

## R852 WNL (CRI90 500mA 70D)

Luminaire Name: R852 WNL (CRI90 500mA 70D)

Report NO.: 01313217030305A

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: 230.74 V

Current: 0.094 A

Power: 20.803 W

Power Factor: 0.9595

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

Width: -115mm

Height: 72mm

Optical Component: 70D Reflector DC(V:34.73V I:0.505A P:17.539W)

## Photometric Results

Lumens: 1990.37 lm

Efficiency: 88.69%

Central Intensity: 1532.176cd

Maximum Intensity: 1746.47cd

Beam Angle(10%): Left: -23.0 Right:64.1

Maximum s/h: C0\_180: 0.61 C90\_270: 0.6

Effective Luminous Flux: 1866.00 lm

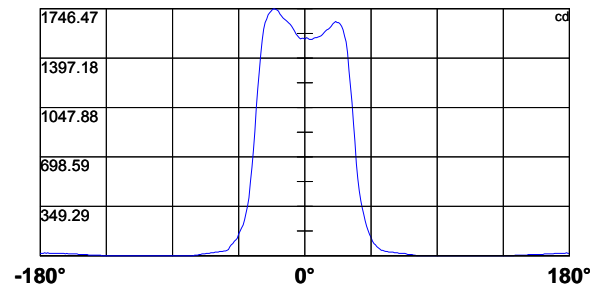
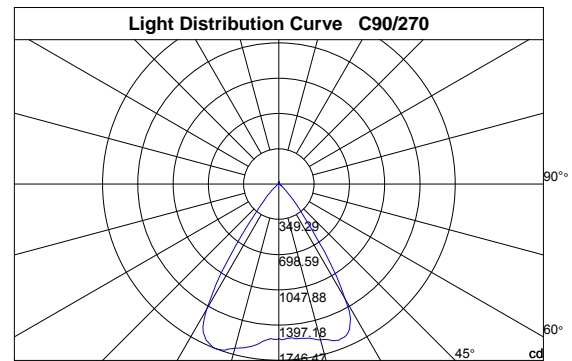
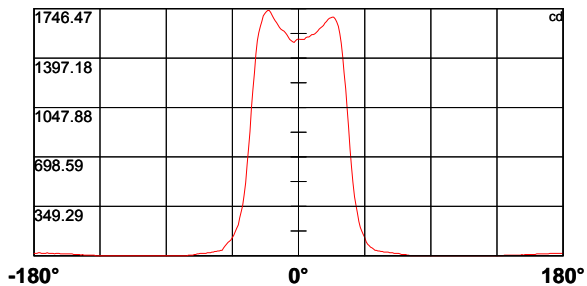
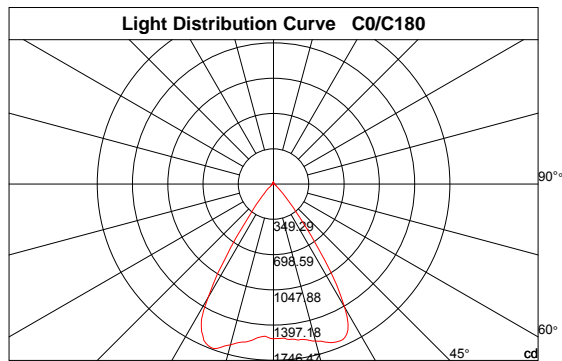
Angle of maximum intensity: C:270.0 G:21.0

Half Peak Side Angle(50%): Left: -13.0 Right:54.5

Up Flux Rate: 0.57%

Down Flux Rate: 88.12%

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	1532.2	1529.2	1529.2	1529.2	1529.2	1542.0	1546.3	1546.3	1554.8	1563.3
30.0	1532.2	1533.5	1529.2	1529.2	1529.2	1533.5	1537.7	1537.7	1542.0	1546.3
60.0	1532.2	1537.7	1529.2	1525.0	1525.0	1529.2	1533.5	1533.5	1537.7	1537.7
90.0	1532.2	1542.0	1537.7	1529.2	1529.2	1529.2	1537.7	1542.0	1542.0	1546.3
120.0	1532.2	1520.7	1516.4	1507.9	1507.9	1512.2	1516.4	1529.2	1542.0	1554.8
150.0	1532.2	1525.0	1512.2	1507.9	1507.9	1516.4	1525.0	1537.7	1559.0	1567.6
180.0	1532.2	1529.2	1520.7	1507.9	1512.2	1520.7	1529.2	1546.3	1563.3	1576.1
210.0	1532.2	1533.5	1525.0	1520.7	1520.7	1525.0	1542.0	1554.8	1571.8	1584.6
240.0	1532.2	1537.7	1529.2	1529.2	1529.2	1542.0	1554.8	1571.8	1588.9	1605.9
270.0	1532.2	1537.7	1537.7	1533.5	1542.0	1554.8	1567.6	1588.9	1605.9	1622.9
300.0	1532.2	1525.0	1525.0	1525.0	1533.5	1546.3	1554.8	1563.3	1580.3	1593.1
330.0	1532.2	1529.2	1525.0	1525.0	1537.7	1542.0	1550.5	1554.8	1567.6	1580.3
360.0	1532.2	1529.2	1529.2	1529.2	1529.2	1542.0	1546.3	1546.3	1554.8	1563.3

C\γ	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	1563.3	1567.6	1576.1	1588.9	1601.6	1610.2	1618.7	1627.2	1644.2	1657.0
30.0	1542.0	1542.0	1550.5	1559.0	1571.8	1580.3	1584.6	1601.6	1618.7	1631.5
60.0	1537.7	1542.0	1550.5	1563.3	1571.8	1584.6	1593.1	1601.6	1622.9	1635.7
90.0	1550.5	1554.8	1563.3	1576.1	1588.9	1597.4	1601.6	1610.2	1622.9	1640.0
120.0	1563.3	1567.6	1580.3	1588.9	1601.6	1610.2	1618.7	1631.5	1648.5	1661.3
150.0	1580.3	1593.1	1601.6	1618.7	1635.7	1652.8	1665.5	1691.1	1703.9	1729.4
180.0	1588.9	1593.1	1601.6	1614.4	1631.5	1648.5	1661.3	1678.3	1699.6	1720.9
210.0	1597.4	1601.6	1605.9	1618.7	1631.5	1640.0	1657.0	1674.1	1691.1	1708.1
240.0	1614.4	1622.9	1631.5	1644.2	1652.8	1665.5	1678.3	1695.4	1716.7	1729.4
270.0	1635.7	1644.2	1657.0	1665.5	1674.1	1682.6	1695.4	1708.1	1729.4	1738.0
300.0	1597.4	1610.2	1622.9	1635.7	1652.8	1661.3	1669.8	1674.1	1686.8	1699.6
330.0	1580.3	1588.9	1605.9	1622.9	1635.7	1648.5	1648.5	1657.0	1678.3	1691.1
360.0	1563.3	1567.6	1576.1	1588.9	1601.6	1610.2	1618.7	1627.2	1644.2	1657.0

C\γ	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	1669.8	1678.3	1682.6	1686.8	1686.8	1674.1	1652.8	1622.9	1571.8	1503.7
30.0	1648.5	1661.3	1665.5	1669.8	1669.8	1661.3	1635.7	1610.2	1567.6	1503.7
60.0	1652.8	1665.5	1665.5	1665.5	1665.5	1652.8	1622.9	1588.9	1550.5	1465.3
90.0	1648.5	1657.0	1648.5	1648.5	1640.0	1622.9	1597.4	1550.5	1512.2	1435.5
120.0	1669.8	1674.1	1665.5	1661.3	1640.0	1622.9	1584.6	1550.5	1490.9	1405.7
150.0	1742.2	1738.0	1729.4	1716.7	1695.4	1657.0	1622.9	1576.1	1516.4	1427.0
180.0	1733.7	1733.7	1725.2	1712.4	1695.4	1657.0	1622.9	1576.1	1520.7	1427.0
210.0	1725.2	1725.2	1716.7	1703.9	1686.8	1661.3	1635.7	1588.9	1546.3	1465.3
240.0	1738.0	1742.2	1733.7	1720.9	1708.1	1691.1	1665.5	1635.7	1588.9	1490.9
270.0	1742.2	1746.5	1742.2	1729.4	1716.7	1703.9	1674.1	1648.5	1601.6	1525.0
300.0	1708.1	1708.1	1708.1	1695.4	1682.6	1669.8	1648.5	1614.4	1571.8	1512.2
330.0	1699.6	1708.1	1712.4	1712.4	1703.9	1695.4	1669.8	1640.0	1601.6	1525.0
360.0	1669.8	1678.3	1682.6	1686.8	1686.8	1674.1	1652.8	1622.9	1571.8	1503.7

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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	1410.0	1290.7	1179.9	1039.4	907.3	754.0	630.4	519.7	417.4	357.8
30.0	1414.2	1294.9	1179.9	1052.1	873.2	736.9	613.4	489.9	413.2	340.8
60.0	1367.4	1260.9	1094.7	984.0	847.7	677.3	562.3	455.8	391.9	340.8
90.0	1307.7	1201.2	1082.0	937.1	809.3	651.7	545.2	460.0	387.6	336.5
120.0	1303.5	1175.7	1052.1	932.9	771.0	660.3	553.8	455.8	396.2	332.3
150.0	1294.9	1175.7	1047.9	886.0	771.0	656.0	532.5	443.0	370.6	328.0
180.0	1294.9	1171.4	1043.6	877.5	758.2	643.2	515.4	426.0	353.6	311.0
210.0	1320.5	1201.2	1077.7	928.6	800.8	681.5	528.2	451.5	379.1	315.2
240.0	1384.4	1273.6	1124.6	996.8	869.0	698.6	596.4	455.8	383.4	332.3
270.0	1427.0	1294.9	1179.9	1047.9	877.5	745.4	626.2	519.7	408.9	349.3
300.0	1384.4	1269.4	1154.4	1013.8	894.5	758.2	647.5	536.7	426.0	357.8
330.0	1431.3	1282.2	1167.2	1047.9	907.3	783.8	664.5	532.5	426.0	357.8
360.0	1410.0	1290.7	1179.9	1039.4	907.3	754.0	630.4	519.7	417.4	357.8

C\γ	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0
0.0	302.4	242.8	200.2	174.6	149.1	127.8	98.0	80.9	72.4	59.6
30.0	289.7	242.8	127.8	115.0	93.7	80.9	68.2	59.6	51.1	46.9
60.0	272.6	230.0	200.2	157.6	132.1	110.8	89.5	76.7	68.2	59.6
90.0	293.9	247.1	208.7	178.9	149.1	127.8	102.2	85.2	76.7	63.9
120.0	293.9	251.3	204.5	187.4	166.1	136.3	119.3	98.0	85.2	72.4
150.0	285.4	234.3	200.2	178.9	153.3	136.3	119.3	106.5	93.7	80.9
180.0	268.4	217.2	195.9	170.4	144.8	127.8	110.8	102.2	93.7	80.9
210.0	272.6	230.0	200.2	183.2	153.3	132.1	119.3	102.2	93.7	85.2
240.0	281.1	242.8	208.7	191.7	170.4	149.1	127.8	110.8	102.2	93.7
270.0	302.4	255.6	217.2	195.9	174.6	153.3	123.5	110.8	102.2	85.2
300.0	293.9	251.3	200.2	183.2	161.9	136.3	119.3	102.2	89.5	76.7
330.0	302.4	247.1	213.0	191.7	157.6	136.3	110.8	93.7	76.7	63.9
360.0	302.4	242.8	200.2	174.6	149.1	127.8	98.0	80.9	72.4	59.6

C\γ	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	55.4	46.9	38.3	38.3	34.1	34.1	29.8	29.8	25.6	25.6
30.0	42.6	38.3	34.1	34.1	29.8	29.8	25.6	25.6	25.6	25.6
60.0	51.1	46.9	42.6	38.3	34.1	34.1	29.8	29.8	29.8	25.6
90.0	55.4	46.9	38.3	38.3	34.1	29.8	29.8	25.6	25.6	25.6
120.0	63.9	51.1	42.6	34.1	34.1	34.1	29.8	29.8	25.6	25.6
150.0	68.2	55.4	38.3	34.1	34.1	34.1	29.8	29.8	25.6	25.6
180.0	68.2	55.4	38.3	38.3	34.1	34.1	29.8	29.8	25.6	25.6
210.0	76.7	63.9	42.6	34.1	34.1	34.1	29.8	29.8	25.6	25.6
240.0	80.9	68.2	46.9	38.3	34.1	29.8	29.8	29.8	25.6	25.6
270.0	76.7	63.9	42.6	38.3	34.1	34.1	29.8	29.8	29.8	25.6
300.0	63.9	51.1	46.9	38.3	34.1	34.1	29.8	29.8	29.8	25.6
330.0	55.4	51.1	42.6	38.3	34.1	34.1	29.8	29.8	25.6	25.6
360.0	55.4	46.9	38.3	38.3	34.1	34.1	29.8	29.8	25.6	25.6

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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	25.6	25.6	21.3	21.3	21.3	17.0	17.0	17.0	17.0	12.8
30.0	21.3	21.3	21.3	17.0	17.0	17.0	12.8	12.8	12.8	8.5
60.0	25.6	21.3	21.3	21.3	21.3	17.0	17.0	17.0	12.8	12.8
90.0	25.6	21.3	21.3	21.3	17.0	17.0	17.0	17.0	17.0	12.8
120.0	25.6	21.3	21.3	21.3	17.0	17.0	17.0	17.0	12.8	12.8
150.0	25.6	21.3	21.3	21.3	21.3	17.0	17.0	12.8	12.8	8.5
180.0	21.3	21.3	21.3	17.0	17.0	17.0	17.0	17.0	12.8	12.8
210.0	25.6	25.6	21.3	21.3	21.3	17.0	17.0	12.8	12.8	12.8
240.0	25.6	25.6	21.3	21.3	17.0	17.0	17.0	12.8	12.8	12.8
270.0	25.6	25.6	21.3	21.3	21.3	17.0	17.0	17.0	12.8	12.8
300.0	25.6	25.6	21.3	21.3	21.3	21.3	17.0	17.0	12.8	12.8
330.0	25.6	21.3	21.3	21.3	17.0	17.0	17.0	12.8	12.8	12.8
360.0	25.6	25.6	21.3	21.3	21.3	17.0	17.0	17.0	17.0	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	0.0	0.0	0.0	0.0
30.0	8.5	8.5	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0
60.0	8.5	8.5	4.3	4.3	4.3	4.3	0.0	0.0	0.0	0.0
90.0	8.5	8.5	8.5	8.5	4.3	4.3	0.0	0.0	0.0	0.0
120.0	12.8	8.5	8.5	4.3	4.3	4.3	0.0	0.0	0.0	0.0
150.0	8.5	8.5	4.3	4.3	4.3	4.3	0.0	0.0	0.0	0.0
180.0	8.5	8.5	4.3	4.3	4.3	4.3	0.0	0.0	0.0	0.0
210.0	8.5	8.5	8.5	4.3	4.3	4.3	0.0	0.0	0.0	0.0
240.0	8.5	8.5	8.5	4.3	4.3	4.3	0.0	0.0	0.0	0.0
270.0	12.8	8.5	8.5	4.3	4.3	4.3	0.0	0.0	0.0	0.0
300.0	8.5	8.5	8.5	4.3	4.3	4.3	0.0	0.0	0.0	0.0
330.0	12.8	8.5	8.5	8.5	4.3	4.3	0.0	0.0	0.0	0.0
360.0	8.5	8.5	8.5	8.5	4.3	4.3	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 70D)****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	4.3
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	4.3	4.3
150.0	0.0	0.0	0.0	0.0	0.0	4.3	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	4.3
240.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	4.3	0.0
270.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3
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	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	4.3
60.0	0.0	4.3	4.3	0.0	0.0	4.3	4.3	4.3	4.3	4.3
90.0	0.0	0.0	0.0	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	4.3	4.3	8.5	8.5
150.0	4.3	4.3	4.3	4.3	4.3	8.5	4.3	8.5	8.5	8.5
180.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	8.5	4.3	8.5
210.0	4.3	4.3	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	8.5	8.5	8.5	4.3
270.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	8.5	8.5
300.0	4.3	0.0	0.0	0.0	4.3	4.3	4.3	4.3	4.3	4.3
330.0	4.3	0.0	4.3	0.0	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

**R852 WNL (CRI90 500mA 70D)****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	8.5	4.3	8.5	8.5	8.5	8.5	8.5	8.5
30.0	4.3	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
60.0	4.3	4.3	4.3	4.3	8.5	4.3	8.5	8.5	8.5	8.5
90.0	4.3	4.3	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
120.0	8.5	8.5	8.5	8.5	8.5	8.5	12.8	12.8	12.8	12.8
150.0	8.5	8.5	8.5	8.5	8.5	12.8	12.8	12.8	12.8	12.8
180.0	8.5	8.5	8.5	8.5	12.8	12.8	12.8	12.8	12.8	12.8
210.0	8.5	4.3	8.5	8.5	8.5	8.5	8.5	12.8	12.8	12.8
240.0	8.5	8.5	8.5	8.5	8.5	8.5	12.8	12.8	12.8	12.8
270.0	8.5	8.5	8.5	8.5	8.5	12.8	12.8	12.8	12.8	12.8
300.0	4.3	4.3	4.3	8.5	8.5	8.5	8.5	8.5	8.5	8.5
330.0	4.3	4.3	4.3	4.3	8.5	4.3	8.5	8.5	8.5	8.5
360.0	4.3	4.3	8.5	4.3	8.5	8.5	8.5	8.5	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	8.5	8.5	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
30.0	8.5	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	17.0
60.0	8.5	12.8	8.5	12.8	12.8	12.8	12.8	12.8	12.8	12.8
90.0	8.5	8.5	8.5	12.8	12.8	12.8	12.8	12.8	12.8	12.8
120.0	12.8	17.0	17.0	17.0	12.8	17.0	17.0	17.0	17.0	17.0
150.0	12.8	17.0	12.8	12.8	12.8	12.8	17.0	17.0	17.0	17.0
180.0	12.8	12.8	12.8	17.0	17.0	17.0	12.8	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	17.0	17.0	17.0	17.0	17.0	17.0	17.0
270.0	12.8	12.8	17.0	12.8	17.0	17.0	17.0	17.0	17.0	17.0
300.0	8.5	8.5	12.8	12.8	12.8	12.8	12.8	12.8	12.8	17.0
330.0	8.5	8.5	8.5	8.5	12.8	12.8	12.8	12.8	12.8	12.8
360.0	8.5	8.5	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8

C\γ	170.0	171.0	172.0	173.0	174.0	175.0	176.0	177.0	178.0	179.0
0.0	12.8	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
30.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
60.0	12.8	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
90.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	21.3	17.0
120.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
150.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
180.0	17.0	21.3	17.0	17.0	17.0	17.0	21.3	21.3	17.0	17.0
210.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
240.0	17.0	17.0	17.0	17.0	17.0	21.3	17.0	21.3	17.0	21.3
270.0	17.0	17.0	17.0	17.0	17.0	21.3	17.0	21.3	17.0	17.0
300.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
330.0	12.8	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
360.0	12.8	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0

Intensity Data [cd]		Page8
C\γ	180.0	
0.0	17.0	
30.0	17.0	
60.0	17.0	
90.0	17.0	
120.0	17.0	
150.0	17.0	
180.0	17.0	
210.0	17.0	
240.0	17.0	
270.0	17.0	
300.0	17.0	
330.0	17.0	
360.0	17.0	



**R852 WNL (CRI90 500mA 70D)**

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	1532.18	0.00	0.00	0.00	0.00
1	1531.71	1.47	1.47	1.47	1.47
2	1526.39	4.39	5.86	4.39	5.86
3	1522.48	7.29	13.15	7.29	13.15
4	1525.32	10.20	23.35	10.20	23.35
5	1532.78	13.16	36.50	13.16	36.50
6	1541.30	16.16	52.66	16.16	52.66
7	1550.53	19.19	71.85	19.19	71.85
8	1562.95	22.28	94.13	22.28	94.13
9	1573.24	25.42	119.55	25.42	119.55
10	1579.28	28.53	148.08	28.53	148.08
11	1585.67	31.62	179.70	31.62	179.70
12	1595.61	34.78	214.48	34.78	214.48
13	1608.03	38.02	252.50	38.02	252.50
14	1620.81	41.33	293.83	41.33	293.83
15	1631.81	44.65	338.48	44.65	338.48
16	1641.04	47.96	386.44	47.96	386.44
17	1654.18	51.32	437.75	51.32	437.75
18	1671.93	54.84	492.59	54.84	492.59
19	1686.83	58.44	551.03	58.44	551.03
20	1698.19	61.96	612.98	61.96	612.98
21	1703.16	65.31	678.30	65.31	678.30
22	1699.61	68.38	746.68	68.38	746.68
23	1693.58	71.20	817.88	71.20	817.88
24	1682.58	73.81	891.69	73.81	891.69
25	1664.12	76.10	967.79	76.10	967.79
26	1636.07	77.90	1045.69	77.90	1045.69
27	1600.22	79.18	1124.87	79.18	1124.87
28	1553.36	79.84	1204.71	79.84	1204.71
29	1473.85	79.20	1283.91	79.20	1283.91
30	1361.68	76.56	1360.47	76.56	1360.47
31	1240.99	72.43	1432.90	72.43	1432.90
32	1115.33	67.51	1500.40	67.51	1500.40
33	978.66	61.69	1562.09	61.69	1562.09
34	840.58	55.06	1617.15	55.06	1617.15
35	703.91	47.97	1665.11	47.97	1665.11
36	584.64	41.03	1706.14	41.03	1706.14
37	478.86	34.69	1740.83	34.69	1740.83
38	396.15	29.21	1770.03	29.21	1770.03
39	338.29	25.07	1795.10	25.07	1795.10
40	288.24	21.85	1816.95	21.85	1816.95

**R852 WNL (CRI90 500mA 70D)**

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	241.03	18.85	1835.80	18.85	1835.80
42	198.08	15.95	1851.75	15.95	1851.75
43	175.71	13.85	1865.60	11.97	1863.72
44	150.51	12.31	1877.91	3.38	1867.09
45	129.57	10.76	1888.67	0.00	1867.09
46	108.98	9.33	1898.00	0.00	1867.09
47	94.07	8.08	1906.08	0.00	1867.09
48	83.77	7.19	1913.27	0.00	1867.09
49	72.41	6.41	1919.68	0.00	1867.09
50	63.19	5.65	1925.34	0.00	1867.09
51	53.25	4.93	1930.26	0.00	1867.09
52	41.18	4.05	1934.31	0.00	1867.09
53	36.92	3.40	1937.71	0.00	1867.09
54	33.72	3.11	1940.82	0.00	1867.09
55	33.01	2.98	1943.80	0.00	1867.09
56	29.46	2.82	1946.63	0.00	1867.09
57	29.11	2.68	1949.30	0.00	1867.09
58	26.62	2.58	1951.88	0.00	1867.09
59	25.56	2.44	1954.32	0.00	1867.09
60	24.85	2.38	1956.70	0.00	1867.09
61	23.07	2.29	1958.99	0.00	1867.09
62	21.30	2.14	1961.13	0.00	1867.09
63	20.59	2.04	1963.16	0.00	1867.09
64	19.17	1.95	1965.11	0.00	1867.09
65	17.39	1.81	1966.92	0.00	1867.09
66	16.68	1.70	1968.62	0.00	1867.09
67	15.26	1.61	1970.23	0.00	1867.09
68	13.49	1.46	1971.69	0.00	1867.09
69	12.07	1.30	1972.99	0.00	1867.09
70	9.58	1.11	1974.10	0.00	1867.09
71	8.52	0.94	1975.04	0.00	1867.09
72	7.10	0.81	1975.85	0.00	1867.09
73	5.32	0.65	1976.50	0.00	1867.09
74	3.90	0.49	1976.99	0.00	1867.09
75	3.90	0.41	1977.40	0.00	1867.09
76	0.00	0.21	1977.60	0.00	1867.09
77	0.00	0.00	1977.60	0.00	1867.09
78	0.00	0.00	1977.60	0.00	1867.09
79	0.00	0.00	1977.60	0.00	1867.09
80	0.00	0.00	1977.60	0.00	1867.09
81	0.00	0.00	1977.60	0.00	1867.09

**R852 WNL (CRI90 500mA 70D)**

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	1977.60	0.00	1867.09
83	0.00	0.00	1977.60	0.00	1867.09
84	0.00	0.00	1977.60	0.00	1867.09
85	0.00	0.00	1977.60	0.00	1867.09
86	0.00	0.00	1977.60	0.00	1867.09
87	0.00	0.00	1977.60	0.00	1867.09
88	0.00	0.00	1977.60	0.00	1867.09
89	0.00	0.00	1977.60	0.00	1867.09
90	0.00	0.00	1977.60	0.00	1867.09
91	0.00	0.00	1977.60	0.00	1867.09
92	0.00	0.00	1977.60	0.00	1867.09
93	0.00	0.00	1977.60	0.00	1867.09
94	0.00	0.00	1977.60	0.00	1867.09
95	0.00	0.00	1977.60	0.00	1867.09
96	0.00	0.00	1977.60	0.00	1867.09
97	0.00	0.00	1977.60	0.00	1867.09
98	0.00	0.00	1977.60	0.00	1867.09
99	0.00	0.00	1977.60	0.00	1867.09
100	0.00	0.00	1977.60	0.00	1867.09
101	0.00	0.00	1977.60	0.00	1867.09
102	0.00	0.00	1977.60	0.00	1867.09
103	0.00	0.00	1977.60	0.00	1867.09
104	0.00	0.00	1977.60	0.00	1867.09
105	0.00	0.00	1977.60	0.00	1867.09
106	0.00	0.00	1977.60	0.00	1867.09
107	0.00	0.00	1977.60	0.00	1867.09
108	0.00	0.00	1977.60	0.00	1867.09
109	0.00	0.00	1977.60	0.00	1867.09
110	0.00	0.00	1977.60	0.00	1867.09
111	0.00	0.00	1977.60	0.00	1867.09
112	0.00	0.00	1977.60	0.00	1867.09
113	0.00	0.00	1977.60	0.00	1867.09
114	0.00	0.00	1977.60	0.00	1867.09
115	0.00	0.00	1977.60	0.00	1867.09
116	0.00	0.00	1977.60	0.00	1867.09
117	0.00	0.00	1977.60	0.00	1867.09
118	0.00	0.00	1977.60	0.00	1867.09
119	0.00	0.00	1977.60	0.00	1867.09
120	0.00	0.00	1977.60	0.00	1867.09
121	0.00	0.00	1977.60	0.00	1867.09
122	0.00	0.00	1977.60	0.00	1867.09

**R852 WNL (CRI90 500mA 70D)**

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	1977.60	0.00	1867.09
124	0.00	0.00	1977.60	0.00	1867.09
125	0.00	0.00	1977.60	0.00	1867.09
126	0.00	0.00	1977.60	0.00	1867.09
127	0.00	0.00	1977.60	0.00	1867.09
128	0.00	0.00	1977.60	0.00	1867.09
129	0.00	0.00	1977.60	0.00	1867.09
130	0.00	0.00	1977.60	0.00	1867.09
131	0.00	0.00	1977.60	0.00	1867.09
132	0.00	0.00	1977.60	0.00	1867.09
133	0.00	0.00	1977.60	0.00	1867.09
134	0.00	0.00	1977.60	0.00	1867.09
135	0.35	0.01	1977.62	0.00	1867.09
136	0.00	0.01	1977.63	0.00	1867.09
137	0.35	0.01	1977.65	0.00	1867.09
138	0.71	0.04	1977.68	0.00	1867.09
139	2.13	0.10	1977.79	0.00	1867.09
140	3.55	0.20	1977.99	0.00	1867.09
141	3.19	0.24	1978.23	0.00	1867.09
142	3.55	0.23	1978.46	0.00	1867.09
143	3.19	0.23	1978.68	0.00	1867.09
144	3.90	0.23	1978.91	0.00	1867.09
145	4.61	0.27	1979.18	0.00	1867.09
146	4.61	0.29	1979.47	0.00	1867.09
147	5.32	0.30	1979.77	0.00	1867.09
148	5.68	0.32	1980.10	0.00	1867.09
149	5.68	0.33	1980.42	0.00	1867.09
150	6.39	0.34	1980.76	0.00	1867.09
151	6.39	0.35	1981.10	0.00	1867.09
152	7.45	0.36	1981.46	0.00	1867.09
153	7.45	0.38	1981.84	0.00	1867.09
154	8.87	0.40	1982.24	0.00	1867.09
155	8.87	0.42	1982.66	0.00	1867.09
156	10.29	0.44	1983.10	0.00	1867.09
157	10.65	0.46	1983.55	0.00	1867.09
158	10.65	0.45	1984.00	0.00	1867.09
159	10.65	0.43	1984.43	0.00	1867.09
160	10.65	0.41	1984.84	0.00	1867.09
161	12.07	0.42	1985.25	0.00	1867.09
162	12.42	0.43	1985.68	0.00	1867.09
163	13.49	0.43	1986.11	0.00	1867.09

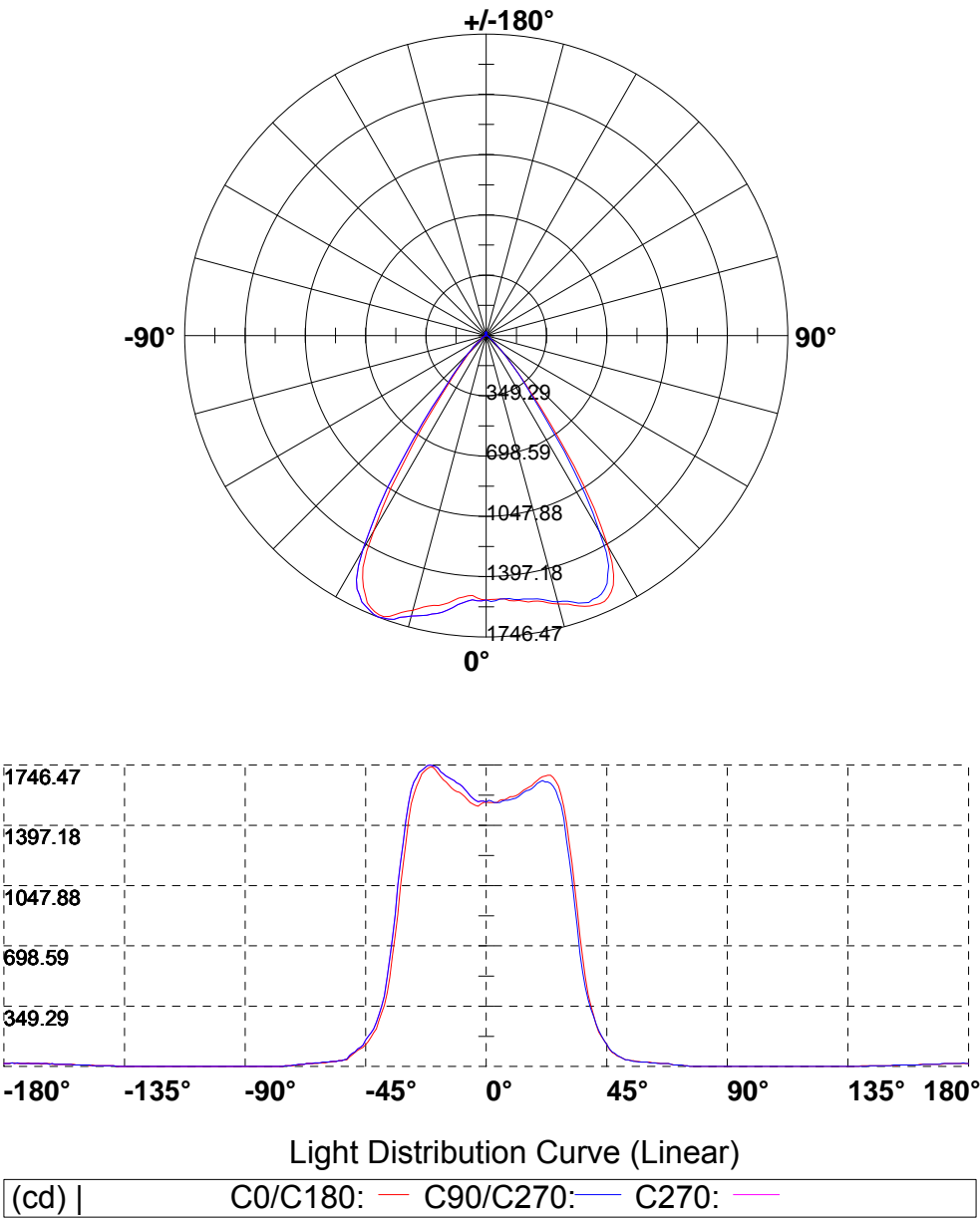
### R852 WNL (CRI90 500mA 70D)

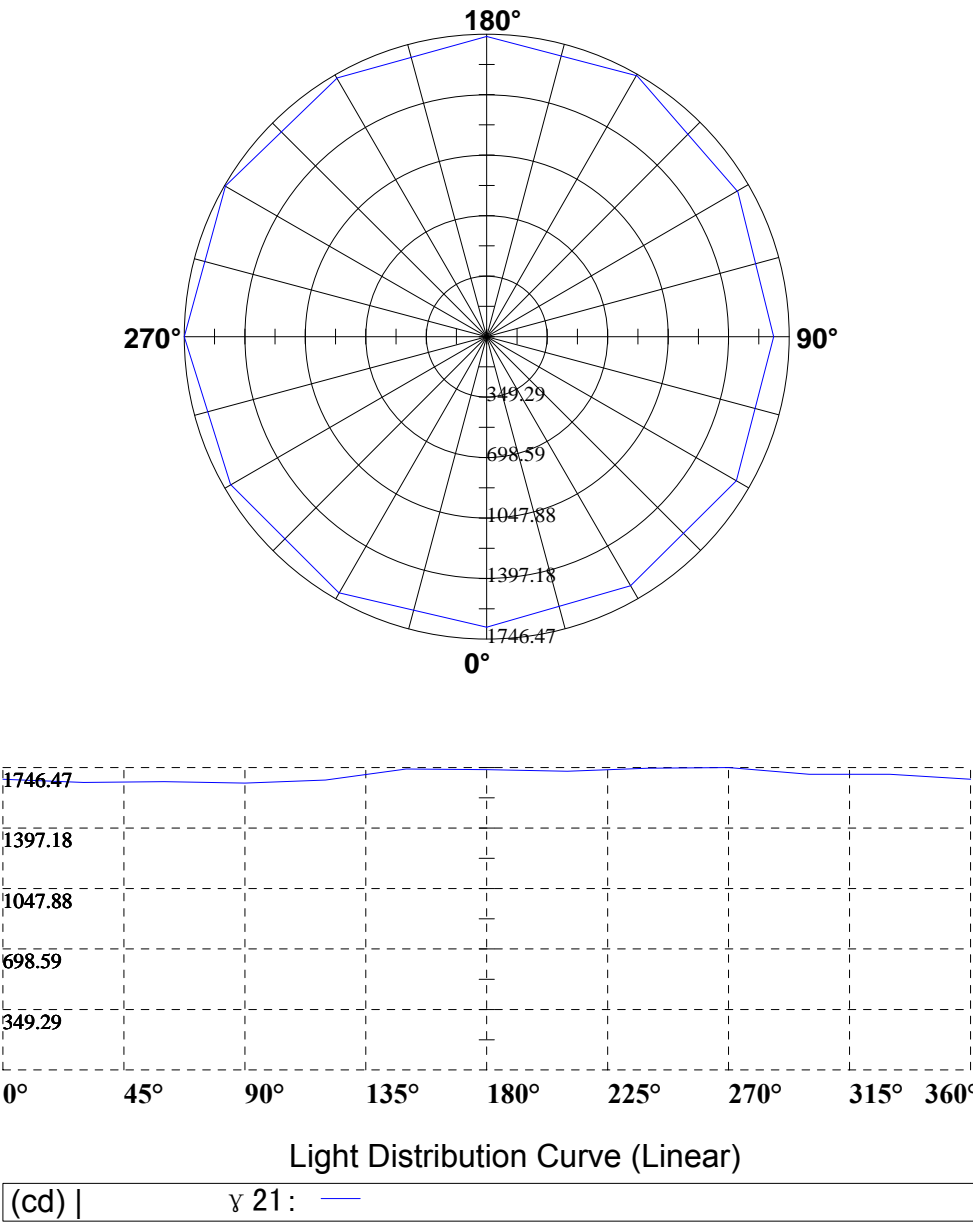
### Zonal flux distribution table

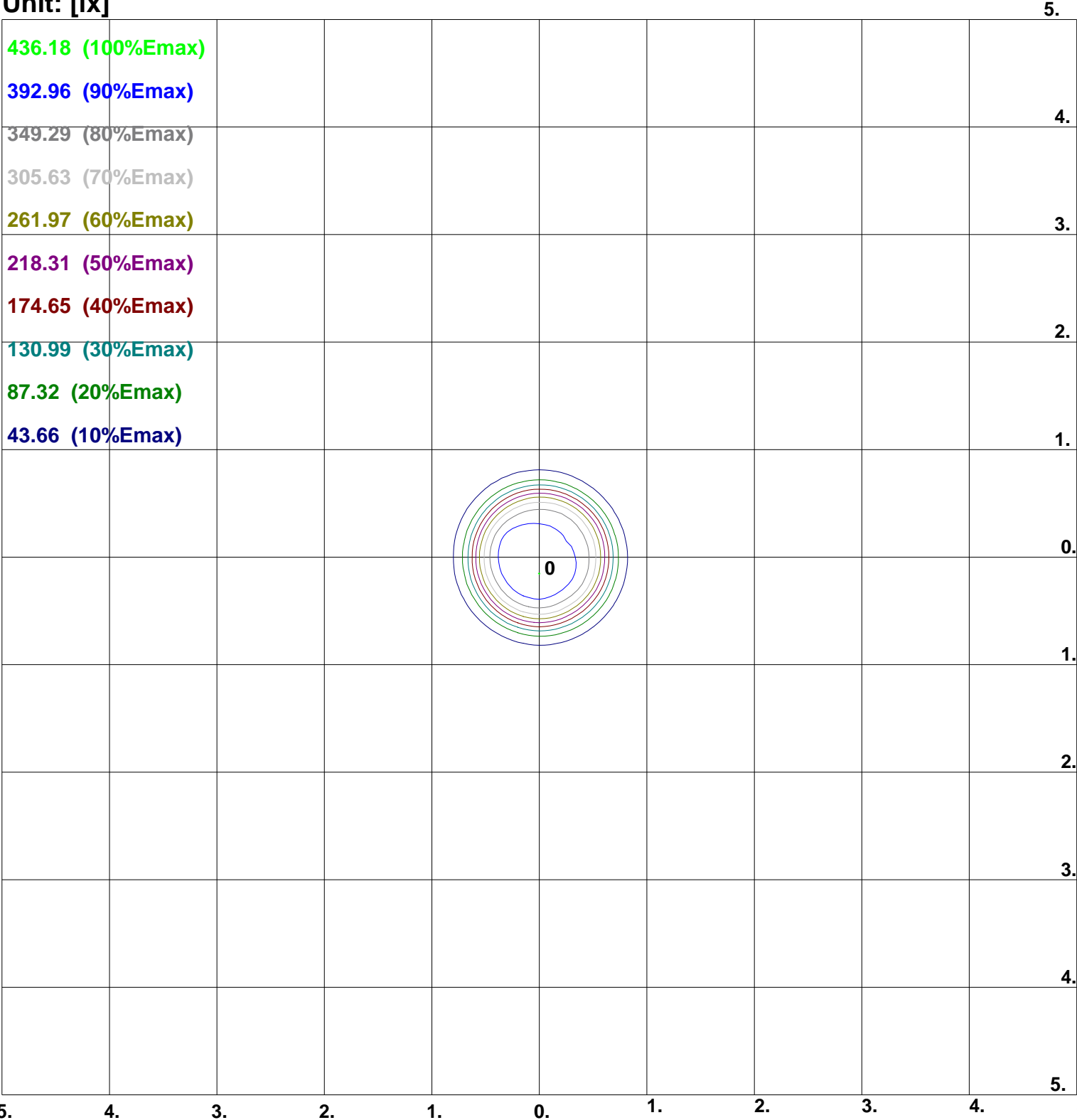
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[illegible]

Light Distribution Curve [Unit: cd]







Coordinate Scale: d/h  
Height: 2 m  
Max Illuminance : 436.62lx



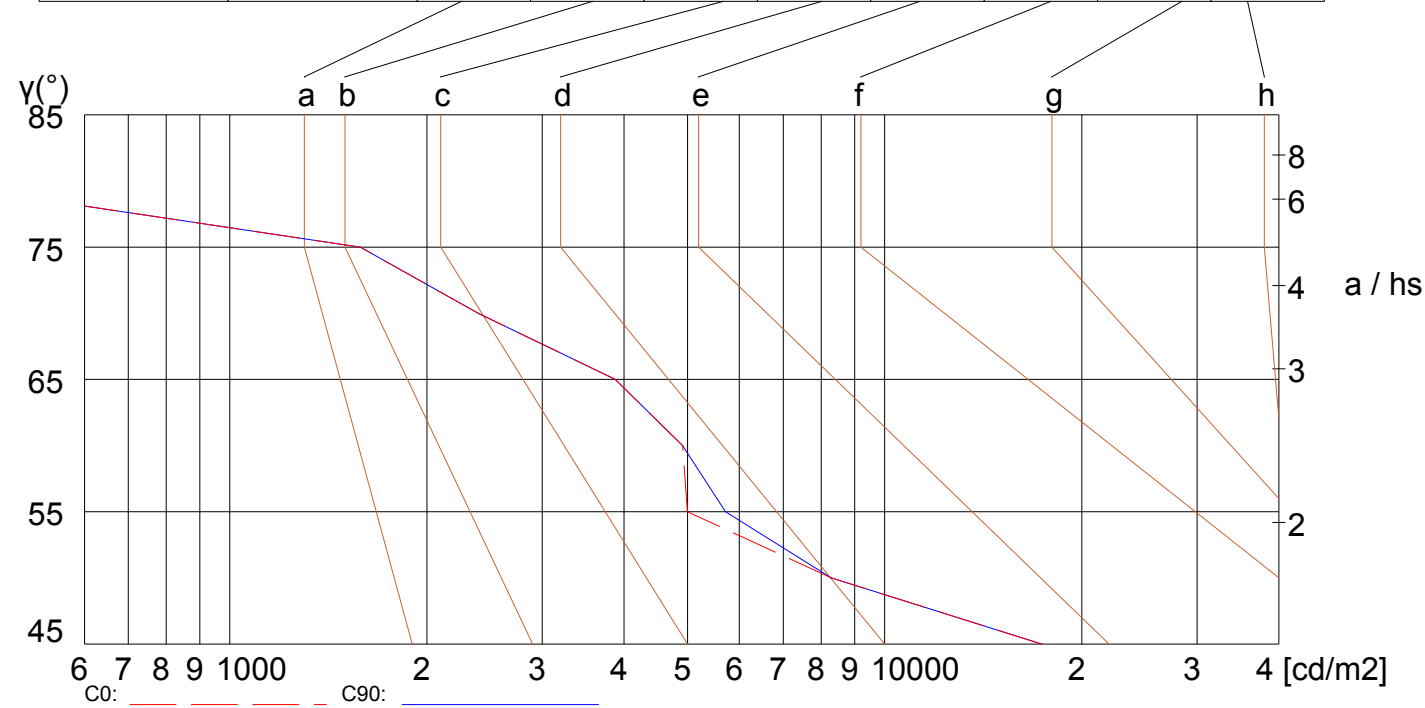
Luminance Limiting Curve (There is not luminous side)

Diameter: 115mm  
Length: -115mm  
Width: -115mm  
Height: 72mm

(cd/m2)

$\gamma$	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	17377	8284	4999	4915	3877	2395	1583		
C90	17377	8284	5713	4915	3877	2395	1583		

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 70D)**

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	1.06	1.06	1.06	1.03	1.03	1.03	0.99	0.99	0.99	0.94	0.94	0.94	0.91	0.91	0.91	0.89
1	1.01	1.00	0.99	0.99	0.98	0.97	0.95	0.94	0.93	0.91	0.89	0.88	0.84	0.83	0.82	0.77
2	0.94	0.92	0.91	0.92	0.91	0.90	0.89	0.87	0.86	0.85	0.83	0.81	0.80	0.78	0.76	0.72
3	0.87	0.85	0.84	0.86	0.84	0.83	0.83	0.81	0.79	0.80	0.77	0.75	0.75	0.72	0.70	0.66
4	0.81	0.79	0.78	0.80	0.78	0.76	0.77	0.75	0.73	0.75	0.71	0.69	0.71	0.68	0.65	0.61
5	0.75	0.73	0.72	0.74	0.72	0.71	0.72	0.69	0.67	0.70	0.67	0.64	0.67	0.63	0.60	0.57
6	0.70	0.68	0.67	0.69	0.67	0.66	0.68	0.65	0.62	0.66	0.62	0.59	0.63	0.59	0.56	0.53
7	0.65	0.63	0.62	0.64	0.62	0.61	0.63	0.60	0.58	0.62	0.58	0.55	0.60	0.55	0.52	0.49
8	0.61	0.59	0.58	0.60	0.58	0.57	0.59	0.56	0.54	0.58	0.54	0.51	0.56	0.52	0.49	0.46
9	0.57	0.55	0.54	0.56	0.54	0.53	0.56	0.53	0.51	0.55	0.51	0.48	0.53	0.49	0.45	0.43
10	0.53	0.52	0.51	0.53	0.51	0.50	0.52	0.49	0.47	0.51	0.48	0.45	0.50	0.46	0.43	0.40

