

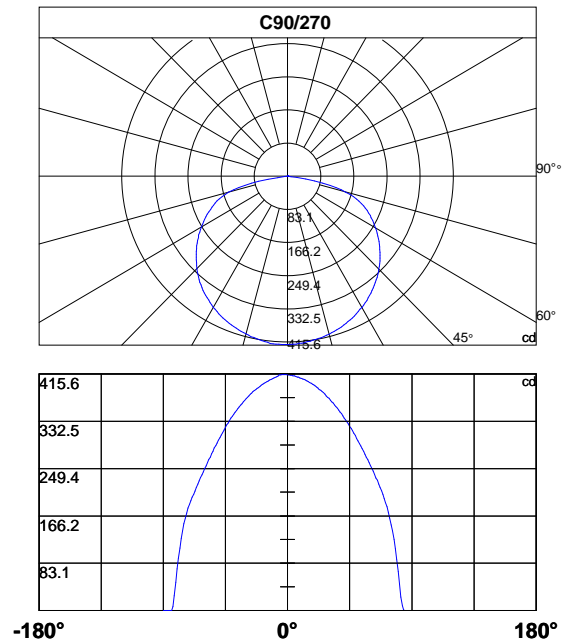
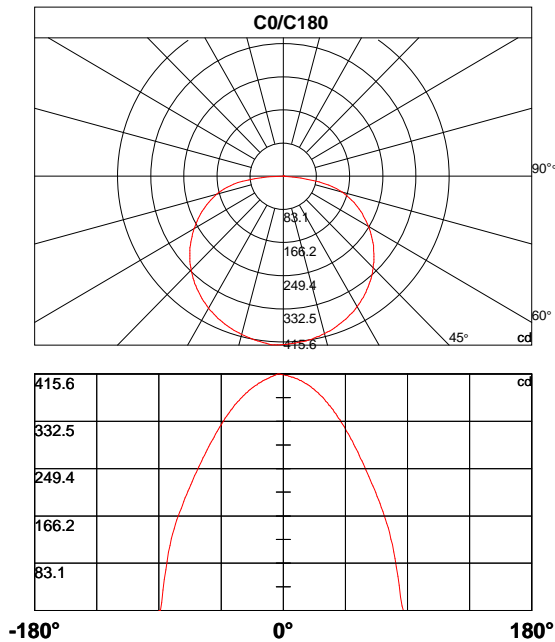
Luminaire Property

Luminaire: RH-ROP20 20W 4000K

Report NO.:	Voltage: 230.0 V
Test NO.:	Current: 0.135 A
Lamp:	Power: 17.3 W
Sum Lumens: 1470.69 lm	Power Factor: 0.559
Number of Lamps: 1	Ballast Type: 300mA
Diameter: 172mm	Width: 172mm
Length: mm	Height: 50mm
Photometric Type: Type C	Remark:

Photometric Results

Lumens: 1470.69 lm	Angle of maximum intensity: C:135.0 G:4.0
Efficiency: 85.011 lm/W	Half Peak Side Angle(50%): Left: -70.9 Right:65.3
Central Intensity: 414.24cd	Light Out Rate(LOR) : 100.00%
Maximum Intensity: 415.626cd	Up Flux Rate: 0.0%
Beam Angle(10%): Left: -88.1 Right:82.7	Down Flux Rate: 100.0%



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	414.2	414.0	412.9	412.8	411.7	411.1	410.3	409.9	409.1	407.8
45.0	414.2	413.9	413.5	413.7	412.4	412.2	411.4	410.2	410.0	408.4
90.0	414.2	413.9	413.5	413.7	412.4	412.2	411.4	410.2	410.0	408.4
135.0	414.2	414.7	415.1	415.6	415.6	414.9	413.8	412.3	411.3	410.4
180.0	414.2	414.7	415.1	415.6	415.6	414.9	413.8	412.3	411.3	410.4
225.0	414.2	414.6	414.7	414.3	414.4	413.8	414.0	411.9	410.9	409.7
270.0	414.2	414.6	414.7	414.3	414.4	413.8	414.0	411.9	410.9	409.7
315.0	414.2	414.0	412.9	412.8	411.7	411.1	410.3	409.9	409.1	407.8
360.0	414.2	414.0	412.9	412.8	411.7	411.1	410.3	409.9	409.1	407.8

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	407.4	405.9	404.5	403.8	401.9	401.4	399.0	398.3	396.7	394.7
45.0	407.9	406.6	406.0	404.7	403.7	402.5	400.3	399.2	397.7	396.6
90.0	407.9	406.6	406.0	404.7	403.7	402.5	400.3	399.2	397.7	396.6
135.0	408.9	407.9	406.9	405.8	404.4	403.4	401.5	400.0	399.1	396.8
180.0	408.9	407.9	406.9	405.8	404.4	403.4	401.5	400.0	399.1	396.8
225.0	408.6	407.4	405.9	405.3	403.1	402.1	400.6	399.3	397.8	395.8
270.0	408.6	407.4	405.9	405.3	403.1	402.1	400.6	399.3	397.8	395.8
315.0	407.4	405.9	404.5	403.8	401.9	401.4	399.0	398.3	396.7	394.7
360.0	407.4	405.9	404.5	403.8	401.9	401.4	399.0	398.3	396.7	394.7

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	393.0	390.5	389.1	386.9	384.9	383.1	380.2	378.3	375.8	373.4
45.0	394.7	392.5	390.9	388.3	386.9	384.9	382.9	380.2	377.2	374.5
90.0	394.7	392.5	390.9	388.3	386.9	384.9	382.9	380.2	377.2	374.5
135.0	395.7	393.8	392.2	390.3	388.3	386.4	383.5	381.8	379.3	377.6
180.0	395.7	393.8	392.2	390.3	388.3	386.4	383.5	381.8	379.3	377.6
225.0	394.1	391.8	390.5	388.4	386.4	384.6	381.8	380.1	377.0	374.6
270.0	394.1	391.8	390.5	388.4	386.4	384.6	381.8	380.1	377.0	374.6
315.0	393.0	390.5	389.1	386.9	384.9	383.1	380.2	378.3	375.8	373.4
360.0	393.0	390.5	389.1	386.9	384.9	383.1	380.2	378.3	375.8	373.4

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	370.5	367.6	365.0	361.4	359.6	355.5	353.2	348.9	345.8	342.0
45.0	372.9	369.9	367.1	364.8	361.4	358.2	355.4	352.3	349.0	345.7
90.0	372.9	369.9	367.1	364.8	361.4	358.2	355.4	352.3	349.0	345.7
135.0	374.2	372.3	369.0	366.7	363.9	360.9	357.8	354.2	351.9	347.5
180.0	374.2	372.3	369.0	366.7	363.9	360.9	357.8	354.2	351.9	347.5
225.0	372.5	369.1	366.7	363.4	361.3	358.0	354.9	351.5	348.2	344.8
270.0	372.5	369.1	366.7	363.4	361.3	358.0	354.9	351.5	348.2	344.8
315.0	370.5	367.6	365.0	361.4	359.6	355.5	353.2	348.9	345.8	342.0
360.0	370.5	367.6	365.0	361.4	359.6	355.5	353.2	348.9	345.8	342.0

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	338.2	335.2	330.8	327.6	323.1	318.9	314.2	310.5	306.6	301.6
45.0	342.2	338.3	335.5	331.4	328.0	323.5	319.8	315.9	311.8	307.5
90.0	342.2	338.3	335.5	331.4	328.0	323.5	319.8	315.9	311.8	307.5
135.0	345.0	341.7	337.9	333.8	330.1	326.5	322.3	318.5	314.3	310.0
180.0	345.0	341.7	337.9	333.8	330.1	326.5	322.3	318.5	314.3	310.0
225.0	341.6	338.1	333.9	329.7	326.3	321.7	317.2	312.5	308.3	303.6
270.0	341.6	338.1	333.9	329.7	326.3	321.7	317.2	312.5	308.3	303.6
315.0	338.2	335.2	330.8	327.6	323.1	318.9	314.2	310.5	306.6	301.6
360.0	338.2	335.2	330.8	327.6	323.1	318.9	314.2	310.5	306.6	301.6

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	297.4	291.8	287.7	283.5	278.2	273.1	267.3	262.8	257.9	252.5
45.0	302.2	298.1	293.0	289.0	284.9	279.5	274.7	269.6	265.0	259.7
90.0	302.2	298.1	293.0	289.0	284.9	279.5	274.7	269.6	265.0	259.7
135.0	305.1	301.3	296.7	292.5	287.8	282.4	277.7	272.8	268.2	262.9
180.0	305.1	301.3	296.7	292.5	287.8	282.4	277.7	272.8	268.2	262.9
225.0	299.0	294.5	289.8	285.6	279.8	275.6	269.6	265.8	260.0	254.6
270.0	299.0	294.5	289.8	285.6	279.8	275.6	269.6	265.8	260.0	254.6
315.0	297.4	291.8	287.7	283.5	278.2	273.1	267.3	262.8	257.9	252.5
360.0	297.4	291.8	287.7	283.5	278.2	273.1	267.3	262.8	257.9	252.5

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	247.0	241.0	235.9	229.1	223.5	218.9	212.6	207.0	200.0	194.2
45.0	254.9	249.2	244.5	239.1	232.7	228.7	222.0	216.6	210.4	204.4
90.0	254.9	249.2	244.5	239.1	232.7	228.7	222.0	216.6	210.4	204.4
135.0	258.3	252.4	247.7	242.5	237.1	231.8	226.1	221.1	214.3	210.0
180.0	258.3	252.4	247.7	242.5	237.1	231.8	226.1	221.1	214.3	210.0
225.0	249.4	243.7	238.3	233.5	227.9	222.0	216.0	209.7	204.2	198.9
270.0	249.4	243.7	238.3	233.5	227.9	222.0	216.0	209.7	204.2	198.9
315.0	247.0	241.0	235.9	229.1	223.5	218.9	212.6	207.0	200.0	194.2
360.0	247.0	241.0	235.9	229.1	223.5	218.9	212.6	207.0	200.0	194.2

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	188.4	181.1	174.7	167.4	160.4	153.1	145.3	136.7	125.6	116.0
45.0	197.0	189.3	182.4	172.4	162.4	150.2	139.8	125.1	108.7	89.9
90.0	197.0	189.3	182.4	172.4	162.4	150.2	139.8	125.1	108.7	89.9
135.0	203.5	197.7	191.6	185.1	179.1	173.0	166.5	159.5	151.9	143.6
180.0	203.5	197.7	191.6	185.1	179.1	173.0	166.5	159.5	151.9	143.6
225.0	192.8	187.0	179.7	171.2	162.5	152.7	139.5	126.2	109.4	91.8
270.0	192.8	187.0	179.7	171.2	162.5	152.7	139.5	126.2	109.4	91.8
315.0	188.4	181.1	174.7	167.4	160.4	153.1	145.3	136.7	125.6	116.0
360.0	188.4	181.1	174.7	167.4	160.4	153.1	145.3	136.7	125.6	116.0

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	102.8	91.1	76.4	60.2	44.3	24.1	7.7	0.0	0.0	0.0
45.0	68.4	46.1	23.4	8.4	0.4	0.0	0.0	0.0	0.0	0.0
90.0	68.4	46.1	23.4	8.4	0.4	0.0	0.0	0.0	0.0	0.0
135.0	134.5	126.0	114.4	102.1	86.7	71.2	54.2	36.0	14.1	0.0
180.0	134.5	126.0	114.4	102.1	86.7	71.2	54.2	36.0	14.1	0.0
225.0	73.3	49.7	25.7	6.5	0.0	0.0	0.0	0.0	0.0	0.0
270.0	73.3	49.7	25.7	6.5	0.0	0.0	0.0	0.0	0.0	0.0
315.0	102.8	91.1	76.4	60.2	44.3	24.1	7.7	0.0	0.0	0.0
360.0	102.8	91.1	76.4	60.2	44.3	24.1	7.7	0.0	0.0	0.0

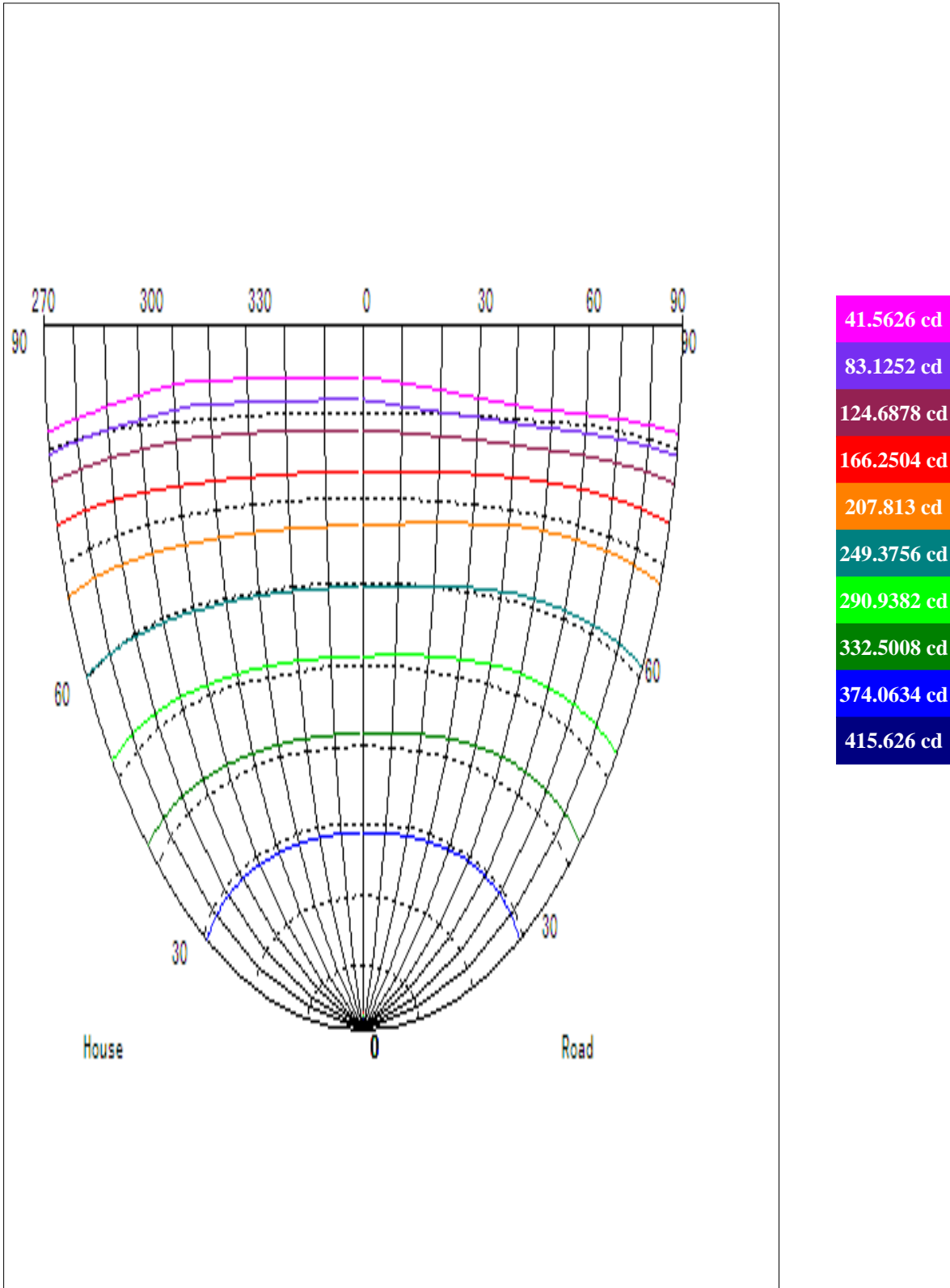
C\G	90.0
0.0	0.0
45.0	0.0
90.0	0.0
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

Zonal Flux Distribution

Gamma [°]	I_{mean} [cd]	Zonal Flux [lm]	Sum Flux [lm]	Zonal Flux [%]	Sum Flux [%]
0	414.24	0.00	0.00	0.00	0.00
1	414.31	0.40	0.40	0.03	0.03
2	414.04	1.19	1.59	0.08	0.11
3	414.09	1.98	3.57	0.13	0.24
4	413.53	2.77	6.34	0.19	0.43
5	413.01	3.56	9.89	0.24	0.67
6	412.38	4.34	14.23	0.29	0.97
7	411.06	5.11	19.34	0.35	1.32
8	410.32	5.88	25.22	0.40	1.71
9	409.07	6.64	31.86	0.45	2.17
10	408.21	7.40	39.26	0.50	2.67
11	406.96	8.15	47.40	0.55	3.22
12	405.84	8.89	56.29	0.60	3.83
13	404.92	9.62	65.91	0.65	4.48
14	403.29	10.35	76.25	0.70	5.18
15	402.33	11.06	87.31	0.75	5.94
16	400.34	11.76	99.07	0.80	6.74
17	399.20	12.45	111.53	0.85	7.58
18	397.82	13.14	124.67	0.89	8.48
19	395.97	13.81	138.48	0.94	9.42
20	394.37	14.47	152.94	0.98	10.40
21	392.14	15.10	168.04	1.03	11.43
22	390.69	15.73	183.78	1.07	12.50
23	388.45	16.35	200.12	1.11	13.61
24	386.63	16.95	217.07	1.15	14.76
25	384.75	17.54	234.61	1.19	15.95
26	382.12	18.10	252.71	1.23	17.18
27	380.10	18.65	271.36	1.27	18.45
28	377.34	19.18	290.54	1.30	19.76
29	375.02	19.68	310.22	1.34	21.09
30	372.53	20.18	330.40	1.37	22.47
31	369.72	20.66	351.06	1.40	23.87
32	366.94	21.10	372.16	1.44	25.31
33	364.06	21.54	393.70	1.46	26.77
34	361.54	21.96	415.66	1.49	28.26
35	358.14	22.35	438.01	1.52	29.78
36	355.31	22.72	460.73	1.54	31.33
37	351.72	23.06	483.78	1.57	32.90
38	348.73	23.38	507.17	1.59	34.48
39	345.01	23.68	530.84	1.61	36.09
40	341.77	23.95	554.80	1.63	37.72

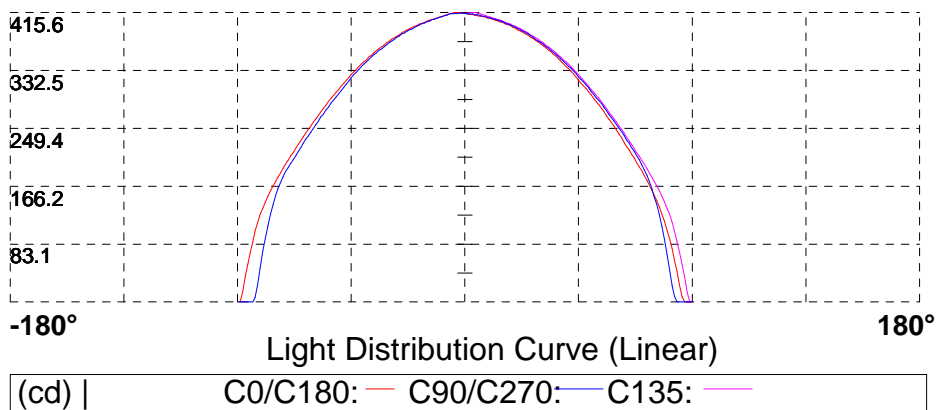
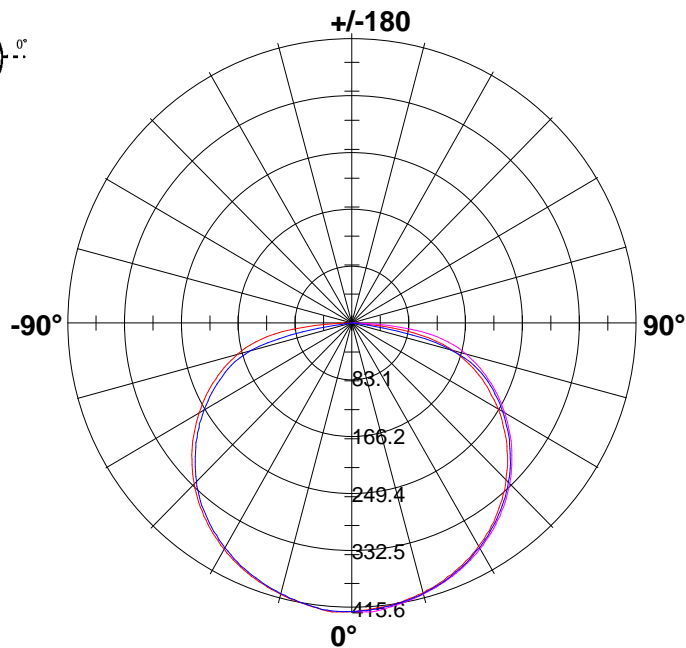
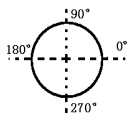
Zonal Flux Distribution

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Flux [lm]	Zonal Flux [%]	Sum Flux [%]
41	338.32	24.22	579.01	1.65	39.37
42	334.52	24.45	603.46	1.66	41.03
43	330.62	24.64	628.10	1.68	42.71
44	326.89	24.82	652.91	1.69	44.40
45	322.62	24.96	677.88	1.70	46.09
46	318.39	25.07	702.94	1.70	47.80
47	314.35	25.17	728.11	1.71	49.51
48	310.25	25.25	753.36	1.72	51.22
49	305.66	25.29	778.65	1.72	52.94
50	300.93	25.29	803.94	1.72	54.66
51	296.41	25.27	829.22	1.72	56.38
52	291.79	25.24	854.46	1.72	58.10
53	287.65	25.21	879.66	1.71	59.81
54	282.66	25.14	904.80	1.71	61.52
55	277.65	25.01	929.81	1.70	63.22
56	272.32	24.85	954.66	1.69	64.91
57	267.75	24.69	979.36	1.68	66.59
58	262.74	24.53	1003.89	1.67	68.26
59	257.43	24.32	1028.21	1.65	69.91
60	252.39	24.09	1052.29	1.64	71.55
61	246.58	23.81	1076.10	1.62	73.17
62	241.61	23.52	1099.63	1.60	74.77
63	236.05	23.23	1122.86	1.58	76.35
64	230.27	22.88	1145.74	1.56	77.90
65	225.34	22.55	1168.29	1.53	79.44
66	219.17	22.18	1190.47	1.51	80.95
67	213.58	21.76	1212.23	1.48	82.43
68	207.25	21.32	1233.54	1.45	83.88
69	201.87	20.87	1254.41	1.42	85.29
70	195.44	20.41	1274.82	1.39	86.68
71	188.80	19.86	1294.68	1.35	88.03
72	182.09	19.28	1313.96	1.31	89.34
73	174.02	18.62	1332.59	1.27	90.61
74	166.07	17.88	1350.46	1.22	91.83
75	157.25	17.08	1367.55	1.16	92.99
76	147.76	16.19	1383.74	1.10	94.09
77	136.85	15.17	1398.91	1.03	95.12
78	123.91	13.96	1412.87	0.95	96.07
79	110.32	12.59	1425.46	0.86	96.92
80	94.73	11.05	1436.51	0.75	97.68
81	78.23	9.35	1445.87	0.64	98.31

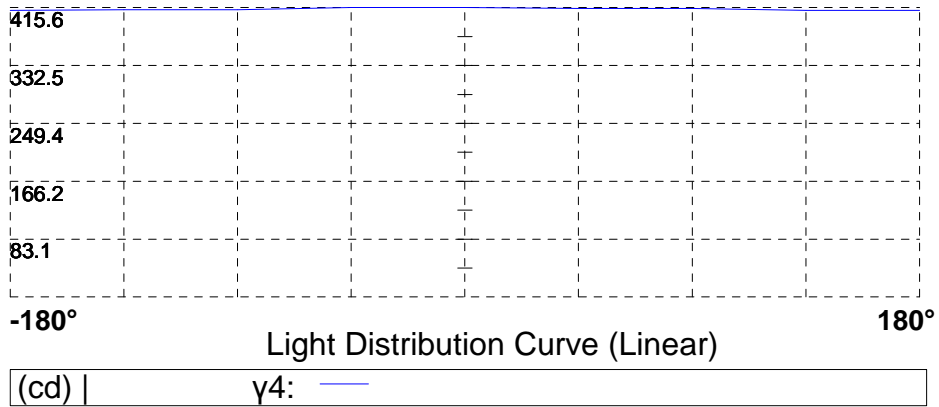
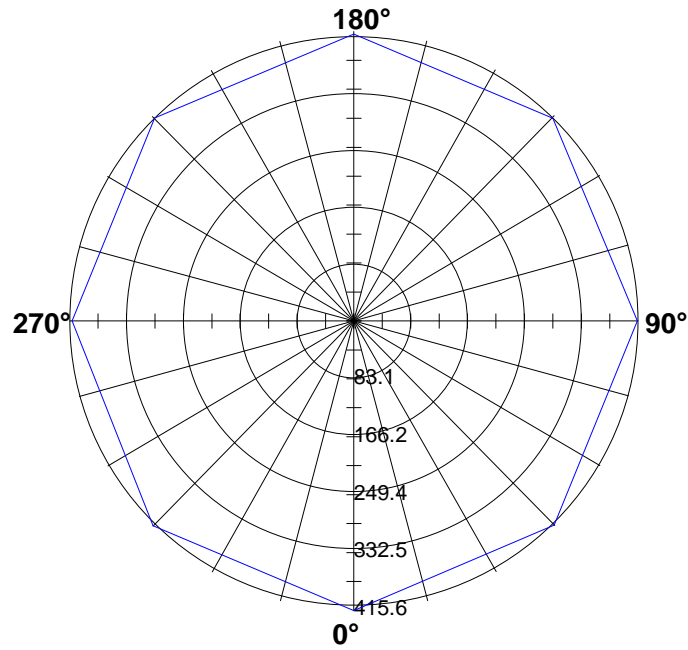


Light Distribution Curve [Unit: cd]

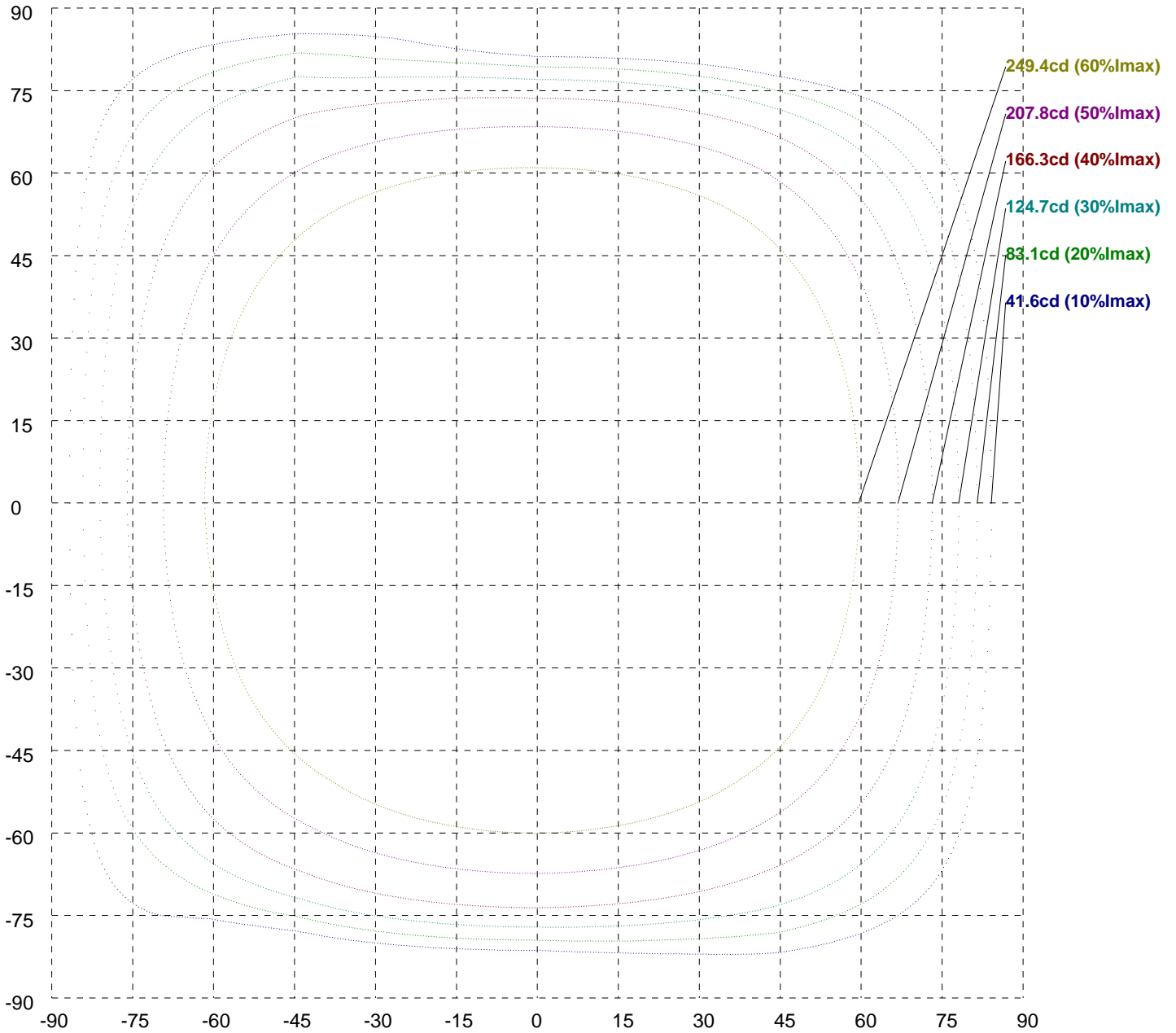
Luminaire



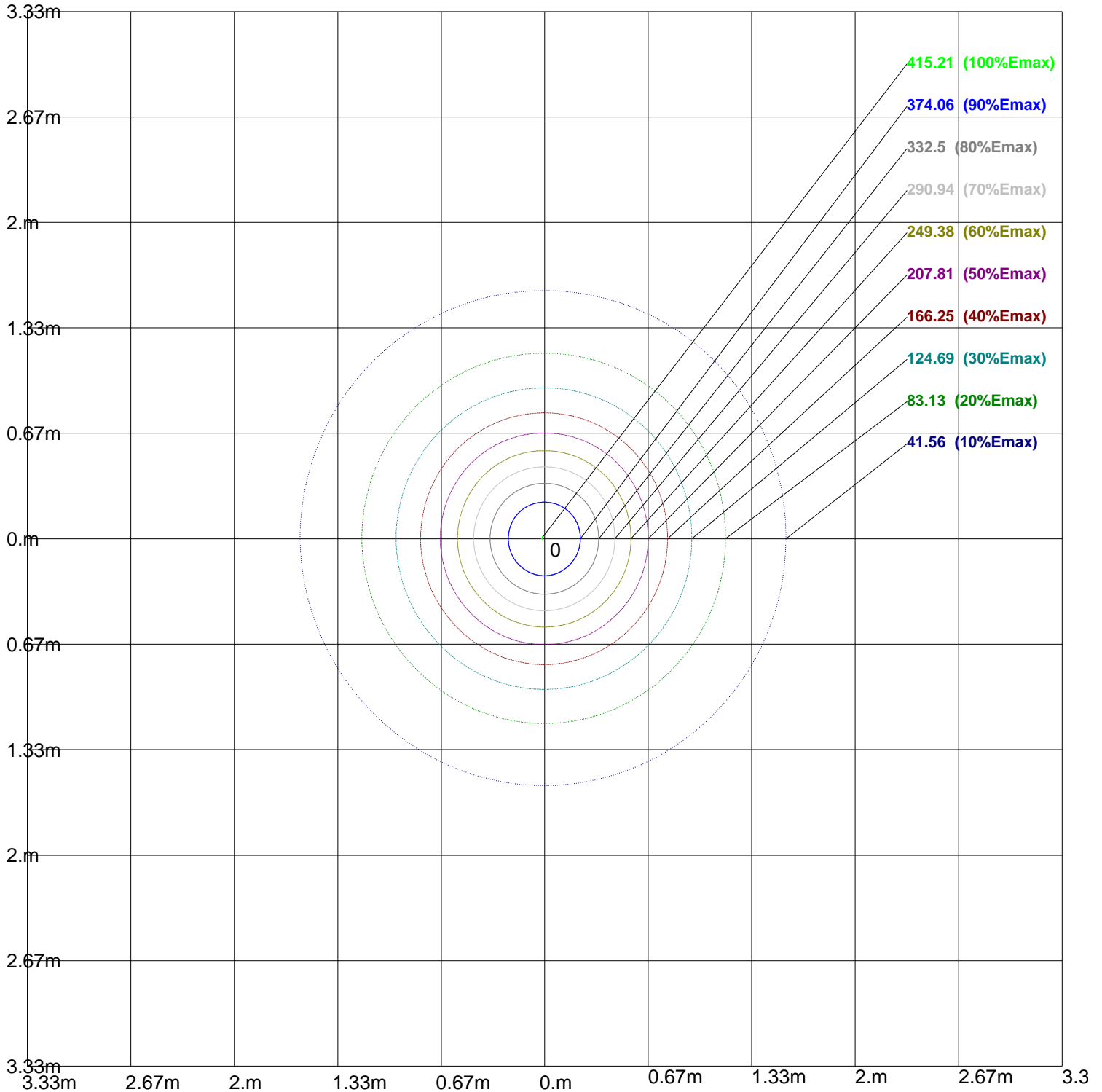
Max Plane Light Distribution Curve [Unit: cd]



等光强曲线 V-H [cd]



Iso-Lux[lx]



Height: 1 m
Max Illuminance : 415.63lx

Luminance Limiting Curve

Diameter: 172mm

Length: mm

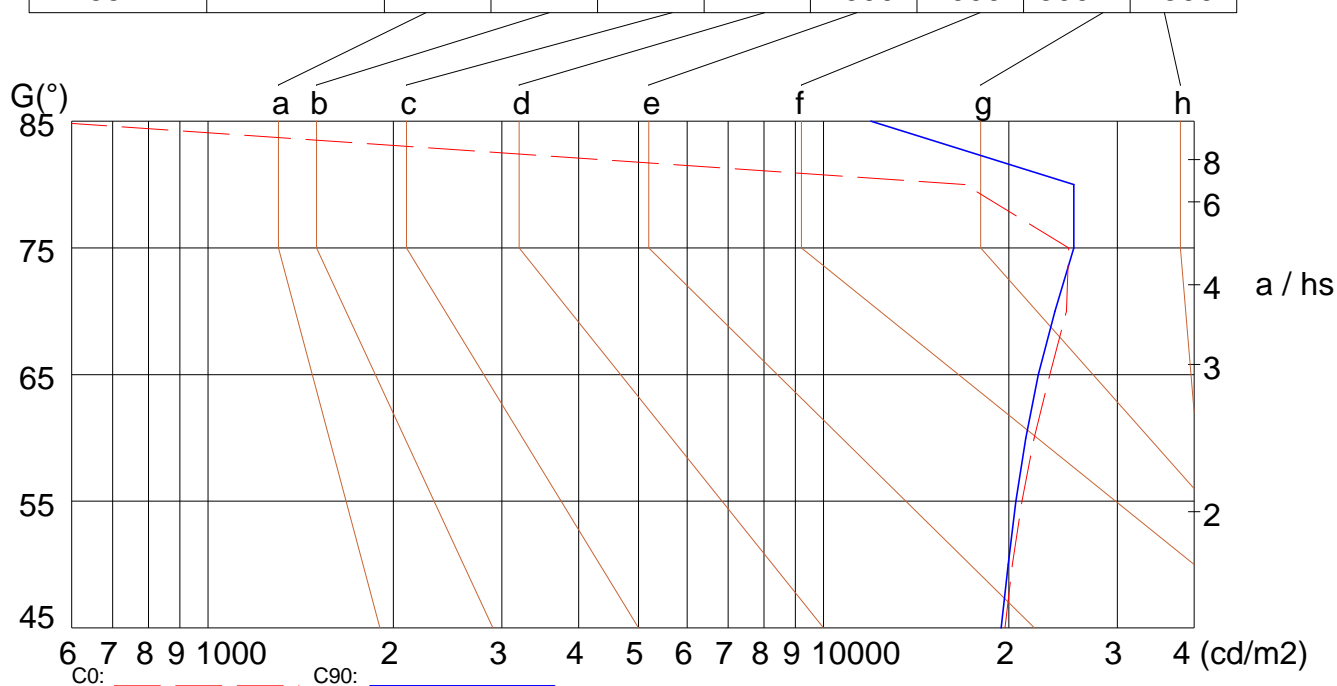
Width: 172mm

Height: 50mm

(cd/m²)

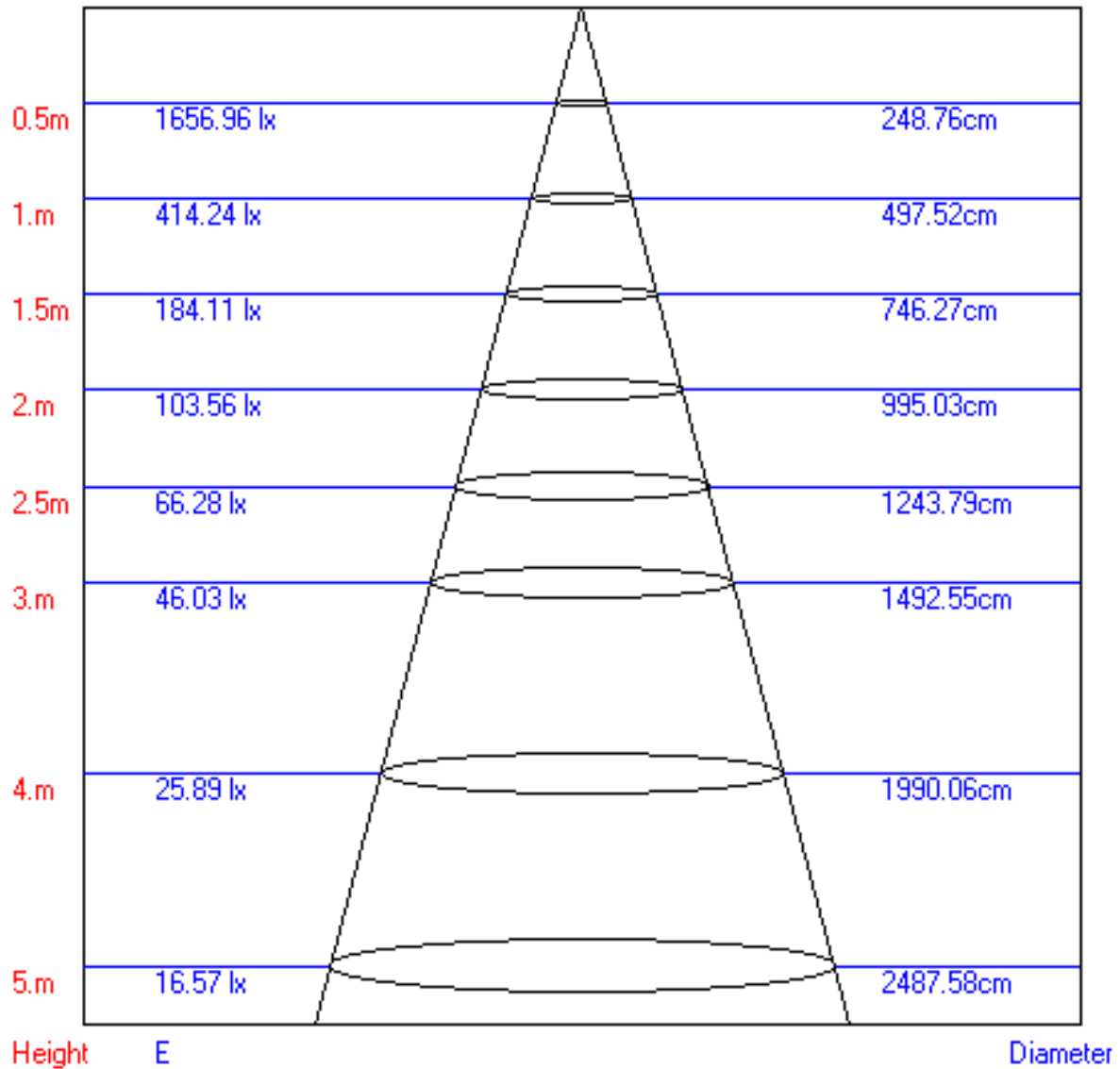
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	19717	20267	21003	21974	23322	24824	25022	16979	0
C90	19439	19945	20527	21291	22327	23748	25499	25506	11934

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:136.20°

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	1.02	1.00	0.98	1.00	0.98	0.96	0.97	0.95	0.92	0.92	0.90	0.87	0.86	0.84	0.81	0.76
2	0.84	0.81	0.79	0.84	0.80	0.78	0.82	0.78	0.74	0.79	0.74	0.71	0.75	0.70	0.66	0.61
3	0.70	0.67	0.65	0.71	0.67	0.64	0.70	0.65	0.61	0.68	0.63	0.58	0.65	0.60	0.55	0.50
4	0.60	0.56	0.54	0.60	0.56	0.53	0.60	0.55	0.51	0.60	0.54	0.49	0.58	0.52	0.46	0.42
5	0.51	0.48	0.46	0.52	0.48	0.45	0.53	0.48	0.44	0.53	0.47	0.42	0.52	0.45	0.40	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	0.40	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	0.24	0.32	0.27	0.24	0.33	0.27	0.23	0.34	0.27	0.22	0.19

