

R852 WWL (CRI90 350mA 40D)

Luminaire Name: R852 WWL (CRI90 350mA 40D)

Report NO.: 01314521062902A

Test NO.:

Lamp: CITIZEN CLU028-1202C4-303H5M3 350mA

Sum Lumens: 1455.4 lm

Number of Lamps: 1

Diameter: 115mm

Length: -115mm

Photometric Type: Type C

Voltage: 228.6 V

Current: 0.0683 A

Power: 15.003 W

Power Factor: 0.9616

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

Width: -115mm

Height: 105mm

Optical Component: 40D Reflector DC(V:37.43V I:0.344A P:12.88W)

Photometric Results

Lumens: 1115.08 lm

Efficiency: 76.62%

Central Intensity: 2109.985cd

Maximum Intensity: 2117.489cd

Beam Angle(10%): Left: -35.9 Right:31.5

Maximum s/h: C0_180: 0.31 C90_270: 0.32

Effective Luminous Flux: 1018.58 lm

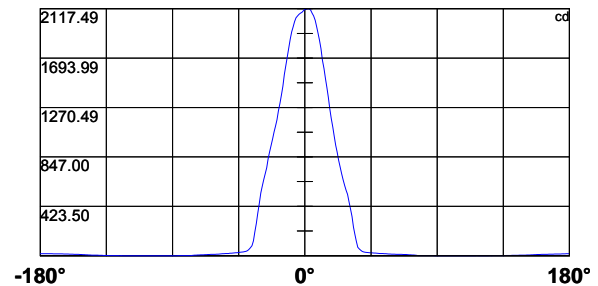
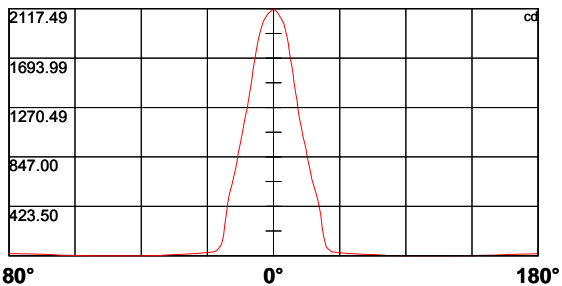
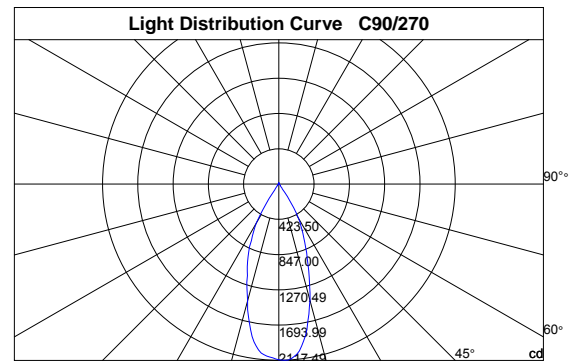
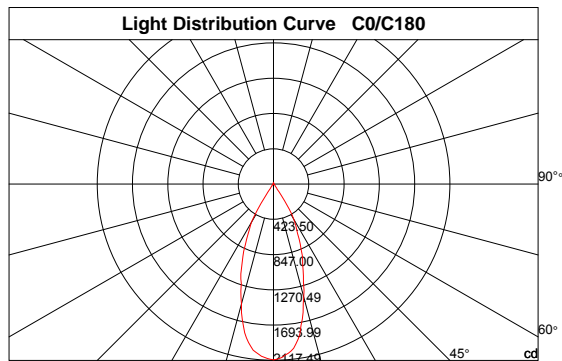
Angle of maximum intensity: C:90.0 G:2.0

Half Peak Side Angle(50%): Left: -23.0 Right:17.5

Up Flux Rate: 0.95%

Down Flux Rate: 75.67%

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	2110.0	2103.0	2093.6	2079.2	2055.7	2039.1	2015.7	1986.7	1938.2	1884.9
30.0	2110.0	2105.6	2100.0	2089.4	2068.9	2045.5	2018.2	1985.9	1934.3	1878.5
60.0	2110.0	2110.2	2110.2	2107.7	2101.7	2081.7	2053.6	2013.1	1957.8	1903.2
90.0	2110.0	2112.8	2117.5	2116.2	2103.9	2078.7	2055.3	2017.4	1962.4	1905.8
120.0	2110.0	2117.5	2114.9	2109.8	2097.9	2082.6	2064.7	2034.4	1992.3	1927.9
150.0	2110.0	2109.0	2103.4	2099.6	2088.1	2071.9	2049.8	2023.3	1982.0	1930.9
180.0	2110.0	2103.9	2094.1	2083.0	2073.2	2050.6	2028.9	2008.4	1966.3	1925.4
210.0	2110.0	2096.6	2086.4	2077.0	2062.5	2043.8	2017.8	1990.1	1955.2	1918.6
240.0	2110.0	2098.3	2085.5	2074.9	2063.0	2046.8	2019.1	1995.7	1957.3	1911.7
270.0	2110.0	2100.4	2086.8	2079.2	2068.9	2055.3	2039.5	2005.9	1962.0	1917.7
300.0	2110.0	2103.0	2094.5	2086.0	2074.0	2060.4	2038.3	2008.9	1963.7	1890.4
330.0	2110.0	2104.7	2094.1	2084.3	2074.9	2064.7	2035.3	2001.2	1958.6	1900.2
360.0	2110.0	2103.0	2093.6	2079.2	2055.7	2039.1	2015.7	1986.7	1938.2	1884.9

C\γ	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	1824.4	1729.0	1658.7	1582.0	1477.3	1396.3	1330.7	1227.6	1158.6	1091.8
30.0	1815.5	1737.1	1663.4	1571.0	1474.7	1395.9	1317.9	1238.3	1137.8	1067.5
60.0	1837.2	1756.3	1668.9	1593.5	1491.3	1412.5	1330.3	1248.9	1154.4	1082.0
90.0	1844.9	1773.7	1676.2	1602.5	1518.6	1441.1	1358.4	1259.6	1177.4	1101.1
120.0	1866.2	1800.6	1707.3	1632.3	1557.8	1467.0	1387.4	1308.1	1202.9	1130.1
150.0	1866.2	1799.7	1734.5	1640.0	1566.7	1492.2	1401.0	1326.0	1251.1	1159.9
180.0	1876.0	1817.2	1739.2	1666.0	1590.6	1492.2	1417.2	1343.9	1256.2	1204.2
210.0	1864.0	1809.1	1741.4	1647.6	1571.4	1494.7	1422.3	1338.4	1274.5	1215.3
240.0	1866.2	1804.8	1727.7	1657.9	1559.9	1486.6	1414.2	1326.9	1261.7	1207.6
270.0	1858.1	1783.5	1700.5	1626.3	1552.2	1451.3	1378.4	1307.7	1241.7	1163.3
300.0	1828.3	1756.3	1671.5	1594.8	1516.9	1415.9	1343.1	1273.2	1202.9	1120.7
330.0	1831.7	1752.0	1661.7	1582.5	1505.8	1400.6	1322.2	1246.4	1177.8	1096.0
360.0	1824.4	1729.0	1658.7	1582.0	1477.3	1396.3	1330.7	1227.6	1158.6	1091.8

C\γ	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	1022.3	974.6	922.6	844.3	786.3	727.1	657.7	612.1	570.4	529.1
30.0	1007.0	942.2	889.4	833.6	762.5	710.9	662.0	609.1	568.7	533.7
60.0	1015.9	935.9	877.1	819.6	754.0	701.1	644.5	592.1	553.8	514.1
90.0	1022.3	946.9	888.1	819.6	764.6	702.8	653.0	601.9	561.0	525.2
120.0	1062.4	999.3	927.3	865.6	803.4	726.3	673.9	621.1	581.9	547.8
150.0	1096.9	1035.1	963.1	901.8	838.7	756.5	697.7	646.2	595.5	558.9
180.0	1145.4	1067.5	1005.3	943.9	880.5	798.7	737.4	680.7	621.9	578.5
210.0	1143.7	1090.9	1033.0	965.2	901.8	828.9	765.9	698.2	648.3	604.4
240.0	1140.3	1087.9	1035.5	979.3	906.9	831.1	775.7	696.5	644.5	599.8
270.0	1111.4	1060.2	1001.9	948.2	890.7	831.9	754.0	699.0	649.6	595.1
300.0	1067.5	1017.6	958.0	905.2	850.2	771.9	716.9	664.9	618.9	560.1
330.0	1041.1	987.8	926.5	871.5	814.9	748.9	687.9	640.7	597.2	557.2
360.0	1022.3	974.6	922.6	844.3	786.3	727.1	657.7	612.1	570.4	529.1

R852 WWL (CRI90 350mA 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	485.2	424.7	352.3	243.2	170.4	115.4	72.0	60.1	48.6	37.1
30.0	476.2	414.9	343.3	263.7	167.4	110.8	75.0	57.9	46.4	37.5
60.0	469.8	409.4	341.2	243.2	175.9	116.7	72.8	58.4	46.9	35.8
90.0	462.2	404.2	335.7	245.4	181.9	123.1	72.0	57.9	46.0	36.6
120.0	504.3	418.7	347.2	270.5	185.7	125.2	84.3	62.6	50.7	41.3
150.0	516.3	452.8	351.8	271.8	194.7	113.3	80.1	65.6	53.7	42.2
180.0	530.3	456.2	363.8	276.9	172.5	117.6	83.1	67.7	53.2	43.0
210.0	535.9	465.2	383.8	283.7	204.9	139.3	85.2	68.6	55.8	45.2
240.0	538.8	466.9	387.2	277.7	205.3	139.3	87.7	70.3	57.1	43.4
270.0	536.7	440.5	362.9	275.6	205.7	126.1	85.6	68.6	54.9	43.4
300.0	505.6	434.9	346.7	268.4	172.9	124.8	80.9	63.0	51.5	39.6
330.0	494.5	426.4	349.7	272.6	175.1	117.1	79.2	60.9	49.8	40.9
360.0	485.2	424.7	352.3	243.2	170.4	115.4	72.0	60.1	48.6	37.1

C\γ	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0
0.0	32.4	30.7	29.0	27.7	26.0	25.1	23.9	23.0	22.2	20.9
30.0	30.7	29.4	28.1	26.4	25.1	24.3	23.4	22.2	21.3	20.4
60.0	31.1	29.4	28.1	26.8	25.6	24.7	23.4	22.2	21.7	20.9
90.0	31.5	29.8	28.1	27.3	26.0	25.1	23.9	23.0	22.2	20.9
120.0	34.1	31.9	30.2	28.5	26.8	25.6	24.7	23.4	22.6	21.3
150.0	35.8	33.2	30.7	29.0	27.7	26.4	24.7	24.3	23.0	22.2
180.0	36.6	32.8	31.5	29.8	27.7	26.8	25.6	24.3	23.4	22.2
210.0	36.2	33.7	31.5	29.8	28.1	26.8	26.0	24.3	23.4	22.6
240.0	37.1	34.5	31.9	30.2	29.0	27.3	26.0	24.7	23.9	22.6
270.0	37.5	34.5	31.9	30.2	29.0	27.7	26.4	25.1	23.9	22.6
300.0	34.5	32.4	30.7	29.0	27.7	26.8	25.6	24.3	23.4	22.2
330.0	33.7	31.5	30.2	28.5	27.3	26.4	25.1	23.9	22.6	21.3
360.0	32.4	30.7	29.0	27.7	26.0	25.1	23.9	23.0	22.2	20.9

C\γ	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	19.6	19.2	18.3	17.5	16.6	16.2	14.9	14.5	14.1	13.2
30.0	19.6	18.7	17.9	17.0	16.6	15.8	15.3	14.5	13.6	13.6
60.0	19.6	18.7	18.3	17.5	16.6	16.2	15.3	14.5	14.1	13.2
90.0	20.0	19.2	18.3	17.5	16.6	16.2	15.8	14.9	14.5	13.6
120.0	20.4	19.6	19.2	17.9	17.5	16.6	15.8	15.3	14.5	14.1
150.0	20.9	20.4	19.2	18.3	17.5	16.6	15.8	15.3	14.5	14.1
180.0	21.3	20.4	19.6	18.3	17.5	16.6	16.2	15.3	14.5	14.1
210.0	21.3	20.0	19.6	18.7	17.5	17.0	16.2	15.3	14.5	13.6
240.0	21.7	20.9	19.6	18.7	17.9	17.0	16.2	15.3	14.5	14.1
270.0	21.7	20.9	19.6	18.7	17.9	17.0	16.2	15.3	14.9	13.6
300.0	20.9	20.0	18.7	17.9	17.5	16.6	15.3	14.9	14.1	13.6
330.0	20.4	19.6	18.7	17.5	17.0	16.2	15.8	14.5	14.1	13.6
360.0	19.6	19.2	18.3	17.5	16.6	16.2	14.9	14.5	14.1	13.2

R852 WWL (CRI90 350mA 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	12.8	12.4	11.5	11.1	10.6	10.2	10.2	9.8	9.4	8.5
30.0	12.8	12.4	11.9	11.5	11.1	10.6	10.2	9.8	9.4	8.9
60.0	12.8	12.8	11.9	11.5	11.1	10.6	10.2	9.8	9.8	8.9
90.0	13.2	12.8	12.4	11.9	11.5	11.1	10.6	10.2	9.8	9.4
120.0	13.6	12.8	12.4	11.9	11.5	11.1	10.6	10.2	9.8	8.9
150.0	13.6	12.8	12.4	11.9	11.1	10.6	10.2	9.8	9.4	8.9
180.0	13.2	12.8	11.9	11.5	11.1	10.6	9.8	9.4	8.9	8.5
210.0	13.2	12.4	11.9	11.1	10.6	10.2	9.8	9.4	8.9	8.1
240.0	13.2	12.4	11.9	11.1	10.6	9.8	9.4	8.9	8.5	8.1
270.0	13.2	12.4	11.9	11.5	10.6	10.2	9.8	8.9	8.5	8.1
300.0	12.8	12.4	11.5	11.1	10.6	10.2	9.8	9.4	8.5	8.1
330.0	12.8	12.4	11.9	11.1	10.6	10.2	9.8	9.4	8.9	8.5
360.0	12.8	12.4	11.5	11.1	10.6	10.2	10.2	9.8	9.4	8.5

C\γ	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	8.1	7.7	7.2	6.4	5.5	4.7	3.0	1.7	0.9	0.9
30.0	8.1	7.7	7.2	6.4	6.0	4.3	3.0	1.7	0.9	0.9
60.0	8.5	8.1	7.2	6.8	6.0	4.7	3.0	1.7	0.9	0.9
90.0	8.5	8.1	7.7	6.8	6.0	5.1	3.0	1.3	0.9	0.9
120.0	8.5	8.1	7.7	6.8	6.0	4.7	2.6	1.3	0.9	0.9
150.0	8.5	7.7	7.2	6.4	5.5	4.3	2.6	1.3	0.9	0.9
180.0	8.1	7.2	6.8	6.0	5.1	4.3	2.6	1.3	1.3	0.9
210.0	7.7	6.8	6.4	6.0	5.1	4.3	3.0	1.3	1.3	0.9
240.0	7.2	6.8	6.4	5.5	5.1	4.3	2.6	1.3	1.3	0.9
270.0	7.7	7.2	6.8	6.0	5.1	4.3	3.0	1.7	0.9	0.9
300.0	7.7	7.2	6.8	6.0	5.1	4.7	3.0	1.7	0.9	0.9
330.0	8.1	7.2	6.8	6.4	5.5	4.7	3.0	1.7	0.9	0.9
360.0	8.1	7.7	7.2	6.4	5.5	4.7	3.0	1.7	0.9	0.9

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

R852 WWL (CRI90 350mA 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	0.0	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	0.4	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	0.4	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	0.4	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	0.4	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 WWL (CRI90 350mA 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	0.4	0.4	0.4
30.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4
60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4
90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4	0.4
120.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4
150.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4	0.4	0.9
180.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4	0.4	0.4
210.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4
240.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4
270.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4	0.4	0.4
300.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.4
330.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4	0.4	0.4
360.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4

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

C\γ	140.0	141.0	142.0	143.0	144.0	145.0	146.0	147.0	148.0	149.0
0.0	2.6	2.6	3.0	3.0	3.4	3.4	3.8	4.3	4.3	5.1
30.0	2.1	2.6	3.0	3.0	3.4	3.8	4.3	4.3	4.7	5.1
60.0	2.6	2.6	3.0	3.4	3.4	3.8	3.8	4.3	4.7	5.1
90.0	2.1	2.6	3.0	3.0	3.4	3.4	3.8	4.3	4.7	5.1
120.0	3.4	3.8	4.3	4.7	5.1	5.5	6.4	6.8	7.2	8.1
150.0	3.4	3.8	4.3	4.7	5.1	5.5	6.0	6.8	7.2	7.7
180.0	3.4	3.4	4.3	4.7	5.1	5.5	6.0	6.8	7.2	8.1
210.0	3.4	3.8	3.8	4.7	5.1	5.5	6.0	6.8	7.2	7.7
240.0	3.4	3.4	4.3	4.7	5.1	5.5	6.0	6.8	7.2	7.7
270.0	3.4	3.8	4.3	4.7	5.1	5.5	6.4	6.8	7.2	8.1
300.0	2.1	2.6	2.6	3.0	3.0	3.4	3.8	4.3	4.3	4.7
330.0	2.1	2.6	2.6	3.0	3.0	3.4	3.8	4.3	4.7	4.7
360.0	2.6	2.6	3.0	3.0	3.4	3.4	3.8	4.3	4.3	5.1

R852 WWL (CRI90 350mA 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	5.1	6.0	6.4	6.8	7.2	7.7	8.5	8.9	9.4	9.8
30.0	5.5	6.0	6.4	6.8	7.7	8.1	8.5	8.9	9.4	9.8
60.0	5.5	6.0	6.4	6.8	7.2	8.1	8.5	8.9	9.4	9.8
90.0	5.5	6.0	6.4	6.8	7.2	7.7	8.5	8.9	9.4	9.8
120.0	8.5	8.9	9.8	10.2	10.6	11.1	11.9	12.4	12.8	13.2
150.0	8.5	8.9	9.4	10.2	10.6	11.1	11.5	11.9	12.8	13.2
180.0	8.5	8.9	9.4	9.8	10.6	11.1	11.5	12.4	12.8	13.2
210.0	8.5	8.9	9.4	9.8	10.6	11.1	11.5	11.9	12.8	13.2
240.0	8.1	8.9	9.4	9.8	10.6	11.1	11.5	11.9	12.8	13.2
270.0	8.5	8.9	9.8	10.2	10.6	11.1	11.9	12.4	12.8	13.2
300.0	5.1	5.5	6.0	6.8	7.2	7.7	8.1	8.9	9.4	9.4
330.0	5.5	5.5	6.4	6.8	7.2	7.7	8.5	8.9	9.4	9.8
360.0	5.1	6.0	6.4	6.8	7.2	7.7	8.5	8.9	9.4	9.8

C\γ	160.0	161.0	162.0	163.0	164.0	165.0	166.0	167.0	168.0	169.0
0.0	10.2	10.6	11.1	11.5	11.9	12.4	12.8	13.2	13.6	14.1
30.0	10.2	10.6	11.1	11.5	11.9	12.4	12.8	13.2	13.6	13.6
60.0	10.2	10.6	11.1	11.5	11.9	12.4	12.8	13.2	13.2	13.6
90.0	10.2	10.6	11.1	11.5	11.9	12.4	12.8	13.2	13.6	13.6
120.0	13.6	14.1	14.5	14.5	14.9	14.9	15.3	15.8	15.8	15.8
150.0	13.6	14.1	14.5	14.5	14.9	14.9	15.3	15.3	15.8	15.8
180.0	13.6	13.6	14.1	14.5	14.9	14.9	15.3	15.3	15.8	15.8
210.0	13.2	14.1	14.1	14.5	14.9	14.9	15.3	15.3	15.8	15.8
240.0	13.6	13.6	14.5	14.5	14.9	14.9	15.3	15.8	15.8	15.8
270.0	13.6	14.1	14.5	14.5	14.9	15.3	15.3	15.8	15.8	15.8
300.0	10.2	10.6	11.1	11.5	11.9	12.4	12.8	13.2	13.6	13.6
330.0	10.6	10.6	11.1	11.5	11.9	12.4	12.8	13.2	13.6	13.6
360.0	10.2	10.6	11.1	11.5	11.9	12.4	12.8	13.2	13.6	14.1

C\γ	170.0	171.0	172.0	173.0	174.0	175.0	176.0	177.0	178.0	179.0
0.0	14.1	14.1	14.5	14.5	14.9	15.3	15.3	15.8	15.8	16.2
30.0	14.1	14.5	14.5	14.5	14.9	14.9	15.3	15.8	16.2	16.2
60.0	14.1	14.1	14.5	14.5	14.9	14.9	15.3	15.8	16.2	16.2
90.0	14.1	14.1	14.5	14.5	14.9	15.3	15.3	15.8	16.2	16.2
120.0	15.8	15.8	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
150.0	16.2	15.8	16.2	15.8	16.2	16.2	16.2	16.2	16.2	16.2
180.0	15.8	15.8	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
210.0	15.8	15.8	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
240.0	15.8	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
270.0	15.8	15.8	16.2	16.2	16.2	16.2	16.2	16.6	16.2	16.2
300.0	14.1	14.1	14.5	14.5	14.9	15.3	15.3	15.8	15.8	16.2
330.0	14.1	14.1	14.5	14.5	14.9	14.9	15.3	15.8	16.2	16.2
360.0	14.1	14.1	14.5	14.5	14.9	15.3	15.3	15.8	15.8	16.2

Intensity Data [cd]**Page8**

C\γ	180.0
0.0	16.2
30.0	16.2
60.0	16.2
90.0	16.6
120.0	16.2
150.0	16.2
180.0	16.2
210.0	16.2
240.0	16.2
270.0	16.6
300.0	16.2
330.0	16.2
360.0	16.2

R852 WWL (CRI90 350mA 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	2109.99	0.00	0.00	0.00	0.00
1	2105.42	2.02	2.02	2.02	2.02
2	2098.43	6.03	8.05	6.03	8.05
3	2090.51	10.02	18.07	10.02	18.07
4	2077.73	13.95	32.02	13.95	32.02
5	2060.09	17.80	49.82	17.80	49.82
6	2036.34	21.53	71.35	21.53	71.35
7	2005.92	25.09	96.44	25.09	96.44
8	1960.84	28.39	124.83	28.39	124.83
9	1907.95	31.35	156.18	31.35	156.18
10	1848.21	33.99	190.18	33.99	190.18
11	1776.61	36.22	226.40	36.22	226.40
12	1695.92	37.96	264.36	37.96	264.36
13	1616.37	39.31	303.66	39.31	303.66
14	1531.92	40.30	343.96	40.30	343.96
15	1445.52	40.88	384.84	40.88	384.84
16	1368.60	41.23	426.07	41.23	426.07
17	1287.10	41.36	467.43	41.36	467.43
18	1208.08	41.14	508.57	41.14	508.57
19	1136.63	40.79	549.36	40.79	549.36
20	1073.01	40.44	589.80	40.44	589.80
21	1012.17	40.04	629.84	40.04	629.84
22	952.32	39.48	669.32	39.48	669.32
23	891.48	38.69	708.01	38.69	708.01
24	829.54	37.63	745.64	37.63	745.64
25	761.35	36.17	781.81	36.17	781.81
26	702.21	34.55	816.36	34.55	816.36
27	646.87	33.01	849.36	33.01	849.36
28	600.97	31.59	880.96	31.59	880.96
29	558.66	30.34	911.30	30.34	911.30
30	504.67	28.71	940.00	28.71	940.00
31	434.56	26.14	966.14	26.14	966.14
32	355.47	22.63	988.78	22.63	988.78
33	266.05	18.31	1007.09	18.31	1007.09
34	184.37	13.63	1020.72	11.50	1018.58
35	122.39	9.53	1030.24	0.00	1018.58
36	79.83	6.44	1036.68	0.00	1018.58
37	63.47	4.67	1041.36	0.00	1018.58
38	51.22	3.83	1045.19	0.00	1018.58
39	40.50	3.13	1048.32	0.00	1018.58
40	34.25	2.61	1050.92	0.00	1018.58

R852 WWL (CRI90 350mA 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	31.98	2.36	1053.28	0.00	1018.58
42	30.17	2.26	1055.54	0.00	1018.58
43	28.61	2.18	1057.72	0.00	1018.58
44	27.16	2.10	1059.82	0.00	1018.58
45	26.09	2.05	1061.87	0.00	1018.58
46	24.88	1.99	1063.86	0.00	1018.58
47	23.71	1.93	1065.80	0.00	1018.58
48	22.79	1.88	1067.68	0.00	1018.58
49	21.65	1.83	1069.50	0.00	1018.58
50	20.62	1.76	1071.26	0.00	1018.58
51	19.81	1.71	1072.97	0.00	1018.58
52	18.92	1.66	1074.64	0.00	1018.58
53	17.96	1.60	1076.24	0.00	1018.58
54	17.22	1.55	1077.79	0.00	1018.58
55	16.51	1.51	1079.30	0.00	1018.58
56	15.73	1.46	1080.75	0.00	1018.58
57	14.98	1.40	1082.16	0.00	1018.58
58	14.31	1.35	1083.51	0.00	1018.58
59	13.70	1.31	1084.82	0.00	1018.58
60	13.10	1.27	1086.09	0.00	1018.58
61	12.53	1.22	1087.31	0.00	1018.58
62	11.96	1.18	1088.49	0.00	1018.58
63	11.43	1.14	1089.63	0.00	1018.58
64	10.93	1.10	1090.73	0.00	1018.58
65	10.47	1.06	1091.79	0.00	1018.58
66	10.05	1.02	1092.81	0.00	1018.58
67	9.58	0.99	1093.80	0.00	1018.58
68	9.16	0.95	1094.75	0.00	1018.58
69	8.59	0.91	1095.65	0.00	1018.58
70	8.06	0.86	1096.51	0.00	1018.58
71	7.49	0.80	1097.31	0.00	1018.58
72	7.03	0.75	1098.06	0.00	1018.58
73	6.28	0.70	1098.76	0.00	1018.58
74	5.50	0.62	1099.38	0.00	1018.58
75	4.51	0.53	1099.91	0.00	1018.58
76	2.84	0.39	1100.30	0.00	1018.58
77	1.49	0.23	1100.53	0.00	1018.58
78	0.96	0.13	1100.66	0.00	1018.58
79	0.85	0.10	1100.76	0.00	1018.58
80	0.85	0.09	1100.85	0.00	1018.58
81	0.75	0.09	1100.94	0.00	1018.58

R852 WWL (CRI90 350mA 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	0.50	0.07	1101.00	0.00	1018.58
83	0.43	0.05	1101.05	0.00	1018.58
84	0.43	0.05	1101.10	0.00	1018.58
85	0.43	0.05	1101.15	0.00	1018.58
86	0.39	0.04	1101.19	0.00	1018.58
87	0.32	0.04	1101.23	0.00	1018.58
88	0.14	0.03	1101.26	0.00	1018.58
89	0.00	0.01	1101.26	0.00	1018.58
90	0.04	0.00	1101.27	0.00	1018.58
91	0.00	0.00	1101.27	0.00	1018.58
92	0.07	0.00	1101.27	0.00	1018.58
93	0.00	0.00	1101.28	0.00	1018.58
94	0.00	0.00	1101.28	0.00	1018.58
95	0.00	0.00	1101.28	0.00	1018.58
96	0.00	0.00	1101.28	0.00	1018.58
97	0.00	0.00	1101.28	0.00	1018.58
98	0.00	0.00	1101.28	0.00	1018.58
99	0.00	0.00	1101.28	0.00	1018.58
100	0.00	0.00	1101.28	0.00	1018.58
101	0.00	0.00	1101.28	0.00	1018.58
102	0.00	0.00	1101.28	0.00	1018.58
103	0.00	0.00	1101.28	0.00	1018.58
104	0.00	0.00	1101.28	0.00	1018.58
105	0.00	0.00	1101.28	0.00	1018.58
106	0.00	0.00	1101.28	0.00	1018.58
107	0.00	0.00	1101.28	0.00	1018.58
108	0.00	0.00	1101.28	0.00	1018.58
109	0.00	0.00	1101.28	0.00	1018.58
110	0.00	0.00	1101.28	0.00	1018.58
111	0.00	0.00	1101.28	0.00	1018.58
112	0.00	0.00	1101.28	0.00	1018.58
113	0.00	0.00	1101.28	0.00	1018.58
114	0.00	0.00	1101.28	0.00	1018.58
115	0.00	0.00	1101.28	0.00	1018.58
116	0.00	0.00	1101.28	0.00	1018.58
117	0.04	0.00	1101.28	0.00	1018.58
118	0.00	0.00	1101.28	0.00	1018.58
119	0.00	0.00	1101.28	0.00	1018.58
120	0.00	0.00	1101.28	0.00	1018.58
121	0.00	0.00	1101.28	0.00	1018.58
122	0.00	0.00	1101.28	0.00	1018.58

R852 WWL (CRI90 350mA 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	1101.28	0.00	1018.58
124	0.00	0.00	1101.28	0.00	1018.58
125	0.28	0.01	1101.29	0.00	1018.58
126	0.18	0.02	1101.31	0.00	1018.58
127	0.35	0.02	1101.34	0.00	1018.58
128	0.43	0.03	1101.37	0.00	1018.58
129	0.46	0.04	1101.41	0.00	1018.58
130	0.57	0.04	1101.45	0.00	1018.58
131	0.64	0.05	1101.50	0.00	1018.58
132	0.85	0.06	1101.56	0.00	1018.58
133	1.06	0.08	1101.64	0.00	1018.58
134	1.17	0.09	1101.73	0.00	1018.58
135	1.42	0.10	1101.83	0.00	1018.58
136	1.63	0.12	1101.95	0.00	1018.58
137	1.92	0.13	1102.08	0.00	1018.58
138	2.13	0.15	1102.23	0.00	1018.58
139	2.48	0.17	1102.40	0.00	1018.58
140	2.84	0.19	1102.59	0.00	1018.58
141	3.12	0.21	1102.80	0.00	1018.58
142	3.51	0.23	1103.02	0.00	1018.58
143	3.87	0.25	1103.27	0.00	1018.58
144	4.19	0.26	1103.53	0.00	1018.58
145	4.54	0.28	1103.81	0.00	1018.58
146	5.01	0.30	1104.11	0.00	1018.58
147	5.54	0.32	1104.43	0.00	1018.58
148	5.89	0.34	1104.76	0.00	1018.58
149	6.43	0.35	1105.12	0.00	1018.58
150	6.92	0.37	1105.49	0.00	1018.58
151	7.38	0.39	1105.87	0.00	1018.58
152	7.92	0.40	1106.27	0.00	1018.58
153	8.41	0.41	1106.69	0.00	1018.58
154	8.98	0.43	1107.11	0.00	1018.58
155	9.44	0.43	1107.55	0.00	1018.58
156	10.05	0.44	1107.99	0.00	1018.58
157	10.54	0.45	1108.44	0.00	1018.58
158	11.08	0.45	1108.90	0.00	1018.58
159	11.47	0.45	1109.35	0.00	1018.58
160	11.93	0.45	1109.80	0.00	1018.58
161	12.28	0.44	1110.24	0.00	1018.58
162	12.71	0.43	1110.67	0.00	1018.58
163	12.99	0.42	1111.10	0.00	1018.58

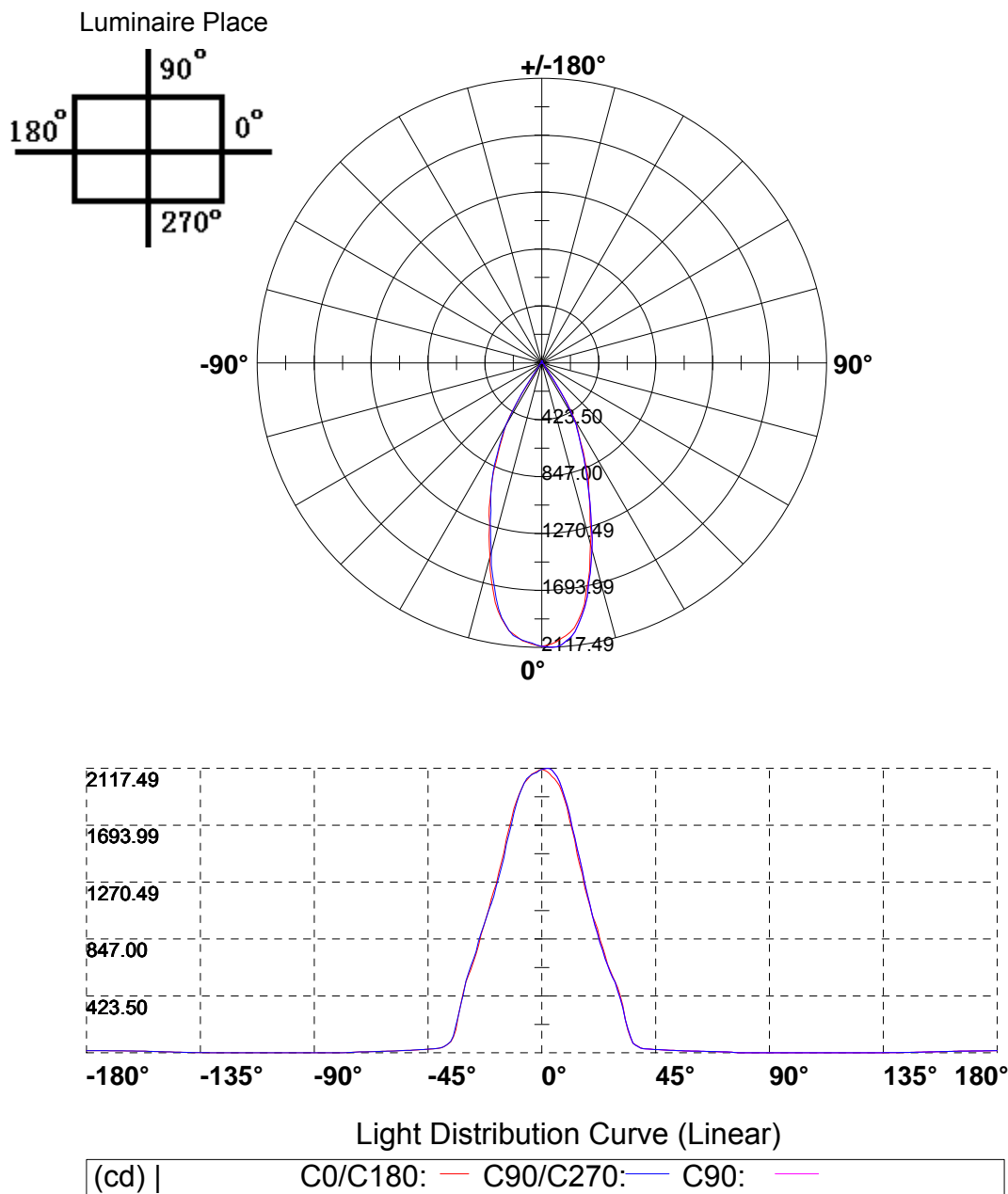
R852 WWL (CRI90 350mA 40D)

Zonal flux distribution table

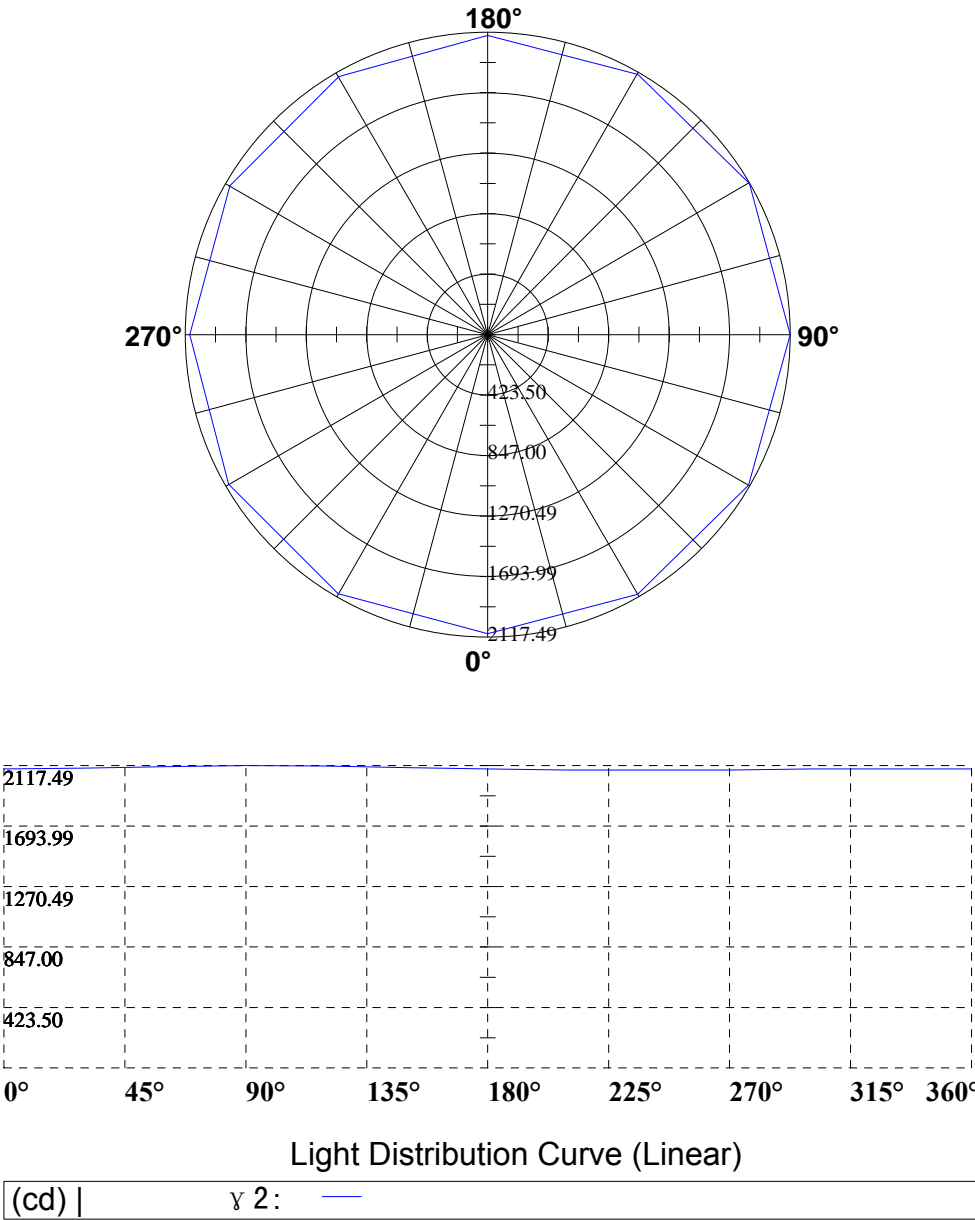
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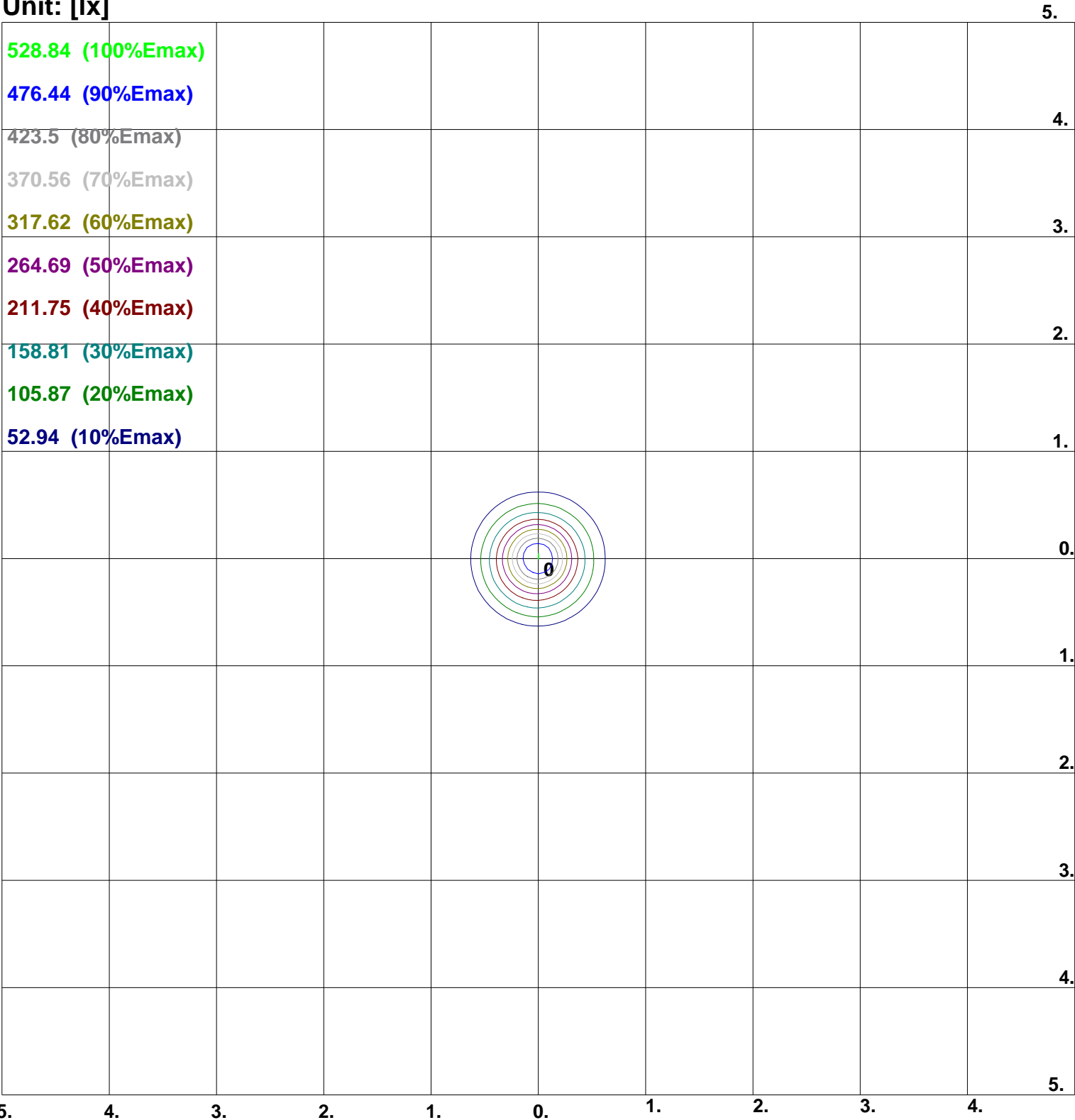
[illegible]

Light Distribution Curve [Unit: cd]



Horizontal cone through Max.cd [Unit: cd]



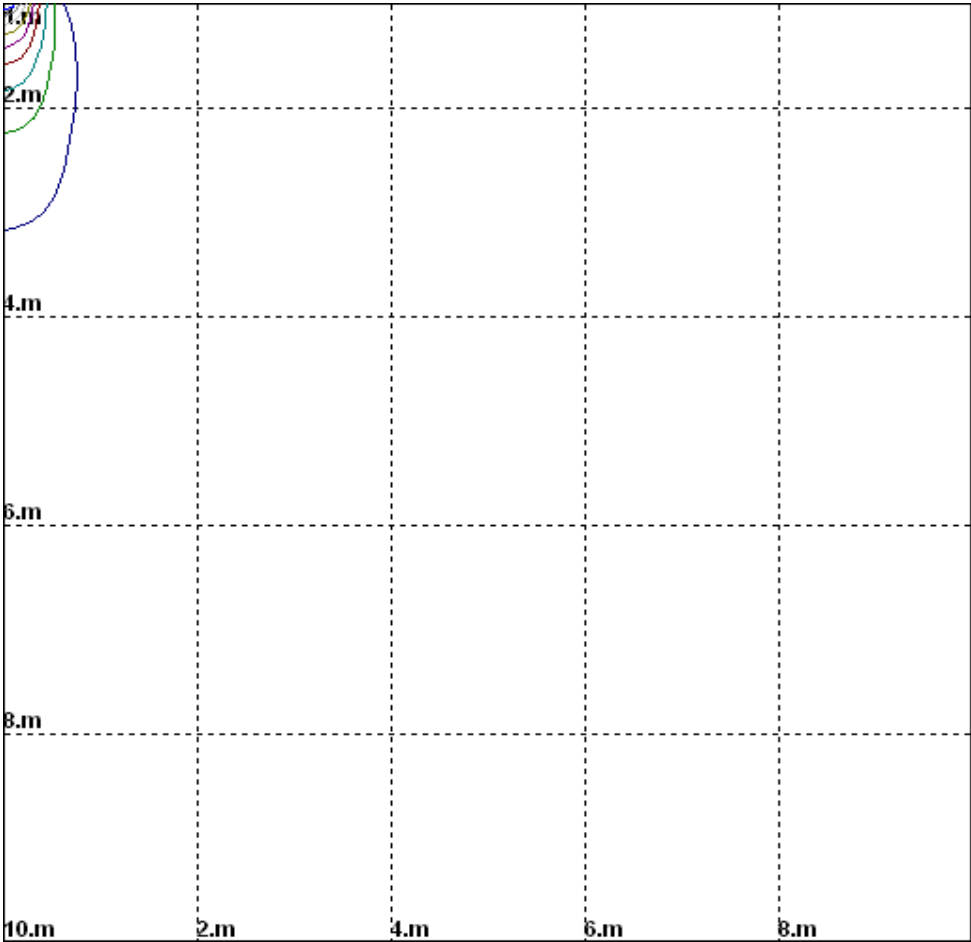


Coordinate Scale: d/h
Height: 2 m
Max Illuminance : 529.37lx

Space ISO-lx

Unit: [lx]
Illuminance

- 528.84
- 476.44
- 423.5
- 370.56
- 317.62
- 264.69
- 211.75
- 158.81
- 105.87
- 52.94



Luminance Limiting Curve (There is not luminous side)

Diameter: 115mm

Length: -115mm

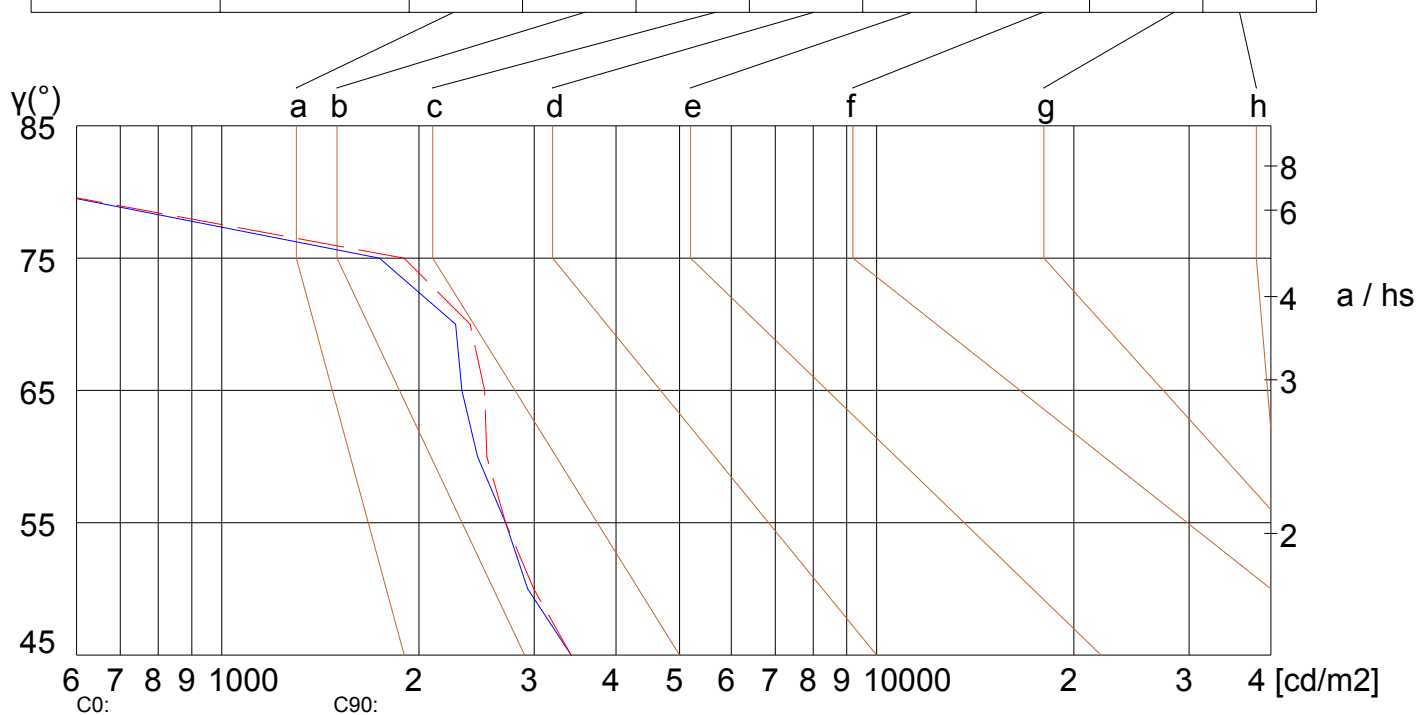
Width: -115mm

Height: 105mm

(cd/m²)

γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	3418	2995	2714	2539	2520	2395	1899	472	470
C90	3418	2931	2714	2458	2326	2275	1741	472	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 350mA 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	COEFFCIENTS OF UTILIZATION FOR RHOFC=20															
0	0.91	0.91	0.91	0.89	0.89	0.89	0.85	0.85	0.85	0.82	0.82	0.82	0.78	0.78	0.78	0.77
1	0.88	0.88	0.87	0.87	0.86	0.85	0.83	0.83	0.82	0.79	0.78	0.77	0.74	0.73	0.72	0.68
2	0.83	0.83	0.82	0.82	0.81	0.80	0.79	0.78	0.77	0.75	0.74	0.73	0.71	0.69	0.68	0.64
3	0.79	0.78	0.77	0.78	0.76	0.76	0.75	0.73	0.72	0.72	0.70	0.68	0.68	0.66	0.64	0.61
4	0.75	0.74	0.73	0.74	0.72	0.71	0.71	0.70	0.68	0.68	0.66	0.65	0.65	0.63	0.61	0.57
5	0.71	0.70	0.69	0.70	0.69	0.68	0.68	0.66	0.64	0.65	0.63	0.61	0.62	0.60	0.57	0.54
6	0.68	0.67	0.66	0.67	0.65	0.64	0.65	0.63	0.61	0.62	0.60	0.58	0.60	0.57	0.55	0.52
7	0.64	0.63	0.63	0.64	0.62	0.61	0.62	0.60	0.58	0.60	0.57	0.55	0.57	0.54	0.52	0.49
8	0.61	0.60	0.60	0.61	0.59	0.58	0.59	0.57	0.56	0.57	0.55	0.53	0.55	0.52	0.50	0.47
9	0.59	0.58	0.57	0.58	0.57	0.56	0.57	0.54	0.53	0.55	0.52	0.50	0.53	0.50	0.47	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

R852 WWL (CRI90 350mA 40D) / UGR-Table

Luminaire: R852 WWL (CRI90 350mA 40D)

Lamps: 1 x CITIZEN CLU028-1202C4-303H5M3 350mA

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	10.1	10.8	10.4	11.0	11.2	10.1	10.8	10.4	11.0	11.2
	3H	10.2	10.8	10.5	11.1	11.3	10.2	10.8	10.5	11.1	11.3
	4H	10.2	10.8	10.5	11.1	11.4	10.2	10.8	10.5	11.1	11.4
	6H	10.1	10.7	10.5	11.0	11.3	10.1	10.7	10.5	11.0	11.3
	8H	10.1	10.6	10.5	10.9	11.3	10.1	10.6	10.5	10.9	11.3
	12H	10.1	10.6	10.4	10.9	11.2	10.1	10.6	10.4	10.9	11.2
4H	2H	10.0	10.6	10.4	10.9	11.2	10.0	10.6	10.4	10.9	11.2
	3H	10.2	10.7	10.6	11.0	11.4	10.2	10.7	10.6	11.0	11.4
	4H	10.2	10.7	10.6	11.0	11.4	10.2	10.7	10.6	11.0	11.4
	6H	10.2	10.5	10.6	10.9	11.3	10.2	10.5	10.6	10.9	11.3
	8H	10.1	10.4	10.6	10.8	11.3	10.1	10.4	10.6	10.8	11.3
	12H	10.1	10.4	10.5	10.8	11.2	10.1	10.4	10.5	10.8	11.2
8H	4H	10.2	10.5	10.6	10.9	11.3	10.2	10.5	10.6	10.9	11.3
	6H	10.1	10.3	10.6	10.8	11.2	10.1	10.3	10.6	10.8	11.2
	8H	10.0	10.2	10.5	10.7	11.2	10.0	10.2	10.5	10.7	11.2
	12H	10.0	10.1	10.5	10.6	11.2	10.0	10.1	10.5	10.6	11.2
12H	4H	10.1	10.4	10.6	10.8	11.3	10.1	10.4	10.6	10.8	11.3
	6H	10.0	10.2	10.5	10.7	11.2	10.0	10.2	10.5	10.7	11.2
	8H	10.0	10.1	10.5	10.6	11.2	10.0	10.1	10.5	10.6	11.2
Variation of the observer position for the luminaire distances S											
S = 1.0H		+5.8 / -4.3					+5.8 / -4.3				
S = 1.5H		+8.5 / -5.0					+8.5 / -5.0				
S = 2.0H		+10.5 / -5.7					+10.5 / -5.7				
Standard table		BK01					BK01				
Correction Summand		-8.7					-8.7				
Corrected Glare Indices referring to 1455lm Total Luminous Flux											

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