

R852 WNL (CRI90 500mA 40D)

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

Report NO.: 01313217030304A

Test NO.:

Lamp: CITIZEN CLUO38-1205C4-403H5M3 500mA

Sum Lumens: 2244.1 lm

Number of Lamps: 1

Diameter: 115mm

Length: -115mm

Photometric Type: Type C

Voltage: 230.72 V

Current: 0.094 A

Power: 20.816 W

Power Factor: 0.9596

Ballast Type: PHILIPS XITANIUM 21W 0.5A 42V I 230V

Width: -115mm

Height: 72mm

Optical Component: 40D Reflector DC(V:34.73V I:0.505A P:17.539W)

Photometric Results

Lumens: 2036.20 lm

Efficiency: 90.74%

Central Intensity: 3786.203cd

Maximum Intensity: 3795.378cd

Beam Angle(10%): Left: -36.0 Right:34.7

Maximum s/h: C0_180: 0.33 C90_270: 0.32

Effective Luminous Flux: 1890.60 lm

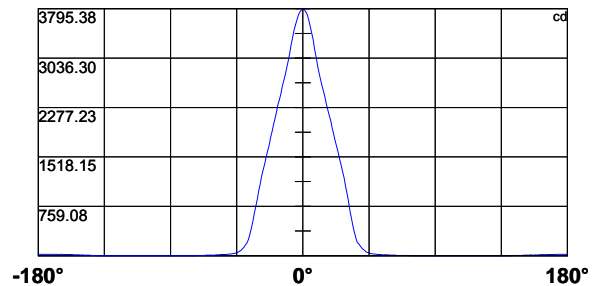
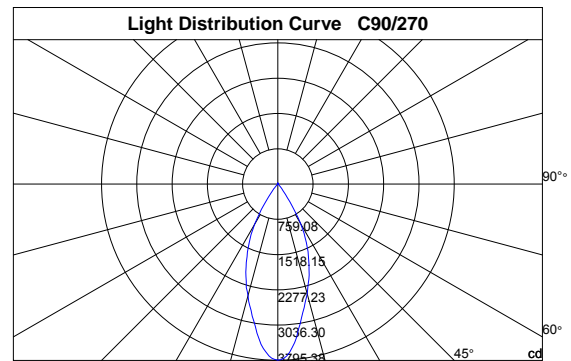
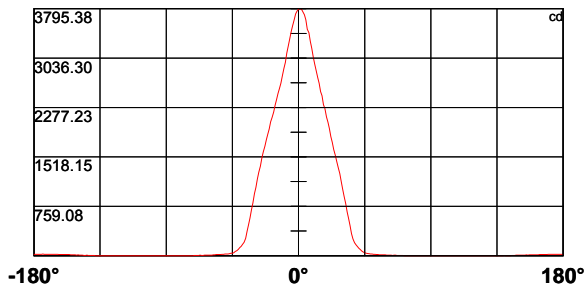
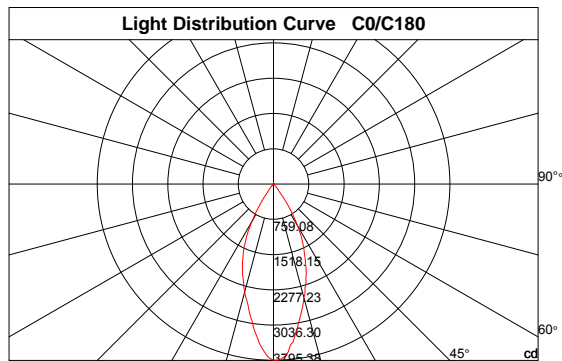
Angle of maximum intensity: C:0.0 G:1.0

Half Peak Side Angle(50%): Left: -21.6 Right:20.5

Up Flux Rate: 0.7%

Down Flux Rate: 90.03%

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	3786.2	3795.4	3786.9	3744.3	3701.7	3625.0	3480.2	3429.0	3292.7	3186.2
30.0	3786.2	3795.4	3782.6	3740.0	3680.4	3603.7	3514.2	3395.0	3267.2	3160.7
60.0	3786.2	3786.9	3769.8	3731.5	3646.3	3565.4	3467.4	3365.1	3233.1	3118.1
90.0	3786.2	3778.3	3748.5	3701.7	3625.0	3527.0	3429.0	3318.3	3164.9	3054.2
120.0	3786.2	3761.3	3718.7	3659.1	3582.4	3463.1	3382.2	3280.0	3135.1	3024.4
150.0	3786.2	3757.0	3710.2	3646.3	3565.4	3458.9	3360.9	3216.1	3109.6	3003.1
180.0	3786.2	3757.0	3714.4	3625.0	3539.8	3450.3	3326.8	3220.3	3113.8	2969.0
210.0	3786.2	3752.8	3723.0	3642.0	3561.1	3471.6	3348.1	3250.1	3139.4	2994.6
240.0	3786.2	3769.8	3727.2	3684.6	3612.2	3501.5	3399.2	3280.0	3177.7	3067.0
270.0	3786.2	3774.1	3748.5	3701.7	3629.3	3552.6	3463.1	3348.1	3241.6	3105.3
300.0	3786.2	3778.3	3761.3	3727.2	3654.8	3573.9	3484.4	3365.1	3258.7	3113.8
330.0	3786.2	3791.1	3774.1	3740.0	3680.4	3590.9	3505.7	3407.7	3280.0	3173.5
360.0	3786.2	3795.4	3786.9	3744.3	3701.7	3625.0	3480.2	3429.0	3292.7	3186.2

C\γ	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	3054.2	2947.7	2849.7	2739.0	2649.5	2521.7	2457.8	2321.5	2261.9	2129.8
30.0	3049.9	2922.1	2819.9	2709.2	2624.0	2526.0	2440.8	2351.3	2210.8	2151.1
60.0	2969.0	2858.2	2760.3	2666.6	2564.3	2479.1	2385.4	2296.0	2210.8	2091.5
90.0	2922.1	2815.6	2713.4	2611.2	2526.0	2440.8	2334.3	2240.6	2155.4	2070.2
120.0	2909.4	2802.9	2709.2	2589.9	2513.2	2428.0	2330.0	2244.9	2142.6	2057.4
150.0	2875.3	2773.1	2679.3	2564.3	2487.7	2406.7	2308.7	2227.8	2142.6	2044.6
180.0	2879.5	2773.1	2649.5	2568.6	2491.9	2398.2	2313.0	2206.5	2125.6	2057.4
210.0	2888.1	2764.5	2670.8	2594.1	2500.4	2419.5	2338.6	2223.6	2138.4	2053.2
240.0	2926.4	2819.9	2730.5	2632.5	2555.8	2457.8	2372.6	2283.2	2159.7	2070.2
270.0	2994.6	2892.3	2777.3	2687.9	2602.7	2487.7	2398.2	2325.8	2202.3	2104.3
300.0	3003.1	2892.3	2785.8	2670.8	2585.6	2483.4	2389.7	2304.5	2181.0	2095.8
330.0	3024.4	2917.9	2815.6	2696.4	2602.7	2517.5	2406.7	2317.3	2219.3	2095.8
360.0	3054.2	2947.7	2849.7	2739.0	2649.5	2521.7	2457.8	2321.5	2261.9	2129.8

C\γ	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	2053.2	1955.2	1831.7	1742.2	1631.5	1542.0	1448.3	1346.1	1260.9	1141.6
30.0	2044.6	1938.2	1840.2	1755.0	1631.5	1537.7	1427.0	1337.5	1248.1	1128.8
60.0	2002.1	1916.9	1814.6	1725.2	1601.6	1507.9	1427.0	1307.7	1214.0	1111.8
90.0	1955.2	1865.7	1767.8	1682.6	1593.1	1486.6	1392.9	1286.4	1197.0	1069.2
120.0	1968.0	1848.7	1767.8	1682.6	1576.1	1473.8	1384.4	1294.9	1175.7	1069.2
150.0	1942.4	1861.5	1763.5	1678.3	1588.9	1465.3	1380.1	1286.4	1162.9	1052.1
180.0	1946.7	1865.7	1780.5	1682.6	1593.1	1499.4	1375.9	1282.2	1175.7	1047.9
210.0	1946.7	1861.5	1763.5	1682.6	1593.1	1469.6	1384.4	1290.7	1171.4	1060.7
240.0	1976.5	1865.7	1780.5	1695.4	1588.9	1495.1	1380.1	1290.7	1197.0	1077.7
270.0	2014.8	1908.3	1818.9	1699.6	1605.9	1516.4	1410.0	1316.2	1226.8	1103.3
300.0	2006.3	1895.6	1810.4	1703.9	1618.7	1529.2	1410.0	1320.5	1231.0	1111.8
330.0	2002.1	1908.3	1806.1	1720.9	1605.9	1516.4	1444.0	1333.3	1243.8	1145.9
360.0	2053.2	1955.2	1831.7	1742.2	1631.5	1542.0	1448.3	1346.1	1260.9	1141.6

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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	1022.3	911.6	800.8	673.0	570.8	464.3	340.8	259.8	200.2	170.4
30.0	1018.1	903.1	745.4	634.7	528.2	413.2	323.7	247.1	195.9	166.1
60.0	975.5	856.2	741.2	592.1	485.6	387.6	285.4	221.5	178.9	157.6
90.0	958.4	839.2	685.8	575.1	455.8	362.1	276.9	204.5	178.9	149.1
120.0	962.7	826.4	715.6	604.9	464.3	370.6	272.6	213.0	183.2	149.1
150.0	945.6	822.1	711.4	600.6	464.3	370.6	268.4	204.5	174.6	144.8
180.0	954.2	809.3	702.8	579.3	477.1	379.1	268.4	204.5	174.6	144.8
210.0	954.2	826.4	724.1	617.7	481.3	383.4	281.1	208.7	178.9	144.8
240.0	966.9	860.5	741.2	634.7	532.5	396.2	302.4	217.2	183.2	153.3
270.0	1001.0	856.2	754.0	651.7	528.2	426.0	336.5	247.1	195.9	166.1
300.0	1005.3	869.0	766.7	673.0	536.7	434.5	353.6	247.1	195.9	161.9
330.0	1026.6	920.1	809.3	668.8	558.0	443.0	349.3	264.1	200.2	170.4
360.0	1022.3	911.6	800.8	673.0	570.8	464.3	340.8	259.8	200.2	170.4

C\γ	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0
0.0	140.6	115.0	93.7	72.4	55.4	46.9	38.3	34.1	29.8	25.6
30.0	136.3	110.8	89.5	68.2	55.4	46.9	38.3	34.1	25.6	25.6
60.0	132.1	102.2	80.9	63.9	51.1	42.6	34.1	29.8	29.8	25.6
90.0	119.3	98.0	80.9	59.6	51.1	42.6	34.1	29.8	25.6	25.6
120.0	123.5	102.2	76.7	59.6	51.1	42.6	34.1	29.8	25.6	25.6
150.0	119.3	102.2	76.7	59.6	46.9	38.3	34.1	29.8	25.6	21.3
180.0	123.5	98.0	76.7	63.9	46.9	38.3	38.3	29.8	25.6	25.6
210.0	123.5	102.2	72.4	59.6	51.1	42.6	34.1	29.8	25.6	25.6
240.0	119.3	98.0	80.9	59.6	51.1	42.6	34.1	29.8	29.8	25.6
270.0	132.1	110.8	85.2	68.2	55.4	46.9	38.3	34.1	29.8	25.6
300.0	136.3	115.0	89.5	72.4	59.6	46.9	38.3	34.1	29.8	25.6
330.0	144.8	110.8	89.5	68.2	55.4	46.9	38.3	34.1	29.8	25.6
360.0	140.6	115.0	93.7	72.4	55.4	46.9	38.3	34.1	29.8	25.6

C\γ	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	25.6	21.3	21.3	17.0	17.0	12.8	12.8	12.8	12.8	12.8
30.0	21.3	21.3	21.3	17.0	17.0	12.8	12.8	12.8	8.5	12.8
60.0	21.3	21.3	17.0	17.0	17.0	17.0	17.0	12.8	12.8	12.8
90.0	21.3	21.3	17.0	17.0	12.8	12.8	12.8	12.8	12.8	8.5
120.0	21.3	21.3	17.0	17.0	17.0	17.0	12.8	12.8	8.5	8.5
150.0	21.3	17.0	21.3	17.0	17.0	17.0	12.8	12.8	12.8	8.5
180.0	25.6	21.3	21.3	17.0	17.0	17.0	17.0	12.8	12.8	8.5
210.0	25.6	21.3	21.3	17.0	17.0	17.0	12.8	17.0	12.8	12.8
240.0	21.3	21.3	21.3	17.0	17.0	17.0	12.8	17.0	12.8	12.8
270.0	25.6	21.3	21.3	17.0	17.0	17.0	17.0	12.8	12.8	12.8
300.0	25.6	21.3	21.3	17.0	17.0	17.0	12.8	12.8	12.8	12.8
330.0	21.3	21.3	21.3	17.0	17.0	12.8	12.8	12.8	12.8	12.8
360.0	25.6	21.3	21.3	17.0	17.0	12.8	12.8	12.8	12.8	12.8

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Intensity Data [cd]

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C\γ	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	8.5	8.5	8.5	8.5	4.3	8.5	8.5	4.3	4.3	4.3
30.0	8.5	8.5	8.5	8.5	8.5	8.5	4.3	4.3	4.3	4.3
60.0	8.5	8.5	8.5	8.5	8.5	8.5	4.3	4.3	4.3	4.3
90.0	8.5	8.5	8.5	8.5	4.3	4.3	4.3	4.3	4.3	4.3
120.0	8.5	8.5	8.5	8.5	4.3	8.5	4.3	4.3	4.3	4.3
150.0	8.5	8.5	8.5	8.5	8.5	4.3	4.3	4.3	4.3	4.3
180.0	8.5	8.5	8.5	8.5	8.5	4.3	4.3	8.5	4.3	4.3
210.0	12.8	8.5	8.5	8.5	8.5	8.5	8.5	4.3	8.5	4.3
240.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	4.3	4.3	4.3
270.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	4.3	4.3	4.3
300.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	4.3	4.3	4.3
330.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	4.3	4.3	4.3
360.0	8.5	8.5	8.5	8.5	4.3	8.5	8.5	4.3	4.3	4.3

C\γ	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60.0	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90.0	4.3	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120.0	4.3	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.0	4.3	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.0	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.0	4.3	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
240.0	4.3	4.3	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0
270.0	4.3	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
300.0	4.3	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
330.0	4.3	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
360.0	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

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Intensity Data [cd]

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

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

R852 WNL (CRI90 500mA 40D)**Intensity Data [cd]**

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

C\γ	130.0	131.0	132.0	133.0	134.0	135.0	136.0	137.0	138.0	139.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3
180.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3
210.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
240.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3
270.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
300.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
330.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
360.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

C\γ	140.0	141.0	142.0	143.0	144.0	145.0	146.0	147.0	148.0	149.0
0.0	4.3	0.0	0.0	0.0	0.0	4.3	4.3	4.3	8.5	8.5
30.0	0.0	0.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
60.0	0.0	0.0	0.0	4.3	4.3	4.3	4.3	4.3	4.3	8.5
90.0	0.0	0.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
120.0	4.3	4.3	4.3	4.3	4.3	4.3	8.5	8.5	8.5	8.5
150.0	4.3	4.3	4.3	4.3	4.3	4.3	8.5	8.5	8.5	12.8
180.0	4.3	4.3	4.3	4.3	8.5	4.3	4.3	8.5	8.5	8.5
210.0	4.3	4.3	4.3	4.3	4.3	4.3	8.5	8.5	8.5	8.5
240.0	4.3	4.3	4.3	8.5	8.5	8.5	8.5	8.5	8.5	8.5
270.0	4.3	4.3	4.3	4.3	4.3	8.5	8.5	8.5	8.5	8.5
300.0	0.0	0.0	4.3	0.0	4.3	4.3	4.3	4.3	4.3	4.3
330.0	0.0	0.0	0.0	0.0	4.3	4.3	4.3	4.3	4.3	4.3
360.0	4.3	0.0	0.0	0.0	0.0	4.3	4.3	4.3	8.5	8.5

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Intensity Data [cd]

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C\γ	150.0	151.0	152.0	153.0	154.0	155.0	156.0	157.0	158.0	159.0
0.0	8.5	8.5	8.5	8.5	8.5	12.8	8.5	12.8	12.8	12.8
30.0	8.5	8.5	8.5	8.5	8.5	8.5	12.8	12.8	12.8	12.8
60.0	4.3	8.5	8.5	8.5	8.5	8.5	12.8	12.8	12.8	12.8
90.0	8.5	8.5	8.5	8.5	8.5	12.8	8.5	8.5	12.8	8.5
120.0	8.5	12.8	12.8	8.5	12.8	17.0	17.0	12.8	17.0	17.0
150.0	8.5	12.8	12.8	12.8	12.8	12.8	17.0	17.0	17.0	17.0
180.0	12.8	8.5	12.8	12.8	12.8	12.8	17.0	17.0	17.0	17.0
210.0	12.8	12.8	12.8	12.8	17.0	12.8	17.0	17.0	17.0	17.0
240.0	12.8	12.8	12.8	12.8	12.8	17.0	17.0	17.0	17.0	17.0
270.0	12.8	8.5	12.8	12.8	12.8	12.8	12.8	17.0	17.0	17.0
300.0	4.3	8.5	8.5	8.5	8.5	8.5	8.5	12.8	12.8	12.8
330.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	12.8	12.8
360.0	8.5	8.5	8.5	8.5	8.5	12.8	8.5	12.8	12.8	12.8

C\γ	160.0	161.0	162.0	163.0	164.0	165.0	166.0	167.0	168.0	169.0
0.0	12.8	12.8	12.8	12.8	17.0	17.0	17.0	17.0	17.0	17.0
30.0	12.8	12.8	12.8	12.8	17.0	17.0	17.0	17.0	17.0	17.0
60.0	12.8	12.8	17.0	17.0	12.8	17.0	17.0	17.0	17.0	17.0
90.0	12.8	12.8	17.0	12.8	17.0	12.8	17.0	17.0	17.0	17.0
120.0	17.0	17.0	21.3	17.0	17.0	21.3	21.3	21.3	21.3	21.3
150.0	17.0	17.0	17.0	21.3	17.0	21.3	21.3	21.3	21.3	21.3
180.0	17.0	17.0	17.0	17.0	21.3	21.3	21.3	21.3	21.3	21.3
210.0	17.0	21.3	17.0	17.0	21.3	21.3	21.3	21.3	21.3	21.3
240.0	17.0	17.0	17.0	17.0	21.3	21.3	21.3	21.3	21.3	21.3
270.0	17.0	17.0	17.0	17.0	21.3	21.3	17.0	21.3	21.3	21.3
300.0	12.8	12.8	12.8	12.8	17.0	17.0	17.0	17.0	17.0	17.0
330.0	12.8	12.8	12.8	12.8	17.0	17.0	17.0	17.0	17.0	17.0
360.0	12.8	12.8	12.8	12.8	17.0	17.0	17.0	17.0	17.0	17.0

C\γ	170.0	171.0	172.0	173.0	174.0	175.0	176.0	177.0	178.0	179.0
0.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
30.0	17.0	17.0	17.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3
60.0	17.0	17.0	21.3	21.3	17.0	21.3	21.3	21.3	21.3	21.3
90.0	17.0	17.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
120.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
150.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
180.0	21.3	21.3	21.3	21.3	25.6	21.3	21.3	21.3	21.3	21.3
210.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
240.0	21.3	21.3	21.3	21.3	25.6	21.3	21.3	21.3	25.6	21.3
270.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
300.0	17.0	17.0	21.3	21.3	17.0	21.3	17.0	21.3	21.3	21.3
330.0	17.0	21.3	17.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3
360.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3

Intensity Data [cd]		Page8
C\γ	180.0	
0.0	21.3	
30.0	21.3	
60.0	25.6	
90.0	21.3	
120.0	21.3	
150.0	21.3	
180.0	21.3	
210.0	21.3	
240.0	25.6	
270.0	21.3	
300.0	21.3	
330.0	21.3	
360.0	21.3	

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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	3786.20	0.00	0.00	0.00	0.00
1	3774.79	3.62	3.62	3.62	3.62
2	3747.10	10.80	14.41	10.80	14.41
3	3695.28	17.80	32.21	17.80	32.21
4	3623.22	24.50	56.71	24.50	56.71
5	3531.99	30.78	87.49	30.78	87.49
6	3430.11	36.59	124.08	36.59	124.08
7	3322.91	41.92	166.00	41.92	166.00
8	3201.15	46.69	212.69	46.69	212.69
9	3080.82	50.91	263.60	50.91	263.60
10	2958.00	54.65	318.25	54.65	318.25
11	2848.31	58.02	376.27	58.02	376.27
12	2746.79	61.16	437.43	61.16	437.43
13	2644.20	63.98	501.41	63.98	501.41
14	2558.65	66.60	568.00	66.60	568.00
15	2463.87	68.95	636.95	68.95	636.95
16	2373.00	70.87	707.83	70.87	707.83
17	2278.58	72.44	780.26	72.44	780.26
18	2179.18	73.50	853.76	73.50	853.76
19	2085.12	74.19	927.95	74.19	927.95
20	1988.21	74.55	1002.51	74.55	1002.51
21	1890.94	74.49	1076.99	74.49	1076.99
22	1795.46	74.08	1151.07	74.08	1151.07
23	1704.23	73.43	1224.51	73.43	1224.51
24	1602.35	72.29	1296.80	72.29	1296.80
25	1503.31	70.62	1367.42	70.62	1367.42
26	1405.34	68.66	1436.08	68.66	1436.08
27	1307.72	66.38	1502.45	66.38	1502.45
28	1208.69	63.71	1566.16	63.71	1566.16
29	1093.32	60.23	1626.39	60.23	1626.39
30	982.57	56.05	1682.44	56.05	1682.44
31	858.33	51.23	1733.67	51.23	1733.67
32	741.54	45.83	1779.50	45.83	1779.50
33	625.46	40.27	1819.77	40.27	1819.77
34	506.90	34.27	1854.04	34.27	1854.04
35	402.54	28.24	1882.29	28.24	1882.29
36	304.92	22.53	1904.81	8.32	1890.60
37	228.25	17.39	1922.20	0.00	1890.60
38	186.72	13.85	1936.05	0.00	1890.60
39	156.54	11.72	1947.77	0.00	1890.60
40	129.21	9.97	1957.73	0.00	1890.60

R852 WNL (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	105.43	8.36	1966.09	0.00	1890.60
42	82.71	6.84	1972.92	0.00	1890.60
43	64.61	5.46	1978.38	0.00	1890.60
44	52.54	4.42	1982.80	0.00	1890.60
45	43.66	3.70	1986.50	0.00	1890.60
46	36.21	3.12	1989.62	0.00	1890.60
47	31.59	2.70	1992.32	0.00	1890.60
48	27.69	2.40	1994.72	0.00	1890.60
49	25.20	2.17	1996.89	0.00	1890.60
50	23.07	2.01	1998.90	0.00	1890.60
51	20.94	1.86	2000.76	0.00	1890.60
52	20.23	1.77	2002.53	0.00	1890.60
53	17.04	1.62	2004.15	0.00	1890.60
54	16.68	1.49	2005.64	0.00	1890.60
55	15.62	1.44	2007.08	0.00	1890.60
56	13.84	1.33	2008.41	0.00	1890.60
57	13.49	1.25	2009.66	0.00	1890.60
58	12.07	1.18	2010.84	0.00	1890.60
59	11.36	1.10	2011.94	0.00	1890.60
60	8.87	0.96	2012.89	0.00	1890.60
61	8.52	0.83	2013.72	0.00	1890.60
62	8.52	0.82	2014.54	0.00	1890.60
63	8.52	0.83	2015.37	0.00	1890.60
64	7.45	0.78	2016.16	0.00	1890.60
65	7.45	0.74	2016.90	0.00	1890.60
66	6.39	0.69	2017.59	0.00	1890.60
67	4.61	0.55	2018.14	0.00	1890.60
68	4.61	0.47	2018.61	0.00	1890.60
69	4.26	0.45	2019.06	0.00	1890.60
70	4.26	0.44	2019.50	0.00	1890.60
71	3.90	0.42	2019.92	0.00	1890.60
72	2.48	0.33	2020.25	0.00	1890.60
73	0.35	0.15	2020.40	0.00	1890.60
74	0.00	0.02	2020.42	0.00	1890.60
75	0.00	0.00	2020.42	0.00	1890.60
76	0.00	0.00	2020.42	0.00	1890.60
77	0.00	0.00	2020.42	0.00	1890.60
78	0.00	0.00	2020.42	0.00	1890.60
79	0.00	0.00	2020.42	0.00	1890.60
80	0.00	0.00	2020.42	0.00	1890.60
81	0.00	0.00	2020.42	0.00	1890.60

R852 WNL (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	0.00	0.00	2020.42	0.00	1890.60
83	0.00	0.00	2020.42	0.00	1890.60
84	0.00	0.00	2020.42	0.00	1890.60
85	0.00	0.00	2020.42	0.00	1890.60
86	0.00	0.00	2020.42	0.00	1890.60
87	0.00	0.00	2020.42	0.00	1890.60
88	0.00	0.00	2020.42	0.00	1890.60
89	0.00	0.00	2020.42	0.00	1890.60
90	0.00	0.00	2020.42	0.00	1890.60
91	0.00	0.00	2020.42	0.00	1890.60
92	0.00	0.00	2020.42	0.00	1890.60
93	0.00	0.00	2020.42	0.00	1890.60
94	0.00	0.00	2020.42	0.00	1890.60
95	0.00	0.00	2020.42	0.00	1890.60
96	0.00	0.00	2020.42	0.00	1890.60
97	0.00	0.00	2020.42	0.00	1890.60
98	0.00	0.00	2020.42	0.00	1890.60
99	0.00	0.00	2020.42	0.00	1890.60
100	0.00	0.00	2020.42	0.00	1890.60
101	0.00	0.00	2020.42	0.00	1890.60
102	0.00	0.00	2020.42	0.00	1890.60
103	0.00	0.00	2020.42	0.00	1890.60
104	0.00	0.00	2020.42	0.00	1890.60
105	0.00	0.00	2020.42	0.00	1890.60
106	0.00	0.00	2020.42	0.00	1890.60
107	0.00	0.00	2020.42	0.00	1890.60
108	0.00	0.00	2020.42	0.00	1890.60
109	0.00	0.00	2020.42	0.00	1890.60
110	0.00	0.00	2020.42	0.00	1890.60
111	0.00	0.00	2020.42	0.00	1890.60
112	0.00	0.00	2020.42	0.00	1890.60
113	0.00	0.00	2020.42	0.00	1890.60
114	0.00	0.00	2020.42	0.00	1890.60
115	0.00	0.00	2020.42	0.00	1890.60
116	0.00	0.00	2020.42	0.00	1890.60
117	0.00	0.00	2020.42	0.00	1890.60
118	0.00	0.00	2020.42	0.00	1890.60
119	0.00	0.00	2020.42	0.00	1890.60
120	0.00	0.00	2020.42	0.00	1890.60
121	0.00	0.00	2020.42	0.00	1890.60
122	0.00	0.00	2020.42	0.00	1890.60

R852 WNL (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	0.00	0.00	2020.42	0.00	1890.60
124	0.00	0.00	2020.42	0.00	1890.60
125	0.00	0.00	2020.42	0.00	1890.60
126	0.00	0.00	2020.42	0.00	1890.60
127	0.00	0.00	2020.42	0.00	1890.60
128	0.00	0.00	2020.42	0.00	1890.60
129	0.00	0.00	2020.42	0.00	1890.60
130	0.00	0.00	2020.42	0.00	1890.60
131	0.00	0.00	2020.42	0.00	1890.60
132	0.00	0.00	2020.42	0.00	1890.60
133	0.00	0.00	2020.42	0.00	1890.60
134	0.00	0.00	2020.42	0.00	1890.60
135	0.00	0.00	2020.42	0.00	1890.60
136	0.00	0.00	2020.42	0.00	1890.60
137	0.00	0.00	2020.42	0.00	1890.60
138	0.00	0.00	2020.42	0.00	1890.60
139	1.06	0.04	2020.46	0.00	1890.60
140	2.48	0.13	2020.59	0.00	1890.60
141	2.13	0.16	2020.75	0.00	1890.60
142	3.19	0.18	2020.93	0.00	1890.60
143	3.55	0.23	2021.15	0.00	1890.60
144	4.61	0.27	2021.42	0.00	1890.60
145	4.97	0.31	2021.73	0.00	1890.60
146	6.03	0.34	2022.07	0.00	1890.60
147	6.39	0.38	2022.44	0.00	1890.60
148	6.74	0.39	2022.83	0.00	1890.60
149	7.45	0.41	2023.24	0.00	1890.60
150	9.23	0.46	2023.70	0.00	1890.60
151	9.94	0.52	2024.22	0.00	1890.60
152	10.65	0.54	2024.76	0.00	1890.60
153	10.29	0.53	2025.29	0.00	1890.60
154	11.00	0.52	2025.81	0.00	1890.60
155	12.07	0.54	2026.35	0.00	1890.60
156	13.13	0.57	2026.93	0.00	1890.60
157	13.84	0.59	2027.52	0.00	1890.60
158	14.91	0.60	2028.12	0.00	1890.60
159	14.55	0.59	2028.71	0.00	1890.60
160	14.91	0.57	2029.28	0.00	1890.60
161	15.26	0.55	2029.83	0.00	1890.60
162	15.97	0.54	2030.37	0.00	1890.60
163	15.62	0.52	2030.90	0.00	1890.60

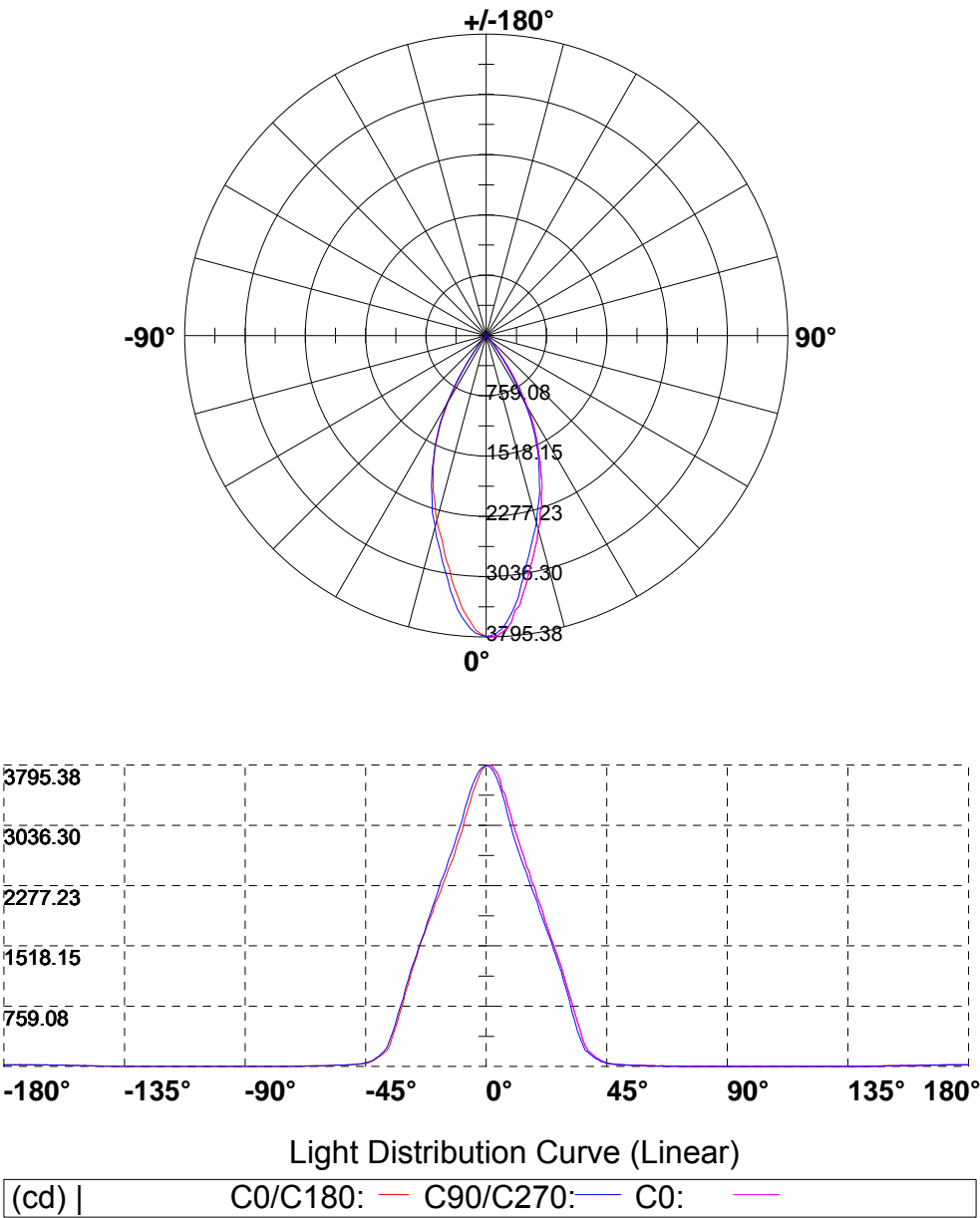
R852 WNL (CRI90 500mA 40D)

Zonal flux distribution table

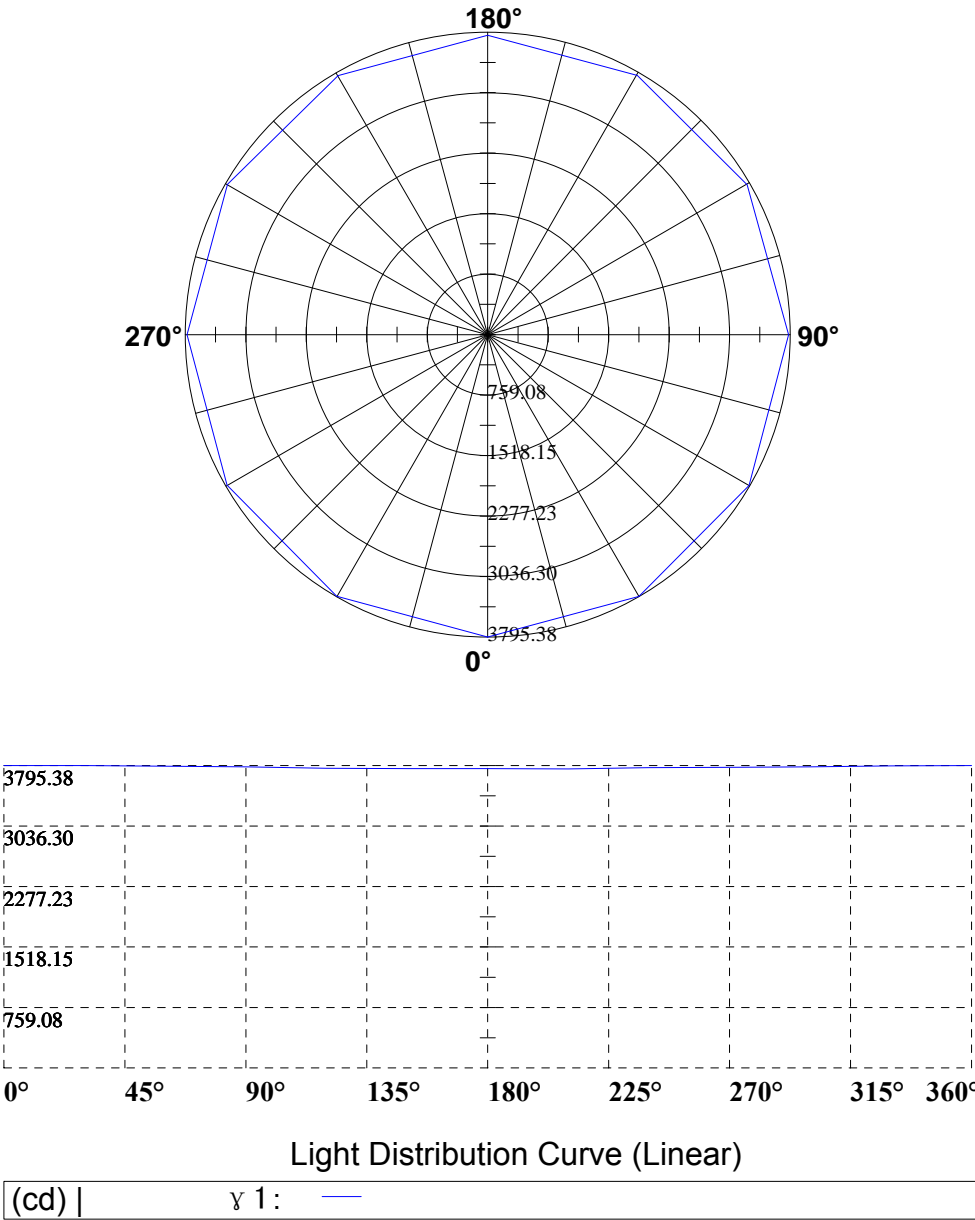
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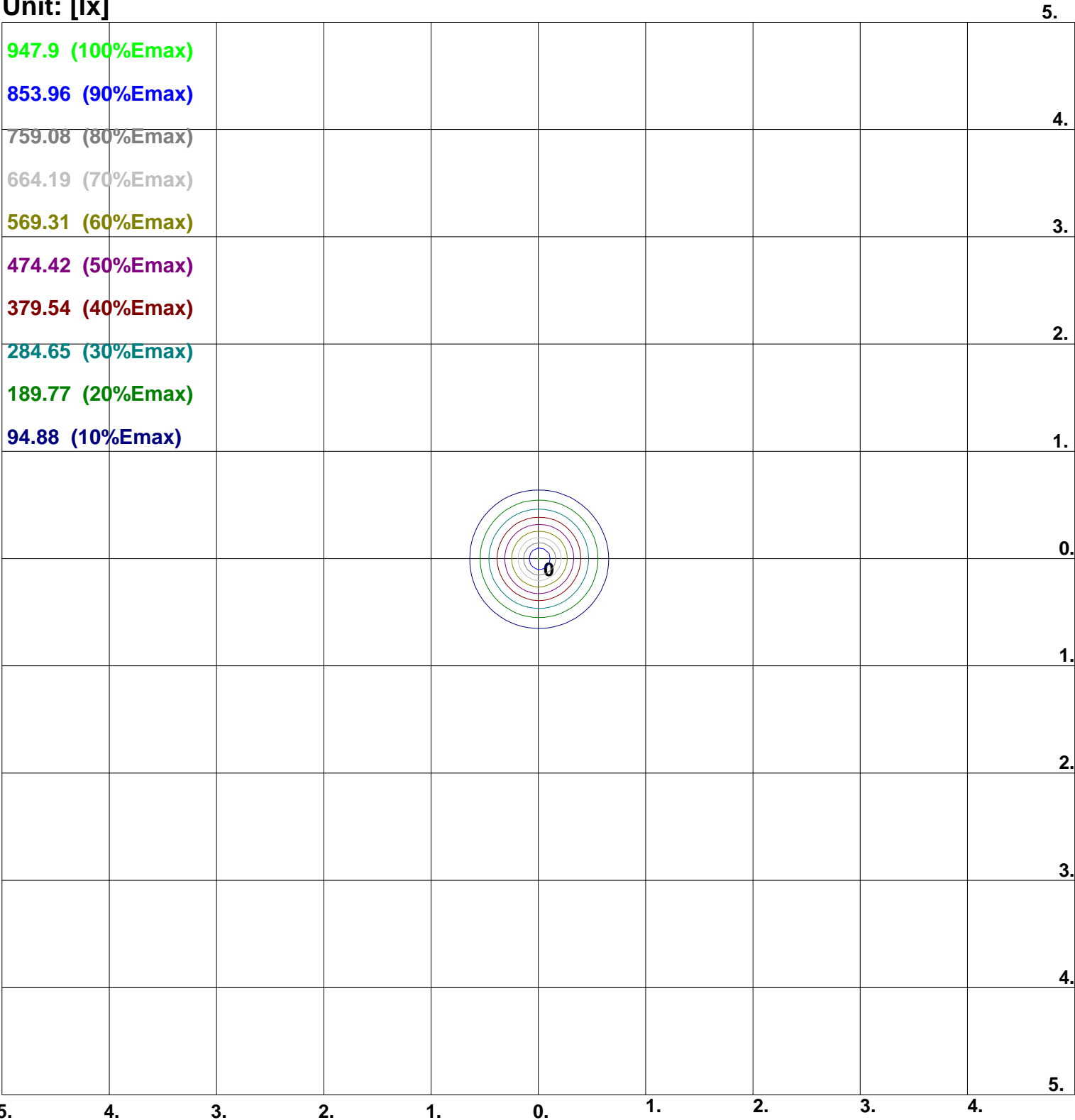
[illegible]

Light Distribution Curve [Unit: cd]



Horizontal cone through Max.cd [Unit: cd]





Coordinate Scale: d/h
Height: 2 m
Max Illuminance : 948.84lx

Luminance Limiting Curve (There is not luminous side)

Diameter: 115mm

Length: -115mm

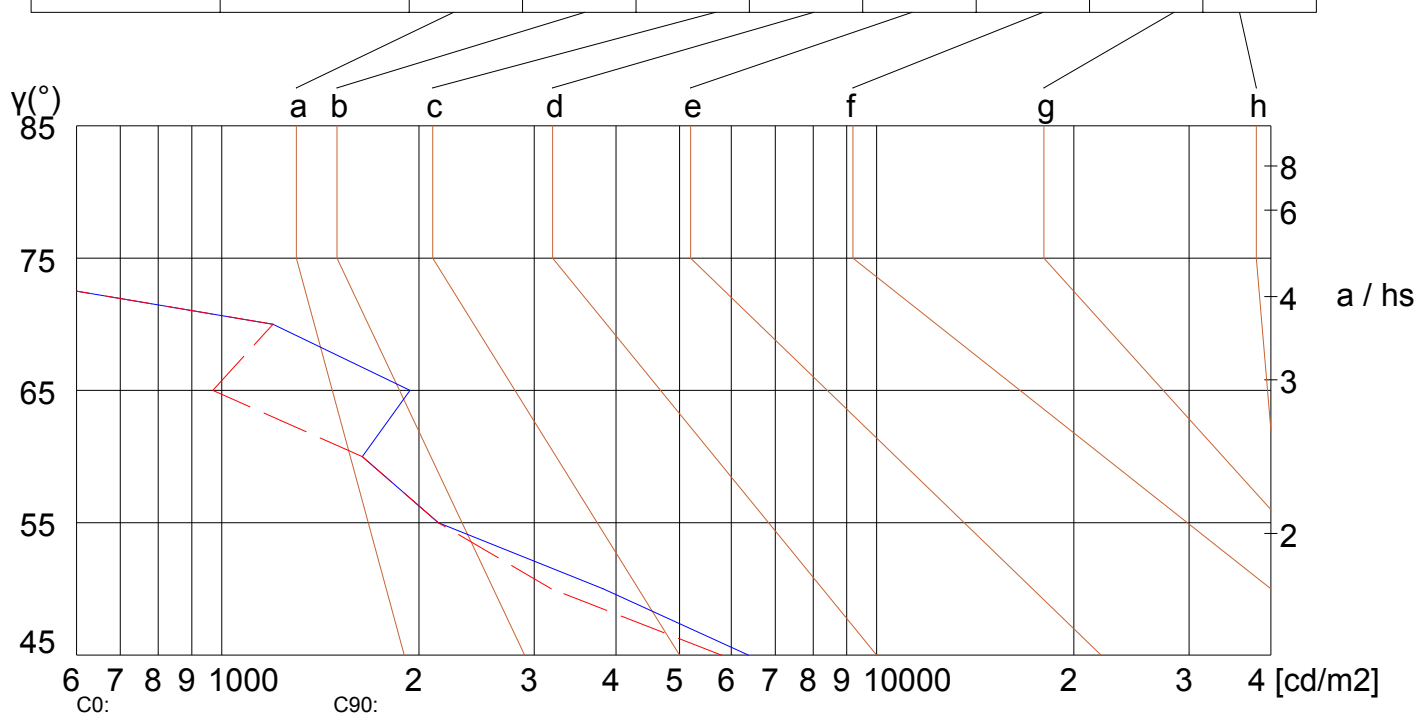
Width: -115mm

Height: 72mm

(cd/m²)

γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	5792	3186	2142	1638	969	1198			
C90	6372	3823	2142	1638	1938	1198			

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 WNL (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	1.08	1.08	1.08	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.04	1.04	1.03	1.03	1.02	1.01	0.99	0.98	0.97	0.94	0.93	0.92	0.87	0.86	0.85	0.80
2	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.92	0.91	0.89	0.88	0.86	0.84	0.82	0.80	0.76
3	0.93	0.92	0.91	0.92	0.90	0.89	0.89	0.87	0.85	0.85	0.83	0.81	0.80	0.78	0.76	0.72
4	0.88	0.87	0.86	0.87	0.85	0.84	0.84	0.82	0.80	0.81	0.78	0.76	0.77	0.74	0.71	0.68
5	0.84	0.82	0.81	0.82	0.81	0.80	0.80	0.78	0.76	0.77	0.74	0.72	0.73	0.70	0.68	0.64
6	0.79	0.78	0.77	0.78	0.77	0.75	0.76	0.74	0.72	0.73	0.70	0.68	0.70	0.67	0.64	0.61
7	0.75	0.74	0.73	0.74	0.73	0.71	0.72	0.70	0.68	0.70	0.67	0.64	0.67	0.64	0.61	0.57
8	0.72	0.70	0.70	0.71	0.69	0.68	0.69	0.66	0.65	0.67	0.64	0.61	0.64	0.61	0.58	0.55
9	0.68	0.67	0.66	0.67	0.66	0.65	0.66	0.63	0.61	0.64	0.61	0.58	0.62	0.58	0.55	0.52
10	0.65	0.64	0.63	0.64	0.63	0.62	0.63	0.60	0.59	0.61	0.58	0.56	0.59	0.55	0.52	0.50

