

R852 WWL (CRI90 350mA 20D)

Luminaire Name: R852 WWL (CRI90 350mA 20D)

Report NO.: 01313217052417A

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: 230.46 V

Current: 0.0697 A

Power: 15.606 W

Power Factor: 0.9722

Ballast Type: PHILIPS XITANIUM 15W 0.35A 42V I 230V

Width: -115mm

Height: 72mm

Optical Component: 20D Reflector DC(V:36.21V I:0.348A P:12.601W)

Photometric Results

Lumens: 1215.24 lm

Efficiency: 83.5%

Central Intensity: 7810.62cd

Maximum Intensity: 7837.817cd

Beam Angle(10%): Left: -18.0 Right:16.8

Maximum s/h: C0_180: 0.16 C90_270: 0.16

Effective Luminous Flux: 780.58 lm

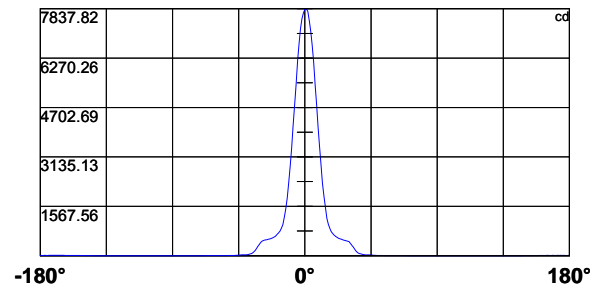
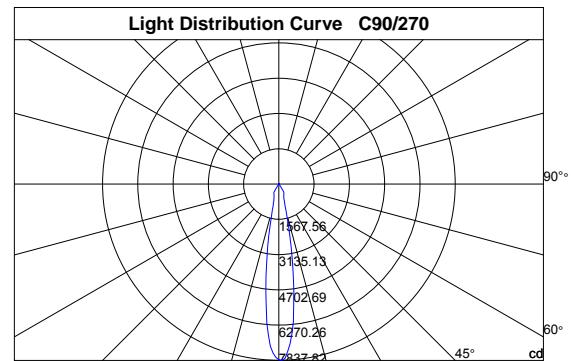
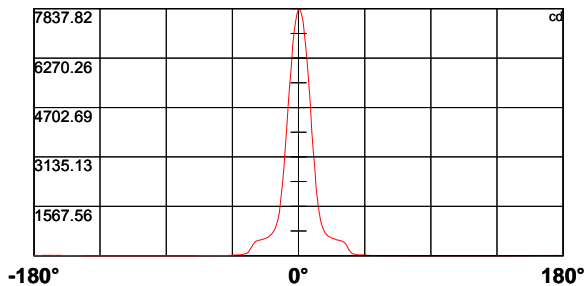
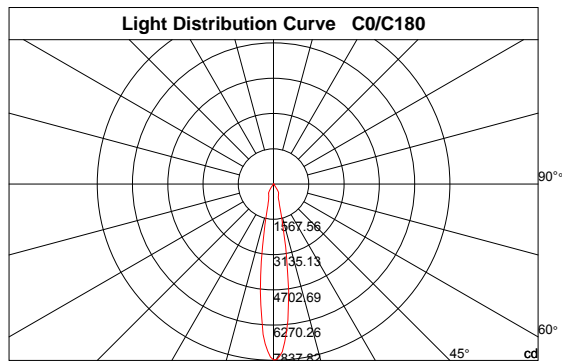
Angle of maximum intensity: C:90.0 G:1.0

Half Peak Side Angle(50%): Left: -9.3 Right:8.2

Up Flux Rate: 0.52%

Down Flux Rate: 82.98%

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	7810.6	7803.7	7658.9	7463.0	7037.0	6598.2	6091.3	5414.1	4800.7	3961.5
30.0	7810.6	7816.5	7663.2	7450.2	7079.6	6653.6	6138.2	5354.4	4728.2	4204.3
60.0	7810.6	7812.3	7684.5	7492.8	7130.7	6692.0	6163.8	5384.2	4856.0	4029.7
90.0	7810.6	7837.8	7748.4	7458.7	7122.2	6683.4	6159.5	5384.2	4775.1	4068.0
120.0	7810.6	7680.2	7458.7	7075.3	6645.1	6129.7	5388.5	4817.7	4217.1	3539.8
150.0	7810.6	7646.1	7424.6	7100.9	6594.0	6087.1	5345.9	4753.8	4178.7	3586.7
180.0	7810.6	7684.5	7428.9	7105.2	6692.0	5993.4	5409.8	4804.9	4080.8	3471.6
210.0	7810.6	7693.0	7454.4	7152.0	6726.0	6116.9	5516.3	4677.1	4051.0	3446.1
240.0	7810.6	7701.5	7463.0	7169.0	6674.9	6129.7	5541.8	4809.2	4166.0	3544.1
270.0	7810.6	7697.2	7514.1	7207.4	6726.0	6180.8	5384.2	4753.8	4140.4	3429.0
300.0	7810.6	7803.7	7693.0	7411.8	7083.9	6640.8	6014.7	5418.3	4813.4	4093.6
330.0	7810.6	7803.7	7701.5	7411.8	7088.1	6581.2	6065.8	5486.5	4660.1	4046.7
360.0	7810.6	7803.7	7658.9	7463.0	7037.0	6598.2	6091.3	5414.1	4800.7	3961.5

C\γ	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	3335.3	2841.2	2146.9	1720.9	1392.9	1116.0	949.9	830.6	728.4	673.0
30.0	3369.4	2773.1	2240.6	1729.4	1392.9	1082.0	924.4	817.9	728.4	677.3
60.0	3412.0	2832.7	2296.0	1776.3	1435.5	1116.0	949.9	851.9	741.2	685.8
90.0	3467.4	2900.8	2308.7	1870.0	1525.0	1179.9	996.8	869.0	762.5	698.6
120.0	2986.0	2308.7	1882.8	1584.6	1231.0	1043.6	911.6	796.6	728.4	673.0
150.0	2828.4	2321.5	1878.5	1473.8	1218.3	1009.5	886.0	792.3	707.1	660.3
180.0	2798.6	2270.4	1827.4	1384.4	1150.1	992.5	856.2	775.3	702.8	660.3
210.0	2756.0	2313.0	1712.4	1384.4	1120.3	966.9	851.9	762.5	707.1	660.3
240.0	2768.8	2330.0	1733.7	1405.7	1162.9	971.2	860.5	775.3	698.6	651.7
270.0	2862.5	2347.1	1823.1	1482.4	1222.5	988.2	873.2	779.5	719.9	673.0
300.0	3488.7	2726.2	2215.0	1780.5	1380.1	1137.3	966.9	826.4	749.7	694.3
330.0	3437.6	2764.5	2240.6	1793.3	1397.2	1154.4	928.6	817.9	736.9	677.3
360.0	3335.3	2841.2	2146.9	1720.9	1392.9	1116.0	949.9	830.6	728.4	673.0

C\γ	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	630.4	600.6	579.3	553.8	536.7	523.9	502.6	494.1	481.3	468.6
30.0	639.0	604.9	575.1	558.0	532.5	515.4	502.6	489.9	477.1	464.3
60.0	634.7	604.9	579.3	549.5	532.5	515.4	502.6	489.9	477.1	464.3
90.0	647.5	613.4	583.6	553.8	536.7	519.7	498.4	485.6	477.1	460.0
120.0	621.9	587.8	562.3	545.2	528.2	511.2	502.6	489.9	472.8	451.5
150.0	621.9	587.8	562.3	545.2	523.9	511.2	498.4	481.3	468.6	455.8
180.0	617.7	583.6	562.3	541.0	528.2	511.2	498.4	489.9	472.8	460.0
210.0	613.4	583.6	562.3	541.0	528.2	515.4	502.6	494.1	481.3	464.3
240.0	613.4	583.6	562.3	545.2	532.5	519.7	502.6	494.1	485.6	464.3
270.0	617.7	592.1	566.5	545.2	532.5	519.7	506.9	498.4	485.6	464.3
300.0	639.0	609.1	579.3	558.0	541.0	519.7	502.6	494.1	477.1	468.6
330.0	639.0	609.1	579.3	558.0	532.5	515.4	502.6	489.9	477.1	468.6
360.0	630.4	600.6	579.3	553.8	536.7	523.9	502.6	494.1	481.3	468.6

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Intensity Data [cd]

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C\γ	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	455.8	426.0	370.6	302.4	200.2	140.6	89.5	59.6	51.1	38.3
30.0	455.8	421.7	345.0	272.6	195.9	132.1	80.9	59.6	46.9	34.1
60.0	451.5	391.9	332.3	264.1	187.4	127.8	80.9	63.9	51.1	38.3
90.0	447.3	387.6	323.7	264.1	191.7	132.1	93.7	68.2	59.6	42.6
120.0	404.7	328.0	251.3	187.4	115.0	68.2	46.9	38.3	34.1	25.6
150.0	400.4	332.3	259.8	166.1	106.5	68.2	51.1	42.6	34.1	25.6
180.0	413.2	340.8	264.1	191.7	115.0	80.9	63.9	55.4	42.6	34.1
210.0	417.4	345.0	268.4	200.2	119.3	85.2	63.9	51.1	42.6	34.1
240.0	421.7	349.3	281.1	208.7	136.3	89.5	68.2	51.1	42.6	34.1
270.0	421.7	353.6	289.7	213.0	153.3	106.5	76.7	59.6	46.9	34.1
300.0	447.3	421.7	366.3	281.1	204.5	149.1	93.7	51.1	42.6	29.8
330.0	451.5	426.0	379.1	289.7	217.2	153.3	85.2	51.1	42.6	34.1
360.0	455.8	426.0	370.6	302.4	200.2	140.6	89.5	59.6	51.1	38.3

C\γ	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0
0.0	29.8	25.6	25.6	29.8	25.6	25.6	21.3	12.8	12.8	8.5
30.0	29.8	25.6	25.6	25.6	25.6	25.6	17.0	12.8	12.8	8.5
60.0	29.8	25.6	25.6	25.6	25.6	25.6	17.0	12.8	12.8	12.8
90.0	34.1	29.8	25.6	29.8	25.6	25.6	17.0	12.8	12.8	8.5
120.0	25.6	21.3	21.3	21.3	17.0	17.0	12.8	12.8	8.5	8.5
150.0	25.6	21.3	21.3	21.3	17.0	17.0	12.8	12.8	8.5	8.5
180.0	29.8	29.8	25.6	25.6	21.3	17.0	12.8	12.8	8.5	8.5
210.0	29.8	29.8	29.8	29.8	29.8	17.0	12.8	12.8	12.8	8.5
240.0	29.8	29.8	29.8	29.8	29.8	21.3	12.8	12.8	12.8	8.5
270.0	29.8	29.8	29.8	29.8	25.6	21.3	12.8	12.8	8.5	8.5
300.0	25.6	21.3	17.0	17.0	17.0	17.0	17.0	12.8	12.8	8.5
330.0	25.6	21.3	21.3	21.3	17.0	17.0	17.0	12.8	8.5	8.5
360.0	29.8	25.6	25.6	29.8	25.6	25.6	21.3	12.8	12.8	8.5

C\γ	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
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	4.3	4.3	4.3	4.3	4.3	4.3
60.0	8.5	8.5	8.5	4.3	4.3	4.3	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	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
150.0	8.5	8.5	4.3	4.3	4.3	4.3	4.3	8.5	4.3	4.3
180.0	8.5	8.5	8.5	8.5	8.5	8.5	4.3	4.3	4.3	4.3
210.0	8.5	8.5	4.3	8.5	8.5	4.3	8.5	8.5	4.3	4.3
240.0	8.5	8.5	8.5	8.5	4.3	4.3	4.3	4.3	8.5	4.3
270.0	8.5	8.5	8.5	4.3	4.3	4.3	4.3	4.3	4.3	4.3
300.0	8.5	8.5	8.5	4.3	4.3	4.3	4.3	4.3	4.3	4.3
330.0	8.5	4.3	4.3	8.5	4.3	4.3	4.3	4.3	4.3	4.3
360.0	8.5	8.5	8.5	8.5	4.3	4.3	4.3	4.3	4.3	4.3

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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	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
30.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	0.0
60.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	0.0
90.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	0.0
120.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	0.0
150.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
180.0	4.3	4.3	4.3	8.5	4.3	4.3	4.3	4.3	4.3	4.3
210.0	4.3	8.5	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
240.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	0.0
270.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	0.0	4.3
300.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	0.0
330.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
360.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	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	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90.0	4.3	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	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.0	4.3	0.0	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	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	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
360.0	4.3	0.0	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

R852 WWL (CRI90 350mA 20D)**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	0.0	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 WWL (CRI90 350mA 20D)**Intensity Data [cd]****Page6**

C\γ	120.0	121.0	122.0	123.0	124.0	125.0	126.0	127.0	128.0	129.0
0.0	0.0	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	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	140.0	141.0	142.0	143.0	144.0	145.0	146.0	147.0	148.0	149.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3
30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3
60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3
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	0.0	0.0	0.0	4.3	0.0	0.0	4.3	4.3	4.3
150.0	0.0	0.0	0.0	0.0	0.0	4.3	4.3	4.3	4.3	4.3
180.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	4.3	4.3
210.0	0.0	0.0	0.0	0.0	0.0	4.3	4.3	4.3	4.3	4.3
240.0	0.0	0.0	0.0	0.0	4.3	4.3	4.3	4.3	4.3	4.3
270.0	0.0	0.0	0.0	0.0	0.0	4.3	4.3	4.3	4.3	4.3
300.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	4.3
330.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3
360.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3

R852 WWL (CRI90 350mA 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	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	8.5	8.5
30.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	8.5	4.3	8.5
60.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	8.5
90.0	4.3	4.3	4.3	4.3	4.3	4.3	8.5	4.3	4.3	8.5
120.0	4.3	4.3	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
150.0	8.5	4.3	8.5	4.3	8.5	8.5	8.5	8.5	8.5	8.5
180.0	4.3	4.3	8.5	8.5	8.5	8.5	4.3	8.5	8.5	8.5
210.0	4.3	4.3	8.5	4.3	8.5	8.5	8.5	8.5	8.5	8.5
240.0	4.3	4.3	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
270.0	4.3	8.5	4.3	8.5	8.5	8.5	8.5	8.5	8.5	8.5
300.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
330.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
360.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	8.5	8.5

C\γ	160.0	161.0	162.0	163.0	164.0	165.0	166.0	167.0	168.0	169.0
0.0	4.3	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
30.0	4.3	4.3	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
60.0	8.5	4.3	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
90.0	8.5	8.5	8.5	8.5	8.5	12.8	8.5	8.5	8.5	12.8
120.0	8.5	8.5	8.5	8.5	8.5	12.8	12.8	12.8	12.8	12.8
150.0	8.5	8.5	8.5	12.8	12.8	12.8	8.5	12.8	12.8	12.8
180.0	8.5	8.5	12.8	12.8	12.8	12.8	8.5	12.8	12.8	12.8
210.0	8.5	8.5	8.5	12.8	8.5	12.8	12.8	12.8	8.5	12.8
240.0	8.5	8.5	8.5	8.5	12.8	12.8	12.8	12.8	12.8	12.8
270.0	8.5	8.5	8.5	8.5	12.8	12.8	12.8	12.8	12.8	12.8
300.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
330.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
360.0	4.3	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5

C\γ	170.0	171.0	172.0	173.0	174.0	175.0	176.0	177.0	178.0	179.0
0.0	8.5	8.5	8.5	8.5	8.5	8.5	12.8	8.5	8.5	8.5
30.0	8.5	8.5	12.8	12.8	8.5	8.5	12.8	12.8	8.5	8.5
60.0	8.5	8.5	8.5	8.5	12.8	8.5	8.5	8.5	8.5	8.5
90.0	8.5	8.5	12.8	8.5	12.8	8.5	12.8	8.5	8.5	8.5
120.0	12.8	12.8	12.8	12.8	12.8	8.5	8.5	12.8	12.8	8.5
150.0	12.8	12.8	12.8	12.8	12.8	12.8	8.5	8.5	8.5	12.8
180.0	12.8	12.8	12.8	12.8	12.8	8.5	8.5	8.5	12.8	8.5
210.0	12.8	12.8	12.8	8.5	12.8	8.5	8.5	8.5	12.8	12.8
240.0	12.8	12.8	12.8	12.8	12.8	12.8	12.8	8.5	12.8	8.5
270.0	12.8	12.8	12.8	12.8	12.8	8.5	8.5	12.8	8.5	8.5
300.0	12.8	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
330.0	8.5	8.5	8.5	12.8	12.8	8.5	12.8	8.5	8.5	8.5
360.0	8.5	8.5	8.5	8.5	8.5	8.5	12.8	8.5	8.5	8.5

Intensity Data [cd]

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C\γ	180.0
0.0	12.8
30.0	12.8
60.0	12.8
90.0	12.8
120.0	12.8
150.0	8.5
180.0	12.8
210.0	12.8
240.0	12.8
270.0	12.8
300.0	12.8
330.0	8.5
360.0	12.8

R852 WWL (CRI90 350mA 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	7810.62	0.00	0.00	0.00	0.00
1	7748.36	7.44	7.44	7.44	7.44
2	7574.43	21.99	29.44	21.99	29.44
3	7291.51	35.55	64.99	35.55	64.99
4	6883.29	47.45	112.44	47.45	112.44
5	6373.91	57.03	169.47	57.03	169.47
6	5768.32	63.81	233.28	63.81	233.28
7	5088.19	67.39	300.67	67.39	300.67
8	4455.63	68.30	368.97	68.30	368.97
9	3785.08	66.79	435.76	66.79	435.76
10	3125.90	62.54	498.30	62.54	498.30
11	2560.78	56.82	555.12	56.82	555.12
12	2025.48	50.13	605.26	50.13	605.26
13	1615.49	43.21	648.47	43.21	648.47
14	1302.40	37.35	685.81	37.35	685.81
15	1063.15	32.48	718.29	32.48	718.29
16	912.99	28.96	747.24	28.96	747.24
17	807.92	26.80	774.04	26.80	774.04
18	725.92	25.29	799.33	6.54	780.58
19	673.74	24.35	823.68	0.00	780.58
20	627.95	23.82	847.51	0.00	780.58
21	596.71	23.52	871.03	0.00	780.58
22	571.15	23.47	894.49	0.00	780.58
23	549.50	23.51	918.01	0.00	780.58
24	532.11	23.65	941.66	0.00	780.58
25	516.49	23.84	965.50	0.00	780.58
26	501.93	24.04	989.54	0.00	780.58
27	490.93	24.29	1013.83	0.00	780.58
28	477.79	24.53	1038.36	0.00	780.58
29	462.89	24.61	1062.97	0.00	780.58
30	432.36	24.17	1087.14	0.00	780.58
31	376.98	22.52	1109.66	0.00	780.58
32	310.96	19.71	1129.37	0.00	780.58
33	236.77	16.14	1145.51	0.00	780.58
34	161.87	12.06	1157.57	0.00	780.58
35	111.11	8.48	1166.05	0.00	780.58
36	74.54	5.91	1171.96	0.00	780.58
37	54.31	4.20	1176.16	0.00	780.58
38	44.73	3.31	1179.47	0.00	780.58
39	33.72	2.68	1182.14	0.00	780.58
40	28.75	2.18	1184.32	0.00	780.58

R852 WWL (CRI90 350mA 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	25.91	1.95	1186.27	0.00	780.58
42	24.85	1.84	1188.11	0.00	780.58
43	25.56	1.87	1189.98	0.00	780.58
44	23.07	1.84	1191.82	0.00	780.58
45	20.59	1.68	1193.49	0.00	780.58
46	15.26	1.40	1194.90	0.00	780.58
47	12.78	1.12	1196.01	0.00	780.58
48	11.00	0.96	1196.97	0.00	780.58
49	8.87	0.82	1197.79	0.00	780.58
50	8.52	0.73	1198.51	0.00	780.58
51	8.16	0.71	1199.22	0.00	780.58
52	7.10	0.65	1199.88	0.00	780.58
53	6.39	0.59	1200.46	0.00	780.58
54	4.97	0.50	1200.96	0.00	780.58
55	4.61	0.43	1201.39	0.00	780.58
56	4.61	0.42	1201.81	0.00	780.58
57	4.97	0.44	1202.25	0.00	780.58
58	4.61	0.44	1202.69	0.00	780.58
59	4.26	0.41	1203.10	0.00	780.58
60	4.26	0.40	1203.51	0.00	780.58
61	4.61	0.42	1203.93	0.00	780.58
62	4.26	0.43	1204.36	0.00	780.58
63	4.61	0.43	1204.79	0.00	780.58
64	4.26	0.44	1205.23	0.00	780.58
65	4.26	0.42	1205.65	0.00	780.58
66	4.26	0.43	1206.07	0.00	780.58
67	4.26	0.43	1206.50	0.00	780.58
68	3.90	0.41	1206.91	0.00	780.58
69	2.13	0.31	1207.22	0.00	780.58
70	3.19	0.27	1207.50	0.00	780.58
71	0.35	0.18	1207.68	0.00	780.58
72	0.35	0.04	1207.72	0.00	780.58
73	0.00	0.02	1207.73	0.00	780.58
74	0.00	0.00	1207.73	0.00	780.58
75	0.00	0.00	1207.73	0.00	780.58
76	0.00	0.00	1207.73	0.00	780.58
77	0.00	0.00	1207.73	0.00	780.58
78	0.00	0.00	1207.73	0.00	780.58
79	0.00	0.00	1207.73	0.00	780.58
80	0.00	0.00	1207.73	0.00	780.58
81	0.00	0.00	1207.73	0.00	780.58

R852 WWL (CRI90 350mA 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	0.00	0.00	1207.73	0.00	780.58
83	0.00	0.00	1207.73	0.00	780.58
84	0.00	0.00	1207.73	0.00	780.58
85	0.00	0.00	1207.73	0.00	780.58
86	0.00	0.00	1207.73	0.00	780.58
87	0.00	0.00	1207.73	0.00	780.58
88	0.00	0.00	1207.73	0.00	780.58
89	0.00	0.00	1207.73	0.00	780.58
90	0.00	0.00	1207.73	0.00	780.58
91	0.00	0.00	1207.73	0.00	780.58
92	0.00	0.00	1207.73	0.00	780.58
93	0.00	0.00	1207.73	0.00	780.58
94	0.00	0.00	1207.73	0.00	780.58
95	0.00	0.00	1207.73	0.00	780.58
96	0.00	0.00	1207.73	0.00	780.58
97	0.00	0.00	1207.73	0.00	780.58
98	0.00	0.00	1207.73	0.00	780.58
99	0.00	0.00	1207.73	0.00	780.58
100	0.00	0.00	1207.73	0.00	780.58
101	0.00	0.00	1207.73	0.00	780.58
102	0.00	0.00	1207.73	0.00	780.58
103	0.00	0.00	1207.73	0.00	780.58
104	0.00	0.00	1207.73	0.00	780.58
105	0.00	0.00	1207.73	0.00	780.58
106	0.00	0.00	1207.73	0.00	780.58
107	0.00	0.00	1207.73	0.00	780.58
108	0.00	0.00	1207.73	0.00	780.58
109	0.00	0.00	1207.73	0.00	780.58
110	0.00	0.00	1207.73	0.00	780.58
111	0.00	0.00	1207.73	0.00	780.58
112	0.00	0.00	1207.73	0.00	780.58
113	0.00	0.00	1207.73	0.00	780.58
114	0.00	0.00	1207.73	0.00	780.58
115	0.00	0.00	1207.73	0.00	780.58
116	0.00	0.00	1207.73	0.00	780.58
117	0.00	0.00	1207.73	0.00	780.58
118	0.00	0.00	1207.73	0.00	780.58
119	0.00	0.00	1207.73	0.00	780.58
120	0.00	0.00	1207.73	0.00	780.58
121	0.00	0.00	1207.73	0.00	780.58
122	0.00	0.00	1207.73	0.00	780.58

R852 WWL (CRI90 350mA 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	0.00	0.00	1207.73	0.00	780.58
124	0.00	0.00	1207.73	0.00	780.58
125	0.00	0.00	1207.73	0.00	780.58
126	0.00	0.00	1207.73	0.00	780.58
127	0.00	0.00	1207.73	0.00	780.58
128	0.00	0.00	1207.73	0.00	780.58
129	0.00	0.00	1207.73	0.00	780.58
130	0.00	0.00	1207.73	0.00	780.58
131	0.00	0.00	1207.73	0.00	780.58
132	0.00	0.00	1207.73	0.00	780.58
133	0.00	0.00	1207.73	0.00	780.58
134	0.00	0.00	1207.73	0.00	780.58
135	0.00	0.00	1207.73	0.00	780.58
136	0.00	0.00	1207.73	0.00	780.58
137	0.00	0.00	1207.73	0.00	780.58
138	0.00	0.00	1207.73	0.00	780.58
139	0.00	0.00	1207.73	0.00	780.58
140	0.00	0.00	1207.73	0.00	780.58
141	0.00	0.00	1207.73	0.00	780.58
142	0.00	0.00	1207.73	0.00	780.58
143	0.00	0.00	1207.73	0.00	780.58
144	0.71	0.02	1207.76	0.00	780.58
145	1.42	0.07	1207.82	0.00	780.58
146	1.42	0.09	1207.91	0.00	780.58
147	2.13	0.11	1208.02	0.00	780.58
148	2.48	0.14	1208.16	0.00	780.58
149	4.26	0.19	1208.35	0.00	780.58
150	4.61	0.25	1208.60	0.00	780.58
151	4.61	0.25	1208.85	0.00	780.58
152	6.03	0.28	1209.12	0.00	780.58
153	5.68	0.30	1209.42	0.00	780.58
154	6.39	0.30	1209.72	0.00	780.58
155	6.39	0.30	1210.02	0.00	780.58
156	6.39	0.29	1210.31	0.00	780.58
157	6.74	0.29	1210.59	0.00	780.58
158	6.74	0.28	1210.88	0.00	780.58
159	7.81	0.29	1211.17	0.00	780.58
160	7.81	0.30	1211.47	0.00	780.58
161	7.81	0.29	1211.76	0.00	780.58
162	8.87	0.29	1212.05	0.00	780.58
163	9.58	0.30	1212.35	0.00	780.58

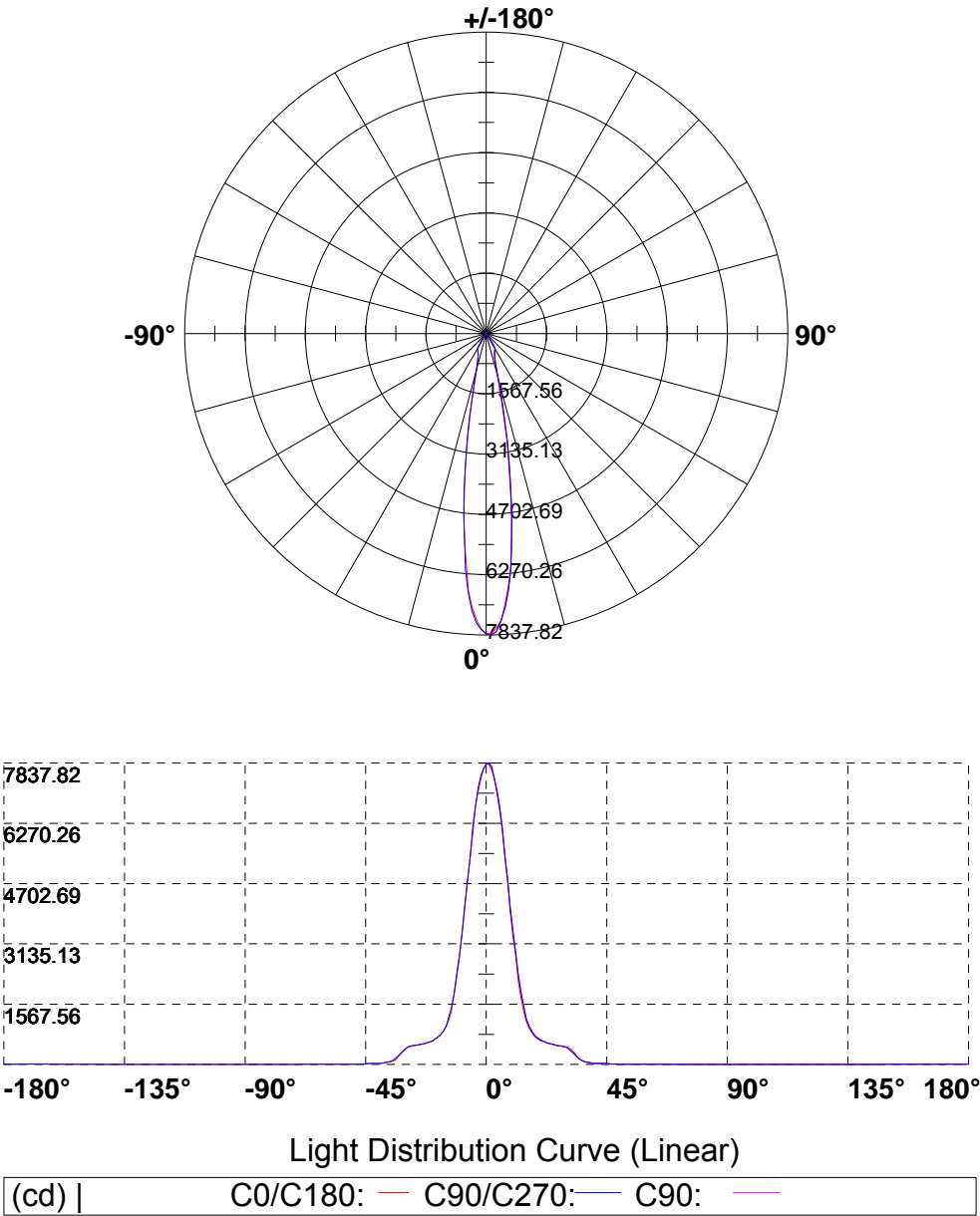
R852 WWL (CRI90 350mA 20D)

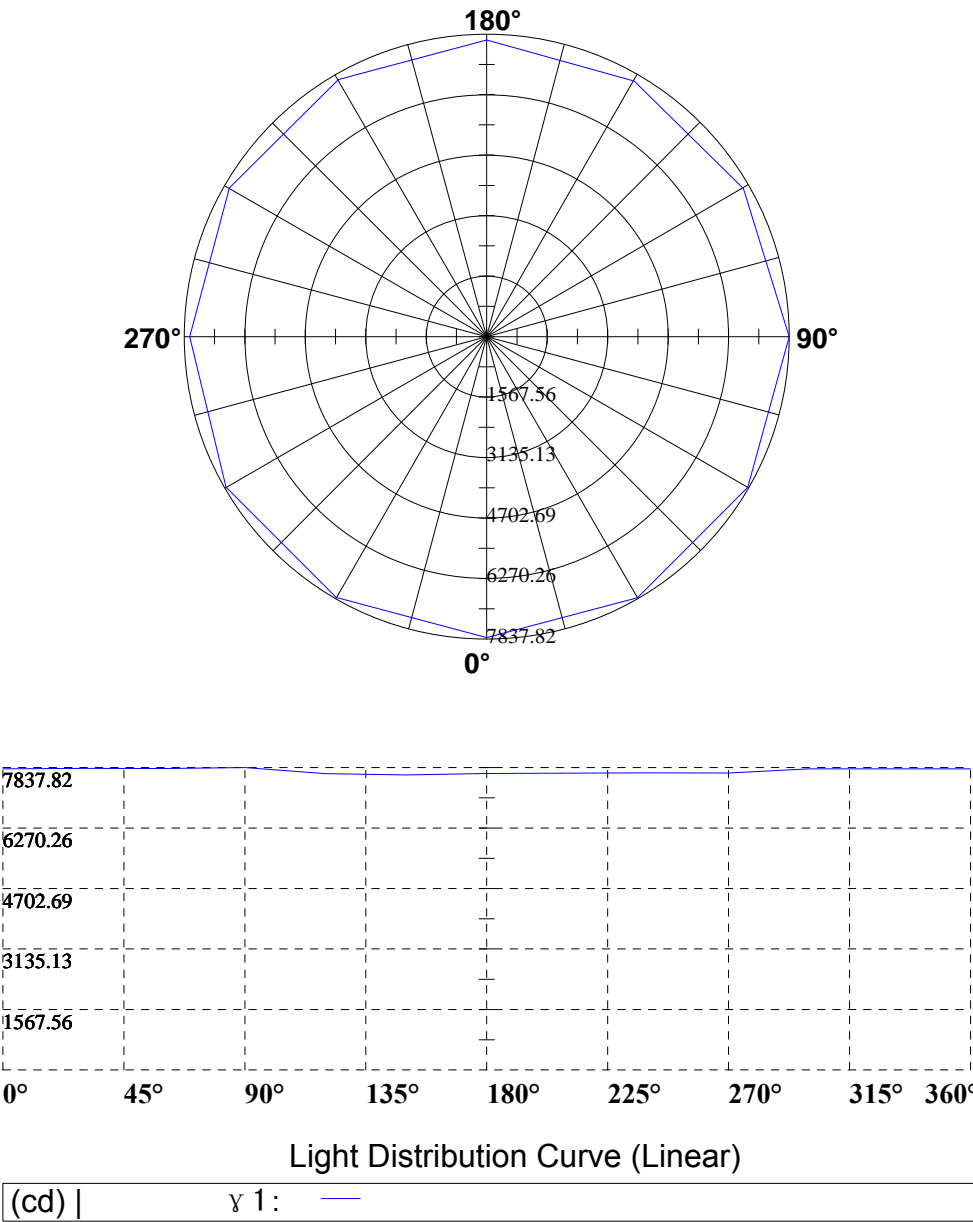
Zonal flux distribution table

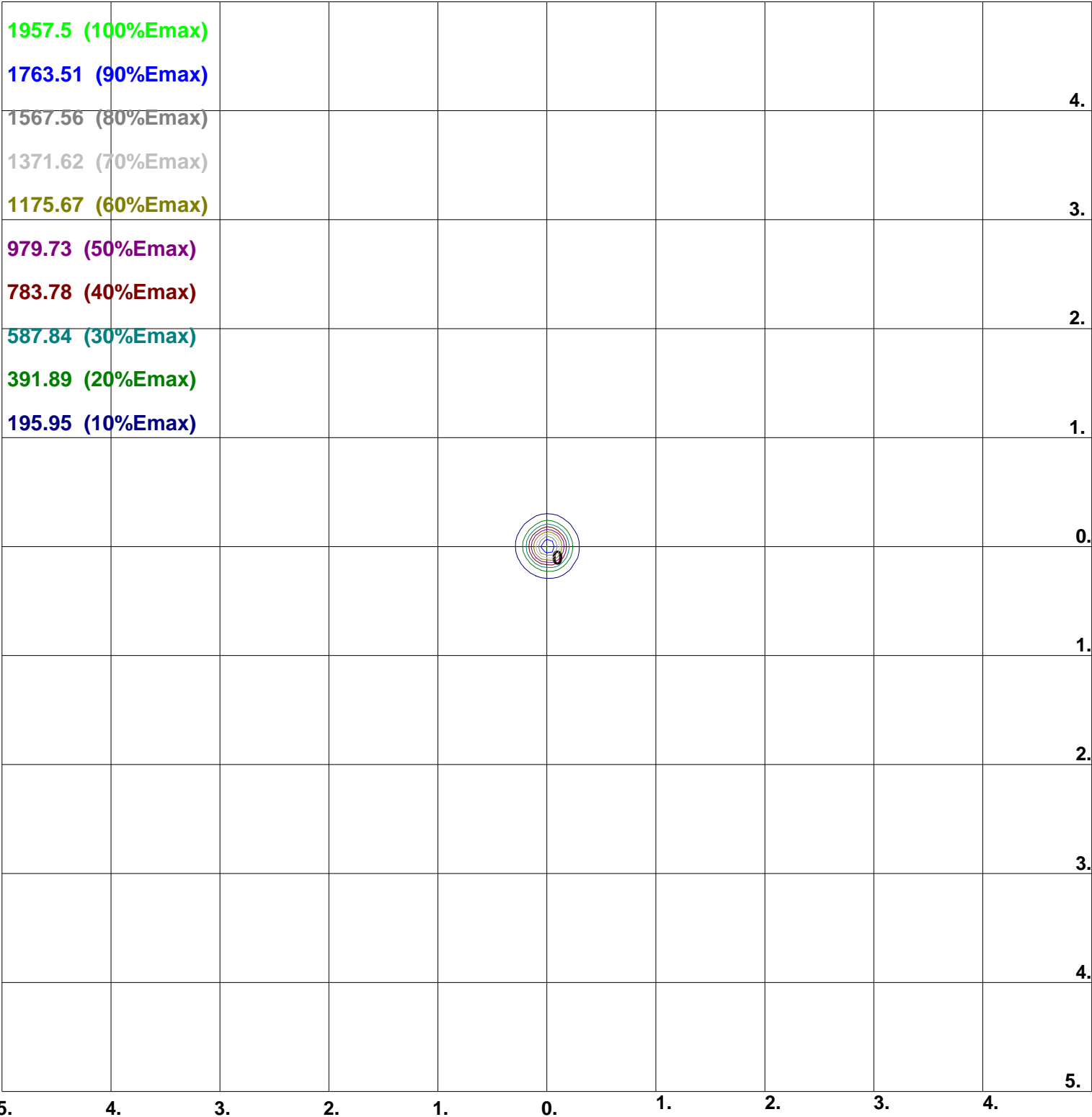
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[illegible]

Light Distribution Curve [Unit: cd]







Coordinate Scale: d/h
Height: 2 m
Max Illuminance : 1959.45lx

Luminance Limiting Curve (There is not luminous side)

Diameter: 115mm

Length: -115mm

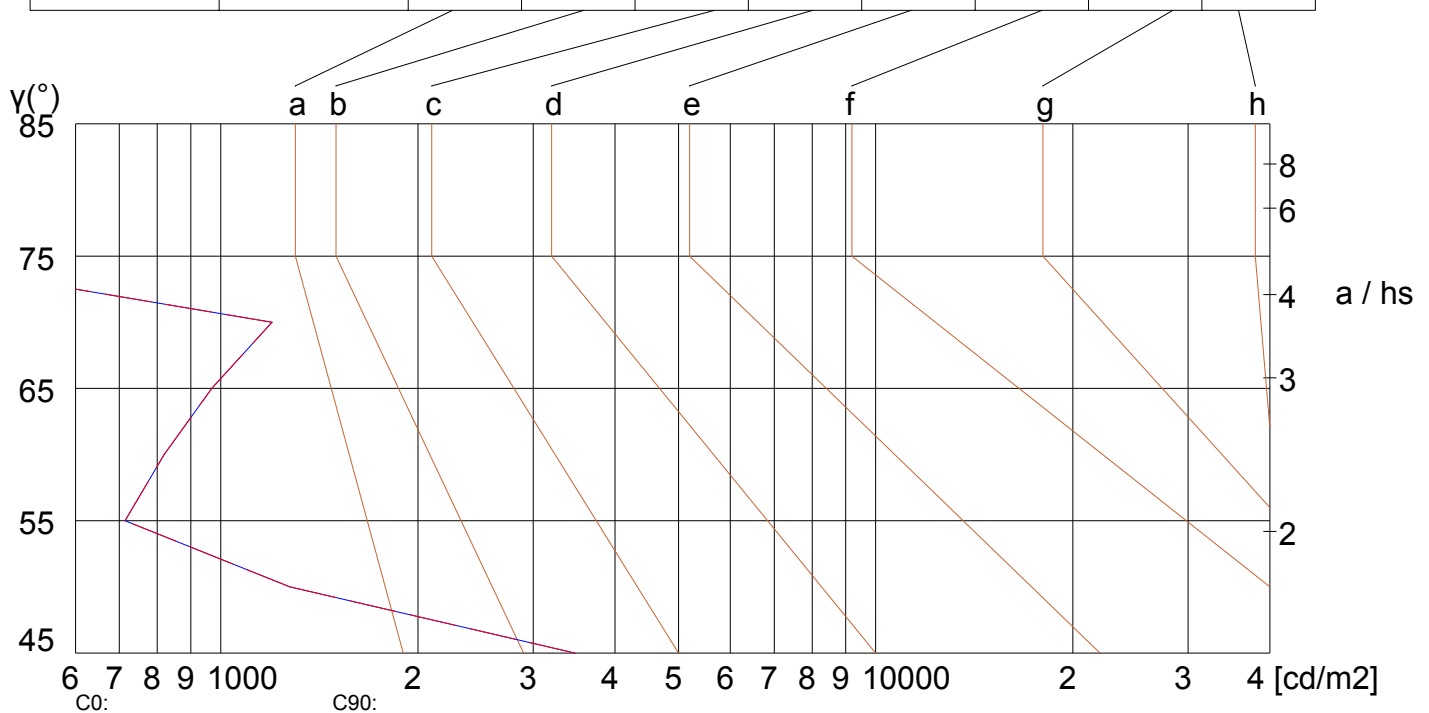
Width: -115mm

Height: 72mm

(cd/m²)

γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	3475	1274	714	819	969	1198			
C90	3475	1274	714	819	969	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 WWL (CRI90 350mA 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	0.99	0.99	0.99	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.85	0.85	0.85	0.83
1	0.98	0.97	0.97	0.96	0.95	0.95	0.92	0.92	0.91	0.87	0.87	0.86	0.81	0.80	0.80	0.75
2	0.94	0.93	0.93	0.92	0.92	0.91	0.89	0.88	0.87	0.85	0.83	0.82	0.79	0.78	0.77	0.73
3	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.84	0.83	0.82	0.80	0.79	0.77	0.75	0.74	0.70
4	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.81	0.80	0.79	0.77	0.76	0.75	0.73	0.71	0.68
5	0.85	0.84	0.83	0.83	0.82	0.81	0.80	0.79	0.77	0.77	0.75	0.73	0.73	0.71	0.69	0.65
6	0.82	0.81	0.81	0.81	0.79	0.79	0.78	0.76	0.75	0.75	0.72	0.71	0.71	0.69	0.67	0.63
7	0.80	0.79	0.78	0.78	0.77	0.76	0.76	0.74	0.73	0.73	0.70	0.69	0.69	0.67	0.65	0.62
8	0.77	0.76	0.76	0.76	0.75	0.74	0.73	0.72	0.70	0.71	0.68	0.67	0.68	0.65	0.63	0.60
9	0.75	0.74	0.74	0.74	0.73	0.72	0.71	0.70	0.68	0.69	0.66	0.65	0.66	0.63	0.61	0.58
10	0.73	0.72	0.72	0.72	0.71	0.70	0.70	0.68	0.67	0.67	0.65	0.63	0.64	0.61	0.59	0.57

