

R854 WNL (CRI90 700mA 70D)

Luminaire Name: R854 WNL (CRI90 700mA 70D)

Report NO.: 01314523082427A

Test NO.:

Lamp: LUMINUS CLM-14-40-90-36-TC40-F5-2 700mA

Sum Lumens: 3385.84 lm

Number of Lamps: 1

Diameter: 154mm

Length: -154mm

Photometric Type: Type C

Voltage: 228.36 V

Current: 0.1172 A

Power: 26.243 W

Power Factor: 0.9809

Ballast Type: OSRAM IT FIT 30/220-240/700 CS I

Width: -154mm

Height: 144mm

Optical Component: 70D Reflector DC(V: 34.12V I: 0.685A P: 23.37W)

Photometric Results

Lumens: 2778.92 lm

Efficiency: 82.07%

Central Intensity: 2011.553cd

Maximum Intensity: 2057.427cd

Beam Angle(10%): Left: -41.8 Right:56.5

Maximum s/h: C0_180: 0.62 C90_270: 0.62

Effective Luminous Flux: 2571.18 lm

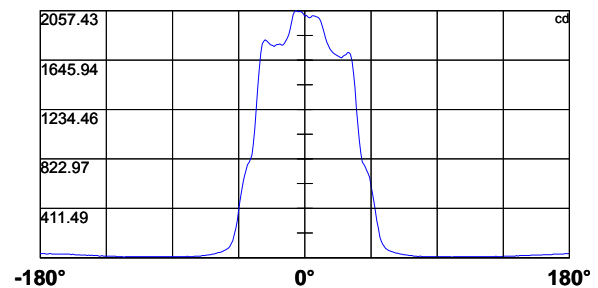
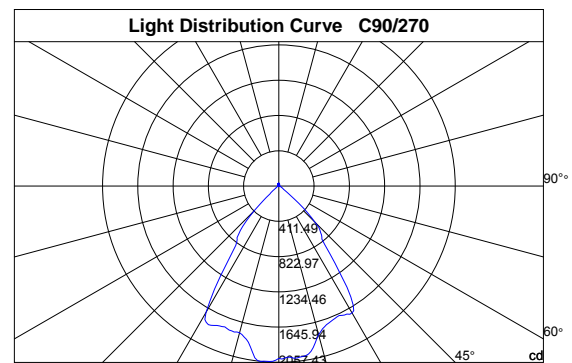
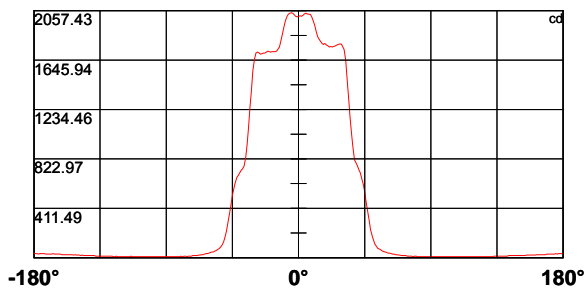
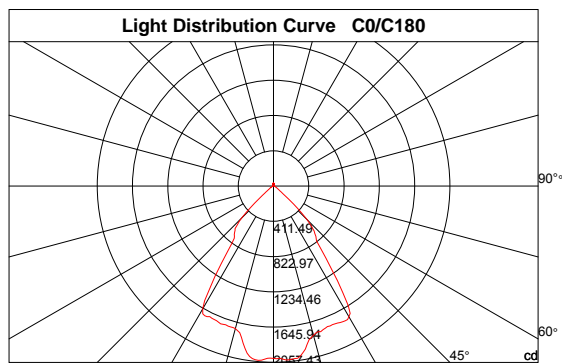
Angle of maximum intensity: C:270.0 G:6.0

Half Peak Side Angle(50%): Left: -28.4 Right:42.7

Up Flux Rate: 2.22%

Down Flux Rate: 79.85%

CIE Classification: Direct



R854 WNL (CRI90 700mA 70D)

Intensity Data [cd]

Page2

C\γ	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
0.0	2011.6	2014.8	2010.6	2019.1	2031.9	2036.1	2031.9	2027.6	2027.6	2006.3
30.0	2011.6	2014.8	2010.6	2014.8	2027.6	2036.1	2031.9	2027.6	2023.3	2010.6
60.0	2011.6	2019.1	2006.3	2006.3	2019.1	2031.9	2027.6	2019.1	2010.6	2002.1
90.0	2011.6	2019.1	2006.3	1997.8	2002.1	2014.8	2014.8	2010.6	2006.3	2002.1
120.0	2011.6	1989.3	1989.3	2002.1	2014.8	2014.8	2014.8	2014.8	1997.8	1968.0
150.0	2011.6	1997.8	1993.5	2006.3	2014.8	2019.1	2019.1	2019.1	2002.1	1972.2
180.0	2011.6	2006.3	2010.6	2023.3	2036.1	2040.4	2036.1	2027.6	2006.3	1972.2
210.0	2011.6	2019.1	2023.3	2040.4	2044.6	2040.4	2040.4	2036.1	2014.8	1972.2
240.0	2011.6	2031.9	2040.4	2048.9	2044.6	2044.6	2044.6	2044.6	2019.1	1976.5
270.0	2011.6	2031.9	2044.6	2048.9	2048.9	2048.9	2057.4	2048.9	2023.3	1963.7
300.0	2011.6	2010.6	2014.8	2023.3	2031.9	2031.9	2027.6	2023.3	2014.8	2002.1
330.0	2011.6	2010.6	2014.8	2023.3	2031.9	2031.9	2027.6	2027.6	2027.6	2002.1
360.0	2011.6	2014.8	2010.6	2019.1	2031.9	2036.1	2031.9	2027.6	2027.6	2006.3

C\γ	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	1972.2	1938.2	1887.0	1840.2	1818.9	1801.8	1784.8	1776.3	1784.8	1772.0
30.0	1980.8	1938.2	1887.0	1848.7	1818.9	1797.6	1784.8	1772.0	1767.8	1763.5
60.0	1985.0	1955.2	1912.6	1853.0	1818.9	1784.8	1763.5	1746.5	1733.7	1729.4
90.0	1989.3	1963.7	1925.4	1878.5	1831.7	1793.3	1767.8	1742.2	1725.2	1708.1
120.0	1929.6	1882.8	1823.1	1789.1	1772.0	1750.7	1729.4	1725.2	1725.2	1720.9
150.0	1925.4	1878.5	1823.1	1780.5	1763.5	1742.2	1738.0	1733.7	1733.7	1733.7
180.0	1921.1	1865.7	1806.1	1755.0	1738.0	1720.9	1716.7	1716.7	1716.7	1712.4
210.0	1925.4	1874.3	1827.4	1780.5	1763.5	1746.5	1742.2	1746.5	1738.0	1733.7
240.0	1908.3	1857.2	1814.6	1789.1	1776.3	1767.8	1767.8	1772.0	1776.3	1772.0
270.0	1908.3	1857.2	1827.4	1806.1	1784.8	1772.0	1772.0	1780.5	1776.3	1776.3
300.0	1976.5	1929.6	1887.0	1848.7	1823.1	1793.3	1776.3	1767.8	1767.8	1763.5
330.0	1968.0	1933.9	1887.0	1831.7	1810.4	1793.3	1780.5	1776.3	1772.0	1763.5
360.0	1972.2	1938.2	1887.0	1840.2	1818.9	1801.8	1784.8	1776.3	1784.8	1772.0

C\γ	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	1763.5	1755.0	1759.2	1755.0	1759.2	1763.5	1772.0	1776.3	1780.5	1780.5
30.0	1750.7	1742.2	1733.7	1720.9	1729.4	1742.2	1746.5	1755.0	1759.2	1759.2
60.0	1720.9	1716.7	1708.1	1699.6	1691.1	1691.1	1691.1	1691.1	1691.1	1691.1
90.0	1699.6	1691.1	1682.6	1678.3	1669.8	1665.5	1678.3	1686.8	1691.1	1708.1
120.0	1720.9	1720.9	1716.7	1716.7	1720.9	1725.2	1725.2	1733.7	1738.0	1742.2
150.0	1729.4	1733.7	1729.4	1729.4	1729.4	1733.7	1733.7	1746.5	1742.2	1738.0
180.0	1716.7	1720.9	1712.4	1703.9	1703.9	1699.6	1695.4	1708.1	1712.4	1703.9
210.0	1720.9	1712.4	1699.6	1695.4	1695.4	1699.6	1695.4	1712.4	1720.9	1712.4
240.0	1763.5	1750.7	1742.2	1746.5	1759.2	1759.2	1772.0	1784.8	1789.1	1763.5
270.0	1767.8	1759.2	1767.8	1772.0	1780.5	1793.3	1806.1	1814.6	1801.8	1780.5
300.0	1759.2	1750.7	1738.0	1733.7	1738.0	1746.5	1759.2	1759.2	1763.5	1763.5
330.0	1759.2	1755.0	1755.0	1750.7	1755.0	1759.2	1772.0	1780.5	1784.8	1784.8
360.0	1763.5	1755.0	1759.2	1755.0	1759.2	1763.5	1772.0	1776.3	1780.5	1780.5

R854 WNL (CRI90 700mA 70D)

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	1759.2	1733.7	1644.2	1482.4	1333.3	1171.4	1039.4	920.1	813.6	792.3
30.0	1746.5	1725.2	1644.2	1499.4	1354.6	1209.8	1026.6	903.1	817.9	775.3
60.0	1691.1	1674.1	1610.2	1499.4	1350.3	1209.8	1073.4	907.3	817.9	783.8
90.0	1708.1	1695.4	1640.0	1542.0	1422.7	1248.1	1116.0	984.0	869.0	796.6
120.0	1699.6	1580.3	1452.6	1307.7	1116.0	988.2	877.5	809.3	775.3	754.0
150.0	1686.8	1576.1	1444.0	1303.5	1107.5	975.5	869.0	813.6	783.8	754.0
180.0	1652.8	1559.0	1392.9	1256.6	1086.2	941.4	830.6	762.5	741.2	728.4
210.0	1652.8	1529.2	1397.2	1256.6	1060.7	915.8	817.9	766.7	741.2	719.9
240.0	1678.3	1563.3	1401.4	1256.6	1107.5	932.9	834.9	800.8	775.3	745.4
270.0	1703.9	1563.3	1418.5	1248.1	1082.0	954.2	856.2	817.9	792.3	775.3
300.0	1755.0	1729.4	1648.5	1507.9	1367.4	1222.5	1039.4	920.1	822.1	796.6
330.0	1767.8	1729.4	1627.2	1499.4	1316.2	1175.7	1047.9	924.4	830.6	805.1
360.0	1759.2	1733.7	1644.2	1482.4	1333.3	1171.4	1039.4	920.1	813.6	792.3

C\γ	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0
0.0	766.7	732.7	707.1	660.3	609.1	545.2	460.0	387.6	315.2	234.3
30.0	754.0	736.9	707.1	677.3	630.4	579.3	498.4	426.0	353.6	264.1
60.0	754.0	736.9	715.6	681.5	639.0	583.6	506.9	434.5	362.1	281.1
90.0	779.5	758.2	728.4	702.8	668.8	596.4	532.5	464.3	387.6	306.7
120.0	732.7	694.3	668.8	621.9	562.3	477.1	413.2	345.0	276.9	200.2
150.0	741.2	719.9	690.1	647.5	587.8	511.2	430.2	362.1	293.9	213.0
180.0	707.1	685.8	668.8	626.2	575.1	519.7	438.7	366.3	298.2	221.5
210.0	702.8	681.5	651.7	609.1	541.0	472.8	400.4	332.3	264.1	204.5
240.0	724.1	690.1	639.0	583.6	519.7	426.0	366.3	293.9	208.7	166.1
270.0	728.4	685.8	630.4	553.8	481.3	400.4	306.7	242.8	195.9	140.6
300.0	762.5	741.2	698.6	651.7	592.1	528.2	430.2	357.8	289.7	225.8
330.0	779.5	754.0	711.4	673.0	609.1	541.0	443.0	366.3	293.9	221.5
360.0	766.7	732.7	707.1	660.3	609.1	545.2	460.0	387.6	315.2	234.3

C\γ	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	183.2	144.8	110.8	93.7	76.7	72.4	63.9	55.4	51.1	46.9
30.0	204.5	153.3	119.3	98.0	80.9	72.4	63.9	59.6	51.1	46.9
60.0	221.5	170.4	127.8	102.2	89.5	72.4	68.2	59.6	51.1	51.1
90.0	242.8	170.4	136.3	110.8	93.7	76.7	68.2	59.6	55.4	51.1
120.0	157.6	123.5	98.0	80.9	72.4	63.9	59.6	51.1	46.9	42.6
150.0	161.9	132.1	102.2	89.5	76.7	68.2	59.6	51.1	46.9	46.9
180.0	170.4	132.1	106.5	89.5	76.7	68.2	59.6	55.4	46.9	46.9
210.0	161.9	127.8	106.5	80.9	72.4	63.9	59.6	51.1	46.9	46.9
240.0	136.3	106.5	93.7	76.7	63.9	59.6	55.4	51.1	46.9	42.6
270.0	119.3	93.7	80.9	72.4	63.9	59.6	51.1	46.9	42.6	42.6
300.0	161.9	132.1	106.5	89.5	76.7	68.2	59.6	51.1	51.1	46.9
330.0	174.6	127.8	102.2	85.2	76.7	68.2	59.6	55.4	46.9	46.9
360.0	183.2	144.8	110.8	93.7	76.7	72.4	63.9	55.4	51.1	46.9

R854 WNL (CRI90 700mA 70D)

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	42.6	38.3	38.3	34.1	29.8	29.8	25.6	25.6	21.3	21.3
30.0	42.6	38.3	38.3	38.3	29.8	29.8	25.6	25.6	25.6	21.3
60.0	46.9	42.6	38.3	38.3	34.1	29.8	25.6	25.6	25.6	25.6
90.0	46.9	42.6	38.3	38.3	34.1	29.8	29.8	25.6	25.6	21.3
120.0	38.3	34.1	34.1	29.8	29.8	25.6	25.6	21.3	21.3	17.0
150.0	42.6	38.3	34.1	29.8	29.8	25.6	25.6	25.6	21.3	21.3
180.0	42.6	38.3	34.1	34.1	29.8	25.6	25.6	21.3	21.3	17.0
210.0	38.3	38.3	34.1	29.8	25.6	25.6	25.6	21.3	17.0	17.0
240.0	38.3	38.3	29.8	29.8	25.6	25.6	21.3	21.3	21.3	17.0
270.0	38.3	34.1	29.8	29.8	25.6	25.6	21.3	21.3	17.0	17.0
300.0	38.3	38.3	34.1	34.1	29.8	29.8	25.6	25.6	21.3	21.3
330.0	42.6	38.3	34.1	34.1	29.8	29.8	29.8	25.6	25.6	21.3
360.0	42.6	38.3	38.3	34.1	29.8	29.8	25.6	25.6	21.3	21.3

C\γ	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	17.0	17.0	17.0	17.0	12.8	12.8	12.8	12.8	8.5	12.8
30.0	21.3	17.0	17.0	17.0	12.8	12.8	12.8	12.8	12.8	8.5
60.0	21.3	17.0	17.0	17.0	17.0	12.8	12.8	8.5	12.8	12.8
90.0	21.3	17.0	17.0	17.0	12.8	12.8	12.8	8.5	12.8	12.8
120.0	17.0	17.0	12.8	12.8	12.8	8.5	12.8	12.8	8.5	8.5
150.0	17.0	17.0	17.0	12.8	12.8	8.5	12.8	8.5	12.8	12.8
180.0	17.0	17.0	17.0	12.8	12.8	12.8	8.5	12.8	12.8	8.5
210.0	17.0	17.0	12.8	12.8	12.8	12.8	8.5	12.8	8.5	8.5
240.0	17.0	12.8	12.8	12.8	12.8	8.5	12.8	8.5	8.5	8.5
270.0	17.0	12.8	12.8	12.8	12.8	12.8	8.5	8.5	8.5	8.5
300.0	21.3	17.0	17.0	17.0	12.8	12.8	12.8	8.5	12.8	12.8
330.0	21.3	17.0	12.8	12.8	12.8	12.8	8.5	12.8	8.5	8.5
360.0	17.0	17.0	17.0	17.0	12.8	12.8	12.8	12.8	8.5	12.8

C\γ	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.8	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
30.0	8.5	8.5	8.5	12.8	8.5	8.5	8.5	8.5	8.5	8.5
60.0	8.5	8.5	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	8.5	8.5	8.5	8.5	8.5
120.0	12.8	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
150.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
180.0	12.8	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
210.0	12.8	8.5	8.5	8.5	8.5	8.5	8.5	8.5	4.3	8.5
240.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
270.0	12.8	8.5	8.5	8.5	8.5	8.5	8.5	8.5	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	12.8	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
360.0	12.8	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5

R854 WNL (CRI90 700mA 70D)

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

C\γ	100.0	101.0	102.0	103.0	104.0	105.0	106.0	107.0	108.0	109.0
0.0	8.5	8.5	8.5	8.5	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	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
90.0	4.3	8.5	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	8.5	8.5	4.3	8.5
150.0	8.5	8.5	4.3	8.5	8.5	8.5	8.5	8.5	8.5	8.5
180.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
210.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
240.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
270.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
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	4.3	8.5	8.5	8.5	8.5
360.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5

C\γ	110.0	111.0	112.0	113.0	114.0	115.0	116.0	117.0	118.0	119.0
0.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
30.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
60.0	8.5	8.5	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	8.5	8.5	8.5	8.5	8.5
120.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
150.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
180.0	8.5	8.5	8.5	8.5	12.8	8.5	8.5	8.5	8.5	8.5
210.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
240.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
270.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
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	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5

R854 WNL (CRI90 700mA 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	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
30.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
60.0	8.5	8.5	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	8.5	8.5	8.5	8.5	8.5
120.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	12.8	12.8	8.5
150.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	12.8
180.0	8.5	8.5	8.5	8.5	12.8	8.5	8.5	12.8	12.8	12.8
210.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	12.8
240.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
270.0	8.5	8.5	8.5	4.3	8.5	8.5	8.5	8.5	8.5	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	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5

C\γ	130.0	131.0	132.0	133.0	134.0	135.0	136.0	137.0	138.0	139.0
0.0	8.5	8.5	8.5	12.8	12.8	12.8	12.8	12.8	12.8	12.8
30.0	8.5	8.5	8.5	12.8	12.8	12.8	12.8	12.8	12.8	12.8
60.0	8.5	8.5	8.5	12.8	8.5	8.5	12.8	12.8	12.8	12.8
90.0	12.8	8.5	8.5	8.5	8.5	12.8	12.8	12.8	12.8	12.8
120.0	8.5	12.8	12.8	12.8	12.8	12.8	12.8	12.8	17.0	17.0
150.0	8.5	8.5	12.8	12.8	12.8	12.8	12.8	12.8	17.0	12.8
180.0	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	17.0
210.0	8.5	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
240.0	12.8	8.5	12.8	12.8	12.8	12.8	12.8	17.0	12.8	17.0
270.0	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	17.0	12.8
300.0	12.8	8.5	8.5	12.8	12.8	12.8	8.5	8.5	12.8	12.8
330.0	12.8	8.5	12.8	8.5	8.5	8.5	12.8	12.8	12.8	12.8
360.0	8.5	8.5	8.5	12.8	12.8	12.8	12.8	12.8	12.8	12.8

C\γ	140.0	141.0	142.0	143.0	144.0	145.0	146.0	147.0	148.0	149.0
0.0	12.8	12.8	12.8	17.0	17.0	17.0	17.0	17.0	17.0	17.0
30.0	12.8	12.8	17.0	12.8	17.0	17.0	12.8	17.0	12.8	17.0
60.0	12.8	12.8	12.8	12.8	17.0	12.8	17.0	17.0	12.8	17.0
90.0	12.8	12.8	12.8	12.8	17.0	12.8	17.0	17.0	17.0	17.0
120.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	21.3	17.0	21.3
150.0	17.0	17.0	17.0	17.0	17.0	17.0	21.3	17.0	21.3	21.3
180.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	21.3	17.0	21.3
210.0	17.0	17.0	17.0	17.0	17.0	17.0	21.3	21.3	21.3	21.3
240.0	12.8	12.8	17.0	17.0	17.0	17.0	21.3	21.3	17.0	21.3
270.0	12.8	17.0	17.0	17.0	17.0	21.3	17.0	21.3	17.0	21.3
300.0	12.8	17.0	12.8	12.8	12.8	17.0	17.0	17.0	17.0	17.0
330.0	12.8	12.8	12.8	12.8	12.8	17.0	17.0	12.8	17.0	17.0
360.0	12.8	12.8	12.8	17.0	17.0	17.0	17.0	17.0	17.0	17.0

R854 WNL (CRI90 700mA 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	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	21.3	17.0	21.3	21.3	21.3	21.3	21.3	21.3
60.0	17.0	17.0	17.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3
90.0	17.0	17.0	17.0	17.0	21.3	21.3	21.3	21.3	21.3	21.3
120.0	21.3	21.3	21.3	21.3	25.6	25.6	25.6	25.6	25.6	25.6
150.0	21.3	21.3	21.3	21.3	25.6	25.6	25.6	25.6	25.6	25.6
180.0	21.3	21.3	25.6	21.3	25.6	25.6	25.6	25.6	25.6	25.6
210.0	21.3	21.3	25.6	25.6	25.6	21.3	21.3	25.6	25.6	25.6
240.0	21.3	21.3	21.3	21.3	25.6	25.6	25.6	25.6	25.6	25.6
270.0	21.3	21.3	21.3	21.3	25.6	21.3	25.6	25.6	29.8	25.6
300.0	17.0	17.0	21.3	17.0	21.3	21.3	21.3	21.3	21.3	21.3
330.0	17.0	17.0	17.0	21.3	21.3	21.3	21.3	21.3	21.3	25.6
360.0	17.0	17.0	17.0	17.0	17.0	21.3	21.3	21.3	21.3	21.3

C\γ	160.0	161.0	162.0	163.0	164.0	165.0	166.0	167.0	168.0	169.0
0.0	21.3	21.3	25.6	25.6	25.6	25.6	25.6	25.6	25.6	29.8
30.0	21.3	21.3	25.6	21.3	25.6	25.6	25.6	25.6	25.6	29.8
60.0	25.6	21.3	25.6	25.6	25.6	25.6	25.6	25.6	25.6	29.8
90.0	21.3	21.3	25.6	25.6	25.6	25.6	25.6	25.6	25.6	29.8
120.0	25.6	29.8	29.8	25.6	29.8	29.8	29.8	29.8	29.8	29.8
150.0	25.6	25.6	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
180.0	25.6	25.6	29.8	29.8	29.8	29.8	29.8	34.1	29.8	29.8
210.0	25.6	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
240.0	25.6	25.6	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
270.0	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
300.0	21.3	21.3	25.6	25.6	25.6	25.6	25.6	25.6	29.8	29.8
330.0	25.6	21.3	21.3	25.6	25.6	25.6	25.6	25.6	25.6	25.6
360.0	21.3	21.3	25.6	25.6	25.6	25.6	25.6	25.6	25.6	29.8

C\γ	170.0	171.0	172.0	173.0	174.0	175.0	176.0	177.0	178.0	179.0
0.0	29.8	29.8	29.8	29.8	29.8	34.1	29.8	34.1	34.1	34.1
30.0	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	34.1
60.0	29.8	25.6	29.8	29.8	29.8	29.8	29.8	29.8	29.8	34.1
90.0	29.8	29.8	29.8	29.8	29.8	29.8	29.8	34.1	34.1	34.1
120.0	29.8	29.8	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1
150.0	29.8	34.1	29.8	29.8	34.1	34.1	34.1	34.1	29.8	29.8
180.0	29.8	29.8	29.8	34.1	34.1	34.1	34.1	29.8	34.1	34.1
210.0	34.1	34.1	29.8	29.8	34.1	34.1	34.1	34.1	34.1	29.8
240.0	29.8	29.8	34.1	34.1	34.1	34.1	29.8	34.1	34.1	34.1
270.0	29.8	29.8	29.8	34.1	34.1	29.8	29.8	34.1	34.1	34.1
300.0	29.8	29.8	29.8	29.8	29.8	29.8	29.8	34.1	29.8	29.8
330.0	29.8	29.8	25.6	29.8	29.8	29.8	29.8	29.8	29.8	34.1
360.0	29.8	29.8	29.8	29.8	29.8	34.1	29.8	34.1	34.1	34.1

Intensity Data [cd]		Page8
C\γ	180.0	
0.0	34.1	
30.0	29.8	
60.0	34.1	
90.0	34.1	
120.0	34.1	
150.0	34.1	
180.0	34.1	
210.0	29.8	
240.0	34.1	
270.0	34.1	
300.0	34.1	
330.0	34.1	
360.0	34.1	

R854 WNL (CRI90 700mA 70D)

Zonal flux distribution table

Page9

Gamma [°]	Average I [cd]	Zonal Flux [lm]	Sum Flux [lm]	Effective Flux [lm]	Effective Sum [lm]
0	2011.55	0.00	0.00	0.00	0.00
1	2013.77	1.93	1.93	1.93	1.93
2	2013.77	5.78	7.71	5.78	7.71
3	2021.22	9.65	17.36	9.65	17.36
4	2029.03	13.56	30.91	13.56	30.91
5	2032.58	17.47	48.39	17.47	48.39
6	2031.16	21.36	69.74	21.36	69.74
7	2027.25	25.19	94.93	25.19	94.93
8	2014.48	28.93	123.86	28.93	123.86
9	1987.50	32.43	156.29	32.43	156.29
10	1949.16	35.63	191.92	35.63	191.92
11	1906.21	38.52	230.44	38.52	230.44
12	1859.00	41.16	271.60	41.16	271.60
13	1816.76	43.62	315.22	43.62	315.22
14	1793.33	46.21	361.43	46.21	361.43
15	1772.03	48.95	410.38	48.95	410.38
16	1760.31	51.76	462.14	51.76	462.14
17	1754.63	54.74	516.87	54.74	516.87
18	1751.44	57.81	574.68	57.81	574.68
19	1745.76	60.84	635.53	60.84	635.53
20	1739.37	63.79	699.31	63.79	699.31
21	1734.05	66.70	766.01	66.70	766.01
22	1728.72	69.59	835.60	69.59	835.60
23	1725.17	72.47	908.07	72.47	908.07
24	1727.66	75.49	983.56	75.49	983.56
25	1731.56	78.66	1062.21	78.66	1062.21
26	1737.24	81.88	1144.10	81.88	1144.10
27	1745.76	85.21	1229.31	85.21	1229.31
28	1747.89	88.45	1317.76	88.45	1317.76
29	1743.99	91.36	1409.12	91.36	1409.12
30	1708.49	93.22	1502.33	93.22	1502.33
31	1638.20	93.13	1595.47	93.13	1595.47
32	1526.74	90.67	1686.14	90.67	1686.14
33	1388.30	85.88	1772.02	85.88	1772.02
34	1225.37	79.10	1851.12	79.10	1851.12
35	1078.77	71.56	1922.67	71.56	1922.67
36	952.39	64.67	1987.35	64.67	1987.35
37	860.81	59.14	2046.48	59.14	2046.48
38	798.34	55.38	2101.86	55.38	2101.86
39	768.87	53.49	2155.36	53.49	2155.36
40	744.38	52.78	2208.13	52.78	2208.13

R854 WNL (CRI90 700mA 70D)

Zonal flux distribution table

Page10

Gamma [°]	Average I [cd]	Zonal Flux [lm]	Sum Flux [lm]	Effective Flux [lm]	Effective Sum [lm]
41	718.11	52.08	2260.21	52.08	2260.21
42	684.74	50.97	2311.18	50.97	2311.18
43	640.73	49.10	2360.28	49.10	2360.28
44	584.64	46.25	2406.53	46.25	2406.53
45	515.07	42.26	2448.79	42.26	2448.79
46	435.55	37.18	2485.97	37.18	2485.97
47	364.91	31.84	2517.80	31.84	2517.80
48	294.98	26.68	2544.48	26.68	2544.48
49	223.28	21.28	2565.76	20.07	2564.55
50	174.65	16.59	2582.35	6.63	2571.18
51	134.54	13.08	2595.43	0.00	2571.18
52	107.56	10.39	2605.82	0.00	2571.18
53	89.10	8.55	2614.38	0.00	2571.18
54	76.67	7.31	2621.68	0.00	2571.18
55	67.80	6.45	2628.13	0.00	2571.18
56	60.70	5.81	2633.94	0.00	2571.18
57	53.96	5.24	2639.18	0.00	2571.18
58	48.63	4.74	2643.93	0.00	2571.18
59	46.50	4.45	2648.37	0.00	2571.18
60	41.53	4.16	2652.53	0.00	2571.18
61	38.34	3.81	2656.34	0.00	2571.18
62	34.79	3.52	2659.87	0.00	2571.18
63	33.37	3.31	2663.18	0.00	2571.18
64	29.46	3.08	2666.26	0.00	2571.18
65	27.69	2.83	2669.09	0.00	2571.18
66	25.56	2.66	2671.75	0.00	2571.18
67	23.78	2.48	2674.23	0.00	2571.18
68	22.01	2.32	2676.55	0.00	2571.18
69	19.88	2.14	2678.69	0.00	2571.18
70	18.81	1.99	2680.67	0.00	2571.18
71	16.33	1.82	2682.49	0.00	2571.18
72	15.26	1.64	2684.13	0.00	2571.18
73	14.55	1.56	2685.69	0.00	2571.18
74	13.13	1.46	2687.15	0.00	2571.18
75	11.71	1.31	2688.46	0.00	2571.18
76	11.36	1.22	2689.68	0.00	2571.18
77	10.65	1.17	2690.86	0.00	2571.18
78	10.65	1.14	2692.00	0.00	2571.18
79	10.29	1.13	2693.12	0.00	2571.18
80	10.65	1.13	2694.25	0.00	2571.18
81	8.87	1.06	2695.31	0.00	2571.18

R854 WNL (CRI90 700mA 70D)

Zonal flux distribution table

Page11

Gamma [°]	Average I [cd]	Zonal Flux [lm]	Sum Flux [lm]	Effective Flux [lm]	Effective Sum [lm]
82	8.52	0.94	2696.25	0.00	2571.18
83	8.87	0.95	2697.20	0.00	2571.18
84	8.52	0.95	2698.14	0.00	2571.18
85	8.52	0.93	2699.07	0.00	2571.18
86	8.52	0.93	2700.00	0.00	2571.18
87	8.52	0.93	2700.94	0.00	2571.18
88	8.16	0.91	2701.85	0.00	2571.18
89	8.52	0.91	2702.77	0.00	2571.18
90	8.16	0.91	2703.68	0.00	2571.18
91	8.52	0.91	2704.60	0.00	2571.18
92	8.52	0.93	2705.53	0.00	2571.18
93	8.52	0.93	2706.47	0.00	2571.18
94	8.16	0.91	2707.38	0.00	2571.18
95	8.52	0.91	2708.29	0.00	2571.18
96	8.52	0.93	2709.22	0.00	2571.18
97	8.16	0.91	2710.13	0.00	2571.18
98	8.52	0.91	2711.04	0.00	2571.18
99	8.52	0.92	2711.96	0.00	2571.18
100	7.81	0.88	2712.84	0.00	2571.18
101	8.52	0.88	2713.72	0.00	2571.18
102	8.16	0.90	2714.62	0.00	2571.18
103	8.52	0.89	2715.51	0.00	2571.18
104	8.52	0.91	2716.42	0.00	2571.18
105	8.16	0.89	2717.30	0.00	2571.18
106	8.52	0.88	2718.19	0.00	2571.18
107	8.52	0.90	2719.08	0.00	2571.18
108	8.16	0.87	2719.95	0.00	2571.18
109	8.52	0.87	2720.82	0.00	2571.18
110	8.52	0.88	2721.70	0.00	2571.18
111	8.52	0.88	2722.58	0.00	2571.18
112	8.52	0.87	2723.45	0.00	2571.18
113	8.52	0.86	2724.31	0.00	2571.18
114	8.87	0.87	2725.19	0.00	2571.18
115	8.52	0.87	2726.05	0.00	2571.18
116	8.52	0.84	2726.90	0.00	2571.18
117	8.52	0.84	2727.73	0.00	2571.18
118	8.52	0.83	2728.56	0.00	2571.18
119	8.52	0.82	2729.38	0.00	2571.18
120	8.52	0.81	2730.20	0.00	2571.18
121	8.52	0.80	2731.00	0.00	2571.18
122	8.52	0.80	2731.80	0.00	2571.18

R854 WNL (CRI90 700mA 70D)

Zonal flux distribution table

Page12

Gamma [°]	Average I [cd]	Zonal Flux [lm]	Sum Flux [lm]	Effective Flux [lm]	Effective Sum [lm]
123	8.16	0.77	2732.57	0.00	2571.18
124	8.87	0.78	2733.35	0.00	2571.18
125	8.52	0.79	2734.14	0.00	2571.18
126	8.52	0.76	2734.90	0.00	2571.18
127	9.23	0.78	2735.68	0.00	2571.18
128	9.23	0.80	2736.48	0.00	2571.18
129	9.94	0.82	2737.30	0.00	2571.18
130	10.65	0.87	2738.18	0.00	2571.18
131	9.94	0.86	2739.03	0.00	2571.18
132	11.00	0.86	2739.89	0.00	2571.18
133	12.07	0.93	2740.83	0.00	2571.18
134	11.71	0.95	2741.77	0.00	2571.18
135	12.07	0.93	2742.70	0.00	2571.18
136	12.42	0.94	2743.64	0.00	2571.18
137	12.78	0.95	2744.59	0.00	2571.18
138	13.84	0.99	2745.58	0.00	2571.18
139	13.84	1.01	2746.59	0.00	2571.18
140	14.20	1.00	2747.58	0.00	2571.18
141	14.91	1.02	2748.60	0.00	2571.18
142	15.26	1.03	2749.63	0.00	2571.18
143	15.26	1.02	2750.65	0.00	2571.18
144	16.33	1.03	2751.68	0.00	2571.18
145	16.68	1.05	2752.73	0.00	2571.18
146	17.75	1.07	2753.80	0.00	2571.18
147	18.46	1.10	2754.89	0.00	2571.18
148	17.04	1.05	2755.94	0.00	2571.18
149	19.17	1.04	2756.98	0.00	2571.18
150	19.17	1.07	2758.04	0.00	2571.18
151	19.17	1.04	2759.08	0.00	2571.18
152	20.59	1.04	2760.12	0.00	2571.18
153	20.23	1.03	2761.15	0.00	2571.18
154	23.07	1.06	2762.21	0.00	2571.18
155	22.72	1.08	2763.29	0.00	2571.18
156	23.07	1.04	2764.33	0.00	2571.18
157	23.43	1.02	2765.35	0.00	2571.18
158	23.78	0.99	2766.34	0.00	2571.18
159	23.78	0.96	2767.30	0.00	2571.18
160	24.49	0.93	2768.23	0.00	2571.18
161	24.49	0.90	2769.12	0.00	2571.18
162	27.33	0.90	2770.02	0.00	2571.18
163	26.98	0.90	2770.92	0.00	2571.18

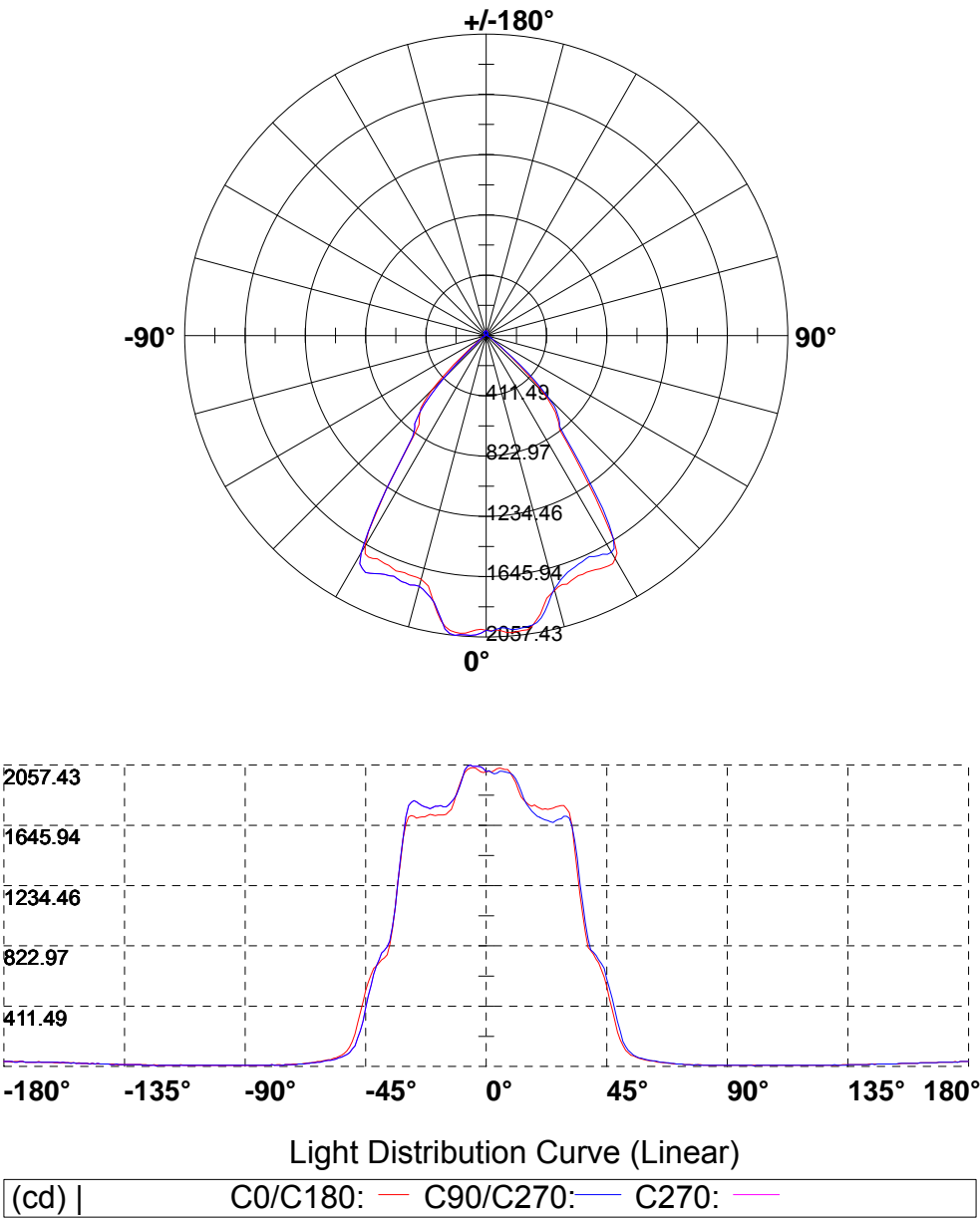
R854 WNL (CRI90 700mA 70D)

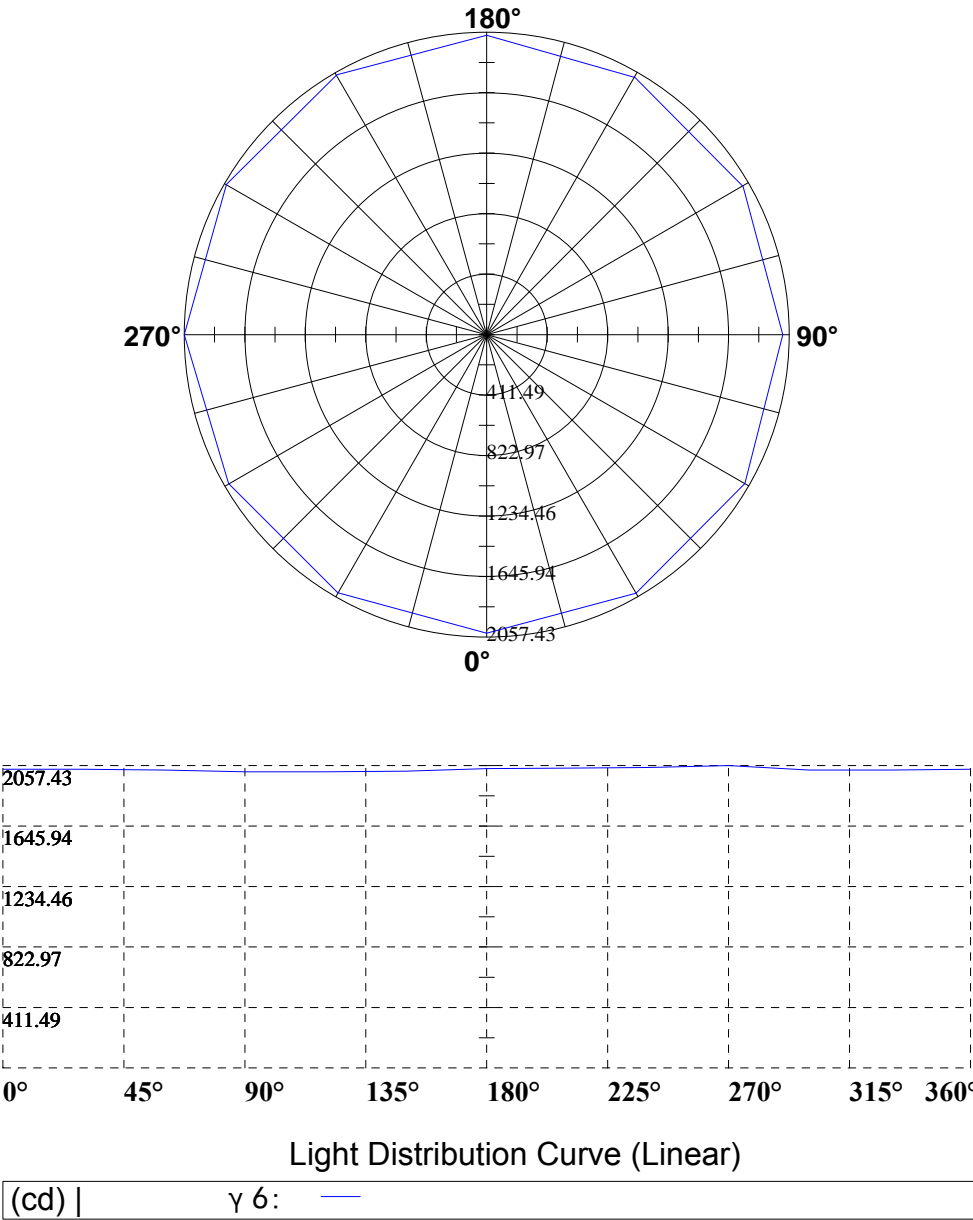
Zonal flux distribution table

Page13

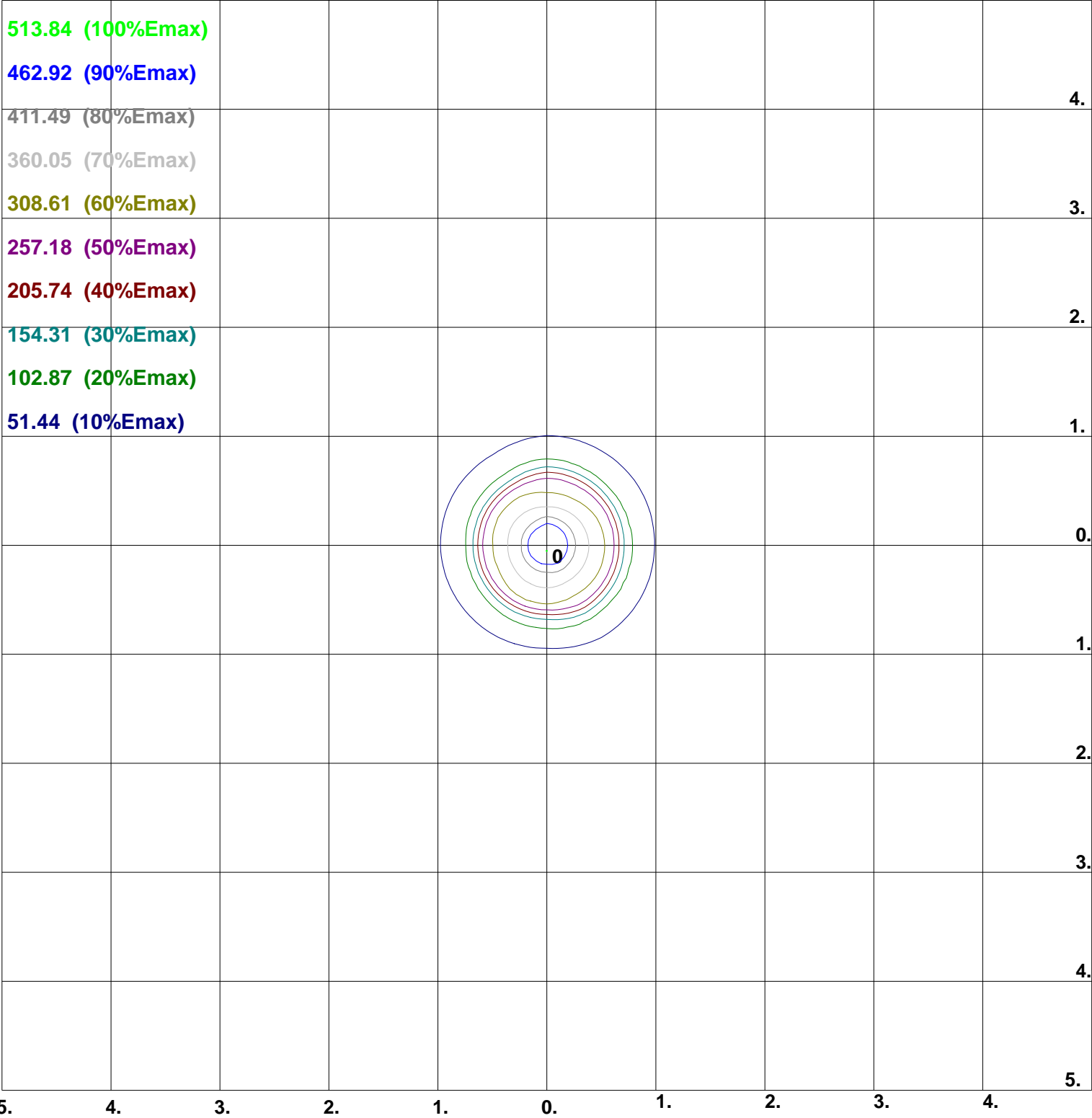
[illegible]

Light Distribution Curve [Unit: cd]





Unit: [lx]

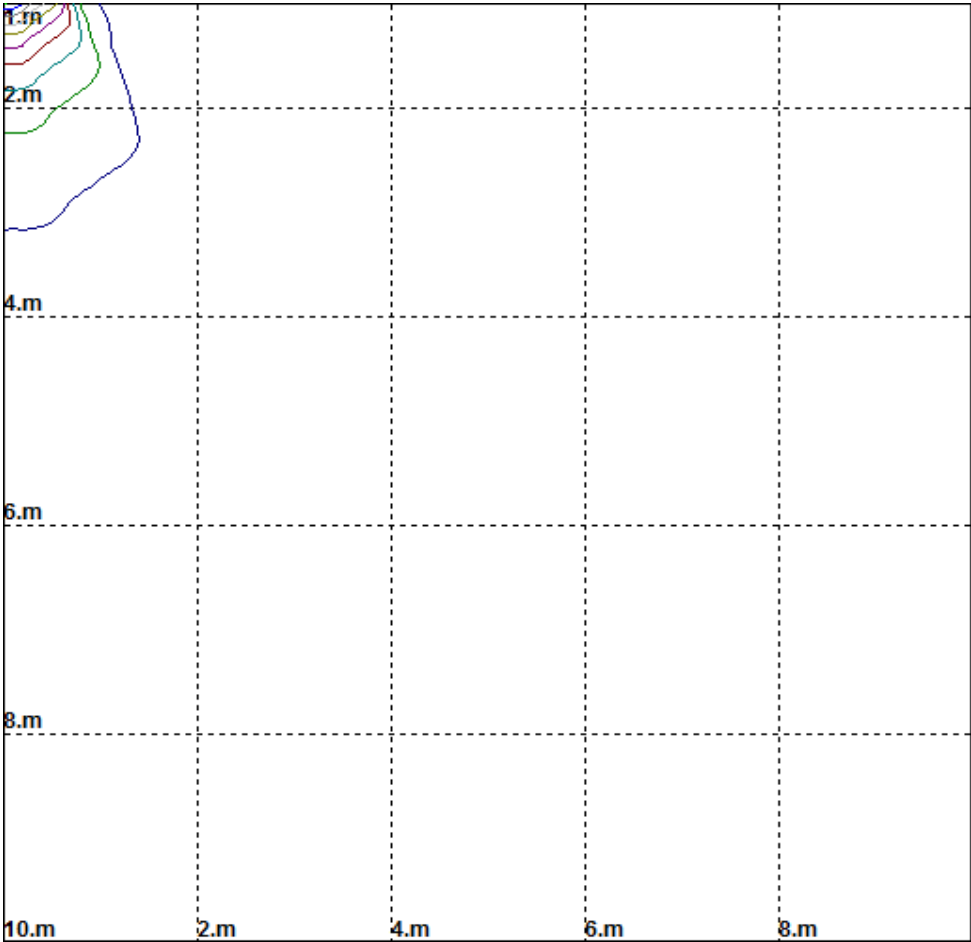


Coordinate Scale: d/h
Height: 2 m
Max Illuminance : 514.36lx

Space ISO-lx

Unit: [lx]
Illuminance

- 513.84
- 462.92
- 411.49
- 360.05
- 308.61
- 257.18
- 205.74
- 154.31
- 102.87
- 51.44



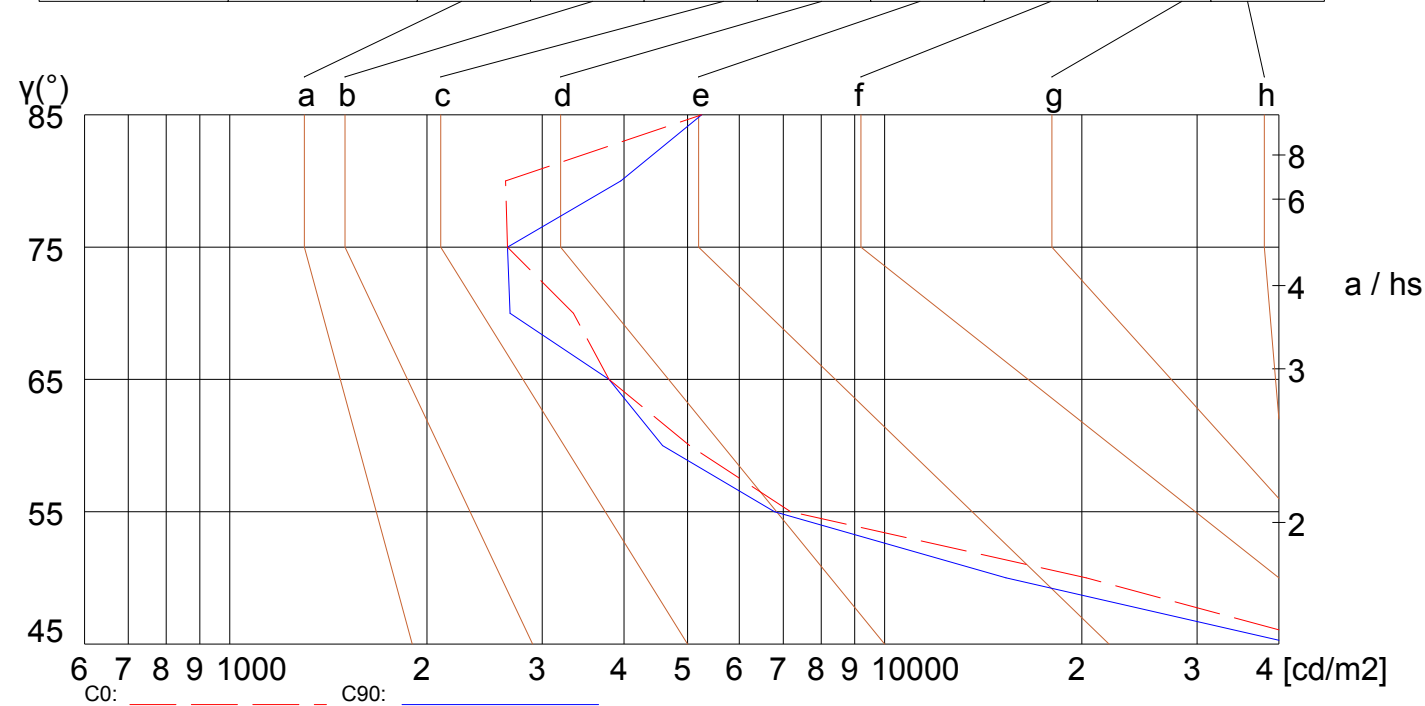
Luminance Limiting Curve (There is not luminous side)

Diameter: 154mm
Length: -154mm
Width: -154mm
Height: 144mm

(cd/m2)

γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	45343	20308	7187	5038	3793	3348	2655	2638	5255
C90	41456	15320	6788	4580	3793	2678	2655	3957	5255

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



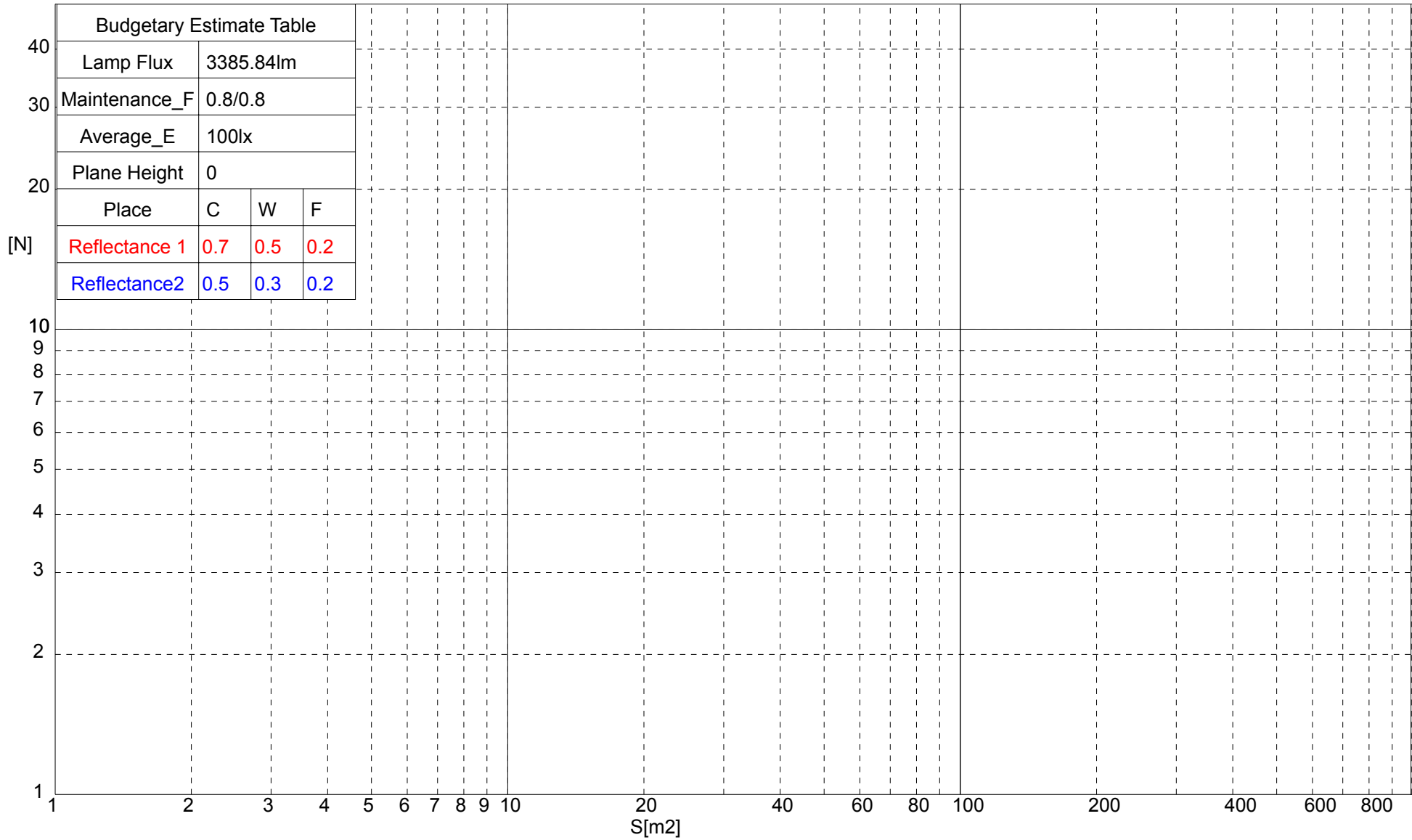
Luminance Limiting Curve (C0/C90)

R854 WNL (CRI90 700mA 70D)

utilization factor table for indoor luminaire

Page19

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	0.98	0.98	0.98	0.95	0.95	0.95	0.91	0.91	0.91	0.87	0.87	0.87	0.84	0.84	0.84	0.82
1	0.92	0.91	0.91	0.91	0.90	0.89	0.87	0.86	0.85	0.83	0.82	0.81	0.77	0.76	0.75	0.71
2	0.85	0.84	0.83	0.84	0.82	0.81	0.81	0.79	0.78	0.77	0.75	0.73	0.73	0.70	0.69	0.65
3	0.78	0.76	0.75	0.77	0.75	0.74	0.75	0.72	0.71	0.72	0.69	0.67	0.68	0.65	0.63	0.59
4	0.72	0.70	0.69	0.71	0.69	0.68	0.69	0.66	0.64	0.67	0.64	0.61	0.64	0.60	0.57	0.54
5	0.66	0.64	0.63	0.65	0.63	0.62	0.64	0.61	0.59	0.62	0.59	0.56	0.60	0.56	0.53	0.50
6	0.61	0.59	0.58	0.60	0.58	0.57	0.59	0.56	0.54	0.58	0.54	0.52	0.56	0.52	0.49	0.46
7	0.56	0.55	0.54	0.56	0.54	0.53	0.55	0.52	0.50	0.54	0.50	0.48	0.52	0.48	0.45	0.42
8	0.52	0.51	0.50	0.52	0.50	0.49	0.52	0.49	0.46	0.51	0.47	0.44	0.49	0.45	0.42	0.39
9	0.49	0.47	0.46	0.49	0.47	0.45	0.48	0.45	0.43	0.47	0.44	0.41	0.46	0.42	0.39	0.36
10	0.45	0.44	0.43	0.45	0.43	0.42	0.45	0.42	0.40	0.45	0.41	0.38	0.44	0.39	0.36	0.34



Operator
Telephone
Fax
e-Mail

R854 WNL (CRI90 700mA 70D) / UGR-Table

Luminaire: R854 WNL (CRI90 700mA 70D)

Lamps: 1 x LUMINUS CLM-14-40-90-36-TC40-F5-2 700mA

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	18.3	19.2	18.6	19.4	19.7	18.3	19.2	18.6	19.4	19.7
	3H	18.2	18.9	18.6	19.2	19.5	18.2	18.9	18.6	19.2	19.5
	4H	18.2	18.8	18.5	19.1	19.5	18.2	18.8	18.5	19.1	19.5
	6H	18.1	18.7	18.5	19.0	19.4	18.1	18.7	18.5	19.0	19.4
	8H	18.1	18.6	18.4	19.0	19.3	18.1	18.6	18.4	19.0	19.3
	12H	18.0	18.6	18.4	18.9	19.3	18.0	18.6	18.4	18.9	19.3
4H	2H	18.1	18.8	18.5	19.1	19.4	18.1	18.8	18.5	19.1	19.4
	3H	18.0	18.6	18.4	18.9	19.3	18.0	18.6	18.4	18.9	19.3
	4H	18.0	18.5	18.4	18.8	19.2	18.0	18.5	18.4	18.8	19.2
	6H	17.9	18.3	18.3	18.7	19.2	17.9	18.3	18.3	18.7	19.2
	8H	17.9	18.2	18.3	18.7	19.1	17.9	18.2	18.3	18.7	19.1
	12H	17.8	18.2	18.3	18.6	19.1	17.8	18.2	18.3	18.6	19.1
8H	4H	17.8	18.2	18.3	18.7	19.1	17.8	18.2	18.3	18.7	19.1
	6H	17.8	18.1	18.3	18.5	19.0	17.8	18.1	18.3	18.5	19.0
	8H	17.7	18.0	18.3	18.5	19.0	17.7	18.0	18.3	18.5	19.0
	12H	17.7	17.9	18.2	18.4	19.0	17.7	17.9	18.2	18.4	19.0
12H	4H	17.8	18.1	18.3	18.6	19.1	17.8	18.1	18.3	18.6	19.1
	6H	17.7	18.0	18.3	18.5	19.0	17.7	18.0	18.3	18.5	19.0
	8H	17.7	17.9	18.2	18.4	19.0	17.7	17.9	18.2	18.4	19.0
Variation of the observer position for the luminaire distances S											
S = 1.0H		+3.5 / -8.5					+3.5 / -8.5				
S = 1.5H		+6.1 / -10.1					+6.1 / -10.1				
S = 2.0H		+8.1 / -11.1					+8.1 / -11.1				
Standard table		BK00					BK00				
Correction Summand		-0.9					-0.9				
Corrected Glare Indices referring to 3386lm Total Luminous Flux											

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