

R852 WWL (CRI90 500mA 20D)

Luminaire Name: R852 WWL (CRI90 500mA 20D)

Report NO.: 01313217030102A

Test NO.:

Lamp: CITIZEN CLUO38-1205C4-303H5M3 500mA

Sum Lumens: 2144.5 lm

Number of Lamps: 1

Diameter: 115mm

Length: -115mm

Photometric Type: Type C

Voltage: 230.76 V

Current: 0.0913 A

Power: 20.695 W

Power Factor: 0.9826

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

Width: -115mm

Height: 72mm

Optical Component: 20D Reflector DC(V:34.21V I:0.493A P:16.866W)

Photometric Results

Lumens: 1816.97 lm

Efficiency: 84.73%

Central Intensity: 8052.439cd

Maximum Intensity: 8072.099cd

Beam Angle(10%): Left: -25.7 Right:24.2

Maximum s/h: C0_180: 0.18 C90_270: 0.18

Effective Luminous Flux: 1352.62 lm

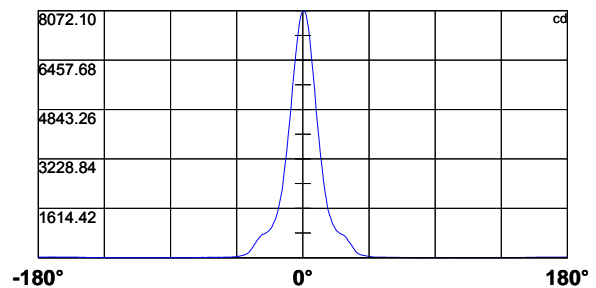
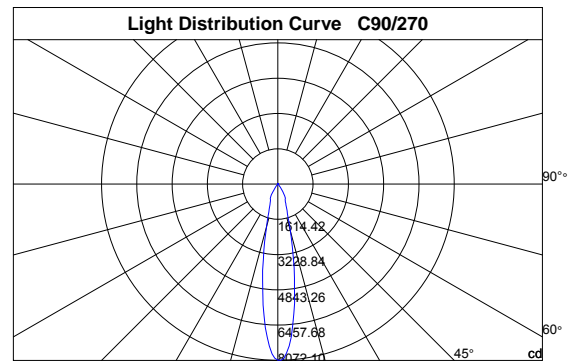
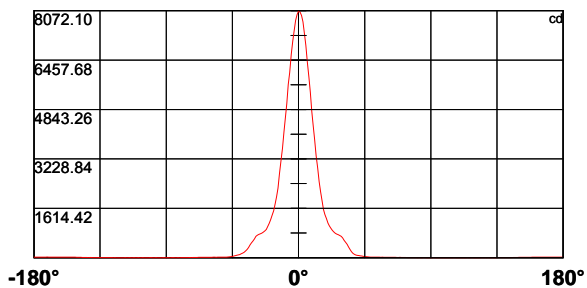
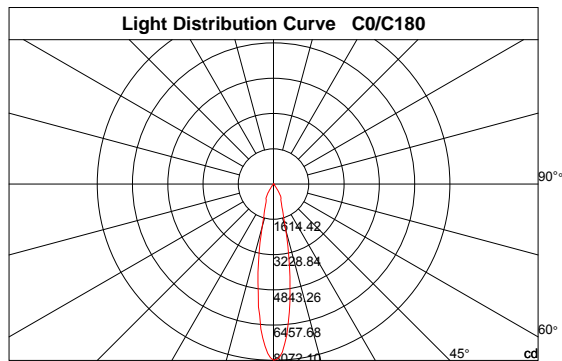
Angle of maximum intensity: C:60.0 G:1.0

Half Peak Side Angle(50%): Left: -10.8 Right:9.8

Up Flux Rate: 1.14%

Down Flux Rate: 83.58%

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	8052.4	8029.5	7914.5	7705.8	7326.7	6939.0	6406.6	5899.7	5409.8	4783.6
30.0	8052.4	8067.8	7961.3	7778.2	7377.8	6990.1	6449.2	5955.0	5456.7	4881.6
60.0	8052.4	8072.1	7982.6	7803.7	7390.6	6985.9	6530.1	5967.8	5448.1	4881.6
90.0	8052.4	8067.8	7974.1	7731.3	7433.1	7032.7	6500.3	5989.1	5495.0	4839.0
120.0	8052.4	7978.4	7837.8	7595.0	7135.0	6704.7	6159.5	5673.9	5196.8	4574.9
150.0	8052.4	7965.6	7778.2	7505.6	7160.5	6602.5	6146.7	5605.7	5196.8	4562.1
180.0	8052.4	7944.3	7752.6	7420.4	7066.8	6653.6	6048.8	5661.1	5039.2	4570.6
210.0	8052.4	7961.3	7765.4	7424.6	7054.0	6632.3	6023.2	5554.6	5000.9	4536.6
240.0	8052.4	7965.6	7731.3	7450.2	7083.9	6504.5	6031.7	5554.6	5005.1	4536.6
270.0	8052.4	7969.9	7769.7	7424.6	7028.5	6594.0	6053.0	5580.2	4941.2	4468.4
300.0	8052.4	8003.9	7863.4	7582.2	7245.7	6819.8	6214.9	5733.5	5171.3	4685.7
330.0	8052.4	8033.8	7884.7	7658.9	7211.6	6798.5	6334.1	5852.8	5290.5	4804.9
360.0	8052.4	8029.5	7914.5	7705.8	7326.7	6939.0	6406.6	5899.7	5409.8	4783.6

C\γ	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	4310.8	3850.8	3339.6	2926.4	2487.7	2155.4	1870.0	1576.1	1410.0	1269.4
30.0	4413.0	3957.2	3386.4	2969.0	2594.1	2193.7	1899.8	1593.1	1422.7	1307.7
60.0	4404.5	3948.7	3505.7	2956.2	2577.1	2181.0	1895.6	1665.5	1448.3	1299.2
90.0	4353.4	3889.1	3382.2	2964.7	2521.7	2189.5	1904.1	1597.4	1427.0	1286.4
120.0	4106.3	3723.0	3156.4	2751.8	2398.2	2036.1	1784.8	1516.4	1363.1	1226.8
150.0	4093.6	3642.0	3135.1	2734.7	2376.9	2023.3	1780.5	1525.0	1375.9	1243.8
180.0	4102.1	3573.9	3139.4	2734.7	2274.7	1989.3	1755.0	1533.5	1384.4	1239.6
210.0	4063.7	3544.1	3118.1	2717.7	2270.4	1989.3	1759.2	1542.0	1392.9	1231.0
240.0	3910.4	3467.4	3109.6	2598.4	2270.4	1993.5	1729.4	1546.3	1341.8	1226.8
270.0	4008.4	3497.2	3071.2	2675.1	2236.3	2006.3	1767.8	1546.3	1346.1	1222.5
300.0	4217.1	3603.7	3169.2	2777.3	2368.4	2065.9	1806.1	1563.3	1397.2	1265.1
330.0	4174.5	3718.7	3356.6	2811.4	2453.6	2138.4	1823.1	1605.9	1435.5	1252.3
360.0	4310.8	3850.8	3339.6	2926.4	2487.7	2155.4	1870.0	1576.1	1410.0	1269.4

C\γ	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	1133.1	1039.4	966.9	894.5	843.4	796.6	771.0	749.7	724.1	694.3
30.0	1145.9	1047.9	971.2	898.8	847.7	800.8	775.3	754.0	732.7	694.3
60.0	1137.3	1039.4	962.7	894.5	851.9	813.6	783.8	762.5	745.4	694.3
90.0	1137.3	1035.1	958.4	877.5	843.4	796.6	771.0	749.7	724.1	677.3
120.0	1077.7	988.2	915.8	851.9	813.6	783.8	758.2	741.2	702.8	647.5
150.0	1099.0	1001.0	932.9	864.7	826.4	788.0	771.0	754.0	719.9	668.8
180.0	1124.6	1022.3	924.4	873.2	834.9	800.8	783.8	762.5	736.9	694.3
210.0	1116.0	1030.8	932.9	881.8	843.4	809.3	788.0	771.0	745.4	698.6
240.0	1116.0	1001.0	928.6	877.5	830.6	796.6	775.3	749.7	728.4	664.5
270.0	1133.1	1009.5	941.4	890.3	843.4	813.6	783.8	766.7	745.4	690.1
300.0	1120.3	1026.6	945.6	890.3	847.7	813.6	783.8	766.7	749.7	719.9
330.0	1141.6	1035.1	962.7	903.1	851.9	813.6	779.5	762.5	745.4	707.1
360.0	1133.1	1039.4	966.9	894.5	843.4	796.6	771.0	749.7	724.1	694.3

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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	647.5	566.5	498.4	438.7	345.0	268.4	195.9	140.6	106.5	85.2
30.0	643.2	566.5	502.6	430.2	336.5	264.1	208.7	144.8	115.0	98.0
60.0	639.0	562.3	498.4	438.7	349.3	276.9	221.5	161.9	136.3	119.3
90.0	626.2	536.7	477.1	413.2	336.5	272.6	204.5	153.3	123.5	102.2
120.0	583.6	511.2	447.3	379.1	293.9	238.5	183.2	132.1	110.8	89.5
150.0	604.9	515.4	451.5	396.2	306.7	247.1	191.7	153.3	127.8	106.5
180.0	613.4	545.2	481.3	417.4	332.3	268.4	221.5	174.6	149.1	127.8
210.0	621.9	558.0	481.3	408.9	340.8	268.4	217.2	166.1	127.8	110.8
240.0	604.9	541.0	468.6	400.4	340.8	264.1	213.0	140.6	115.0	93.7
270.0	630.4	566.5	494.1	430.2	340.8	276.9	217.2	157.6	123.5	106.5
300.0	668.8	604.9	541.0	477.1	404.7	328.0	259.8	204.5	140.6	123.5
330.0	660.3	596.4	523.9	460.0	391.9	298.2	234.3	166.1	127.8	106.5
360.0	647.5	566.5	498.4	438.7	345.0	268.4	195.9	140.6	106.5	85.2

C\γ	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0
0.0	76.7	68.2	59.6	55.4	42.6	34.1	34.1	29.8	25.6	21.3
30.0	89.5	80.9	72.4	68.2	59.6	46.9	34.1	29.8	25.6	21.3
60.0	102.2	93.7	85.2	72.4	63.9	51.1	34.1	29.8	25.6	25.6
90.0	85.2	76.7	68.2	59.6	51.1	42.6	34.1	29.8	25.6	21.3
120.0	72.4	68.2	59.6	51.1	42.6	34.1	29.8	29.8	25.6	25.6
150.0	85.2	80.9	68.2	59.6	51.1	34.1	29.8	29.8	25.6	21.3
180.0	102.2	89.5	80.9	63.9	55.4	38.3	34.1	29.8	25.6	21.3
210.0	89.5	76.7	68.2	55.4	46.9	38.3	29.8	29.8	25.6	21.3
240.0	76.7	68.2	59.6	51.1	42.6	34.1	29.8	25.6	25.6	21.3
270.0	85.2	76.7	63.9	51.1	46.9	38.3	29.8	29.8	25.6	21.3
300.0	106.5	89.5	76.7	68.2	55.4	46.9	34.1	29.8	25.6	25.6
330.0	93.7	80.9	72.4	59.6	51.1	42.6	34.1	29.8	29.8	25.6
360.0	76.7	68.2	59.6	55.4	42.6	34.1	34.1	29.8	25.6	21.3

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

C\γ	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	8.5	8.5	8.5	8.5	4.3	4.3	4.3	4.3	4.3	4.3
30.0	8.5	8.5	8.5	4.3	8.5	4.3	4.3	0.0	4.3	0.0
60.0	8.5	8.5	8.5	8.5	4.3	4.3	4.3	4.3	0.0	0.0
90.0	8.5	8.5	4.3	4.3	4.3	4.3	4.3	0.0	0.0	0.0
120.0	8.5	8.5	4.3	8.5	4.3	4.3	4.3	4.3	0.0	4.3
150.0	8.5	8.5	4.3	4.3	4.3	4.3	4.3	4.3	0.0	4.3
180.0	8.5	8.5	8.5	4.3	8.5	4.3	4.3	4.3	4.3	4.3
210.0	8.5	8.5	8.5	8.5	4.3	4.3	4.3	0.0	4.3	4.3
240.0	8.5	8.5	8.5	8.5	8.5	4.3	4.3	4.3	4.3	0.0
270.0	8.5	8.5	8.5	4.3	4.3	4.3	0.0	0.0	4.3	0.0
300.0	8.5	8.5	8.5	8.5	4.3	4.3	4.3	4.3	0.0	0.0
330.0	8.5	8.5	8.5	8.5	4.3	4.3	4.3	4.3	0.0	0.0
360.0	8.5	8.5	8.5	8.5	4.3	4.3	4.3	4.3	4.3	4.3

C\γ	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	4.3	0.0	4.3	0.0	0.0	4.3	4.3	0.0	0.0	0.0
30.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0
60.0	0.0	0.0	4.3	0.0	0.0	4.3	0.0	0.0	0.0	4.3
90.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	4.3	4.3
120.0	0.0	0.0	0.0	4.3	0.0	0.0	4.3	0.0	4.3	0.0
150.0	4.3	0.0	4.3	0.0	4.3	0.0	4.3	0.0	0.0	0.0
180.0	4.3	0.0	4.3	0.0	0.0	4.3	4.3	0.0	0.0	4.3
210.0	0.0	4.3	0.0	4.3	0.0	0.0	0.0	0.0	4.3	0.0
240.0	0.0	0.0	4.3	0.0	0.0	4.3	0.0	0.0	0.0	4.3
270.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0
300.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0
330.0	0.0	0.0	4.3	0.0	4.3	0.0	4.3	0.0	0.0	0.0
360.0	4.3	0.0	4.3	0.0	0.0	4.3	4.3	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	4.3	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	4.3	0.0
60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	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	4.3	0.0	0.0	4.3	4.3	4.3	0.0	0.0
150.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0
180.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	4.3	0.0	0.0
210.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	4.3	0.0
240.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	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	4.3	0.0	0.0
360.0	0.0	0.0	4.3	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	4.3	0.0	0.0	0.0
30.0	0.0	0.0	4.3	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	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120.0	0.0	4.3	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	4.3	0.0	0.0	0.0
180.0	4.3	4.3	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.3
210.0	4.3	0.0	4.3	0.0	0.0	0.0	0.0	0.0	4.3	0.0
240.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	4.3
270.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0
300.0	0.0	4.3	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	4.3	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	4.3	0.0	0.0	4.3	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	4.3	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	4.3	0.0	4.3	4.3	4.3	4.3	0.0	4.3	0.0	0.0
150.0	0.0	0.0	0.0	0.0	4.3	4.3	0.0	4.3	0.0	4.3
180.0	0.0	0.0	4.3	0.0	0.0	4.3	0.0	0.0	4.3	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	4.3	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	4.3	0.0	0.0
330.0	0.0	0.0	0.0	0.0	4.3	4.3	0.0	0.0	0.0	4.3
360.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.3	0.0

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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	0.0	0.0	0.0	0.0	0.0	4.3	0.0	4.3	0.0	4.3
30.0	0.0	0.0	0.0	0.0	4.3	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	4.3
120.0	0.0	4.3	0.0	4.3	0.0	0.0	0.0	4.3	4.3	4.3
150.0	0.0	4.3	0.0	4.3	0.0	0.0	0.0	0.0	4.3	0.0
180.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	4.3	4.3	4.3
210.0	0.0	0.0	0.0	0.0	4.3	4.3	0.0	0.0	0.0	0.0
240.0	0.0	0.0	4.3	0.0	0.0	0.0	4.3	0.0	0.0	0.0
270.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	4.3	4.3
300.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3
330.0	0.0	4.3	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	4.3	0.0	4.3	0.0	4.3

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

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	4.3	4.3	4.3	4.3	4.3	8.5	8.5	8.5	8.5
30.0	4.3	4.3	4.3	4.3	4.3	8.5	4.3	8.5	8.5	8.5
60.0	4.3	4.3	4.3	4.3	4.3	4.3	8.5	8.5	8.5	8.5
90.0	4.3	4.3	4.3	4.3	4.3	8.5	4.3	8.5	8.5	8.5
120.0	4.3	4.3	4.3	8.5	8.5	12.8	12.8	8.5	12.8	12.8
150.0	4.3	4.3	8.5	8.5	8.5	8.5	8.5	8.5	12.8	12.8
180.0	4.3	8.5	8.5	4.3	8.5	8.5	8.5	8.5	12.8	12.8
210.0	4.3	4.3	8.5	8.5	8.5	8.5	8.5	12.8	12.8	12.8
240.0	4.3	4.3	8.5	8.5	8.5	12.8	12.8	12.8	12.8	12.8
270.0	4.3	4.3	4.3	8.5	8.5	8.5	8.5	8.5	12.8	12.8
300.0	4.3	4.3	4.3	4.3	4.3	8.5	8.5	8.5	8.5	8.5
330.0	4.3	4.3	4.3	4.3	4.3	4.3	8.5	8.5	8.5	8.5
360.0	4.3	4.3	4.3	4.3	4.3	4.3	8.5	8.5	8.5	8.5

R852 WWL (CRI90 500mA 20D)**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	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	17.0
30.0	8.5	12.8	12.8	12.8	12.8	12.8	12.8	17.0	12.8	17.0
60.0	8.5	12.8	8.5	12.8	12.8	12.8	12.8	12.8	17.0	12.8
90.0	8.5	8.5	12.8	12.8	12.8	12.8	12.8	12.8	12.8	17.0
120.0	12.8	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
150.0	12.8	12.8	12.8	17.0	17.0	17.0	17.0	17.0	21.3	17.0
180.0	12.8	12.8	17.0	17.0	17.0	17.0	17.0	17.0	21.3	17.0
210.0	12.8	17.0	17.0	12.8	17.0	17.0	17.0	17.0	17.0	17.0
240.0	12.8	12.8	17.0	17.0	17.0	17.0	17.0	17.0	17.0	21.3
270.0	12.8	12.8	12.8	17.0	17.0	17.0	17.0	17.0	17.0	21.3
300.0	12.8	8.5	12.8	12.8	12.8	12.8	12.8	17.0	12.8	17.0
330.0	8.5	12.8	12.8	12.8	12.8	12.8	12.8	12.8	17.0	17.0
360.0	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	17.0

C\γ	160.0	161.0	162.0	163.0	164.0	165.0	166.0	167.0	168.0	169.0
0.0	17.0	17.0	17.0	17.0	17.0	21.3	21.3	21.3	21.3	21.3
30.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	21.3	21.3	21.3
60.0	17.0	17.0	17.0	17.0	17.0	17.0	21.3	21.3	21.3	21.3
90.0	17.0	17.0	17.0	17.0	17.0	17.0	21.3	21.3	21.3	21.3
120.0	21.3	17.0	21.3	21.3	21.3	21.3	21.3	21.3	25.6	25.6
150.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	25.6	25.6
180.0	21.3	21.3	21.3	21.3	21.3	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	25.6
240.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
270.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	25.6
300.0	17.0	17.0	17.0	17.0	17.0	17.0	21.3	17.0	21.3	21.3
330.0	17.0	17.0	17.0	17.0	17.0	17.0	21.3	21.3	21.3	21.3
360.0	17.0	17.0	17.0	17.0	17.0	21.3	21.3	21.3	21.3	21.3

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	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
60.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
90.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
120.0	25.6	25.6	21.3	21.3	25.6	21.3	21.3	21.3	21.3	21.3
150.0	21.3	25.6	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
180.0	21.3	25.6	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
210.0	21.3	25.6	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
240.0	25.6	25.6	21.3	25.6	25.6	21.3	21.3	21.3	21.3	21.3
270.0	21.3	25.6	21.3	25.6	21.3	21.3	21.3	21.3	21.3	21.3
300.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
330.0	21.3	21.3	21.3	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	21.3	
90.0	21.3	
120.0	21.3	
150.0	21.3	
180.0	21.3	
210.0	21.3	
240.0	21.3	
270.0	21.3	
300.0	21.3	
330.0	21.3	
360.0	21.3	

R852 WWL (CRI90 500mA 20D)

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	8052.44	0.00	0.00	0.00	0.00
1	8005.01	7.68	7.68	7.68	7.68
2	7851.31	22.76	30.44	22.76	30.44
3	7590.05	36.93	67.37	36.93	67.37
4	7209.51	49.54	116.91	49.54	116.91
5	6771.48	60.15	177.06	60.15	177.06
6	6241.50	68.39	245.44	68.39	245.44
7	5752.35	74.45	319.89	74.45	319.89
8	5220.95	78.53	398.42	78.53	398.42
9	4677.13	80.22	478.64	80.22	478.64
10	4179.81	80.15	558.79	80.15	558.79
11	3701.31	78.75	637.54	78.75	637.54
12	3239.13	75.87	713.41	75.87	713.41
13	2801.45	71.69	785.10	71.69	785.10
14	2402.46	66.61	851.71	66.61	851.71
15	2080.15	61.54	913.25	61.54	913.25
16	1814.63	57.07	970.32	57.07	970.32
17	1567.56	52.67	1022.99	52.67	1022.99
18	1395.40	48.85	1071.84	48.85	1071.84
19	1255.90	46.13	1117.97	46.13	1117.97
20	1123.49	43.55	1161.52	43.55	1161.52
21	1023.03	41.22	1202.73	41.22	1202.73
22	945.29	39.55	1242.29	39.55	1242.29
23	883.17	38.37	1280.65	38.37	1280.65
24	839.87	37.67	1318.33	37.67	1318.33
25	802.24	37.34	1355.66	34.30	1352.62
26	777.04	37.28	1392.94	0.00	1352.62
27	757.51	37.54	1430.49	0.00	1352.62
28	733.38	37.75	1468.23	0.00	1352.62
29	687.58	37.18	1505.41	0.00	1352.62
30	628.66	35.54	1540.95	0.00	1352.62
31	555.89	32.96	1573.91	0.00	1352.62
32	488.80	29.93	1603.84	0.00	1352.62
33	424.19	26.90	1630.74	0.00	1352.62
34	343.26	23.23	1653.96	0.00	1352.62
35	272.62	19.13	1673.09	0.00	1352.62
36	214.05	15.50	1688.59	0.00	1352.62
37	157.96	12.13	1700.72	0.00	1352.62
38	125.31	9.46	1710.17	0.00	1352.62
39	105.78	7.89	1718.06	0.00	1352.62
40	88.74	6.78	1724.85	0.00	1352.62

R852 WWL (CRI90 500mA 20D)

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	79.16	5.98	1730.82	0.00	1352.62
42	69.57	5.40	1736.23	0.00	1352.62
43	59.64	4.79	1741.01	0.00	1352.62
44	50.76	4.17	1745.18	0.00	1352.62
45	40.11	3.49	1748.67	0.00	1352.62
46	32.30	2.83	1751.51	0.00	1352.62
47	29.46	2.46	1753.96	0.00	1352.62
48	25.91	2.24	1756.20	0.00	1352.62
49	22.72	2.00	1758.20	0.00	1352.62
50	21.30	1.84	1760.03	0.00	1352.62
51	20.94	1.79	1761.82	0.00	1352.62
52	17.39	1.65	1763.46	0.00	1352.62
53	17.75	1.53	1764.99	0.00	1352.62
54	17.04	1.53	1766.53	0.00	1352.62
55	15.62	1.46	1767.98	0.00	1352.62
56	15.26	1.40	1769.38	0.00	1352.62
57	14.55	1.36	1770.74	0.00	1352.62
58	13.84	1.31	1772.06	0.00	1352.62
59	13.84	1.29	1773.35	0.00	1352.62
60	12.78	1.26	1774.61	0.00	1352.62
61	12.78	1.22	1775.83	0.00	1352.62
62	12.78	1.23	1777.06	0.00	1352.62
63	13.13	1.26	1778.32	0.00	1352.62
64	12.78	1.27	1779.59	0.00	1352.62
65	12.78	1.26	1780.86	0.00	1352.62
66	12.07	1.24	1782.10	0.00	1352.62
67	11.00	1.16	1783.26	0.00	1352.62
68	9.94	1.06	1784.32	0.00	1352.62
69	8.87	0.96	1785.28	0.00	1352.62
70	8.52	0.89	1786.17	0.00	1352.62
71	8.52	0.88	1787.05	0.00	1352.62
72	7.45	0.83	1787.88	0.00	1352.62
73	6.74	0.74	1788.62	0.00	1352.62
74	5.32	0.63	1789.26	0.00	1352.62
75	4.26	0.51	1789.76	0.00	1352.62
76	3.90	0.43	1790.20	0.00	1352.62
77	2.84	0.36	1790.56	0.00	1352.62
78	2.13	0.27	1790.82	0.00	1352.62
79	1.77	0.21	1791.03	0.00	1352.62
80	1.06	0.15	1791.19	0.00	1352.62
81	0.35	0.08	1791.26	0.00	1352.62

R852 WWL (CRI90 500mA 20D)

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	2.13	0.13	1791.40	0.00	1352.62
83	1.06	0.17	1791.57	0.00	1352.62
84	0.71	0.10	1791.67	0.00	1352.62
85	1.42	0.12	1791.78	0.00	1352.62
86	2.13	0.19	1791.98	0.00	1352.62
87	0.35	0.14	1792.11	0.00	1352.62
88	1.42	0.10	1792.21	0.00	1352.62
89	1.42	0.16	1792.37	0.00	1352.62
90	0.00	0.08	1792.45	0.00	1352.62
91	0.00	0.00	1792.45	0.00	1352.62
92	1.06	0.06	1792.50	0.00	1352.62
93	0.00	0.06	1792.56	0.00	1352.62
94	0.00	0.00	1792.56	0.00	1352.62
95	0.35	0.02	1792.58	0.00	1352.62
96	0.71	0.06	1792.64	0.00	1352.62
97	2.13	0.15	1792.79	0.00	1352.62
98	0.71	0.15	1792.95	0.00	1352.62
99	0.00	0.04	1792.99	0.00	1352.62
100	0.71	0.04	1793.03	0.00	1352.62
101	1.42	0.11	1793.14	0.00	1352.62
102	1.06	0.13	1793.27	0.00	1352.62
103	0.00	0.06	1793.33	0.00	1352.62
104	0.00	0.00	1793.33	0.00	1352.62
105	0.00	0.00	1793.33	0.00	1352.62
106	1.42	0.08	1793.41	0.00	1352.62
107	0.00	0.07	1793.48	0.00	1352.62
108	0.71	0.04	1793.52	0.00	1352.62
109	0.71	0.07	1793.59	0.00	1352.62
110	0.35	0.06	1793.65	0.00	1352.62
111	0.00	0.02	1793.66	0.00	1352.62
112	0.71	0.04	1793.70	0.00	1352.62
113	0.35	0.05	1793.75	0.00	1352.62
114	1.77	0.11	1793.86	0.00	1352.62
115	1.77	0.18	1794.04	0.00	1352.62
116	0.00	0.09	1794.13	0.00	1352.62
117	1.06	0.05	1794.18	0.00	1352.62
118	0.71	0.09	1794.27	0.00	1352.62
119	0.71	0.07	1794.33	0.00	1352.62
120	0.00	0.03	1794.37	0.00	1352.62
121	1.06	0.05	1794.42	0.00	1352.62
122	0.71	0.08	1794.50	0.00	1352.62

R852 WWL (CRI90 500mA 20D)

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	0.71	0.07	1794.57	0.00	1352.62
124	0.71	0.06	1794.63	0.00	1352.62
125	1.06	0.08	1794.71	0.00	1352.62
126	0.35	0.06	1794.77	0.00	1352.62
127	1.06	0.06	1794.84	0.00	1352.62
128	1.42	0.11	1794.95	0.00	1352.62
129	2.13	0.15	1795.10	0.00	1352.62
130	0.71	0.12	1795.22	0.00	1352.62
131	1.77	0.10	1795.32	0.00	1352.62
132	2.13	0.16	1795.48	0.00	1352.62
133	2.84	0.20	1795.68	0.00	1352.62
134	2.13	0.20	1795.88	0.00	1352.62
135	3.19	0.21	1796.09	0.00	1352.62
136	3.55	0.26	1796.35	0.00	1352.62
137	3.90	0.28	1796.63	0.00	1352.62
138	3.90	0.29	1796.92	0.00	1352.62
139	4.26	0.30	1797.22	0.00	1352.62
140	4.26	0.30	1797.52	0.00	1352.62
141	4.61	0.31	1797.83	0.00	1352.62
142	5.68	0.35	1798.18	0.00	1352.62
143	6.03	0.39	1798.57	0.00	1352.62
144	6.39	0.41	1798.98	0.00	1352.62
145	8.16	0.46	1799.44	0.00	1352.62
146	8.52	0.52	1799.96	0.00	1352.62
147	9.23	0.54	1800.50	0.00	1352.62
148	10.65	0.59	1801.08	0.00	1352.62
149	10.65	0.61	1801.69	0.00	1352.62
150	11.36	0.61	1802.30	0.00	1352.62
151	12.78	0.65	1802.96	0.00	1352.62
152	13.84	0.70	1803.65	0.00	1352.62
153	14.55	0.72	1804.37	0.00	1352.62
154	14.91	0.72	1805.09	0.00	1352.62
155	14.91	0.70	1805.80	0.00	1352.62
156	14.91	0.68	1806.47	0.00	1352.62
157	15.62	0.67	1807.14	0.00	1352.62
158	16.33	0.67	1807.81	0.00	1352.62
159	17.39	0.68	1808.49	0.00	1352.62
160	19.17	0.70	1809.19	0.00	1352.62
161	18.81	0.70	1809.89	0.00	1352.62
162	19.17	0.66	1810.55	0.00	1352.62
163	19.17	0.63	1811.18	0.00	1352.62

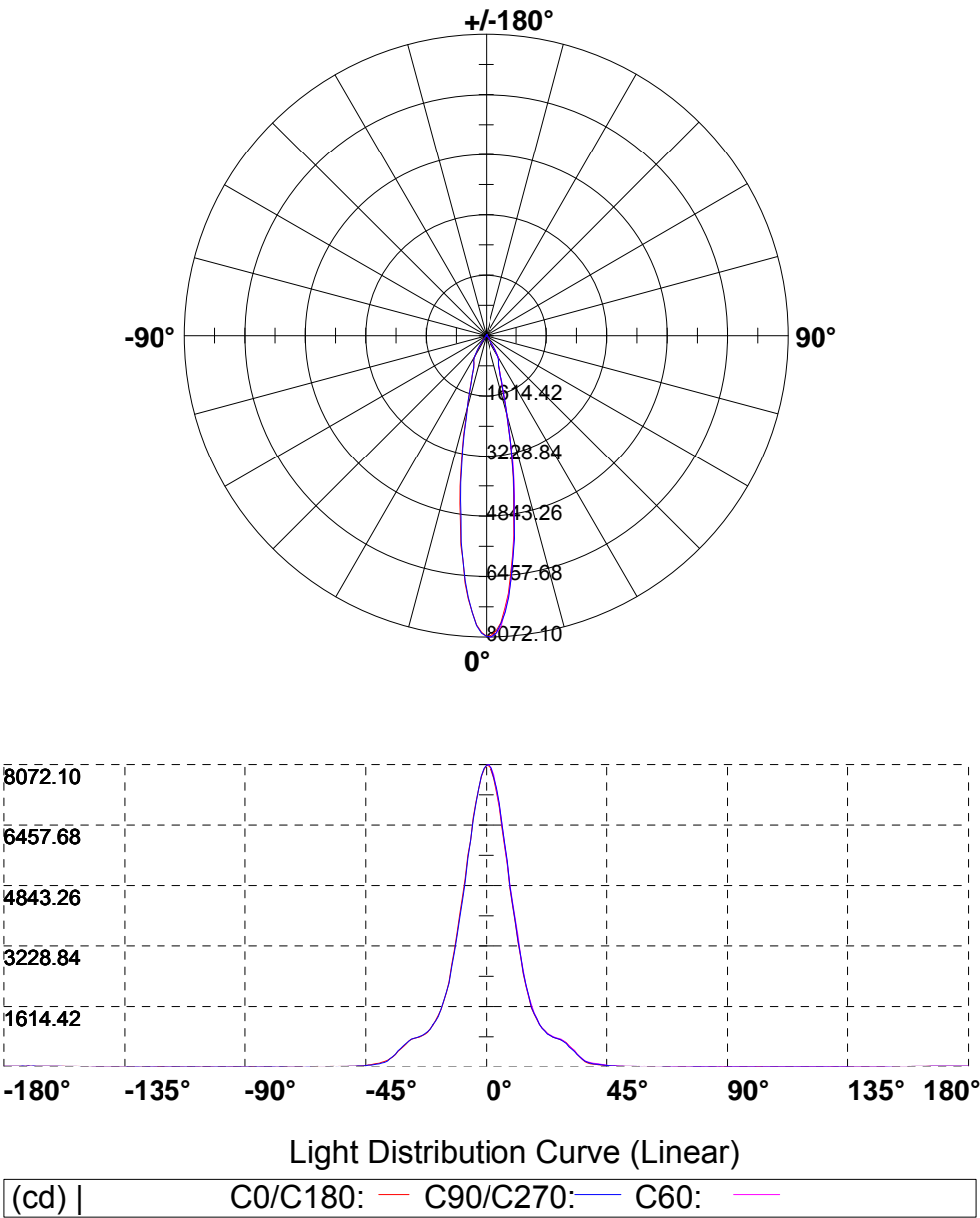
R852 WWL (CRI90 500mA 20D)

Zonal flux distribution table

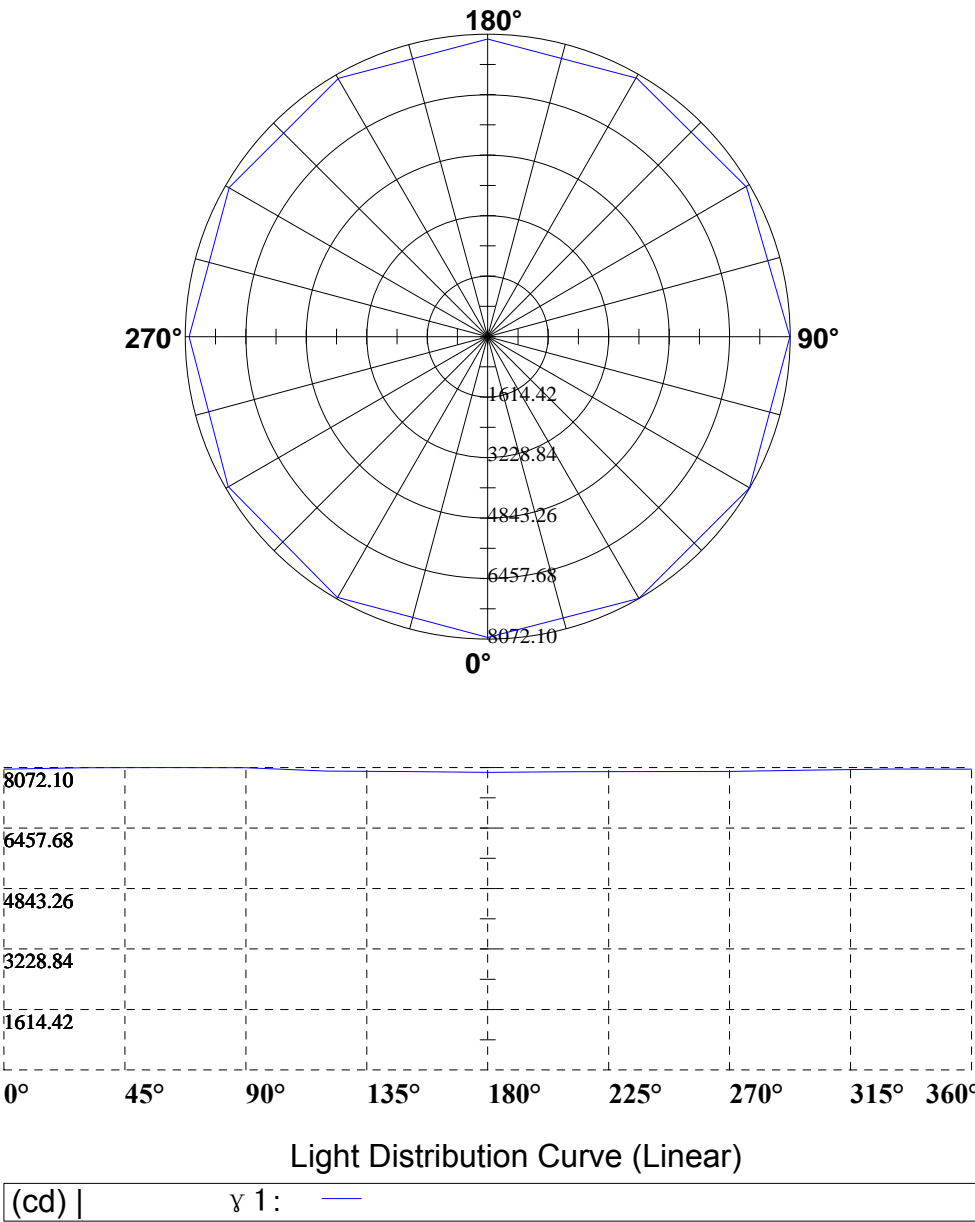
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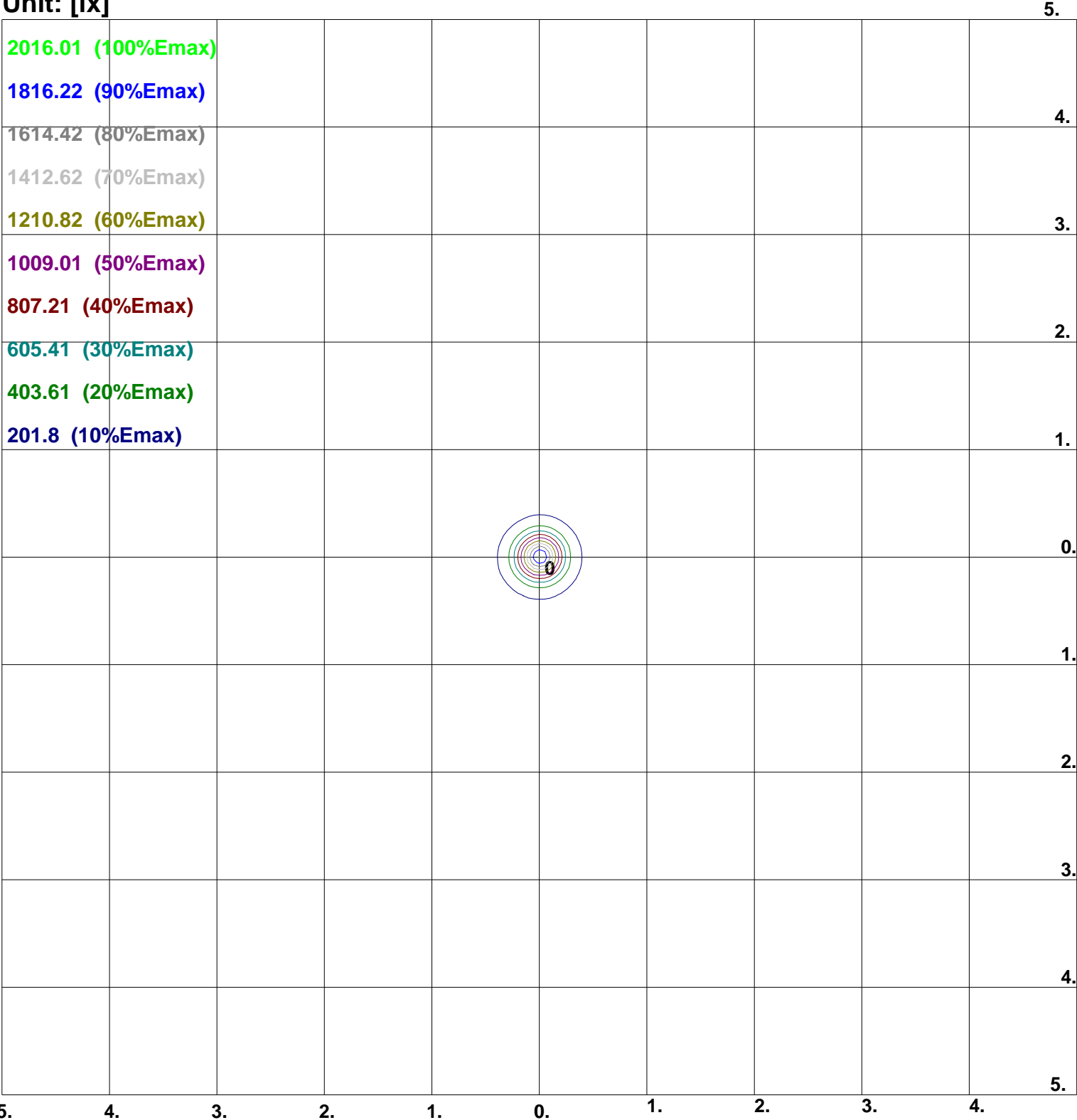
[illegible]

Light Distribution Curve [Unit: cd]



Horizontal cone through Max.cd [Unit: cd]





Coordinate Scale: d/h
Height: 2 m
Max Illuminance : 2018.02lx

Luminance Limiting Curve (There is not luminous side)

Diameter: 115mm

Length: -115mm

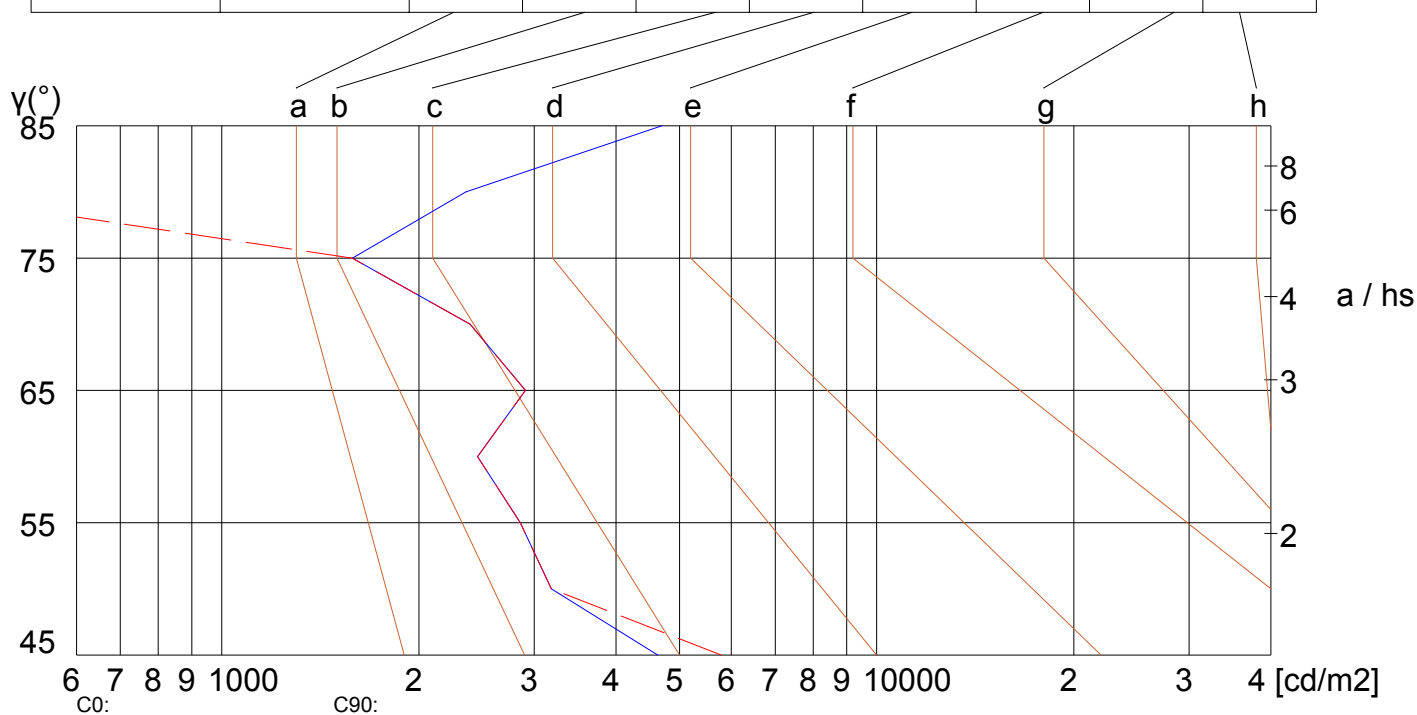
Width: -115mm

Height: 72mm

(cd/m²)

γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	5792	3186	2856	2458	2907	2395	1583	0	0
C90	4634	3186	2856	2458	2907	2395	1583	2359	4699

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 20D)

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	1.01	1.01	1.01	0.99	0.99	0.99	0.94	0.94	0.94	0.90	0.90	0.90	0.86	0.86	0.86	0.85
1	0.98	0.98	0.97	0.97	0.96	0.95	0.93	0.92	0.91	0.88	0.87	0.87	0.82	0.81	0.80	0.76
2	0.94	0.93	0.93	0.92	0.91	0.91	0.89	0.88	0.87	0.85	0.83	0.82	0.79	0.78	0.76	0.72
3	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.82	0.81	0.80	0.78	0.77	0.75	0.73	0.69
4	0.86	0.85	0.84	0.85	0.83	0.83	0.82	0.80	0.79	0.78	0.76	0.75	0.74	0.72	0.70	0.66
5	0.83	0.82	0.81	0.81	0.80	0.79	0.79	0.77	0.75	0.76	0.73	0.71	0.72	0.69	0.67	0.64
6	0.79	0.78	0.78	0.78	0.77	0.76	0.76	0.74	0.72	0.73	0.70	0.69	0.70	0.67	0.64	0.61
7	0.77	0.76	0.75	0.75	0.74	0.73	0.73	0.71	0.70	0.70	0.68	0.66	0.67	0.64	0.62	0.59
8	0.74	0.73	0.72	0.73	0.71	0.71	0.71	0.69	0.67	0.68	0.65	0.64	0.65	0.62	0.60	0.57
9	0.71	0.70	0.70	0.70	0.69	0.68	0.68	0.66	0.65	0.66	0.63	0.61	0.63	0.60	0.58	0.55
10	0.69	0.68	0.68	0.68	0.67	0.66	0.66	0.64	0.63	0.64	0.61	0.59	0.62	0.58	0.56	0.53

