

**R852 WWL (CRI90 500mA 40D)**

Luminaire Name: R852 WWL (CRI90 500mA 40D)

Report NO.: 01314521062906A

Test NO.:

Lamp: CITIZEN CLU038-1205C4-303H5M3 500mA

Sum Lumens: 2144.5 lm

Number of Lamps: 1

Diameter: 115mm

Length: -115mm

Photometric Type: Type C

Voltage: 225.32 V

Current: 0.0916 A

Power: 20.135 W

Power Factor: 0.9761

Ballast Type: OSRAM OT FIT 20/220-240/500 CS

Width: -115mm

Height: 105mm

Optical Component: 40D Reflector DC(V:34.86V I:0.489A P:17.05W)

**Photometric Results**

Lumens: 1734.82 lm

Efficiency: 80.9%

Central Intensity: 3578.492cd

Maximum Intensity: 3578.986cd

Beam Angle(10%): Left: -31.1 Right:34.9

Maximum s/h: C0\_180: 0.31 C90\_270: 0.31

Effective Luminous Flux: 1568.78 lm

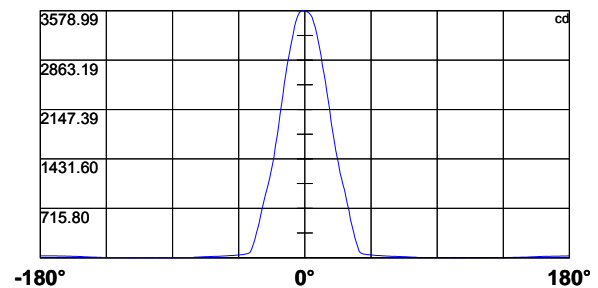
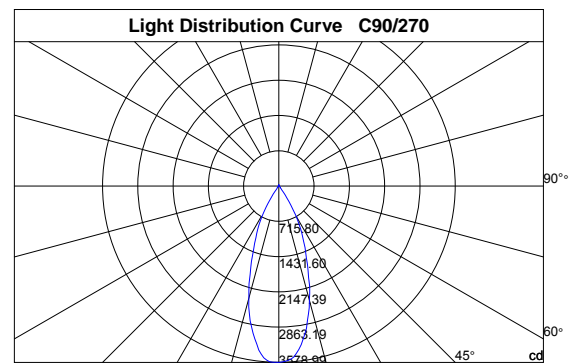
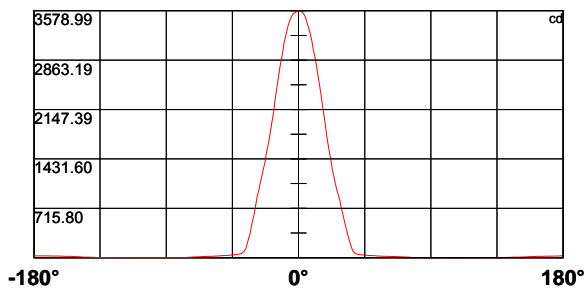
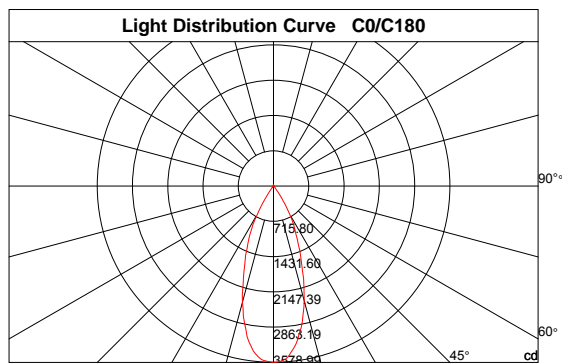
Angle of maximum intensity: C:300.0 G:2.0

Half Peak Side Angle(50%): Left: -17.0 Right:21.3

Up Flux Rate: 1.06%

Down Flux Rate: 79.83%

CIE Classification: Direct



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**Intensity Data [cd]**

C\γ	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
0.0	3578.5	3574.3	3565.4	3544.5	3515.9	3468.2	3388.6	3320.0	3239.1	3147.9
30.0	3578.5	3573.0	3562.4	3550.0	3515.9	3475.9	3421.8	3334.5	3252.7	3148.8
60.0	3578.5	3570.0	3564.5	3551.7	3525.7	3484.4	3418.8	3347.7	3268.5	3139.0
90.0	3578.5	3567.5	3556.8	3542.4	3517.6	3481.0	3410.3	3341.3	3251.8	3145.4
120.0	3578.5	3569.6	3551.7	3537.2	3518.1	3470.4	3415.8	3331.5	3253.5	3159.8
150.0	3578.5	3567.9	3551.7	3540.2	3522.3	3480.2	3426.5	3354.1	3265.5	3176.4
180.0	3578.5	3569.6	3558.1	3546.2	3528.7	3484.4	3433.3	3371.5	3283.4	3195.2
210.0	3578.5	3574.7	3566.6	3556.8	3530.4	3493.4	3439.7	3378.8	3275.7	3185.8
240.0	3578.5	3578.6	3573.9	3562.8	3536.4	3497.2	3439.3	3356.2	3271.0	3178.1
270.0	3578.5	3576.4	3578.1	3569.2	3541.1	3497.2	3428.6	3352.4	3234.0	3135.1
300.0	3578.5	3578.1	3579.0	3571.3	3553.9	3512.5	3440.5	3361.3	3243.7	3164.1
330.0	3578.5	3578.1	3573.4	3562.8	3525.7	3478.0	3419.2	3327.2	3245.5	3152.6
360.0	3578.5	3574.3	3565.4	3544.5	3515.9	3468.2	3388.6	3320.0	3239.1	3147.9

C\γ	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	3021.0	2929.8	2818.6	2661.9	2537.1	2407.6	2252.1	2115.4	1972.7	1789.5
30.0	3032.0	2929.8	2815.7	2698.1	2532.0	2402.5	2242.3	2101.7	1962.0	1798.0
60.0	3037.2	2928.1	2815.2	2655.5	2529.8	2401.2	2243.6	2086.4	1947.1	1811.2
90.0	3043.1	2936.6	2783.7	2666.1	2546.0	2399.5	2268.3	2134.1	1954.3	1818.9
120.0	3045.7	2937.5	2827.6	2672.5	2550.3	2400.3	2269.1	2130.7	1949.2	1818.5
150.0	3066.1	2962.6	2849.3	2712.6	2591.2	2414.4	2281.9	2145.2	1988.4	1858.5
180.0	3098.5	2953.7	2839.5	2716.0	2567.3	2433.6	2296.0	2113.7	1976.5	1851.7
210.0	3086.6	2955.8	2837.8	2716.0	2542.6	2408.9	2270.4	2108.1	1949.7	1820.2
240.0	3056.7	2927.3	2809.3	2664.0	2536.2	2402.9	2218.9	2080.4	1940.7	1778.8
270.0	3029.1	2912.8	2796.5	2654.6	2526.4	2348.8	2212.5	2071.5	1882.4	1742.6
300.0	3058.5	2910.2	2794.4	2676.8	2534.1	2403.7	2222.7	2083.8	1967.5	1781.8
330.0	3039.7	2929.8	2794.4	2673.4	2528.5	2398.6	2261.0	2101.3	1960.7	1823.6
360.0	3021.0	2929.8	2818.6	2661.9	2537.1	2407.6	2252.1	2115.4	1972.7	1789.5

C\γ	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	1654.5	1531.4	1420.6	1283.9	1185.0	1074.3	988.2	910.3	836.6	728.8
30.0	1641.7	1519.4	1392.5	1289.0	1189.7	1063.6	976.3	898.8	826.0	730.5
60.0	1657.9	1539.0	1430.4	1296.2	1200.8	1109.2	1010.0	932.9	858.3	742.9
90.0	1691.5	1558.2	1454.7	1355.9	1231.0	1140.7	1054.3	972.5	864.3	766.7
120.0	1718.8	1575.2	1470.9	1373.3	1262.1	1168.9	1077.7	963.1	870.3	766.7
150.0	1741.4	1596.1	1511.3	1410.8	1282.2	1187.2	1094.7	986.1	892.4	748.9
180.0	1716.7	1609.7	1507.9	1375.0	1277.9	1182.5	1092.2	975.5	899.2	779.1
210.0	1683.0	1573.5	1467.5	1363.5	1228.9	1133.9	1048.3	953.7	869.8	771.9
240.0	1649.8	1532.2	1389.9	1288.6	1192.3	1101.6	1004.0	927.8	846.8	722.0
270.0	1629.8	1469.6	1360.5	1259.2	1147.6	1061.1	978.9	893.7	805.5	714.8
300.0	1649.8	1526.2	1396.8	1289.0	1152.7	1059.4	974.6	889.4	820.4	739.5
330.0	1643.0	1522.8	1412.5	1271.9	1170.6	1076.4	976.7	899.2	829.8	738.2
360.0	1654.5	1531.4	1420.6	1283.9	1185.0	1074.3	988.2	910.3	836.6	728.8

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**Intensity Data [cd]**

C\γ	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	641.1	548.6	449.4	370.2	285.4	216.8	145.3	99.3	71.1	57.1
30.0	641.9	522.7	438.3	359.1	285.8	207.0	146.5	99.3	66.9	57.5
60.0	647.9	554.2	464.7	355.3	280.7	213.0	141.8	93.7	67.7	60.1
90.0	685.8	553.8	463.0	379.1	289.7	220.2	156.8	90.7	69.0	59.2
120.0	643.6	541.0	434.5	351.4	275.2	184.4	126.1	86.0	68.6	59.6
150.0	643.6	558.4	434.1	347.2	271.8	192.5	132.9	83.1	69.4	60.9
180.0	653.9	550.4	455.8	342.1	277.3	194.7	126.9	88.2	72.0	60.9
210.0	632.6	535.0	443.0	360.4	258.6	190.4	132.9	86.9	71.1	63.0
240.0	625.7	532.5	434.1	353.1	279.4	191.3	133.8	90.7	69.9	61.3
270.0	621.5	504.8	425.1	350.1	266.7	198.9	138.9	84.8	67.7	59.2
300.0	637.2	548.2	464.3	363.8	294.3	227.0	149.9	101.0	75.0	59.2
330.0	633.8	546.9	463.9	385.1	287.1	221.1	150.8	101.8	72.8	58.8
360.0	641.1	548.6	449.4	370.2	285.4	216.8	145.3	99.3	71.1	57.1

C\γ	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0
0.0	50.3	46.4	43.4	41.3	39.2	37.5	36.2	34.5	32.8	31.1
30.0	51.1	47.7	44.3	41.7	40.0	38.3	36.6	35.4	33.7	31.5
60.0	52.0	49.0	46.4	43.9	41.3	39.6	37.5	35.8	34.1	32.4
90.0	52.4	49.0	46.4	43.4	41.3	39.6	37.9	35.8	34.5	32.8
120.0	53.2	49.4	46.4	43.0	41.3	39.6	37.5	35.8	34.1	32.4
150.0	54.1	50.3	46.9	43.9	41.7	40.0	37.9	36.2	34.5	32.8
180.0	55.4	52.0	48.1	44.7	42.2	39.6	38.3	36.6	34.5	32.8
210.0	54.9	51.5	48.1	44.7	42.2	40.0	37.9	36.6	34.9	33.2
240.0	54.5	49.8	46.9	44.3	42.2	39.6	38.3	37.1	34.9	33.2
270.0	52.8	49.0	46.4	43.4	41.3	39.2	37.5	35.8	34.1	32.4
300.0	53.2	49.0	46.0	44.3	41.3	38.8	37.1	35.4	34.1	32.4
330.0	52.4	48.6	46.0	43.0	40.5	38.8	36.6	34.9	33.7	31.5
360.0	50.3	46.4	43.4	41.3	39.2	37.5	36.2	34.5	32.8	31.1

C\γ	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	29.8	28.5	27.7	26.4	25.1	24.3	23.0	22.2	21.3	20.4
30.0	30.2	29.0	27.7	26.8	25.6	24.3	23.4	22.6	21.3	20.4
60.0	31.1	29.8	28.5	27.3	26.0	24.7	23.9	23.0	21.7	20.4
90.0	31.1	30.2	29.0	27.3	26.4	25.1	23.9	22.6	22.2	20.9
120.0	31.1	29.8	28.5	27.3	26.0	24.7	23.9	22.6	21.7	20.9
150.0	31.5	29.8	28.5	27.3	26.0	24.7	23.9	22.6	21.7	20.9
180.0	31.5	29.8	29.0	27.7	26.0	25.1	23.9	22.6	22.2	20.9
210.0	31.5	30.2	29.4	27.7	26.4	25.1	23.9	23.0	22.2	20.9
240.0	31.9	30.2	29.0	27.7	26.8	25.1	24.3	23.4	22.2	20.9
270.0	31.1	29.4	28.1	26.8	25.6	24.7	23.9	22.6	21.7	20.9
300.0	30.7	29.4	28.1	26.4	25.6	24.7	23.4	22.6	21.7	20.9
330.0	30.2	29.0	27.7	26.4	25.6	23.9	23.4	22.6	21.3	20.4
360.0	29.8	28.5	27.7	26.4	25.1	24.3	23.0	22.2	21.3	20.4

**R852 WWL (CRI90 500mA 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	19.6	18.7	18.3	17.5	16.6	16.2	15.8	14.9	14.5	13.6
30.0	19.6	18.7	18.3	17.5	17.0	16.2	15.8	14.9	14.5	14.1
60.0	20.0	19.2	18.3	17.9	17.0	16.2	15.8	14.9	14.1	13.6
90.0	20.0	18.7	17.9	17.5	16.6	15.8	15.3	14.5	14.1	13.2
120.0	20.0	18.7	17.9	17.0	16.6	15.8	14.9	14.5	13.6	12.8
150.0	19.6	19.2	17.9	17.0	16.6	15.8	14.9	14.1	13.2	12.4
180.0	19.6	18.7	17.9	17.0	16.2	15.8	14.9	14.1	13.2	12.8
210.0	20.0	19.2	17.9	17.5	16.6	15.8	14.9	14.5	13.6	12.8
240.0	20.0	19.2	18.3	17.5	17.0	16.2	15.3	14.9	14.1	13.6
270.0	20.0	18.7	18.3	17.5	16.6	16.2	15.3	14.9	14.1	13.6
300.0	20.0	19.2	18.3	17.5	17.0	16.2	15.8	15.3	14.5	14.1
330.0	20.0	19.2	18.3	17.9	17.0	16.2	15.8	15.3	14.9	14.1
360.0	19.6	18.7	18.3	17.5	16.6	16.2	15.8	14.9	14.5	13.6

C\γ	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	12.8	12.4	11.5	10.2	8.9	7.7	5.1	3.0	1.7	1.7
30.0	12.8	11.9	11.5	10.2	8.9	7.7	4.7	2.6	1.7	1.3
60.0	13.2	11.9	11.1	10.2	8.9	7.7	4.3	3.0	1.7	1.3
90.0	12.4	11.5	10.6	9.8	8.5	7.2	4.3	2.6	1.7	1.7
120.0	11.9	10.6	10.2	9.4	7.7	5.5	3.4	1.7	1.7	1.3
150.0	11.5	11.1	9.8	8.5	7.7	5.1	3.4	1.7	1.7	1.3
180.0	11.5	11.1	10.2	8.9	7.7	6.0	3.4	1.7	1.7	1.3
210.0	11.9	11.5	10.2	8.9	8.1	6.0	3.4	1.7	1.7	1.3
240.0	12.4	11.5	10.6	9.8	8.5	6.4	3.8	2.1	1.7	1.7
270.0	12.4	11.5	11.1	9.8	8.5	7.2	3.8	1.7	1.7	1.3
300.0	12.8	11.9	11.5	10.2	9.4	7.7	5.5	3.0	1.7	1.3
330.0	13.2	12.4	11.5	10.6	9.4	7.7	5.5	3.4	1.7	1.7
360.0	12.8	12.4	11.5	10.2	8.9	7.7	5.1	3.0	1.7	1.7

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

**R852 WWL (CRI90 500mA 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	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.4	0.4	0.0
30.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.0
60.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
90.0	0.4	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.4	0.4
120.0	0.4	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
150.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.0	0.0
180.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.4	0.4	0.0
210.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.0
240.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
270.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0
300.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
330.0	0.4	0.0	0.0	0.0	0.4	0.0	0.4	0.0	0.0	0.0
360.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.4	0.4	0.0

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

**R852 WWL (CRI90 500mA 40D)**

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**Intensity Data [cd]**

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	0.4	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.9
30.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9
60.0	0.4	0.4	0.4	0.0	0.0	0.4	0.4	0.4	0.4	0.4
90.0	0.0	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4
120.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.9	0.9
150.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.9
180.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.9
210.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.9
240.0	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.9	0.9	0.9
270.0	0.0	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.9	0.9
300.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
330.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
360.0	0.4	0.4	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.9

C\γ	130.0	131.0	132.0	133.0	134.0	135.0	136.0	137.0	138.0	139.0
0.0	0.9	0.9	1.3	1.3	1.3	1.7	2.1	2.1	2.6	3.0
30.0	0.4	0.9	0.9	1.3	1.3	1.7	2.1	2.1	2.6	3.0
60.0	0.4	0.9	1.3	1.3	1.3	1.7	2.1	2.1	2.6	3.0
90.0	0.9	0.9	0.9	1.3	1.3	1.7	2.1	2.6	2.6	3.0
120.0	0.9	1.3	1.7	2.1	2.6	2.6	3.0	3.4	4.3	4.7
150.0	1.3	1.3	1.7	2.1	2.1	2.6	3.0	3.4	3.8	4.7
180.0	0.9	1.3	1.7	1.7	2.1	2.6	3.0	3.4	3.8	4.7
210.0	1.3	1.3	1.7	2.1	2.1	2.6	3.0	3.4	3.8	4.7
240.0	1.3	1.3	1.7	2.1	2.1	2.6	3.0	3.4	3.8	4.7
270.0	1.3	1.3	1.7	2.1	2.6	2.6	3.0	3.4	3.8	4.7
300.0	0.9	0.9	0.9	1.3	1.3	1.7	2.1	2.1	2.6	3.0
330.0	0.4	0.9	1.3	1.3	1.3	1.7	2.1	2.1	2.6	3.0
360.0	0.9	0.9	1.3	1.3	1.3	1.7	2.1	2.1	2.6	3.0

C\γ	140.0	141.0	142.0	143.0	144.0	145.0	146.0	147.0	148.0	149.0
0.0	3.4	3.8	4.3	4.7	5.1	5.5	6.4	6.8	7.7	8.1
30.0	3.4	3.8	4.3	4.7	5.1	5.5	6.0	6.8	7.2	8.1
60.0	3.4	3.4	4.3	4.7	5.1	5.5	6.0	6.8	7.7	8.1
90.0	3.4	3.4	4.3	4.7	5.1	5.5	6.0	6.8	7.2	7.7
120.0	5.1	6.0	6.8	7.7	8.5	8.9	10.2	10.6	11.9	12.8
150.0	5.1	6.0	6.8	7.2	8.1	8.9	9.8	10.6	11.5	12.8
180.0	5.1	5.5	6.4	7.2	8.5	8.9	9.8	10.6	11.5	12.4
210.0	5.1	6.0	6.8	7.2	8.1	8.9	9.8	10.6	11.9	12.8
240.0	5.1	6.0	6.8	7.7	8.5	8.9	10.2	11.1	11.5	12.8
270.0	5.1	5.5	6.4	7.7	8.1	8.9	10.2	10.6	11.9	12.8
300.0	3.4	3.8	4.3	4.7	5.1	5.5	6.0	6.4	7.2	8.1
330.0	3.4	3.8	3.8	4.7	5.1	5.5	6.4	6.8	7.7	8.1
360.0	3.4	3.8	4.3	4.7	5.1	5.5	6.4	6.8	7.7	8.1

**R852 WWL (CRI90 500mA 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	8.9	9.4	10.2	11.1	11.9	12.4	13.6	14.1	15.3	16.2
30.0	8.9	9.4	9.8	11.1	11.5	12.8	13.2	14.1	14.9	15.3
60.0	8.9	9.4	10.2	10.6	11.5	12.4	13.2	14.1	14.9	15.8
90.0	8.5	9.4	10.2	11.1	11.9	12.8	13.6	14.1	14.9	15.8
120.0	13.6	14.5	15.8	16.6	17.5	17.9	19.2	20.0	20.9	21.3
150.0	13.6	14.1	15.8	16.2	17.0	17.9	19.2	19.6	20.4	21.3
180.0	13.6	14.5	15.3	16.2	17.0	17.9	18.7	19.6	20.4	21.3
210.0	13.2	14.5	15.3	16.2	17.5	18.3	18.7	19.6	20.4	20.9
240.0	13.6	14.5	15.3	16.2	17.5	18.3	19.2	19.6	20.4	21.3
270.0	13.6	14.5	15.8	16.6	17.5	18.3	19.2	20.0	20.4	21.7
300.0	8.9	9.4	10.2	10.6	11.9	12.8	13.2	14.5	15.3	15.8
330.0	8.5	9.4	10.2	11.1	11.9	12.8	13.2	14.1	14.9	16.2
360.0	8.9	9.4	10.2	11.1	11.9	12.4	13.6	14.1	15.3	16.2

C\γ	160.0	161.0	162.0	163.0	164.0	165.0	166.0	167.0	168.0	169.0
0.0	16.6	17.5	17.9	18.7	19.2	20.0	20.4	21.3	21.7	22.2
30.0	16.6	17.0	17.9	18.7	19.6	20.0	20.9	21.3	21.7	22.2
60.0	16.2	17.0	17.9	18.7	19.2	20.0	20.4	21.3	21.7	22.2
90.0	16.6	17.0	17.9	18.3	19.2	20.0	20.4	21.3	21.7	22.2
120.0	21.7	22.6	23.0	23.4	24.3	24.7	24.7	25.1	25.1	25.6
150.0	21.7	22.6	23.4	23.4	23.9	24.3	24.7	24.7	25.1	25.6
180.0	21.7	22.6	23.0	23.9	23.9	24.3	24.7	25.1	25.1	25.1
210.0	21.7	22.6	23.0	23.4	24.3	24.3	24.7	25.1	25.1	25.6
240.0	22.2	22.6	23.0	23.9	24.3	24.3	24.7	25.1	25.1	25.6
270.0	22.2	22.6	23.0	23.9	23.9	24.7	24.7	25.1	25.1	25.6
300.0	16.6	17.5	18.3	18.7	19.2	20.0	20.4	21.3	21.7	22.2
330.0	16.6	17.5	17.9	18.7	19.6	20.0	20.4	21.3	21.7	22.2
360.0	16.6	17.5	17.9	18.7	19.2	20.0	20.4	21.3	21.7	22.2

C\γ	170.0	171.0	172.0	173.0	174.0	175.0	176.0	177.0	178.0	179.0
0.0	22.6	23.0	23.0	23.4	23.9	24.3	24.7	24.7	25.6	26.0
30.0	22.6	23.0	23.0	23.4	23.9	24.3	24.3	25.1	25.6	25.6
60.0	22.6	23.0	23.0	23.4	23.9	24.3	24.3	24.7	25.1	25.6
90.0	22.6	23.0	23.0	23.4	23.9	24.3	24.7	25.1	25.1	25.6
120.0	26.0	25.6	25.6	26.0	26.0	26.0	25.6	26.0	26.0	26.0
150.0	25.6	26.0	25.6	25.6	26.0	26.0	25.6	25.6	26.0	26.0
180.0	25.6	25.6	26.0	25.6	26.0	26.0	26.0	26.0	26.0	26.0
210.0	25.6	25.6	25.6	25.6	26.0	25.6	25.6	26.0	26.0	26.0
240.0	25.6	25.6	25.6	25.6	26.0	26.0	26.0	25.6	26.0	26.0
270.0	25.6	25.6	25.6	26.0	25.6	25.6	25.6	25.6	26.0	26.0
300.0	22.6	23.0	23.0	23.4	23.9	24.3	24.7	25.1	25.6	26.0
330.0	22.6	23.0	23.4	23.4	23.4	23.9	24.7	25.1	25.6	26.0
360.0	22.6	23.0	23.0	23.4	23.9	24.3	24.7	24.7	25.6	26.0

**Intensity Data [cd]****Page8**

<b>C\γ</b>	<b>180.0</b>
<b>0.0</b>	26.0
<b>30.0</b>	26.0
<b>60.0</b>	26.0
<b>90.0</b>	26.0
<b>120.0</b>	26.0
<b>150.0</b>	26.0
<b>180.0</b>	26.0
<b>210.0</b>	26.0
<b>240.0</b>	26.0
<b>270.0</b>	26.0
<b>300.0</b>	26.0
<b>330.0</b>	26.0
<b>360.0</b>	26.0



**R852 WWL (CRI90 500mA 40D)**

Zonal flux distribution table

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Gamma [°]	Average I [cd]	Zonal Flux [lm]	Sum Flux [lm]	Effective Flux [lm]	Effective Sum [lm]
0	3578.49	0.00	0.00	0.00	0.00
1	3573.16	3.42	3.42	3.42	3.42
2	3565.14	10.25	13.67	10.25	13.67
3	3552.93	17.02	30.69	17.02	30.69
4	3527.66	23.70	54.39	23.70	54.39
5	3485.24	30.17	84.56	30.17	84.56
6	3423.54	36.31	120.87	36.31	120.87
7	3348.04	42.03	162.90	42.03	162.90
8	3257.03	47.27	210.17	47.27	210.17
9	3160.69	52.01	262.18	52.01	262.18
10	3051.18	56.22	318.40	56.22	318.40
11	2934.50	59.81	378.21	59.81	378.21
12	2815.15	62.85	441.06	62.85	441.06
13	2680.62	65.22	506.28	65.22	506.28
14	2543.46	66.87	573.15	66.87	573.15
15	2401.82	67.89	641.04	67.89	641.04
16	2253.23	68.21	709.25	68.21	709.25
17	2106.02	67.89	777.13	67.89	777.13
18	1954.27	66.95	844.08	66.95	844.08
19	1807.77	65.45	909.53	65.45	909.53
20	1673.13	63.71	973.24	63.71	973.24
21	1546.12	61.82	1035.06	61.82	1035.06
22	1434.63	59.90	1094.96	59.90	1094.96
23	1321.35	57.83	1152.79	57.83	1152.79
24	1210.07	55.35	1208.13	55.35	1208.13
25	1113.23	52.83	1260.96	52.83	1260.96
26	1023.00	50.43	1311.38	50.43	1311.38
27	933.58	47.87	1359.25	47.87	1359.25
28	851.62	45.20	1404.45	45.20	1404.45
29	745.84	41.79	1446.24	41.79	1446.24
30	642.40	37.48	1483.73	37.48	1483.73
31	541.37	32.94	1516.67	32.94	1516.67
32	447.52	28.33	1545.00	28.33	1545.00
33	359.73	23.78	1568.78	23.78	1568.78
34	279.33	19.34	1588.12	0.00	1568.78
35	204.78	15.03	1603.16	0.00	1568.78
36	140.21	10.98	1614.14	0.00	1568.78
37	92.12	7.58	1621.72	0.00	1568.78
38	70.11	5.41	1627.13	0.00	1568.78
39	59.74	4.43	1631.57	0.00	1568.78
40	53.03	3.93	1635.50	0.00	1568.78

**R852 WWL (CRI90 500mA 40D)**

Zonal flux distribution table

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Gamma [°]	Average I [cd]	Zonal Flux [lm]	Sum Flux [lm]	Effective Flux [lm]	Effective Sum [lm]
41	49.31	3.64	1639.14	0.00	1568.78
42	46.29	3.47	1642.62	0.00	1568.78
43	43.48	3.33	1645.94	0.00	1568.78
44	41.21	3.20	1649.14	0.00	1568.78
45	39.22	3.09	1652.23	0.00	1568.78
46	37.45	3.00	1655.23	0.00	1568.78
47	35.82	2.91	1658.14	0.00	1568.78
48	34.15	2.83	1660.97	0.00	1568.78
49	32.37	2.73	1663.70	0.00	1568.78
50	30.99	2.64	1666.34	0.00	1568.78
51	29.60	2.56	1668.91	0.00	1568.78
52	28.43	2.49	1671.40	0.00	1568.78
53	27.08	2.42	1673.81	0.00	1568.78
54	25.91	2.34	1676.15	0.00	1568.78
55	24.71	2.26	1678.41	0.00	1568.78
56	23.71	2.19	1680.60	0.00	1568.78
57	22.68	2.12	1682.72	0.00	1568.78
58	21.76	2.06	1684.77	0.00	1568.78
59	20.73	1.99	1686.76	0.00	1568.78
60	19.88	1.92	1688.68	0.00	1568.78
61	18.96	1.85	1690.53	0.00	1568.78
62	18.14	1.79	1692.32	0.00	1568.78
63	17.43	1.73	1694.05	0.00	1568.78
64	16.75	1.68	1695.73	0.00	1568.78
65	16.01	1.62	1697.35	0.00	1568.78
66	15.37	1.57	1698.91	0.00	1568.78
67	14.73	1.51	1700.43	0.00	1568.78
68	14.02	1.46	1701.88	0.00	1568.78
69	13.38	1.40	1703.28	0.00	1568.78
70	12.39	1.32	1704.61	0.00	1568.78
71	11.61	1.24	1705.85	0.00	1568.78
72	10.83	1.17	1707.01	0.00	1568.78
73	9.73	1.07	1708.09	0.00	1568.78
74	8.52	0.96	1709.05	0.00	1568.78
75	6.82	0.81	1709.86	0.00	1568.78
76	4.22	0.59	1710.44	0.00	1568.78
77	2.34	0.35	1710.79	0.00	1568.78
78	1.70	0.22	1711.01	0.00	1568.78
79	1.42	0.17	1711.18	0.00	1568.78
80	1.28	0.15	1711.32	0.00	1568.78
81	1.14	0.13	1711.45	0.00	1568.78

**R852 WWL (CRI90 500mA 40D)**

Zonal flux distribution table

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Gamma [°]	Average I [cd]	Zonal Flux [lm]	Sum Flux [lm]	Effective Flux [lm]	Effective Sum [lm]
82	0.89	0.11	1711.56	0.00	1568.78
83	0.85	0.09	1711.66	0.00	1568.78
84	0.71	0.09	1711.74	0.00	1568.78
85	0.50	0.07	1711.81	0.00	1568.78
86	0.46	0.05	1711.86	0.00	1568.78
87	0.46	0.05	1711.91	0.00	1568.78
88	0.32	0.04	1711.95	0.00	1568.78
89	0.39	0.04	1711.99	0.00	1568.78
90	0.25	0.04	1712.03	0.00	1568.78
91	0.18	0.02	1712.05	0.00	1568.78
92	0.28	0.03	1712.08	0.00	1568.78
93	0.28	0.03	1712.11	0.00	1568.78
94	0.28	0.03	1712.14	0.00	1568.78
95	0.18	0.03	1712.17	0.00	1568.78
96	0.25	0.02	1712.19	0.00	1568.78
97	0.25	0.03	1712.22	0.00	1568.78
98	0.18	0.02	1712.24	0.00	1568.78
99	0.04	0.01	1712.25	0.00	1568.78
100	0.00	0.00	1712.25	0.00	1568.78
101	0.04	0.00	1712.26	0.00	1568.78
102	0.14	0.01	1712.26	0.00	1568.78
103	0.07	0.01	1712.28	0.00	1568.78
104	0.18	0.01	1712.29	0.00	1568.78
105	0.07	0.01	1712.30	0.00	1568.78
106	0.25	0.02	1712.32	0.00	1568.78
107	0.14	0.02	1712.34	0.00	1568.78
108	0.18	0.02	1712.36	0.00	1568.78
109	0.14	0.02	1712.37	0.00	1568.78
110	0.14	0.01	1712.39	0.00	1568.78
111	0.14	0.01	1712.40	0.00	1568.78
112	0.28	0.02	1712.42	0.00	1568.78
113	0.18	0.02	1712.45	0.00	1568.78
114	0.21	0.02	1712.47	0.00	1568.78
115	0.14	0.02	1712.49	0.00	1568.78
116	0.21	0.02	1712.50	0.00	1568.78
117	0.14	0.02	1712.52	0.00	1568.78
118	0.28	0.02	1712.54	0.00	1568.78
119	0.21	0.02	1712.56	0.00	1568.78
120	0.14	0.02	1712.58	0.00	1568.78
121	0.35	0.02	1712.61	0.00	1568.78
122	0.35	0.03	1712.64	0.00	1568.78

**R852 WWL (CRI90 500mA 40D)**

Zonal flux distribution table

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Gamma [°]	Average I [cd]	Zonal Flux [lm]	Sum Flux [lm]	Effective Flux [lm]	Effective Sum [lm]
123	0.32	0.03	1712.67	0.00	1568.78
124	0.35	0.03	1712.70	0.00	1568.78
125	0.43	0.04	1712.74	0.00	1568.78
126	0.43	0.04	1712.77	0.00	1568.78
127	0.50	0.04	1712.81	0.00	1568.78
128	0.64	0.05	1712.86	0.00	1568.78
129	0.71	0.06	1712.92	0.00	1568.78
130	0.89	0.07	1712.99	0.00	1568.78
131	1.06	0.08	1713.07	0.00	1568.78
132	1.38	0.10	1713.17	0.00	1568.78
133	1.67	0.12	1713.30	0.00	1568.78
134	1.77	0.14	1713.43	0.00	1568.78
135	2.13	0.15	1713.59	0.00	1568.78
136	2.56	0.18	1713.77	0.00	1568.78
137	2.80	0.20	1713.97	0.00	1568.78
138	3.23	0.22	1714.19	0.00	1568.78
139	3.83	0.26	1714.45	0.00	1568.78
140	4.26	0.29	1714.74	0.00	1568.78
141	4.76	0.31	1715.05	0.00	1568.78
142	5.43	0.35	1715.40	0.00	1568.78
143	6.07	0.38	1715.78	0.00	1568.78
144	6.71	0.42	1716.20	0.00	1568.78
145	7.24	0.44	1716.64	0.00	1568.78
146	8.06	0.48	1717.12	0.00	1568.78
147	8.73	0.51	1717.63	0.00	1568.78
148	9.58	0.54	1718.17	0.00	1568.78
149	10.37	0.57	1718.74	0.00	1568.78
150	11.18	0.60	1719.34	0.00	1568.78
151	11.89	0.62	1719.96	0.00	1568.78
152	12.85	0.65	1720.61	0.00	1568.78
153	13.63	0.67	1721.28	0.00	1568.78
154	14.55	0.69	1721.97	0.00	1568.78
155	15.37	0.71	1722.67	0.00	1568.78
156	16.19	0.72	1723.39	0.00	1568.78
157	16.93	0.72	1724.12	0.00	1568.78
158	17.78	0.73	1724.84	0.00	1568.78
159	18.57	0.73	1725.57	0.00	1568.78
160	19.20	0.73	1726.30	0.00	1568.78
161	19.91	0.72	1727.02	0.00	1568.78
162	20.52	0.70	1727.72	0.00	1568.78
163	21.16	0.69	1728.41	0.00	1568.78

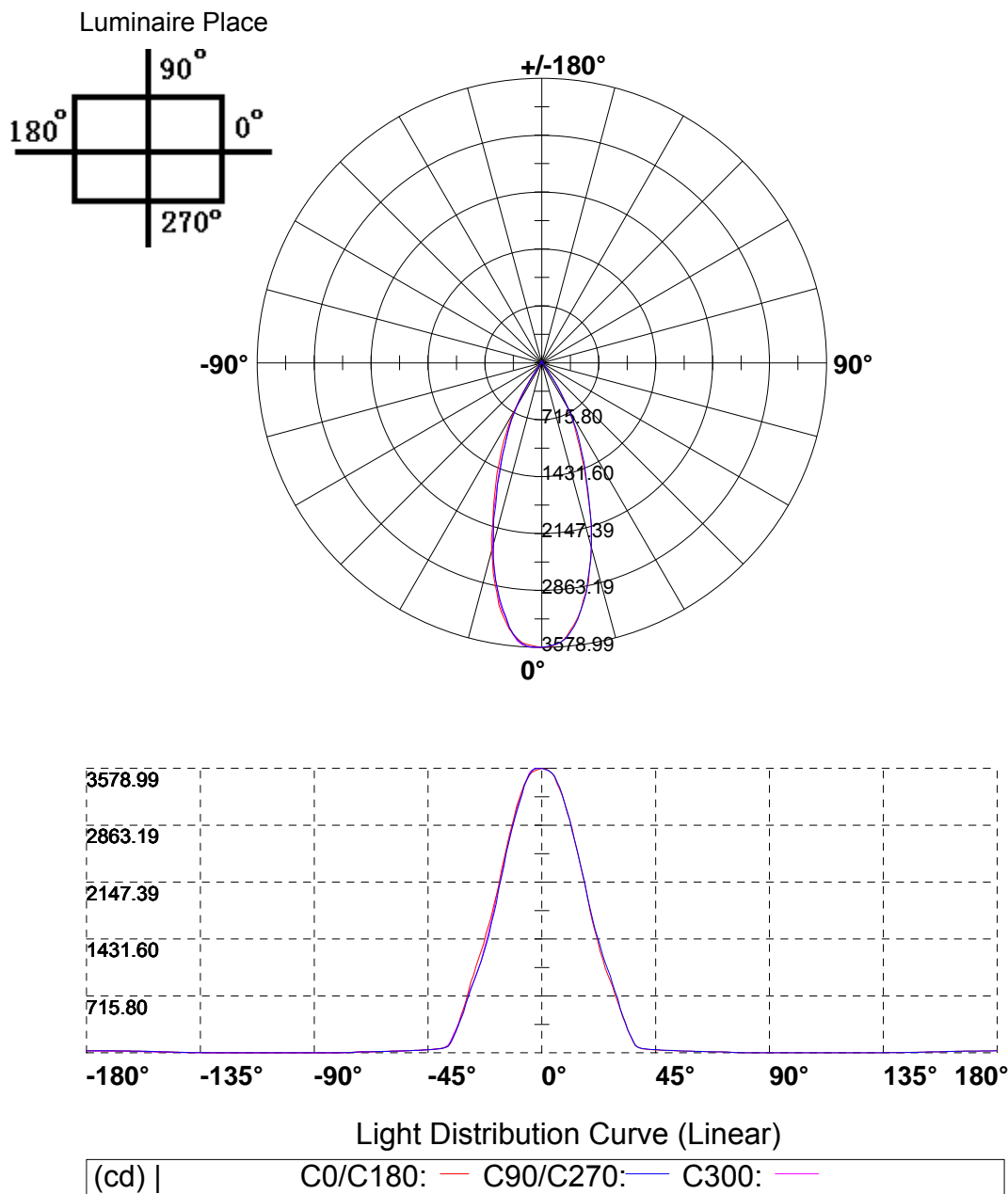
**R852 WWL (CRI90 500mA 40D)**

### Zonal flux distribution table

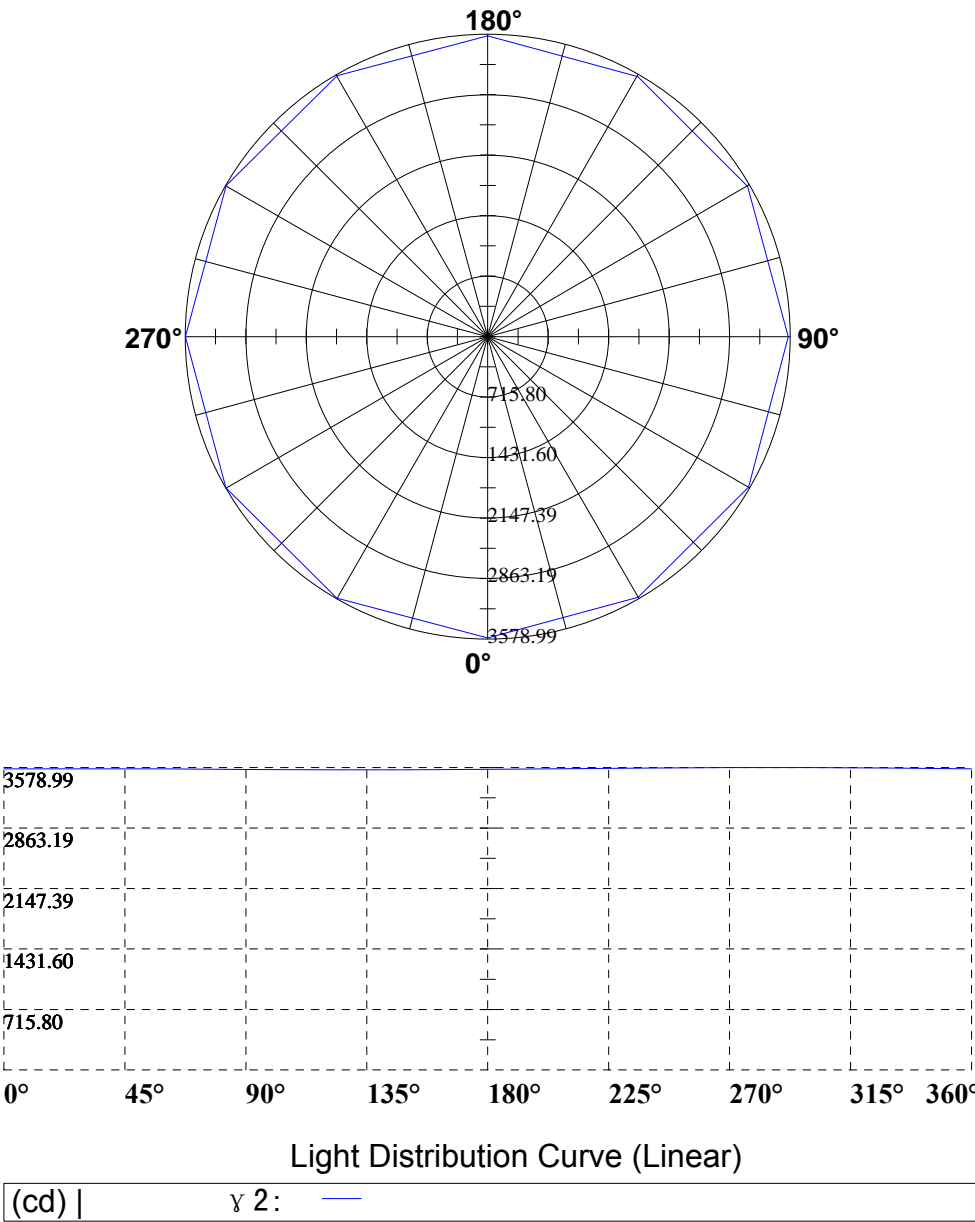
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[illegible]

Light Distribution Curve [Unit: cd]



Horizontal cone through Max.cd [Unit: cd]



ISO-Illuminance

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Unit: [lx]

5.

893.85 (100%Emax)

805.27 (90%Emax)

715.8 (80%Emax)

626.32 (70%Emax)

536.85 (60%Emax)

447.37 (50%Emax)

357.9 (40%Emax)

268.42 (30%Emax)

178.95 (20%Emax)

89.48 (10%Emax)

4.

3.

2.

1.

0.

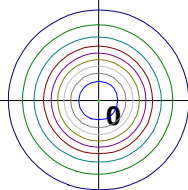
1.

2.

3.

4.

5.



Coordinate Scale: d/h

Height: 2 m

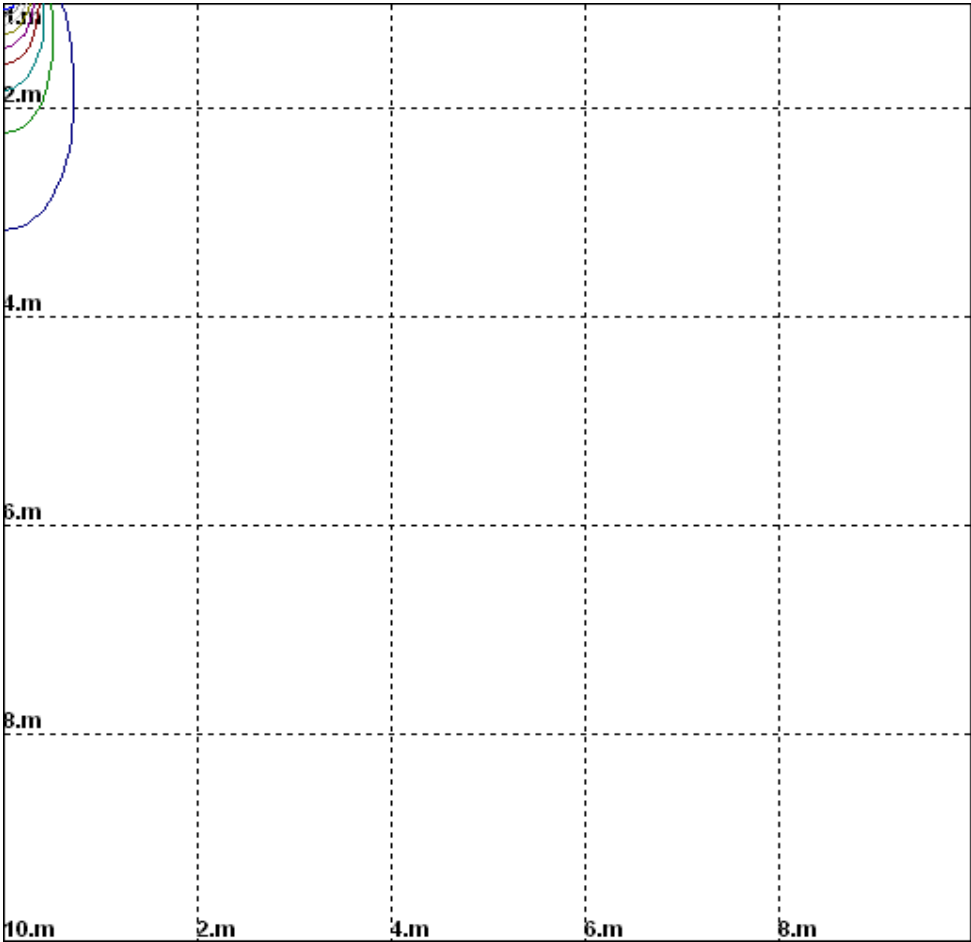
Max Illuminance : 894.75lx



Space ISO-lx

Unit: [lx]  
Illuminance

- 893.85
- 805.27
- 715.8
- 626.32
- 536.85
- 447.37
- 357.9
- 268.42
- 178.95
- 89.48



## Luminance Limiting Curve (There is not luminous side)

Diameter: 115mm

Length: -115mm

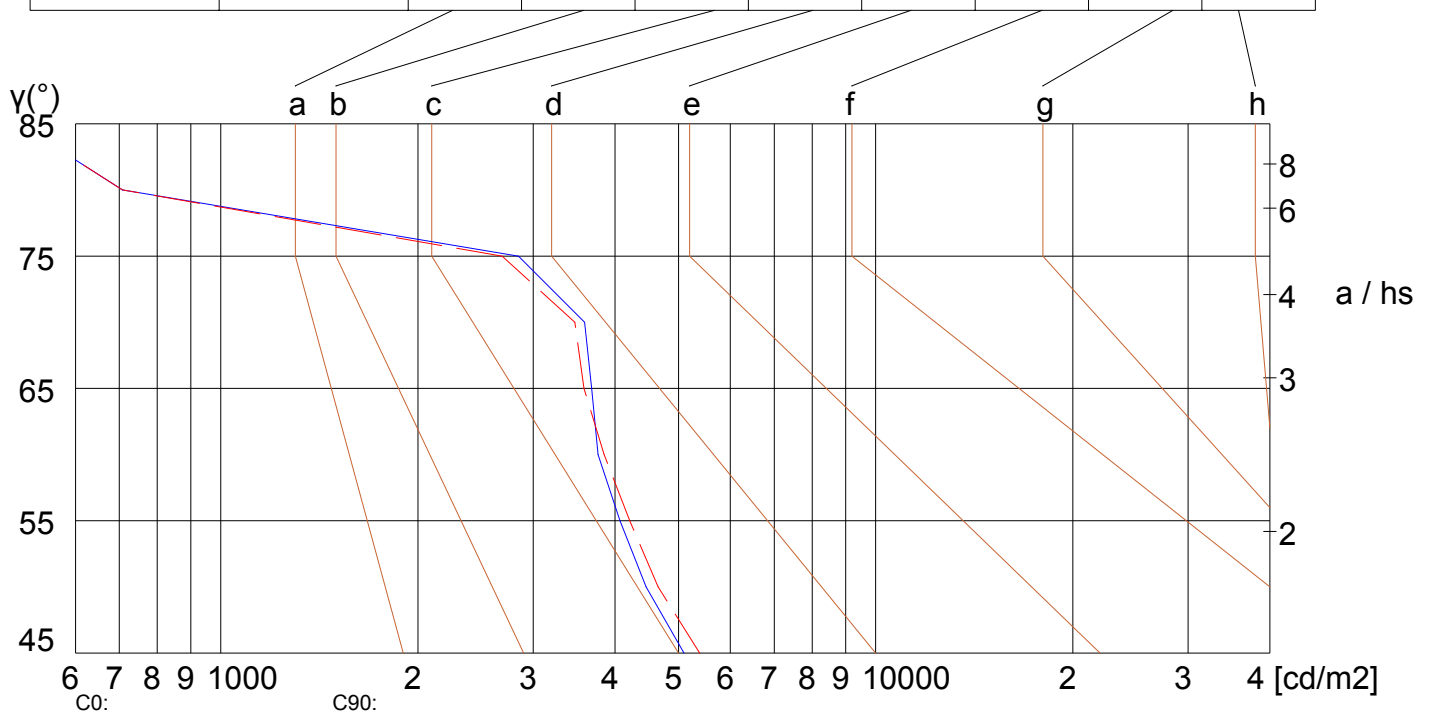
Width: -115mm

Height: 105mm

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

$\gamma$	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	5387	4652	4213	3850	3586	3473	2690	708	470
C90	5097	4460	4070	3768	3683	3593	2849	708	470

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)

**R852 WWL (CRI90 500mA 40D)**

utilization factor table for indoor luminaire

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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	0.96	0.96	0.96	0.94	0.94	0.94	0.90	0.90	0.90	0.86	0.86	0.86	0.83	0.83	0.83	0.81
1	0.93	0.93	0.92	0.92	0.91	0.90	0.88	0.87	0.87	0.84	0.83	0.82	0.78	0.77	0.76	0.72
2	0.88	0.87	0.87	0.87	0.86	0.85	0.84	0.82	0.81	0.80	0.78	0.77	0.75	0.73	0.72	0.68
3	0.84	0.83	0.82	0.83	0.81	0.80	0.80	0.78	0.77	0.76	0.74	0.73	0.72	0.70	0.68	0.64
4	0.80	0.79	0.78	0.78	0.77	0.76	0.76	0.74	0.73	0.73	0.71	0.69	0.69	0.67	0.64	0.61
5	0.76	0.75	0.74	0.75	0.73	0.72	0.72	0.70	0.69	0.70	0.67	0.65	0.66	0.64	0.61	0.58
6	0.72	0.71	0.71	0.71	0.70	0.69	0.69	0.67	0.66	0.67	0.64	0.62	0.64	0.61	0.58	0.55
7	0.69	0.68	0.67	0.68	0.67	0.66	0.66	0.64	0.62	0.64	0.61	0.59	0.61	0.58	0.56	0.53
8	0.66	0.65	0.64	0.65	0.64	0.63	0.63	0.61	0.60	0.61	0.59	0.57	0.59	0.56	0.53	0.51
9	0.63	0.62	0.62	0.62	0.61	0.60	0.61	0.59	0.57	0.59	0.56	0.54	0.57	0.54	0.51	0.48
10	0.61	0.60	0.59	0.60	0.59	0.58	0.58	0.56	0.55	0.57	0.54	0.52	0.55	0.51	0.49	0.46



Operator  
Telephone  
Fax  
e-Mail

## R852 WWL (CRI90 500mA 40D) / UGR-Table

Luminaire: R852 WWL (CRI90 500mA 40D)

Lamps: 1 x CITIZEN CLU038-1205C4-303H5M3 500mA

Glare Evaluation According to UGR											
ρ Ceiling		70	70	50	50	30	70	70	50	50	30
ρ Walls		50	30	50	30	30	50	30	50	30	30
ρ 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	10.7	11.3	10.9	11.6	11.8	10.7	11.3	10.9	11.6	11.8
	3H	10.8	11.4	11.1	11.7	12.0	10.8	11.4	11.1	11.7	12.0
	4H	10.8	11.4	11.2	11.7	12.0	10.8	11.4	11.2	11.7	12.0
	6H	10.8	11.3	11.1	11.6	11.9	10.8	11.3	11.1	11.6	11.9
	8H	10.7	11.3	11.1	11.6	11.9	10.7	11.3	11.1	11.6	11.9
	12H	10.7	11.2	11.1	11.5	11.8	10.7	11.2	11.1	11.5	11.8
4H	2H	10.6	11.2	11.0	11.5	11.8	10.6	11.2	11.0	11.5	11.8
	3H	10.9	11.4	11.2	11.7	12.0	10.9	11.4	11.2	11.7	12.0
	4H	10.9	11.3	11.3	11.7	12.1	10.9	11.3	11.3	11.7	12.1
	6H	10.9	11.2	11.3	11.6	12.0	10.9	11.2	11.3	11.6	12.0
	8H	10.8	11.1	11.3	11.5	12.0	10.8	11.1	11.3	11.5	12.0
	12H	10.8	11.0	11.2	11.5	11.9	10.8	11.0	11.2	11.5	11.9
8H	4H	10.9	11.2	11.3	11.6	12.0	10.9	11.2	11.3	11.6	12.0
	6H	10.8	11.0	11.3	11.5	11.9	10.8	11.0	11.3	11.5	11.9
	8H	10.7	10.9	11.2	11.4	11.9	10.7	10.9	11.2	11.4	11.9
	12H	10.7	10.8	11.2	11.3	11.9	10.7	10.8	11.2	11.3	11.9
12H	4H	10.8	11.1	11.3	11.5	12.0	10.8	11.1	11.3	11.5	12.0
	6H	10.7	10.9	11.2	11.4	11.9	10.7	10.9	11.2	11.4	11.9
	8H	10.7	10.8	11.2	11.3	11.9	10.7	10.8	11.2	11.3	11.9
Variation of the observer position for the luminaire distances S											
S = 1.0H		+5.4 / -3.7					+5.4 / -3.7				
S = 1.5H		+8.0 / -4.3					+8.0 / -4.3				
S = 2.0H		+10.0 / -5.0					+10.0 / -5.0				
Standard table		BK01					BK01				
Correction Summand		-7.9					-7.9				
Corrected Glare Indices referring to 2145lm Total Luminous Flux											

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