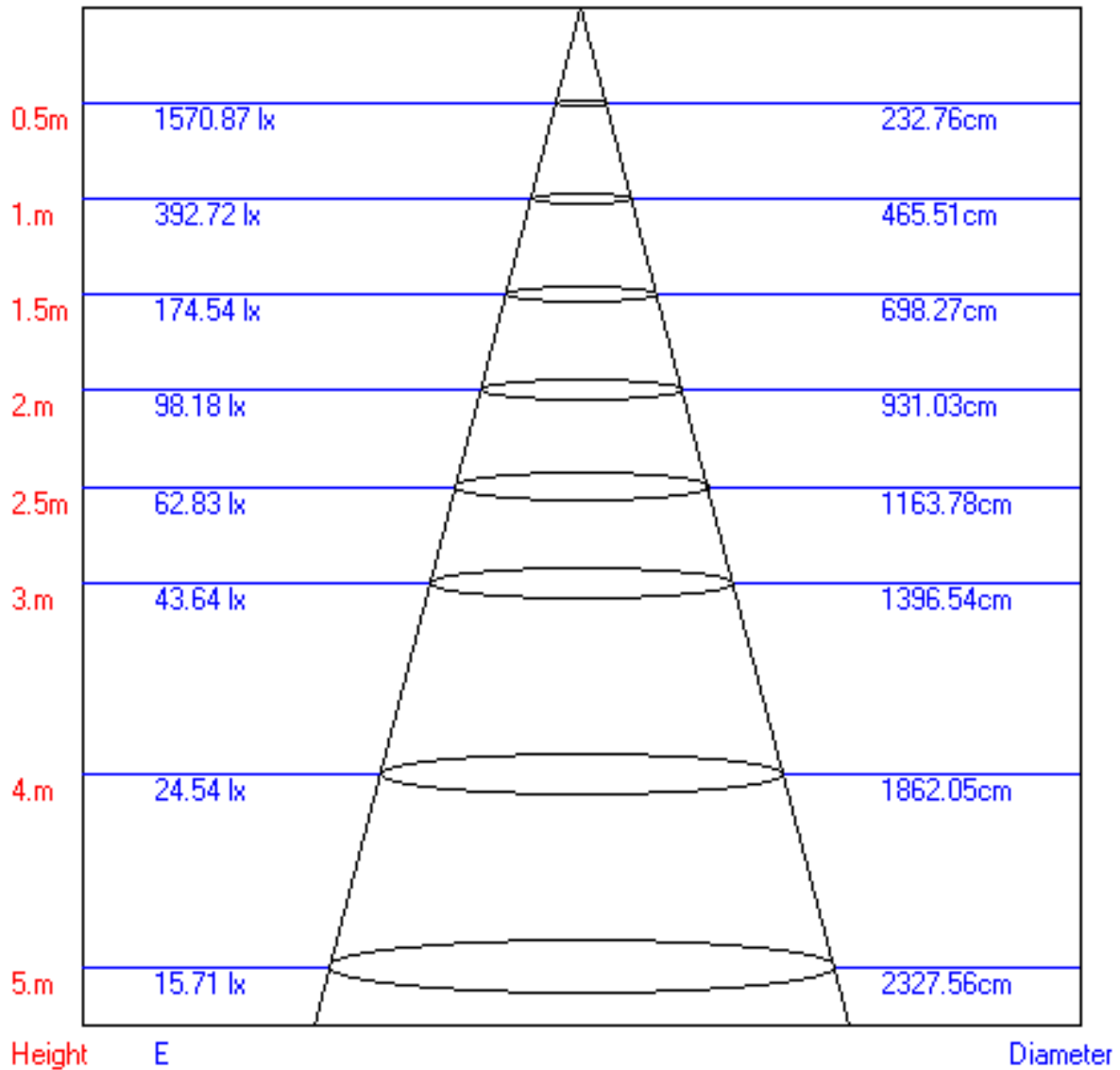
Glare	Quality	Service Values Illuminance (lx)							
1.15	A	2000	1000	500	≤300				
1.5	B		2000	1000	500	≤300			
1.85	C			2000	1000	500	≤300		
2.2	D				2000	1000	500	≤300	
2.55	E					2000	1000	500	≤300



Lum. Limiting Curve (C0/C90)



### Lux-Distance Curve



Beam Angle:133.50°

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	1.01	0.99	0.97	1.00	0.97	0.95	0.96	0.94	0.91	0.92	0.89	0.87	0.86	0.83	0.80	0.75
2	0.83	0.80	0.78	0.83	0.79	0.77	0.81	0.77	0.74	0.78	0.74	0.70	0.74	0.70	0.65	0.61
3	0.70	0.66	0.64	0.70	0.66	0.63	0.69	0.64	0.61	0.68	0.62	0.58	0.65	0.59	0.54	0.50
4	0.59	0.56	0.54	0.60	0.56	0.53	0.60	0.55	0.51	0.59	0.53	0.49	0.58	0.51	0.46	0.42
5	0.51	0.48	0.46	0.52	0.48	0.45	0.53	0.47	0.43	0.53	0.46	0.42	0.52	0.45	0.39	0.36
6	0.45	0.42	0.40	0.46	0.42	0.39	0.47	0.42	0.38	0.47	0.41	0.36	0.47	0.40	0.34	0.31
7	0.39	0.37	0.35	0.41	0.37	0.34	0.42	0.37	0.33	0.43	0.36	0.32	0.43	0.36	0.30	0.27
8	0.35	0.33	0.31	0.36	0.33	0.30	0.38	0.33	0.29	0.39	0.33	0.28	0.39	0.32	0.27	0.24
9	0.32	0.29	0.28	0.33	0.29	0.27	0.35	0.30	0.26	0.36	0.30	0.25	0.36	0.29	0.24	0.21
10	0.29	0.26	0.25	0.30	0.27	0.25	0.32	0.27	0.24	0.33	0.27	0.23	0.34	0.27	0.22	0.19

