

Luminaire Property

Luminaire: RH-MSD48 48W 4000K

Report NO.:

Voltage: 219.3 V

Test NO.:

Current: 0.229 A

Lamp:

Power: 49.9 W

Sum Lumens: 4229.82 lm

Power Factor: 0.992

Number of Lamps: 1

Ballast Type: 27-42V/1200mA

Diameter: mm

Width: 600mm

Length: 600mm

Height: 38mm

Photometric Type: Type C

Remark: SMD2835 12C20B

Photometric Results

Lumens: 4229.82 lm

Angle of maximum intensity: C:0.0 G:1.0

Efficiency: 84.7659 lm/W

Half Peak Side Angle(50%): Left: -55.6 Right:55.3

Central Intensity: 1505.853cd

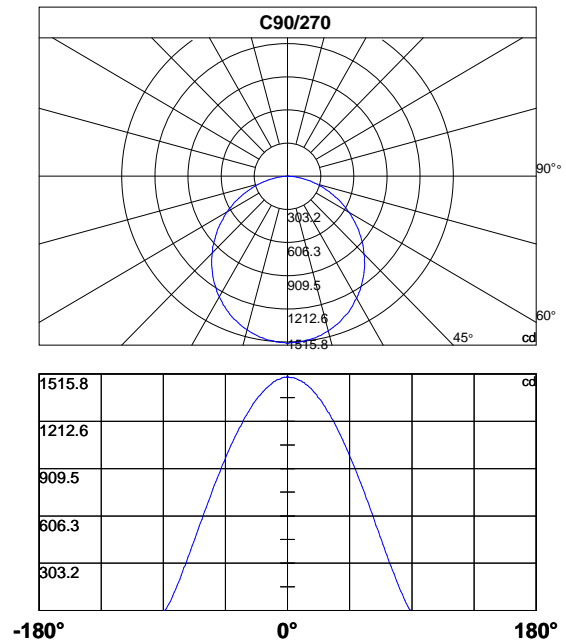
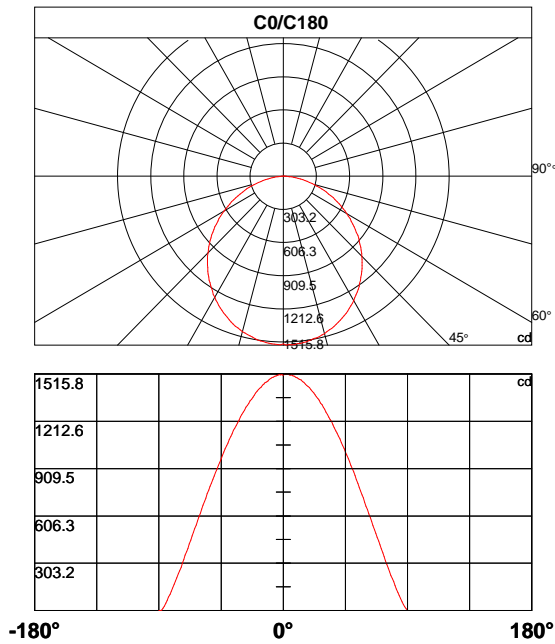
Light Out Rate(LOR) : 100.00%

Maximum Intensity: 1515.782cd

Up Flux Rate: 0.0%

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -80.6 Right:80.4



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	1505.9	1515.8	1512.6	1514.0	1513.5	1508.8	1509.7	1504.4	1502.6	1495.0
45.0	1505.9	1493.4	1494.7	1492.5	1493.9	1488.9	1488.5	1482.0	1478.0	1472.8
90.0	1505.9	1493.4	1494.7	1492.5	1493.9	1488.9	1488.5	1482.0	1478.0	1472.8
135.0	1505.9	1512.4	1510.4	1511.1	1507.7	1504.6	1501.0	1495.8	1493.2	1487.4
180.0	1505.9	1512.4	1510.4	1511.1	1507.7	1504.6	1501.0	1495.8	1493.2	1487.4
225.0	1505.9	1493.2	1495.2	1493.4	1491.1	1484.9	1481.1	1480.9	1477.1	1469.3
270.0	1505.9	1493.2	1495.2	1493.4	1491.1	1484.9	1481.1	1480.9	1477.1	1469.3
315.0	1505.9	1515.8	1512.6	1514.0	1513.5	1508.8	1509.7	1504.4	1502.6	1495.0
360.0	1505.9	1515.8	1512.6	1514.0	1513.5	1508.8	1509.7	1504.4	1502.6	1495.0

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	1490.7	1485.1	1481.1	1477.3	1467.5	1462.3	1450.9	1443.1	1437.3	1428.1
45.0	1471.5	1463.9	1461.2	1450.7	1444.2	1438.0	1429.5	1421.4	1412.0	1402.0
90.0	1471.5	1463.9	1461.2	1450.7	1444.2	1438.0	1429.5	1421.4	1412.0	1402.0
135.0	1480.9	1471.3	1464.4	1460.5	1450.7	1444.0	1432.4	1424.1	1415.6	1404.2
180.0	1480.9	1471.3	1464.4	1460.5	1450.7	1444.0	1432.4	1424.1	1415.6	1404.2
225.0	1466.6	1458.1	1450.5	1443.3	1436.4	1427.9	1419.8	1410.5	1401.7	1390.1
270.0	1466.6	1458.1	1450.5	1443.3	1436.4	1427.9	1419.8	1410.5	1401.7	1390.1
315.0	1490.7	1485.1	1481.1	1477.3	1467.5	1462.3	1450.9	1443.1	1437.3	1428.1
360.0	1490.7	1485.1	1481.1	1477.3	1467.5	1462.3	1450.9	1443.1	1437.3	1428.1

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	1414.9	1404.0	1395.0	1382.0	1371.6	1358.8	1347.0	1330.2	1319.0	1302.2
45.0	1392.8	1382.0	1366.9	1358.4	1347.8	1335.8	1319.7	1308.3	1291.1	1275.0
90.0	1392.8	1382.0	1366.9	1358.4	1347.8	1335.8	1319.7	1308.3	1291.1	1275.0
135.0	1393.2	1379.8	1366.9	1354.3	1344.1	1328.2	1315.4	1302.0	1284.6	1271.0
180.0	1393.2	1379.8	1366.9	1354.3	1344.1	1328.2	1315.4	1302.0	1284.6	1271.0
225.0	1378.7	1371.1	1358.8	1347.2	1332.9	1323.1	1305.8	1294.0	1277.0	1264.7
270.0	1378.7	1371.1	1358.8	1347.2	1332.9	1323.1	1305.8	1294.0	1277.0	1264.7
315.0	1414.9	1404.0	1395.0	1382.0	1371.6	1358.8	1347.0	1330.2	1319.0	1302.2
360.0	1414.9	1404.0	1395.0	1382.0	1371.6	1358.8	1347.0	1330.2	1319.0	1302.2

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	1290.2	1271.4	1256.0	1239.7	1225.4	1210.6	1189.1	1171.3	1151.8	1135.9
45.0	1265.1	1249.9	1231.6	1217.7	1200.3	1182.7	1164.1	1145.6	1130.1	1108.6
90.0	1265.1	1249.9	1231.6	1217.7	1200.3	1182.7	1164.1	1145.6	1130.1	1108.6
135.0	1254.6	1240.3	1220.9	1202.8	1186.5	1168.1	1154.5	1133.5	1116.3	1096.1
180.0	1254.6	1240.3	1220.9	1202.8	1186.5	1168.1	1154.5	1133.5	1116.3	1096.1
225.0	1249.3	1235.4	1219.1	1198.3	1181.7	1169.5	1149.3	1133.9	1114.9	1095.7
270.0	1249.3	1235.4	1219.1	1198.3	1181.7	1169.5	1149.3	1133.9	1114.9	1095.7
315.0	1290.2	1271.4	1256.0	1239.7	1225.4	1210.6	1189.1	1171.3	1151.8	1135.9
360.0	1290.2	1271.4	1256.0	1239.7	1225.4	1210.6	1189.1	1171.3	1151.8	1135.9

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	1116.9	1100.0	1077.8	1058.8	1037.8	1015.7	997.8	973.4	954.4	928.9
45.0	1092.1	1071.8	1054.3	1030.8	1012.7	989.5	968.3	948.9	929.6	904.6
90.0	1092.1	1071.8	1054.3	1030.8	1012.7	989.5	968.3	948.9	929.6	904.6
135.0	1073.3	1056.3	1036.0	1015.0	996.0	971.6	949.0	930.0	907.4	885.1
180.0	1073.3	1056.3	1036.0	1015.0	996.0	971.6	949.0	930.0	907.4	885.1
225.0	1076.0	1058.6	1038.5	1018.6	997.3	973.8	954.4	935.4	913.0	888.0
270.0	1076.0	1058.6	1038.5	1018.6	997.3	973.8	954.4	935.4	913.0	888.0
315.0	1116.9	1100.0	1077.8	1058.8	1037.8	1015.7	997.8	973.4	954.4	928.9
360.0	1116.9	1100.0	1077.8	1058.8	1037.8	1015.7	997.8	973.4	954.4	928.9

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	905.6	888.0	864.7	838.2	814.0	790.0	766.4	740.9	722.1	693.9
45.0	883.8	861.4	835.0	816.0	794.3	768.2	746.0	718.3	697.5	675.2
90.0	883.8	861.4	835.0	816.0	794.3	768.2	746.0	718.3	697.5	675.2
135.0	861.8	840.6	814.9	796.1	771.9	747.8	720.8	698.8	674.5	651.5
180.0	861.8	840.6	814.9	796.1	771.9	747.8	720.8	698.8	674.5	651.5
225.0	866.1	845.5	824.0	801.9	778.4	754.3	730.2	703.5	683.5	658.8
270.0	866.1	845.5	824.0	801.9	778.4	754.3	730.2	703.5	683.5	658.8
315.0	905.6	888.0	864.7	838.2	814.0	790.0	766.4	740.9	722.1	693.9
360.0	905.6	888.0	864.7	838.2	814.0	790.0	766.4	740.9	722.1	693.9

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	668.9	645.9	620.6	595.8	570.3	543.9	517.8	495.0	469.0	444.5
45.0	648.1	622.6	597.8	574.8	545.7	524.3	501.7	474.2	451.0	423.2
90.0	648.1	622.6	597.8	574.8	545.7	524.3	501.7	474.2	451.0	423.2
135.0	623.7	598.5	573.4	547.5	524.9	499.9	477.3	451.6	426.1	397.7
180.0	623.7	598.5	573.4	547.5	524.9	499.9	477.3	451.6	426.1	397.7
225.0	636.5	611.7	584.0	561.4	540.1	515.3	487.4	462.6	439.1	415.4
270.0	636.5	611.7	584.0	561.4	540.1	515.3	487.4	462.6	439.1	415.4
315.0	668.9	645.9	620.6	595.8	570.3	543.9	517.8	495.0	469.0	444.5
360.0	668.9	645.9	620.6	595.8	570.3	543.9	517.8	495.0	469.0	444.5

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	421.7	395.9	370.0	344.7	317.0	296.0	271.9	247.7	222.9	202.8
45.0	404.0	375.3	353.7	326.0	304.0	279.9	256.2	235.2	212.0	188.9
90.0	404.0	375.3	353.7	326.0	304.0	279.9	256.2	235.2	212.0	188.9
135.0	376.7	354.8	326.4	304.7	277.6	253.7	235.6	209.5	189.6	167.0
180.0	376.7	354.8	326.4	304.7	277.6	253.7	235.6	209.5	189.6	167.0
225.0	390.1	365.5	341.4	316.1	292.4	273.9	248.1	226.7	201.4	179.3
270.0	390.1	365.5	341.4	316.1	292.4	273.9	248.1	226.7	201.4	179.3
315.0	421.7	395.9	370.0	344.7	317.0	296.0	271.9	247.7	222.9	202.8
360.0	421.7	395.9	370.0	344.7	317.0	296.0	271.9	247.7	222.9	202.8

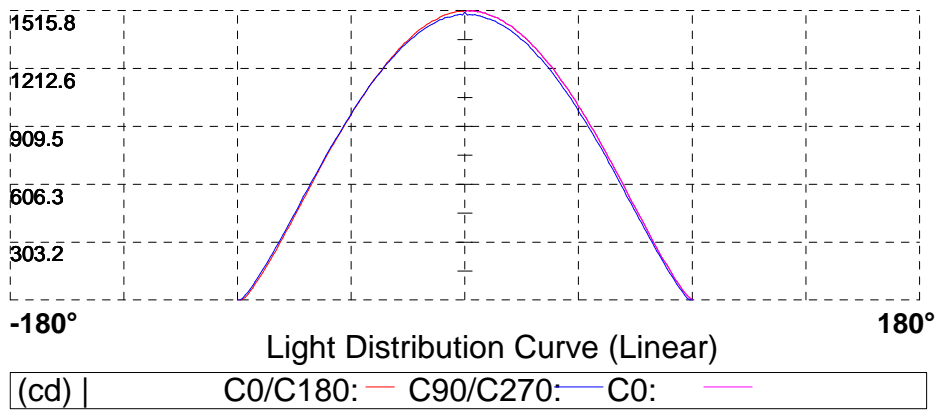
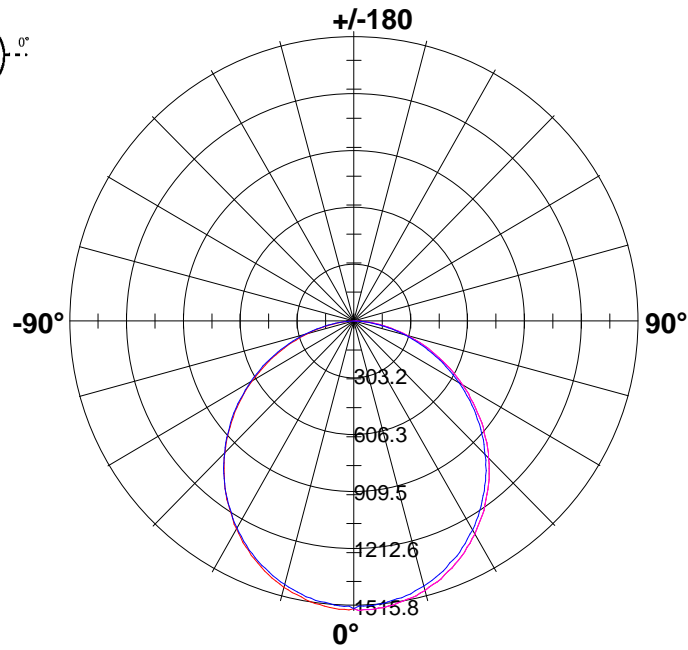
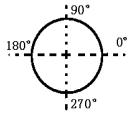
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	183.3	160.7	136.1	114.9	97.5	77.3	55.9	39.4	24.6	10.9
45.0	163.4	141.5	123.4	104.9	81.6	64.0	45.6	25.9	9.8	1.8
90.0	163.4	141.5	123.4	104.9	81.6	64.0	45.6	25.9	9.8	1.8
135.0	142.4	123.4	102.9	85.2	64.0	47.4	27.5	15.0	2.7	0.0
180.0	142.4	123.4	102.9	85.2	64.0	47.4	27.5	15.0	2.7	0.0
225.0	159.9	138.4	116.7	96.6	76.5	57.5	39.6	26.2	8.7	0.7
270.0	159.9	138.4	116.7	96.6	76.5	57.5	39.6	26.2	8.7	0.7
315.0	183.3	160.7	136.1	114.9	97.5	77.3	55.9	39.4	24.6	10.9
360.0	183.3	160.7	136.1	114.9	97.5	77.3	55.9	39.4	24.6	10.9

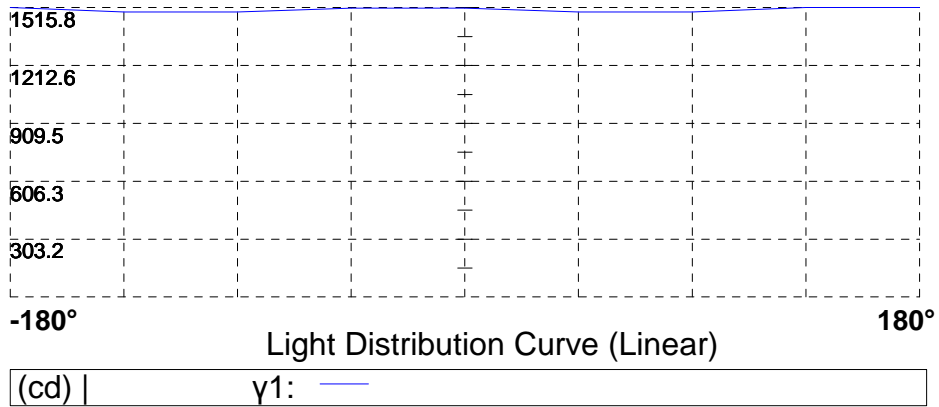
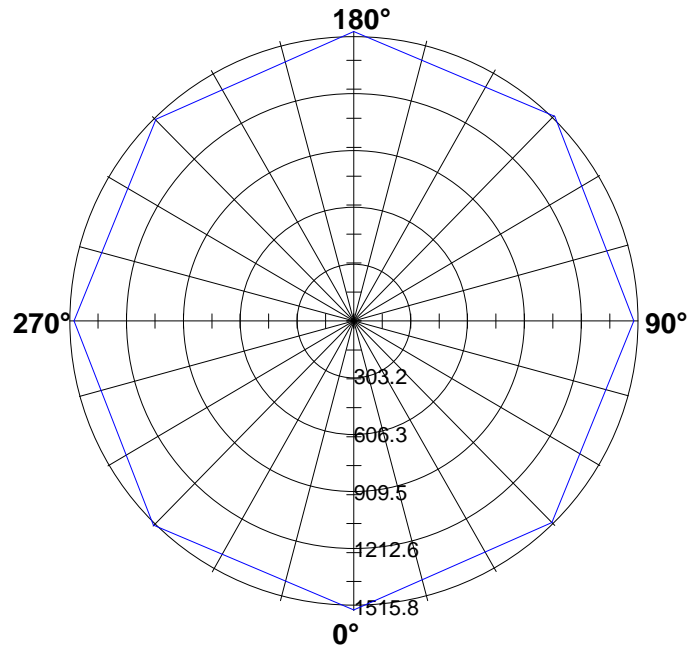
C\G	90.0
0.0	2.7
45.0	0.0
90.0	0.0
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	2.7
360.0	2.7

Light Distribution Curve [Unit: cd]

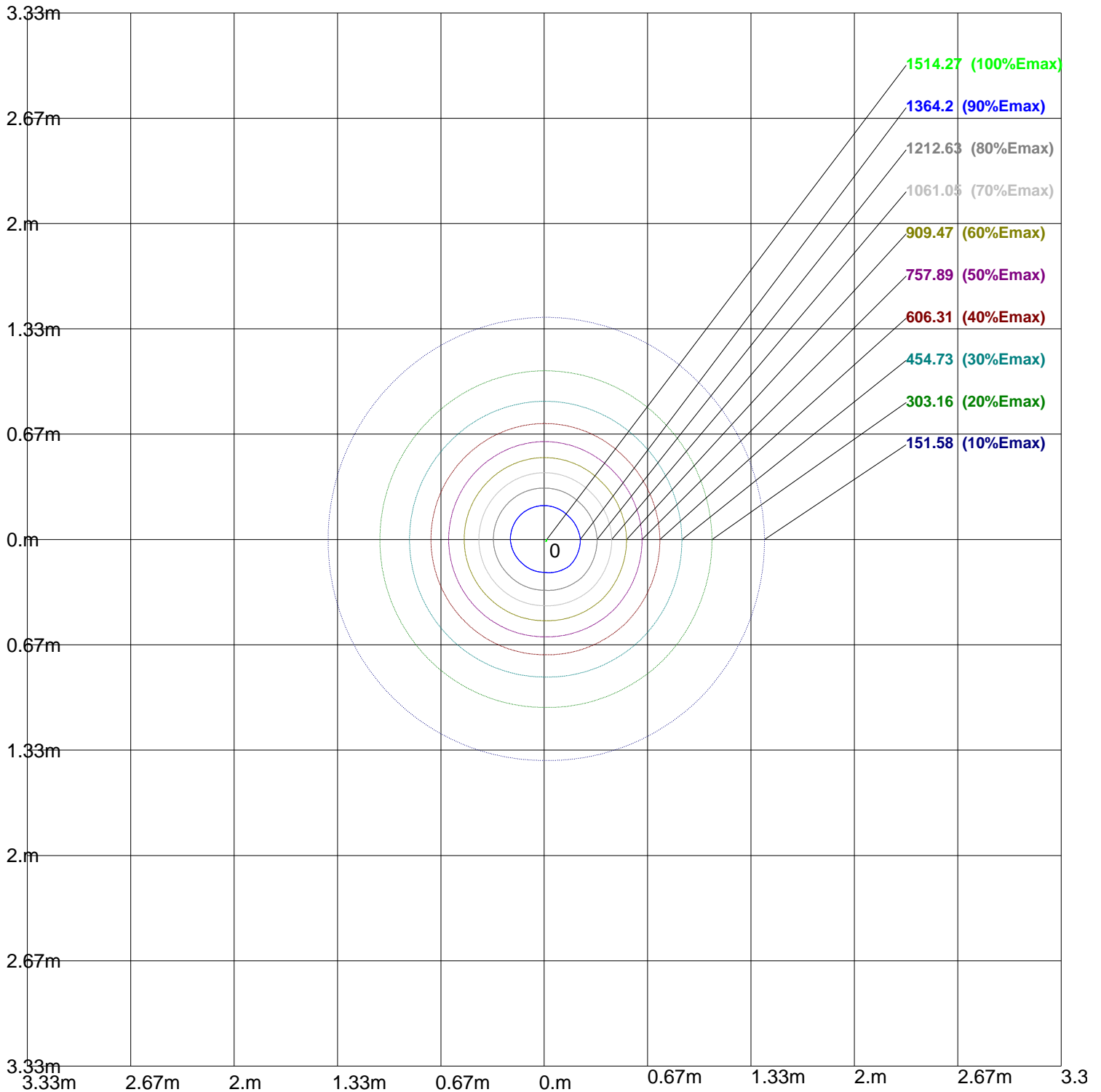
Luminaire



Max Plane Light Distribution Curve [Unit: cd]



Iso-Lux[lx]



Height: 1 m
Max Illuminance : 1515.78lx

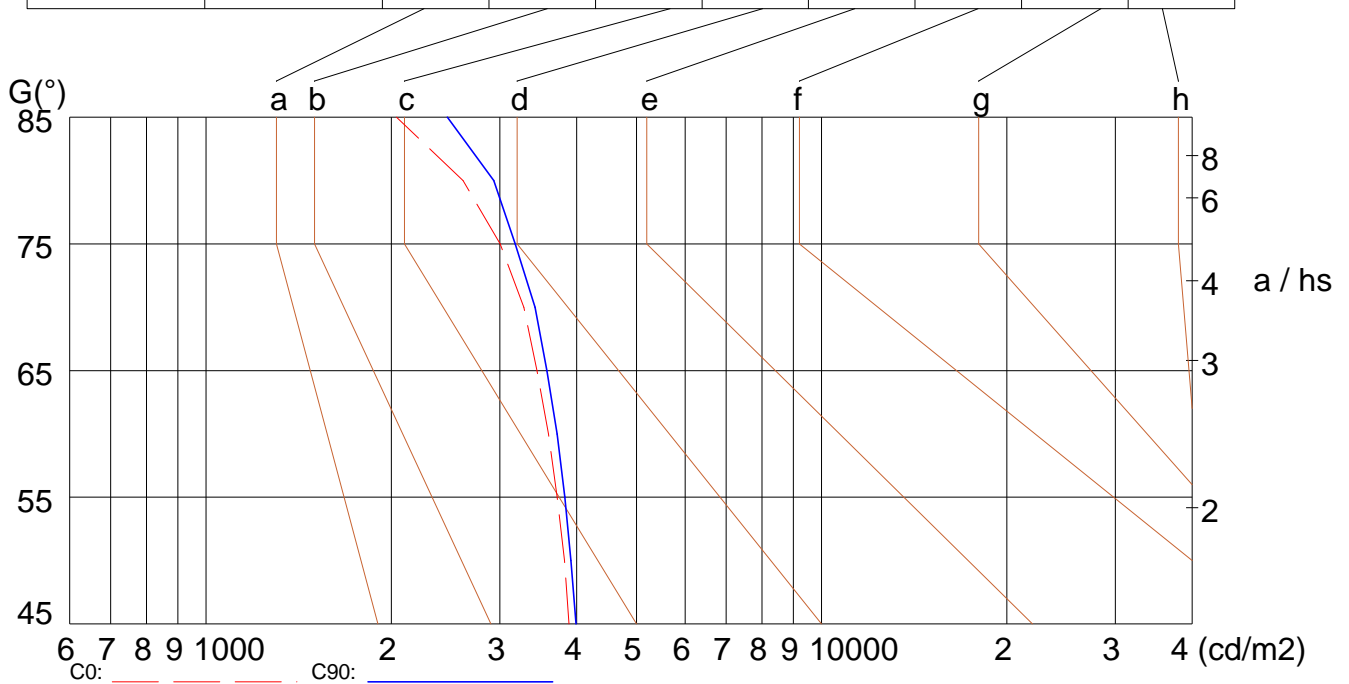
Luminance Limiting Curve

Diameter: mm
Length: 600mm
Width: 600mm
Height: 38mm

(cd/m²)

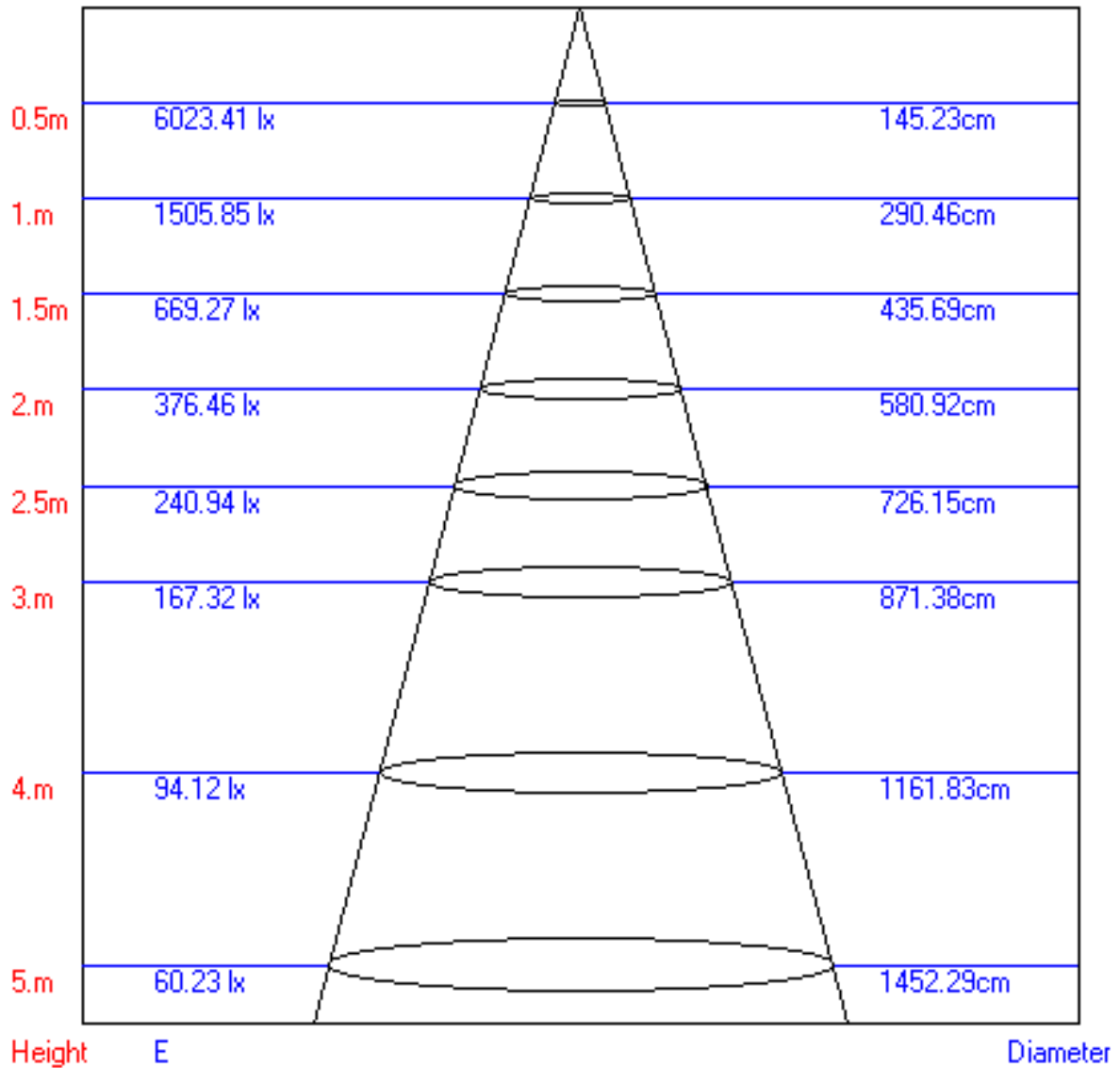
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	3887	3819	3720	3601	3446	3281	3004	2614	2038
C90	3990	3914	3826	3716	3575	3425	3177	2933	2465

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:110.90°

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	1.04	1.03	1.01	1.03	1.01	0.99	0.99	0.97	0.95	0.95	0.92	0.90	0.88	0.86	0.84	0.79
2	0.89	0.86	0.84	0.88	0.85	0.83	0.86	0.82	0.79	0.82	0.79	0.75	0.78	0.74	0.70	0.65
3	0.76	0.73	0.71	0.76	0.72	0.69	0.75	0.70	0.67	0.72	0.67	0.63	0.69	0.64	0.59	0.55
4	0.65	0.62	0.60	0.66	0.62	0.59	0.65	0.61	0.57	0.64	0.59	0.54	0.62	0.56	0.51	0.47
5	0.57	0.54	0.52	0.58	0.54	0.51	0.58	0.53	0.49	0.57	0.51	0.47	0.56	0.50	0.44	0.41
6	0.50	0.47	0.46	0.51	0.47	0.45	0.52	0.47	0.43	0.52	0.46	0.41	0.51	0.44	0.39	0.36
7	0.45	0.42	0.40	0.46	0.42	0.40	0.47	0.42	0.38	0.47	0.41	0.36	0.47	0.40	0.35	0.31
8	0.40	0.38	0.36	0.41	0.38	0.35	0.42	0.37	0.34	0.43	0.37	0.33	0.43	0.36	0.31	0.28
9	0.36	0.34	0.32	0.37	0.34	0.32	0.39	0.34	0.31	0.39	0.34	0.29	0.40	0.33	0.28	0.25
10	0.33	0.31	0.29	0.34	0.31	0.29	0.36	0.31	0.28	0.36	0.31	0.27	0.37	0.30	0.26	0.23

