

**R854 WNL (CRI90 700mA 40D)**

Luminaire Name: R854 WNL (CRI90 700mA 40D)

Report NO.: 01314523082426A

Test NO.:

Lamp: LUMINUS CLM-14-40-90-36-TC40-F5-2 700mA

Sum Lumens: 3385.84 lm

Number of Lamps: 1

Diameter: 154mm

Length: -154mm

Photometric Type: Type C

Voltage: 229.9 V

Current: 0.1164 A

Power: 26.242 W

Power Factor: 0.9806

Ballast Type: OSRAM IT FIT 30/220-240/700 CS I

Width: -154mm

Height: 144mm

Optical Component: 40D Reflector DC(V: 34.12V I: 0.685A P: 23.37W)

**Photometric Results**

Lumens: 2692.06 lm

Efficiency: 79.51%

Central Intensity: 4554.388cd

Maximum Intensity: 4621.331cd

Beam Angle(10%): Left: -39.2 Right:31.2

Maximum s/h: C0\_180: 0.33 C90\_270: 0.32

Effective Luminous Flux: 2500.26 lm

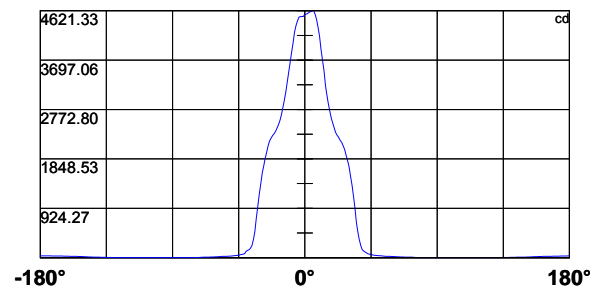
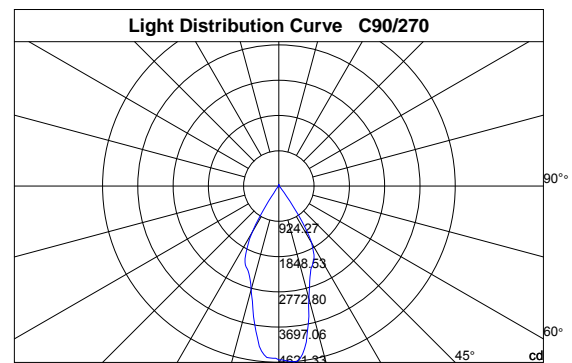
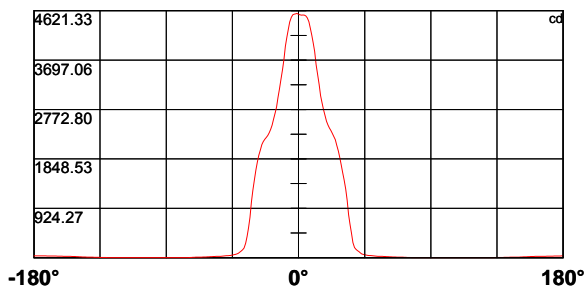
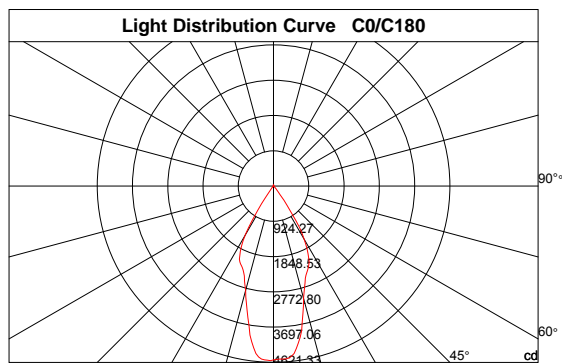
Angle of maximum intensity: C:90.0 G:5.0

Half Peak Side Angle(50%): Left: -26.3 Right:16.6

Up Flux Rate: 0.97%

Down Flux Rate: 78.54%

CIE Classification: Direct



## R854 WNL (CRI90 700mA 40D)

### Intensity Data [cd]

Page2

C\γ	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
0.0	4554.4	4543.8	4537.8	4540.0	4537.8	4522.9	4485.0	4415.6	4292.9	4164.3
30.0	4554.4	4549.3	4553.6	4566.0	4575.3	4568.9	4531.9	4472.2	4381.5	4252.9
60.0	4554.4	4550.2	4564.7	4580.9	4590.2	4593.6	4571.9	4525.1	4429.6	4291.6
90.0	4554.4	4554.9	4572.8	4591.1	4609.0	4621.3	4617.5	4549.8	4449.7	4309.1
120.0	4554.4	4577.9	4601.7	4619.2	4607.3	4551.0	4439.4	4304.4	4148.9	3970.0
150.0	4554.4	4585.1	4586.4	4577.5	4568.9	4515.7	4426.7	4300.6	4102.1	3926.1
180.0	4554.4	4571.9	4563.4	4556.2	4543.4	4496.1	4408.8	4266.5	4119.5	3953.4
210.0	4554.4	4551.9	4543.4	4536.1	4522.9	4491.0	4385.8	4267.8	4120.4	3950.0
240.0	4554.4	4529.3	4526.3	4523.4	4512.7	4471.0	4381.5	4264.4	4098.2	3900.6
270.0	4554.4	4514.4	4510.6	4510.2	4499.9	4436.0	4344.0	4225.2	4022.8	3851.6
300.0	4554.4	4537.0	4510.2	4490.1	4476.9	4465.0	4417.3	4353.8	4258.0	4094.0
330.0	4554.4	4537.8	4523.8	4515.7	4499.5	4483.7	4433.1	4368.3	4256.3	4134.9
360.0	4554.4	4543.8	4537.8	4540.0	4537.8	4522.9	4485.0	4415.6	4292.9	4164.3

C\γ	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	4017.7	3856.7	3612.6	3418.4	3240.3	3032.0	2899.1	2774.3	2669.5	2552.8
30.0	4056.1	3871.2	3674.0	3442.7	3229.7	3065.3	2915.3	2750.1	2652.1	2557.5
60.0	4094.8	3908.7	3708.5	3431.6	3229.3	3052.5	2895.3	2725.8	2619.3	2525.6
90.0	4146.0	3903.1	3703.8	3500.6	3223.7	3044.4	2880.0	2743.7	2615.0	2515.8
120.0	3718.7	3510.0	3301.3	3114.3	2905.1	2771.4	2658.9	2547.3	2445.5	2376.5
150.0	3738.3	3498.9	3302.5	3127.5	2925.1	2795.2	2676.8	2573.7	2456.6	2383.3
180.0	3705.5	3511.7	3328.9	3156.4	2998.8	2819.9	2707.5	2602.7	2477.0	2400.3
210.0	3704.2	3512.5	3321.3	3142.4	2964.3	2817.4	2700.6	2575.4	2480.8	2405.9
240.0	3709.8	3519.8	3343.0	3119.4	2974.1	2842.1	2721.9	2576.7	2488.9	2426.3
270.0	3668.0	3484.0	3280.8	3095.1	2943.9	2809.3	2675.5	2568.6	2484.7	2420.4
300.0	3948.3	3784.3	3609.2	3400.5	3233.1	3045.7	2899.1	2750.9	2640.2	2544.7
330.0	3989.2	3836.3	3594.7	3410.7	3234.4	3027.8	2890.6	2767.9	2661.4	2549.0
360.0	4017.7	3856.7	3612.6	3418.4	3240.3	3032.0	2899.1	2774.3	2669.5	2552.8

C\γ	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	2485.1	2426.7	2381.6	2327.9	2272.1	2207.8	2103.9	1995.7	1872.6	1735.0
30.0	2480.0	2402.0	2359.4	2320.7	2268.3	2205.2	2125.6	2031.4	1884.9	1774.6
60.0	2429.7	2362.4	2316.8	2279.8	2239.3	2186.5	2118.3	1999.5	1895.1	1786.9
90.0	2424.6	2340.7	2289.6	2251.7	2200.1	2159.2	2098.7	2023.3	1919.0	1817.6
120.0	2320.7	2274.7	2241.4	2209.5	2151.6	2085.1	1994.4	1900.2	1755.0	1629.8
150.0	2325.4	2267.9	2235.1	2201.4	2164.3	2109.8	2001.6	1908.3	1798.4	1678.7
180.0	2338.1	2285.3	2251.2	2217.2	2173.7	2114.5	2016.1	1915.2	1788.6	1640.4
210.0	2349.2	2291.7	2253.8	2222.3	2173.3	2111.5	2021.6	1907.1	1785.2	1650.2
240.0	2370.5	2328.3	2289.2	2251.2	2199.3	2129.8	2036.1	1887.0	1755.0	1623.8
270.0	2360.3	2321.1	2287.4	2242.7	2185.6	2098.7	1974.8	1856.4	1712.0	1583.8
300.0	2446.3	2387.1	2337.3	2299.0	2244.4	2187.3	2110.7	2009.7	1855.5	1740.5
330.0	2482.1	2412.3	2353.9	2312.6	2268.3	2209.5	2100.4	1994.4	1879.4	1767.3
360.0	2485.1	2426.7	2381.6	2327.9	2272.1	2207.8	2103.9	1995.7	1872.6	1735.0

## R854 WNL (CRI90 700mA 40D)

### Intensity Data [cd]

Page3

C\γ	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	1590.1	1455.5	1283.9	1077.7	802.5	620.2	458.8	283.7	191.3	155.5
30.0	1650.6	1467.0	1291.1	1080.7	833.6	646.6	460.5	325.9	209.2	165.3
60.0	1668.5	1493.4	1315.8	1109.2	863.4	637.2	469.8	326.7	200.6	152.9
90.0	1709.4	1538.2	1358.8	1152.2	934.6	665.8	488.6	339.1	224.5	149.5
120.0	1461.5	1185.9	958.9	745.9	554.2	368.9	255.6	181.0	149.9	123.5
150.0	1490.5	1285.1	1024.5	767.2	571.6	408.1	245.8	187.9	156.8	132.9
180.0	1465.3	1261.7	1042.8	755.7	561.4	397.9	270.5	180.2	147.8	124.0
210.0	1484.9	1209.3	986.1	773.1	578.0	357.0	240.2	179.3	146.5	115.0
240.0	1460.6	1188.5	965.7	745.4	550.4	340.3	225.3	177.6	147.4	129.9
270.0	1385.2	1179.9	955.0	740.8	489.9	338.2	228.3	172.9	148.2	136.3
300.0	1613.6	1453.8	1282.2	1079.8	800.4	615.1	451.1	310.5	183.6	151.2
330.0	1603.8	1465.3	1287.3	1081.1	805.9	618.1	453.2	293.9	179.8	145.7
360.0	1590.1	1455.5	1283.9	1077.7	802.5	620.2	458.8	283.7	191.3	155.5

C\γ	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0
0.0	134.6	115.4	91.6	68.6	61.3	54.5	49.0	44.7	41.7	37.9
30.0	138.4	121.0	100.1	70.3	63.0	56.7	49.4	45.2	41.7	38.8
60.0	129.5	111.2	90.3	72.0	64.3	58.4	51.5	46.9	43.0	39.6
90.0	124.4	105.2	89.9	74.5	65.2	58.8	52.4	47.7	43.9	40.0
120.0	110.3	89.9	71.6	62.2	55.8	50.3	44.3	41.3	38.3	35.8
150.0	114.6	85.6	72.4	63.9	54.9	49.4	45.2	41.7	38.3	35.8
180.0	104.4	81.4	71.1	62.6	54.9	49.4	44.7	41.7	37.5	35.4
210.0	100.1	80.9	70.7	60.5	54.1	49.4	43.9	40.9	37.9	35.4
240.0	116.3	80.1	70.3	60.5	53.2	48.1	43.4	40.0	37.5	34.9
270.0	118.4	77.5	66.5	59.2	52.8	46.9	43.0	40.0	36.6	34.1
300.0	127.8	112.0	85.2	69.4	61.8	55.4	48.6	44.3	41.3	38.3
330.0	120.5	102.2	85.6	68.2	60.9	54.1	48.6	44.7	41.3	37.5
360.0	134.6	115.4	91.6	68.6	61.3	54.5	49.0	44.7	41.7	37.9

C\γ	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	35.4	33.2	31.1	29.4	27.7	26.8	25.1	23.9	22.2	20.9
30.0	35.8	34.1	31.9	29.8	28.1	26.8	25.6	24.3	23.0	21.7
60.0	37.1	34.9	32.4	30.7	29.0	27.3	26.0	24.3	23.4	22.2
90.0	37.5	35.4	33.2	30.7	29.0	27.7	26.4	25.1	23.9	22.6
120.0	33.7	31.5	29.8	28.1	26.8	25.6	24.3	22.6	20.9	20.0
150.0	33.7	31.1	29.4	28.1	26.8	25.1	23.9	22.6	20.9	19.6
180.0	33.2	31.1	29.4	27.7	26.0	25.1	23.4	22.2	20.9	19.6
210.0	32.8	31.1	29.4	27.7	26.4	25.1	23.4	22.2	20.9	19.6
240.0	32.4	30.7	29.4	27.7	26.0	24.7	23.4	21.7	20.4	19.2
270.0	32.4	30.2	28.5	27.3	26.0	24.3	23.0	21.3	20.0	18.7
300.0	35.8	33.2	31.1	29.4	27.7	26.8	25.1	23.4	22.2	20.9
330.0	35.4	33.2	31.1	29.0	27.7	26.4	24.7	23.4	22.6	20.9
360.0	35.4	33.2	31.1	29.4	27.7	26.8	25.1	23.9	22.2	20.9

## R854 WNL (CRI90 700mA 40D)

### Intensity Data [cd]

Page4

C\γ	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	20.0	18.7	17.0	16.2	14.9	14.1	13.2	12.4	11.5	10.2
30.0	20.0	18.7	17.5	16.6	15.8	14.5	13.6	12.8	11.9	11.1
60.0	20.9	19.2	17.9	17.0	16.2	15.3	14.1	13.2	12.4	11.5
90.0	20.9	19.6	18.3	17.5	16.2	15.3	14.5	13.6	12.8	11.9
120.0	18.3	17.5	16.2	15.3	14.5	13.6	12.8	11.5	10.6	9.8
150.0	18.7	17.0	16.2	14.9	14.1	13.2	12.4	11.1	10.2	9.8
180.0	18.3	17.0	16.2	14.9	13.6	13.2	12.4	11.1	10.2	9.4
210.0	17.9	17.0	15.8	14.5	13.6	12.8	11.9	11.1	10.2	9.4
240.0	17.5	16.6	15.8	14.5	13.6	12.4	11.5	11.1	9.8	8.9
270.0	17.5	16.6	14.9	14.1	13.2	12.4	11.5	10.6	9.8	8.9
300.0	19.6	18.7	17.0	15.8	14.9	14.1	13.2	12.4	11.5	10.2
330.0	19.6	18.3	17.0	15.8	14.9	13.6	13.2	12.4	11.5	9.8
360.0	20.0	18.7	17.0	16.2	14.9	14.1	13.2	12.4	11.5	10.2

C\γ	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	9.4	8.5	7.7	6.8	5.1	3.0	3.0	2.6	2.6	2.1
30.0	10.2	9.4	8.5	7.2	5.5	3.4	2.6	2.6	2.6	2.1
60.0	10.6	9.8	8.9	7.2	6.0	4.3	3.0	2.6	2.6	2.1
90.0	10.6	9.8	8.9	8.1	6.4	4.3	3.0	2.6	2.6	2.6
120.0	8.9	7.7	6.4	4.7	3.0	3.0	2.6	2.6	2.1	1.7
150.0	8.5	7.7	6.4	4.7	3.0	3.0	2.6	2.1	2.1	2.1
180.0	8.9	7.7	6.4	4.7	3.4	2.6	2.6	2.1	2.1	1.7
210.0	8.5	7.2	6.0	4.3	3.4	2.6	2.6	2.6	2.1	1.7
240.0	7.7	6.8	5.5	3.8	3.0	3.0	2.1	2.6	2.1	1.7
270.0	7.7	6.8	5.1	3.8	3.0	2.6	2.6	2.1	2.1	1.7
300.0	9.4	8.5	7.7	6.8	4.7	3.4	3.0	2.6	2.6	2.1
330.0	9.4	8.5	7.7	6.8	4.7	3.0	3.0	2.6	2.6	2.1
360.0	9.4	8.5	7.7	6.8	5.1	3.0	3.0	2.6	2.6	2.1

C\γ	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	2.1	1.7	1.7	1.3	1.3	1.3	0.9	0.9	0.9	0.4
30.0	2.1	1.7	1.7	1.3	1.3	1.3	0.9	0.9	0.9	0.9
60.0	2.1	1.7	1.7	1.3	1.3	1.3	1.3	0.9	0.9	0.9
90.0	2.1	2.1	1.7	1.3	1.3	1.3	0.9	0.9	0.9	0.9
120.0	1.7	1.3	1.3	1.3	1.3	0.9	0.9	0.9	0.9	0.4
150.0	1.7	1.7	1.3	1.3	0.9	0.9	0.9	0.9	0.4	0.4
180.0	1.7	1.3	1.3	1.3	0.9	0.9	0.9	0.9	0.4	0.4
210.0	1.7	1.3	1.3	1.3	1.3	0.9	0.9	0.4	0.4	0.4
240.0	1.7	1.3	1.3	1.3	0.9	0.9	0.9	0.4	0.4	0.4
270.0	1.7	1.3	1.3	1.3	0.9	0.9	0.9	0.9	0.4	0.4
300.0	2.1	1.7	1.7	1.3	1.3	0.9	0.9	0.9	0.9	0.9
330.0	2.1	1.7	1.7	1.3	1.3	1.3	0.9	0.9	0.9	0.9
360.0	2.1	1.7	1.7	1.3	1.3	1.3	0.9	0.9	0.9	0.4

## R854 WNL (CRI90 700mA 40D)

### Intensity Data [cd]

Page5

C\γ	90.0	91.0	92.0	93.0	94.0	95.0	96.0	97.0	98.0	99.0
0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
30.0	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
60.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
90.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
120.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
150.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
180.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
210.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
240.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
270.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
300.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
330.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
360.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

C\γ	100.0	101.0	102.0	103.0	104.0	105.0	106.0	107.0	108.0	109.0
0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
30.0	0.4	0.4	0.4	0.4	0.9	0.4	0.4	0.9	0.4	0.4
60.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9
90.0	0.4	0.4	0.4	0.4	0.9	0.4	0.4	0.4	0.4	0.4
120.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
150.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
180.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
210.0	0.4	0.4	0.4	0.4	0.9	0.4	0.4	0.4	0.4	0.4
240.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.4
270.0	0.4	0.9	0.4	0.4	0.4	0.4	0.4	0.9	0.9	0.4
300.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
330.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
360.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

C\γ	110.0	111.0	112.0	113.0	114.0	115.0	116.0	117.0	118.0	119.0
0.0	0.4	0.9	0.4	0.4	0.9	0.4	0.9	0.4	0.9	0.4
30.0	0.4	0.4	0.4	0.4	0.4	0.9	0.4	0.4	0.4	0.4
60.0	0.4	0.4	0.4	0.4	0.9	0.9	0.4	0.9	0.9	0.9
90.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
120.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
150.0	0.4	0.4	0.9	0.4	0.4	0.4	0.9	0.4	0.4	0.4
180.0	0.4	0.4	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.4
210.0	0.4	0.9	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.4
240.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.4	0.4
270.0	0.4	0.9	0.4	0.4	0.4	0.4	0.4	0.9	0.4	0.9
300.0	0.4	0.4	0.4	0.4	0.9	0.4	0.4	0.9	0.4	0.4
330.0	0.4	0.4	0.9	0.4	0.4	0.4	0.4	0.4	0.9	0.4
360.0	0.4	0.9	0.4	0.4	0.9	0.4	0.9	0.4	0.9	0.4

## R854 WNL (CRI90 700mA 40D)

### Intensity Data [cd]

Page6

C\γ	120.0	121.0	122.0	123.0	124.0	125.0	126.0	127.0	128.0	129.0
0.0	0.4	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3	1.3
30.0	0.4	0.9	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.3
60.0	0.9	0.9	0.4	0.4	0.9	0.9	0.9	0.9	1.3	1.3
90.0	0.4	0.9	0.9	0.4	0.9	0.9	0.9	0.9	1.3	1.3
120.0	0.4	0.4	0.9	0.9	0.9	0.9	1.3	1.7	2.1	2.1
150.0	0.4	0.4	0.9	0.9	0.9	1.3	1.3	1.3	1.7	2.1
180.0	0.4	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.7	2.1
210.0	0.4	0.4	0.4	0.9	0.9	0.9	1.3	1.7	1.7	2.1
240.0	0.4	0.9	0.9	0.9	1.3	1.3	1.3	1.3	2.1	2.1
270.0	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.1
300.0	0.4	0.9	0.4	0.9	0.9	0.9	0.9	0.9	1.3	1.3
330.0	0.9	0.9	0.4	0.4	0.4	0.9	0.9	0.9	1.3	1.3
360.0	0.4	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3	1.3

C\γ	130.0	131.0	132.0	133.0	134.0	135.0	136.0	137.0	138.0	139.0
0.0	1.7	1.7	2.1	2.6	3.0	3.4	3.4	3.8	4.7	5.1
30.0	1.7	1.7	2.1	2.6	2.6	3.0	3.4	4.3	4.7	5.1
60.0	1.7	1.7	2.1	2.6	2.6	3.4	3.4	3.8	4.7	5.1
90.0	1.7	1.7	2.1	2.6	3.0	3.0	3.4	3.8	4.7	5.1
120.0	2.6	3.0	3.4	3.8	4.3	5.1	5.5	6.4	7.2	7.7
150.0	2.6	3.0	3.4	3.8	4.3	5.1	5.5	6.4	7.2	7.7
180.0	2.6	3.0	3.4	3.8	4.3	5.1	5.5	6.4	6.8	7.7
210.0	2.6	3.0	3.4	3.8	4.3	5.1	5.5	6.4	6.8	7.7
240.0	2.6	3.0	3.4	3.8	4.3	5.1	5.5	6.4	6.8	7.7
270.0	2.6	3.0	3.4	3.8	4.3	5.1	6.0	6.4	7.2	7.7
300.0	1.7	1.7	2.1	2.6	2.6	3.0	3.4	4.3	4.7	5.1
330.0	1.7	1.7	2.1	2.6	2.6	3.4	3.4	3.8	4.3	5.1
360.0	1.7	1.7	2.1	2.6	3.0	3.4	3.4	3.8	4.7	5.1

C\γ	140.0	141.0	142.0	143.0	144.0	145.0	146.0	147.0	148.0	149.0
0.0	6.0	6.4	6.8	7.2	8.5	8.9	9.8	10.6	11.5	11.9
30.0	5.5	6.4	6.8	7.2	8.1	8.9	9.8	10.6	11.1	11.9
60.0	5.5	6.4	6.8	7.7	8.1	8.9	9.8	10.2	10.6	12.4
90.0	5.5	6.4	6.8	7.7	8.1	8.9	9.8	10.2	11.1	11.9
120.0	8.5	9.4	10.2	11.5	12.4	13.2	14.1	15.3	16.2	17.5
150.0	8.5	9.4	10.2	11.1	12.4	13.2	14.1	15.3	16.6	17.5
180.0	8.5	9.4	10.2	11.5	12.4	13.2	14.1	15.3	16.6	17.0
210.0	8.5	9.4	10.2	11.1	12.4	13.6	14.5	15.3	16.6	17.5
240.0	8.5	9.4	10.2	11.5	12.4	13.2	14.5	15.3	16.2	17.5
270.0	8.5	9.8	10.6	11.5	12.4	13.2	14.5	15.3	16.6	17.5
300.0	5.5	6.4	6.8	7.7	8.1	9.4	9.8	10.2	11.1	11.9
330.0	5.5	6.4	6.8	7.7	8.1	8.9	9.8	10.2	11.1	11.9
360.0	6.0	6.4	6.8	7.2	8.5	8.9	9.8	10.6	11.5	11.9

## R854 WNL (CRI90 700mA 40D)

### Intensity Data [cd]

Page7

C\γ	150.0	151.0	152.0	153.0	154.0	155.0	156.0	157.0	158.0	159.0
0.0	12.8	14.1	14.9	15.8	16.6	17.5	18.3	19.6	20.4	21.3
30.0	12.8	13.6	14.5	15.8	16.6	17.5	18.7	19.6	20.4	20.9
60.0	12.8	13.6	14.5	15.3	16.2	17.5	18.7	19.2	20.0	20.9
90.0	12.8	13.6	14.5	15.3	16.2	17.5	18.3	19.2	20.0	20.9
120.0	18.3	19.6	20.4	21.3	22.6	23.4	24.3	25.1	26.4	26.8
150.0	18.7	19.6	20.4	21.7	22.2	23.4	24.7	25.6	26.0	27.3
180.0	18.3	19.6	20.4	21.3	22.6	23.4	24.7	25.6	26.0	26.8
210.0	18.7	19.6	20.4	21.7	22.6	23.4	24.7	25.6	26.0	26.8
240.0	18.7	19.6	20.4	21.7	22.6	23.4	24.3	25.6	26.4	26.8
270.0	18.7	19.6	20.4	21.7	22.6	23.9	24.7	25.6	26.0	27.3
300.0	12.8	13.6	14.5	15.3	16.6	17.5	18.3	19.6	20.4	20.9
330.0	13.2	13.6	14.5	15.8	16.6	17.5	18.3	19.6	20.4	21.3
360.0	12.8	14.1	14.9	15.8	16.6	17.5	18.3	19.6	20.4	21.3

C\γ	160.0	161.0	162.0	163.0	164.0	165.0	166.0	167.0	168.0	169.0
0.0	22.2	23.0	23.9	24.7	25.1	26.0	26.8	27.3	27.7	28.5
30.0	22.2	23.0	23.4	24.3	25.1	26.0	26.8	27.3	27.7	28.1
60.0	22.2	22.6	23.4	24.3	25.1	26.0	26.4	27.3	27.7	28.1
90.0	21.7	22.6	23.9	24.3	25.1	25.6	26.4	27.3	27.7	28.1
120.0	27.7	28.1	29.0	29.4	29.8	30.7	31.1	31.1	31.5	31.9
150.0	27.7	28.1	29.0	29.8	30.2	30.7	31.1	31.5	31.9	31.9
180.0	27.7	28.1	29.0	29.4	30.2	30.7	31.1	31.5	31.9	32.4
210.0	27.7	28.1	29.0	29.4	30.2	30.7	31.1	31.5	31.9	32.4
240.0	27.3	28.1	29.0	29.4	29.8	30.7	31.1	31.5	31.9	32.4
270.0	27.7	28.1	29.0	29.8	30.2	30.7	31.1	31.5	32.4	32.4
300.0	22.2	22.6	23.4	24.3	25.1	25.6	26.8	27.3	27.7	28.1
330.0	22.2	23.0	23.9	24.3	25.1	26.0	26.8	27.3	28.1	28.5
360.0	22.2	23.0	23.9	24.7	25.1	26.0	26.8	27.3	27.7	28.5

C\γ	170.0	171.0	172.0	173.0	174.0	175.0	176.0	177.0	178.0	179.0
0.0	29.0	29.4	29.8	30.2	30.7	31.1	31.9	32.4	32.4	33.2
30.0	29.0	29.4	29.8	30.2	30.7	31.1	31.5	31.9	32.4	33.2
60.0	28.5	29.4	29.4	29.8	30.7	30.7	31.5	31.9	32.4	32.8
90.0	28.5	29.0	29.4	30.2	30.7	31.1	31.5	31.9	32.8	33.2
120.0	32.4	32.4	32.8	32.8	33.2	33.2	33.2	33.7	33.7	33.7
150.0	32.4	32.8	32.8	33.2	33.2	33.2	33.7	33.7	33.7	33.7
180.0	32.8	32.8	33.2	33.2	33.7	33.7	33.7	33.7	33.7	33.7
210.0	32.8	32.8	33.2	33.2	33.2	33.7	33.7	34.1	33.7	33.7
240.0	32.4	32.8	32.8	33.2	33.2	33.7	33.7	34.1	33.7	33.7
270.0	32.8	32.8	32.8	33.2	33.2	33.7	33.7	34.1	34.1	34.1
300.0	28.5	29.0	29.8	30.2	30.7	31.1	31.9	32.4	32.8	33.2
330.0	29.0	29.4	29.8	30.7	30.7	31.1	31.9	32.4	32.8	32.8
360.0	29.0	29.4	29.8	30.2	30.7	31.1	31.9	32.4	32.4	33.2

Intensity Data [cd]		Page8
C\γ	180.0	
0.0	33.2	
30.0	33.2	
60.0	33.2	
90.0	33.7	
120.0	33.2	
150.0	33.2	
180.0	33.2	
210.0	33.2	
240.0	33.2	
270.0	33.7	
300.0	33.2	
330.0	33.2	
360.0	33.2	

## R854 WNL (CRI90 700mA 40D)

Zonal flux distribution table

Page9

Gamma [°]	Average I [cd]	Zonal Flux [lm]	Sum Flux [lm]	Effective Flux [lm]	Effective Sum [lm]
0	4554.39	0.00	0.00	0.00	0.00
1	4550.30	4.36	4.36	4.36	4.36
2	4549.56	13.06	17.42	13.06	17.42
3	4550.51	21.76	39.18	21.76	39.18
4	4545.33	30.45	69.63	30.45	69.63
5	4518.03	38.99	108.62	38.99	108.62
6	4453.57	47.15	155.77	47.15	155.77
7	4359.47	54.70	210.47	54.70	210.47
8	4223.33	61.43	271.89	61.43	271.89
9	4066.54	67.18	339.08	67.18	339.08
10	3874.72	71.87	410.95	71.87	410.95
11	3683.10	75.52	486.46	75.52	486.46
12	3481.72	78.32	564.79	78.32	564.79
13	3279.96	80.24	645.03	80.24	645.03
14	3091.82	81.56	726.59	81.56	726.59
15	2926.90	82.63	809.22	82.63	809.22
16	2793.39	83.82	893.03	83.82	893.03
17	2663.08	84.97	978.01	84.97	978.01
18	2557.59	86.08	1064.08	86.08	1064.08
19	2471.50	87.50	1151.58	87.50	1151.58
20	2401.01	89.18	1240.76	89.18	1240.76
21	2341.69	91.07	1331.83	91.07	1331.83
22	2299.73	93.27	1425.10	93.27	1425.10
23	2261.32	95.70	1520.80	95.70	1520.80
24	2211.70	97.80	1618.60	97.80	1618.60
25	2150.43	99.19	1717.78	99.19	1717.78
26	2058.53	99.35	1817.14	99.35	1817.14
27	1952.36	98.13	1915.26	98.13	1915.26
28	1825.06	95.64	2010.90	95.64	2010.90
29	1702.38	92.29	2103.19	92.29	2103.19
30	1548.68	87.78	2190.97	87.78	2190.97
31	1348.65	80.63	2271.60	80.63	2271.60
32	1146.00	71.47	2343.06	71.47	2343.06
33	925.74	61.03	2404.10	61.03	2404.10
34	695.50	49.06	2453.16	49.06	2453.16
35	501.12	37.16	2490.32	32.58	2485.74
36	353.98	27.23	2517.55	14.53	2500.26
37	246.56	19.59	2537.14	0.00	2500.26
38	173.80	14.03	2551.17	0.00	2500.26
39	140.14	10.72	2561.88	0.00	2500.26
40	119.95	9.07	2570.95	0.00	2500.26

## R854 WNL (CRI90 700mA 40D)

Zonal flux distribution table

Page10

Gamma [°]	Average I [cd]	Zonal Flux [lm]	Sum Flux [lm]	Effective Flux [lm]	Effective Sum [lm]
41	96.87	7.72	2578.67	0.00	2500.26
42	80.44	6.44	2585.12	0.00	2500.26
43	65.99	5.42	2590.54	0.00	2500.26
44	58.54	4.70	2595.24	0.00	2500.26
45	52.61	4.27	2599.51	0.00	2500.26
46	47.00	3.90	2603.41	0.00	2500.26
47	43.27	3.59	2607.00	0.00	2500.26
48	39.93	3.36	2610.36	0.00	2500.26
49	36.95	3.16	2613.52	0.00	2500.26
50	34.57	2.98	2616.50	0.00	2500.26
51	32.48	2.84	2619.34	0.00	2500.26
52	30.56	2.71	2622.04	0.00	2500.26
53	28.79	2.58	2624.62	0.00	2500.26
54	27.26	2.47	2627.10	0.00	2500.26
55	25.98	2.38	2629.47	0.00	2500.26
56	24.53	2.28	2631.76	0.00	2500.26
57	23.07	2.18	2633.93	0.00	2500.26
58	21.76	2.07	2636.00	0.00	2500.26
59	20.48	1.97	2637.98	0.00	2500.26
60	19.10	1.87	2639.85	0.00	2500.26
61	17.93	1.77	2641.62	0.00	2500.26
62	16.65	1.67	2643.28	0.00	2500.26
63	15.58	1.57	2644.85	0.00	2500.26
64	14.62	1.48	2646.33	0.00	2500.26
65	13.70	1.40	2647.73	0.00	2500.26
66	12.85	1.32	2649.06	0.00	2500.26
67	11.93	1.25	2650.31	0.00	2500.26
68	11.04	1.16	2651.47	0.00	2500.26
69	10.08	1.08	2652.55	0.00	2500.26
70	9.16	0.99	2653.53	0.00	2500.26
71	8.20	0.90	2654.43	0.00	2500.26
72	7.10	0.80	2655.23	0.00	2500.26
73	5.75	0.67	2655.90	0.00	2500.26
74	4.26	0.53	2656.42	0.00	2500.26
75	3.16	0.39	2656.82	0.00	2500.26
76	2.70	0.31	2657.13	0.00	2500.26
77	2.45	0.27	2657.40	0.00	2500.26
78	2.34	0.26	2657.66	0.00	2500.26
79	1.99	0.23	2657.89	0.00	2500.26
80	1.92	0.21	2658.10	0.00	2500.26
81	1.56	0.19	2658.29	0.00	2500.26

## R854 WNL (CRI90 700mA 40D)

Zonal flux distribution table

Page11

Gamma [°]	Average I [cd]	Zonal Flux [lm]	Sum Flux [lm]	Effective Flux [lm]	Effective Sum [lm]
82	1.49	0.17	2658.46	0.00	2500.26
83	1.28	0.15	2658.61	0.00	2500.26
84	1.14	0.13	2658.74	0.00	2500.26
85	1.03	0.12	2658.86	0.00	2500.26
86	0.89	0.10	2658.96	0.00	2500.26
87	0.78	0.09	2659.05	0.00	2500.26
88	0.67	0.08	2659.13	0.00	2500.26
89	0.60	0.07	2659.20	0.00	2500.26
90	0.46	0.06	2659.26	0.00	2500.26
91	0.43	0.05	2659.31	0.00	2500.26
92	0.43	0.05	2659.36	0.00	2500.26
93	0.43	0.05	2659.41	0.00	2500.26
94	0.43	0.05	2659.45	0.00	2500.26
95	0.43	0.05	2659.50	0.00	2500.26
96	0.43	0.05	2659.55	0.00	2500.26
97	0.43	0.05	2659.59	0.00	2500.26
98	0.43	0.05	2659.64	0.00	2500.26
99	0.43	0.05	2659.69	0.00	2500.26
100	0.43	0.05	2659.73	0.00	2500.26
101	0.46	0.05	2659.78	0.00	2500.26
102	0.43	0.05	2659.83	0.00	2500.26
103	0.43	0.05	2659.88	0.00	2500.26
104	0.53	0.05	2659.93	0.00	2500.26
105	0.43	0.05	2659.98	0.00	2500.26
106	0.43	0.05	2660.02	0.00	2500.26
107	0.50	0.05	2660.07	0.00	2500.26
108	0.50	0.05	2660.12	0.00	2500.26
109	0.46	0.05	2660.17	0.00	2500.26
110	0.43	0.05	2660.22	0.00	2500.26
111	0.53	0.05	2660.27	0.00	2500.26
112	0.57	0.06	2660.33	0.00	2500.26
113	0.43	0.05	2660.38	0.00	2500.26
114	0.53	0.05	2660.42	0.00	2500.26
115	0.50	0.05	2660.48	0.00	2500.26
116	0.50	0.05	2660.52	0.00	2500.26
117	0.57	0.05	2660.58	0.00	2500.26
118	0.53	0.05	2660.63	0.00	2500.26
119	0.50	0.05	2660.68	0.00	2500.26
120	0.53	0.05	2660.73	0.00	2500.26
121	0.75	0.06	2660.79	0.00	2500.26
122	0.71	0.07	2660.86	0.00	2500.26

## R854 WNL (CRI90 700mA 40D)

Zonal flux distribution table

Page12

Gamma [°]	Average I [cd]	Zonal Flux [lm]	Sum Flux [lm]	Effective Flux [lm]	Effective Sum [lm]
123	0.75	0.07	2660.93	0.00	2500.26
124	0.85	0.07	2661.00	0.00	2500.26
125	0.96	0.08	2661.08	0.00	2500.26
126	1.06	0.09	2661.17	0.00	2500.26
127	1.21	0.10	2661.27	0.00	2500.26
128	1.56	0.12	2661.39	0.00	2500.26
129	1.70	0.14	2661.53	0.00	2500.26
130	2.13	0.16	2661.69	0.00	2500.26
131	2.34	0.19	2661.88	0.00	2500.26
132	2.77	0.21	2662.09	0.00	2500.26
133	3.19	0.24	2662.33	0.00	2500.26
134	3.48	0.27	2662.60	0.00	2500.26
135	4.15	0.30	2662.90	0.00	2500.26
136	4.51	0.33	2663.23	0.00	2500.26
137	5.18	0.37	2663.60	0.00	2500.26
138	5.82	0.41	2664.00	0.00	2500.26
139	6.39	0.44	2664.45	0.00	2500.26
140	7.06	0.48	2664.93	0.00	2500.26
141	7.92	0.52	2665.45	0.00	2500.26
142	8.55	0.56	2666.01	0.00	2500.26
143	9.44	0.60	2666.61	0.00	2500.26
144	10.26	0.64	2667.25	0.00	2500.26
145	11.15	0.68	2667.94	0.00	2500.26
146	12.03	0.72	2668.66	0.00	2500.26
147	12.85	0.75	2669.41	0.00	2500.26
148	13.77	0.78	2670.19	0.00	2500.26
149	14.70	0.82	2671.01	0.00	2500.26
150	15.73	0.85	2671.86	0.00	2500.26
151	16.65	0.87	2672.73	0.00	2500.26
152	17.50	0.89	2673.62	0.00	2500.26
153	18.57	0.91	2674.54	0.00	2500.26
154	19.49	0.93	2675.47	0.00	2500.26
155	20.48	0.94	2676.41	0.00	2500.26
156	21.51	0.95	2677.37	0.00	2500.26
157	22.47	0.96	2678.33	0.00	2500.26
158	23.22	0.96	2679.29	0.00	2500.26
159	24.00	0.95	2680.23	0.00	2500.26
160	24.85	0.94	2681.17	0.00	2500.26
161	25.45	0.92	2682.09	0.00	2500.26
162	26.30	0.90	2682.99	0.00	2500.26
163	26.94	0.88	2683.87	0.00	2500.26

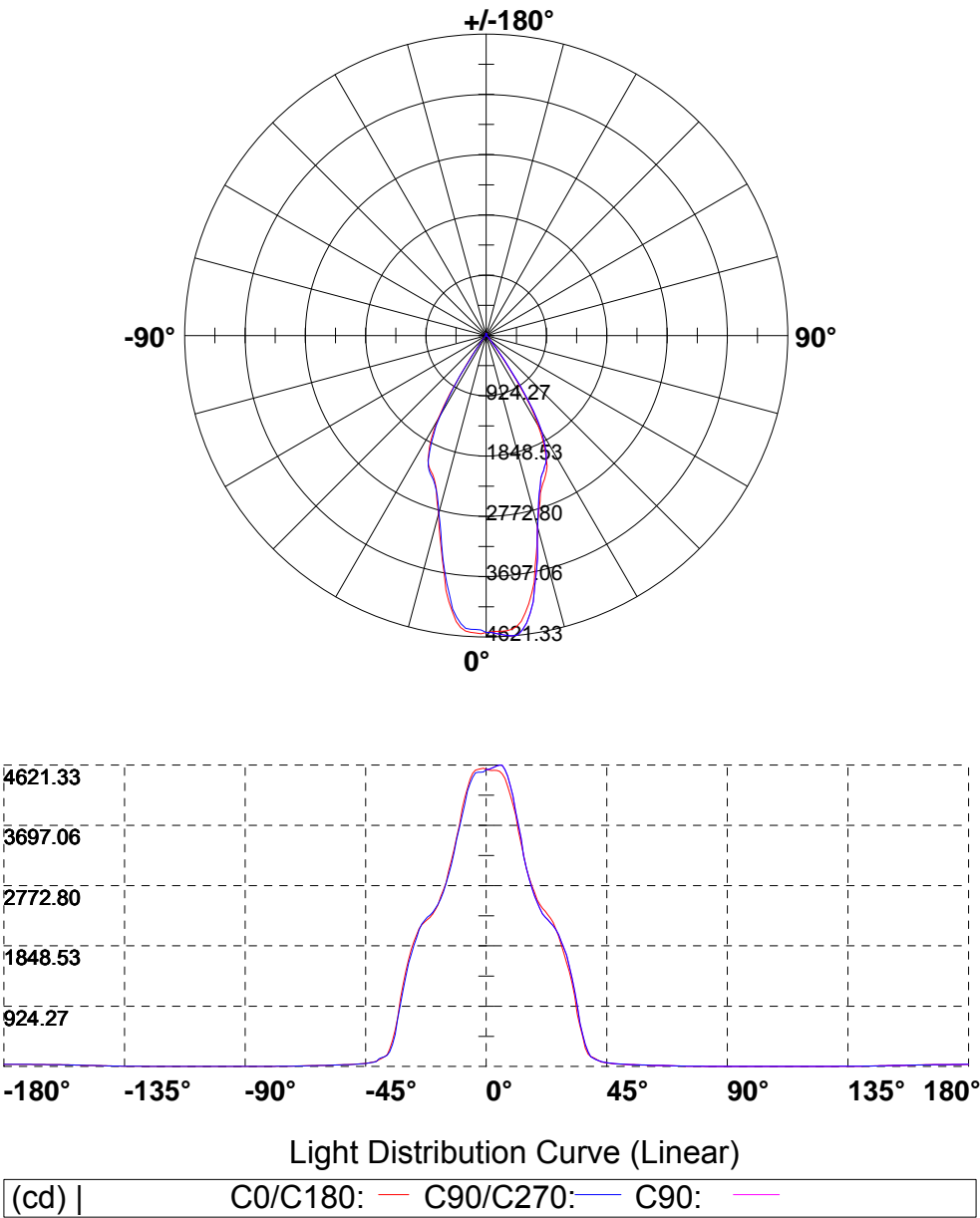
### R854 WNL (CRI90 700mA 40D)

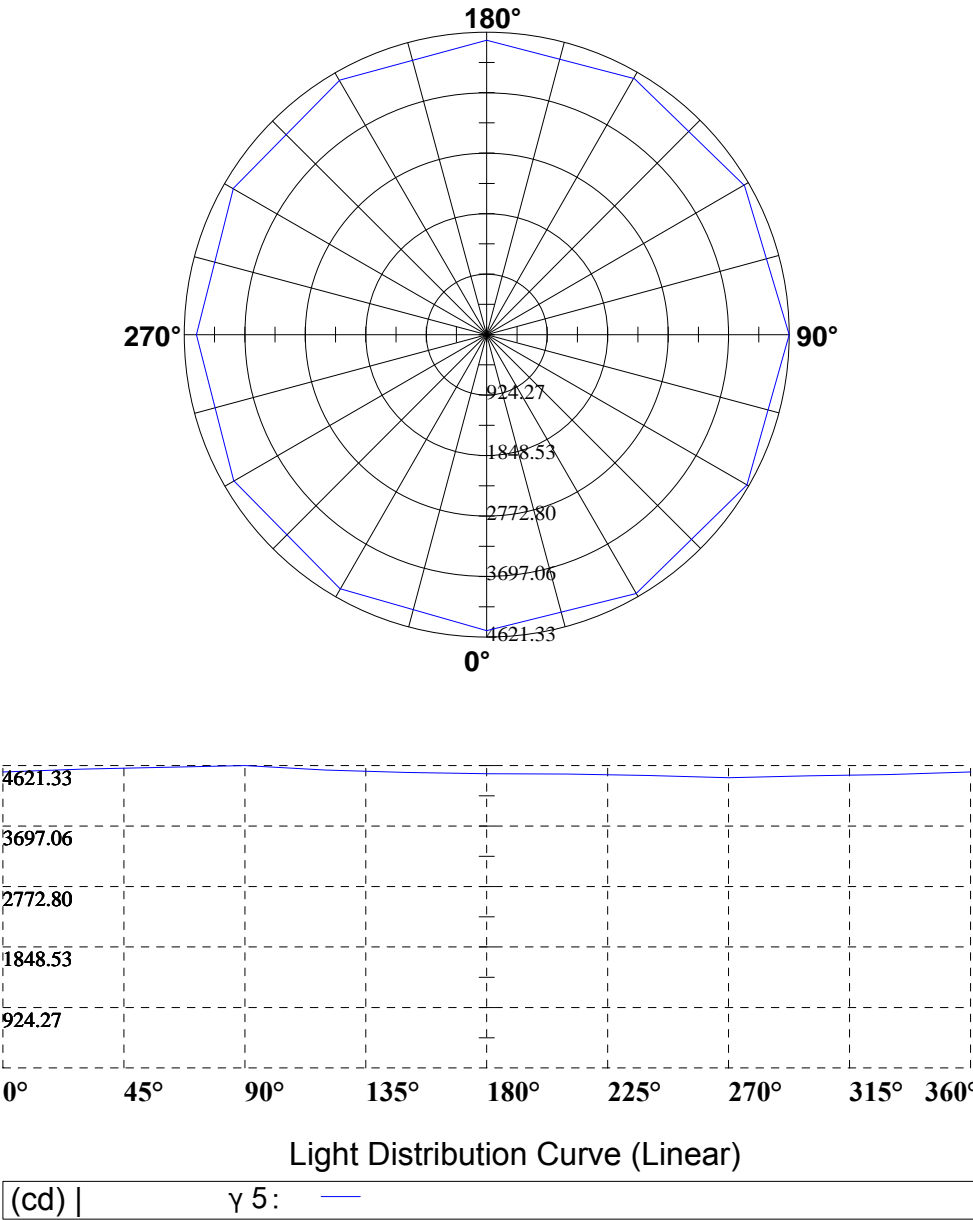
### Zonal flux distribution table

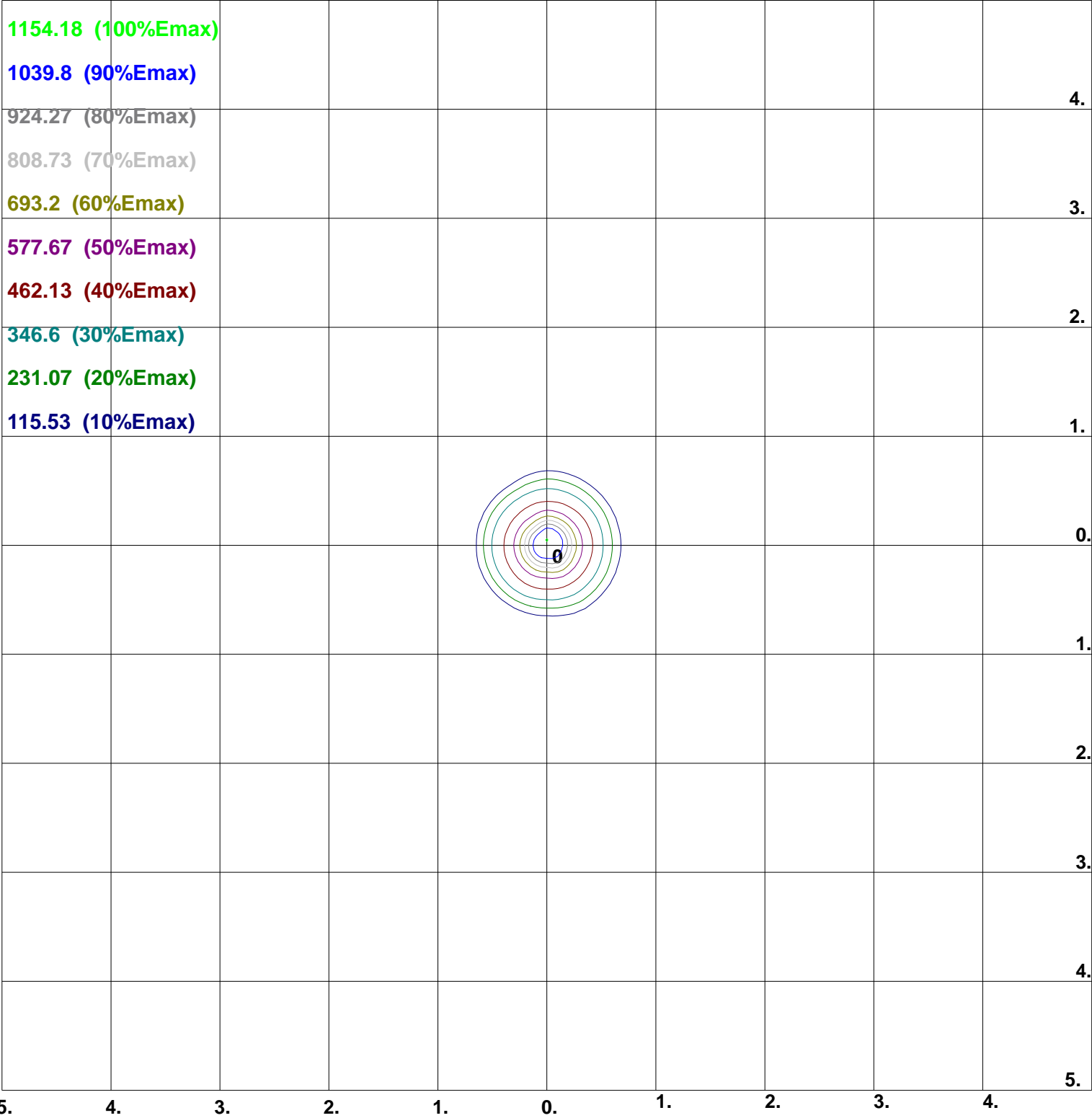
Page13

[illegible]

Light Distribution Curve [Unit: cd]





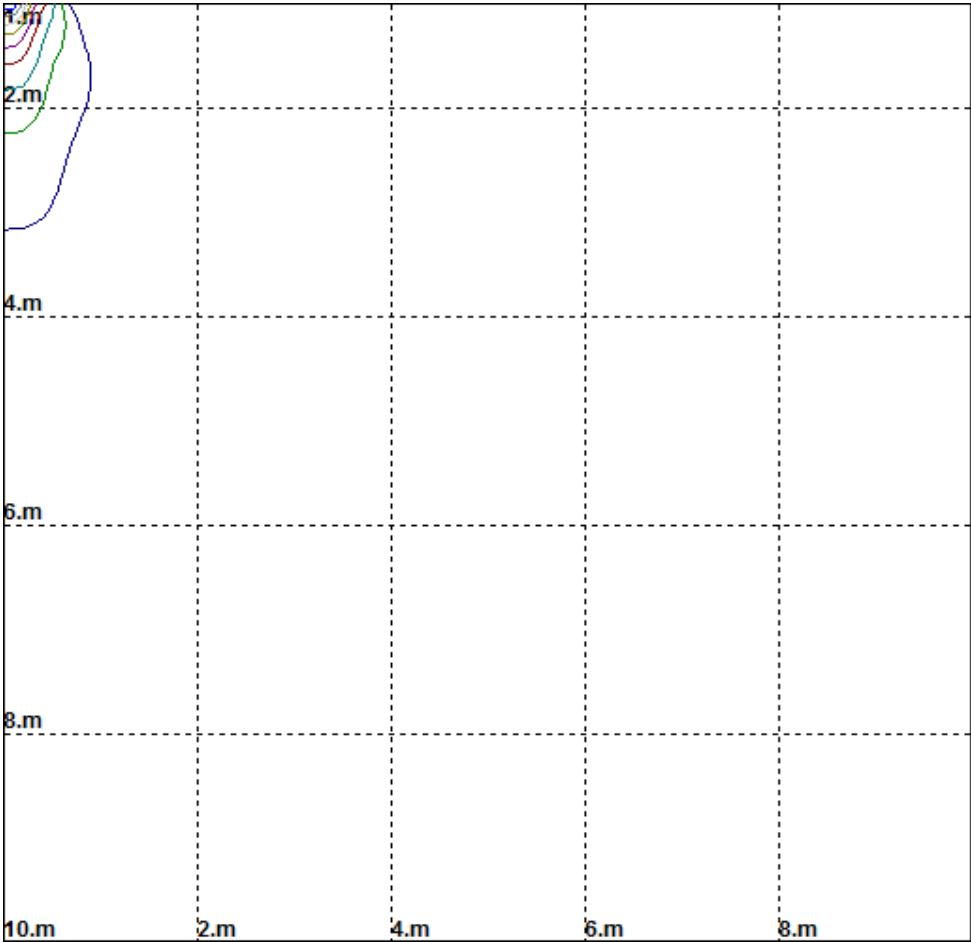


Coordinate Scale: d/h  
Height: 2 m  
Max Illuminance : 1155.33lx

Space ISO-lx

Unit: [lx]  
Illuminance

- 1154.18
- 1039.8
- 924.27
- 808.73
- 693.2
- 577.67
- 462.13
- 346.6
- 231.07
- 115.53



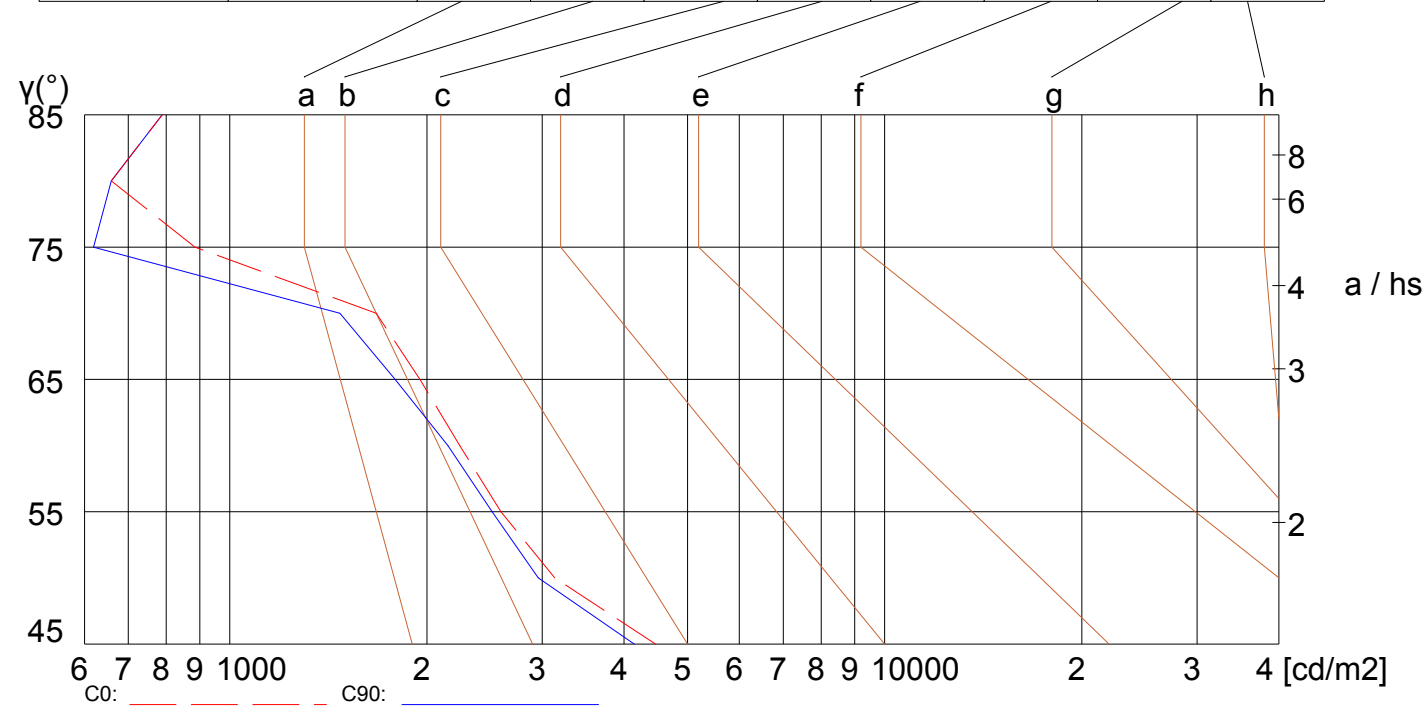
Luminance Limiting Curve (There is not luminous side)

Diameter: 154mm  
Length: -154mm  
Width: -154mm  
Height: 144mm

(cd/m2)

$\gamma$	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	4469	3135	2595	2244	1951	1674	885	659	788
C90	4146	2957	2515	2153	1788	1473	619	659	788

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



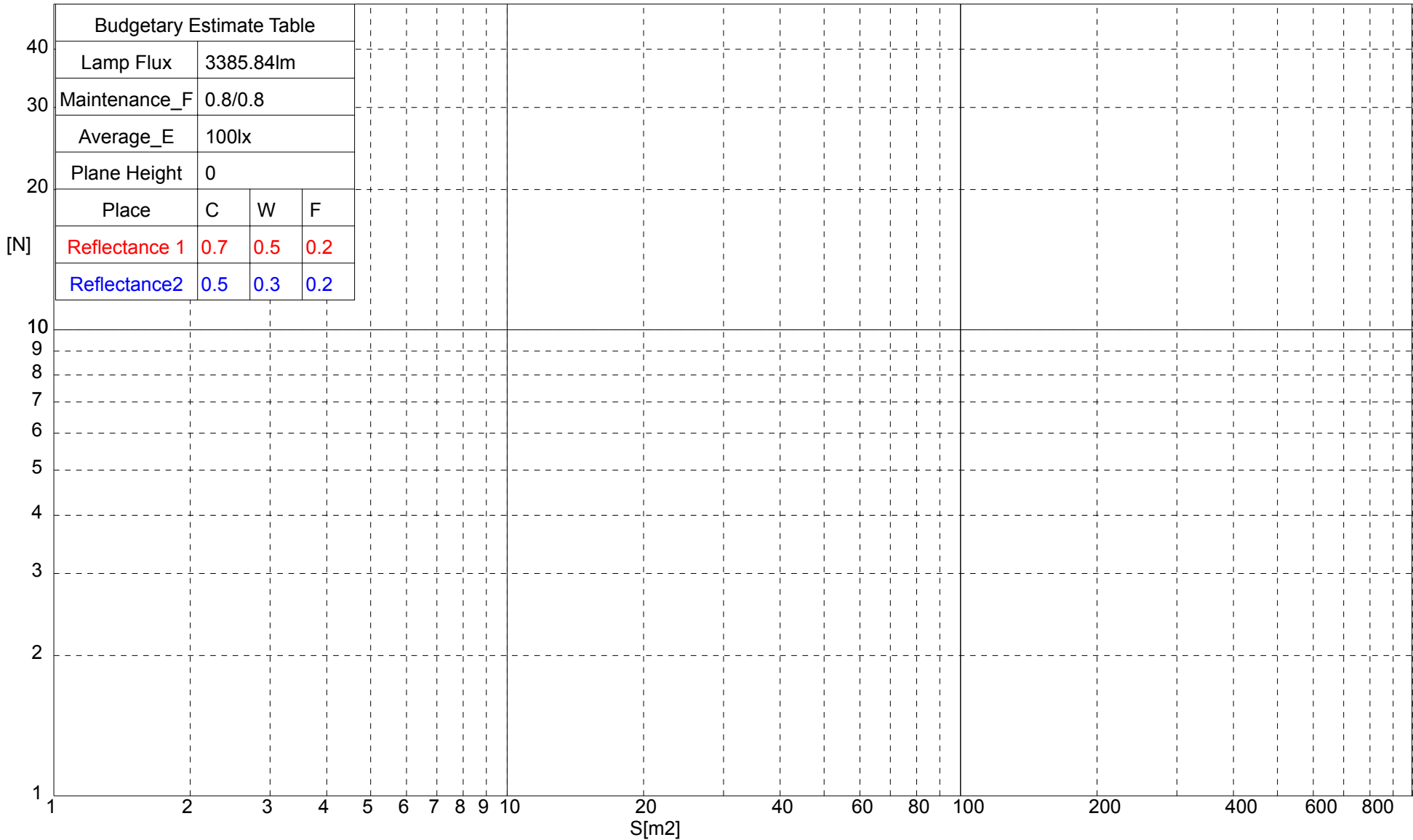
Luminance Limiting Curve (C0/C90)

**R854 WNL (CRI90 700mA 40D)**

utilization factor table for indoor luminaire

Page19

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	COEFFCIENTS OF UTILIZATION FOR RHOFC=20															
0	0.95	0.95	0.95	0.92	0.92	0.92	0.88	0.88	0.88	0.85	0.85	0.85	0.81	0.81	0.81	0.80
1	0.91	0.91	0.90	0.90	0.89	0.89	0.86	0.86	0.85	0.82	0.81	0.80	0.76	0.75	0.74	0.70
2	0.86	0.85	0.85	0.85	0.84	0.83	0.82	0.80	0.79	0.78	0.76	0.75	0.73	0.71	0.70	0.66
3	0.81	0.80	0.80	0.80	0.79	0.78	0.77	0.76	0.74	0.74	0.72	0.70	0.70	0.68	0.66	0.62
4	0.77	0.76	0.75	0.76	0.74	0.73	0.73	0.71	0.70	0.70	0.68	0.66	0.67	0.64	0.62	0.59
5	0.73	0.72	0.71	0.72	0.70	0.69	0.70	0.67	0.66	0.67	0.64	0.62	0.64	0.61	0.59	0.56
6	0.69	0.68	0.67	0.68	0.66	0.65	0.66	0.64	0.62	0.64	0.61	0.59	0.61	0.58	0.56	0.53
7	0.65	0.64	0.63	0.65	0.63	0.62	0.63	0.61	0.59	0.61	0.58	0.56	0.59	0.55	0.53	0.50
8	0.62	0.61	0.60	0.61	0.60	0.59	0.60	0.58	0.56	0.58	0.55	0.53	0.56	0.53	0.50	0.47
9	0.59	0.58	0.57	0.58	0.57	0.56	0.57	0.55	0.53	0.55	0.53	0.50	0.54	0.50	0.48	0.45
10	0.56	0.55	0.55	0.56	0.54	0.53	0.54	0.52	0.51	0.53	0.50	0.48	0.51	0.48	0.45	0.43



Operator  
Telephone  
Fax  
e-Mail

## R854 WNL (CRI90 700mA 40D) / UGR-Table

Luminaire: R854 WNL (CRI90 700mA 40D)

Lamps: 1 x LUMINUS CLM-14-40-90-36-TC40-F5-2 700mA

Glare Evaluation According to UGR											
$\rho$ Ceiling		70	70	50	50	30	70	70	50	50	30
$\rho$ Walls		50	30	50	30	30	50	30	50	30	30
$\rho$ Floor		20	20	20	20	20	20	20	20	20	20
Room Size X                  Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	13.0	13.6	13.2	13.8	14.0	13.0	13.6	13.2	13.8	14.0
	3H	12.9	13.5	13.2	13.7	14.0	12.9	13.5	13.2	13.7	14.0
	4H	12.8	13.4	13.1	13.6	13.9	12.8	13.4	13.1	13.6	13.9
	6H	12.7	13.2	13.1	13.5	13.8	12.7	13.2	13.1	13.5	13.8
	8H	12.7	13.2	13.0	13.5	13.8	12.7	13.2	13.0	13.5	13.8
	12H	12.6	13.1	13.0	13.4	13.8	12.6	13.1	13.0	13.4	13.8
4H	2H	12.8	13.3	13.1	13.6	13.9	12.8	13.3	13.1	13.6	13.9
	3H	12.7	13.1	13.0	13.5	13.8	12.7	13.1	13.0	13.5	13.8
	4H	12.6	13.0	13.0	13.4	13.7	12.6	13.0	13.0	13.4	13.7
	6H	12.5	12.9	12.9	13.2	13.7	12.5	12.9	12.9	13.2	13.7
	8H	12.5	12.8	12.9	13.2	13.6	12.5	12.8	12.9	13.2	13.6
	12H	12.5	12.7	12.9	13.1	13.6	12.5	12.7	12.9	13.1	13.6
8H	4H	12.5	12.8	12.9	13.2	13.6	12.5	12.8	12.9	13.2	13.6
	6H	12.4	12.6	12.9	13.1	13.5	12.4	12.6	12.9	13.1	13.5
	8H	12.4	12.5	12.8	13.0	13.5	12.4	12.5	12.8	13.0	13.5
	12H	12.3	12.5	12.8	12.9	13.5	12.3	12.5	12.8	12.9	13.5
12H	4H	12.5	12.7	12.9	13.1	13.6	12.5	12.7	12.9	13.1	13.6
	6H	12.4	12.5	12.8	13.0	13.5	12.4	12.5	12.8	13.0	13.5
	8H	12.3	12.5	12.8	12.9	13.5	12.3	12.5	12.8	12.9	13.5
Variation of the observer position for the luminaire distances S											
S = 1.0H S = 1.5H S = 2.0H		+6.5 / -9.7 +9.3 / -10.9 +11.3 / -11.8					+6.5 / -9.7 +9.3 / -10.9 +11.3 / -11.8				
Standard table		BK00					BK00				
Correction Summand		-6.5					-6.5				
Corrected Glare Indices referring to 3386lm Total Luminous Flux											

The UGR values have been calculated according to CIE Publ. 117 Spacing-to-Height-Ratio = 0.25.