

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P242744

Luminaire Tested: S124RDRP-S1020D835-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242744
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-31)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S1020D835-X4F0-XX-UDD-A-W
Description: DEFINE 4 REGRESSED DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

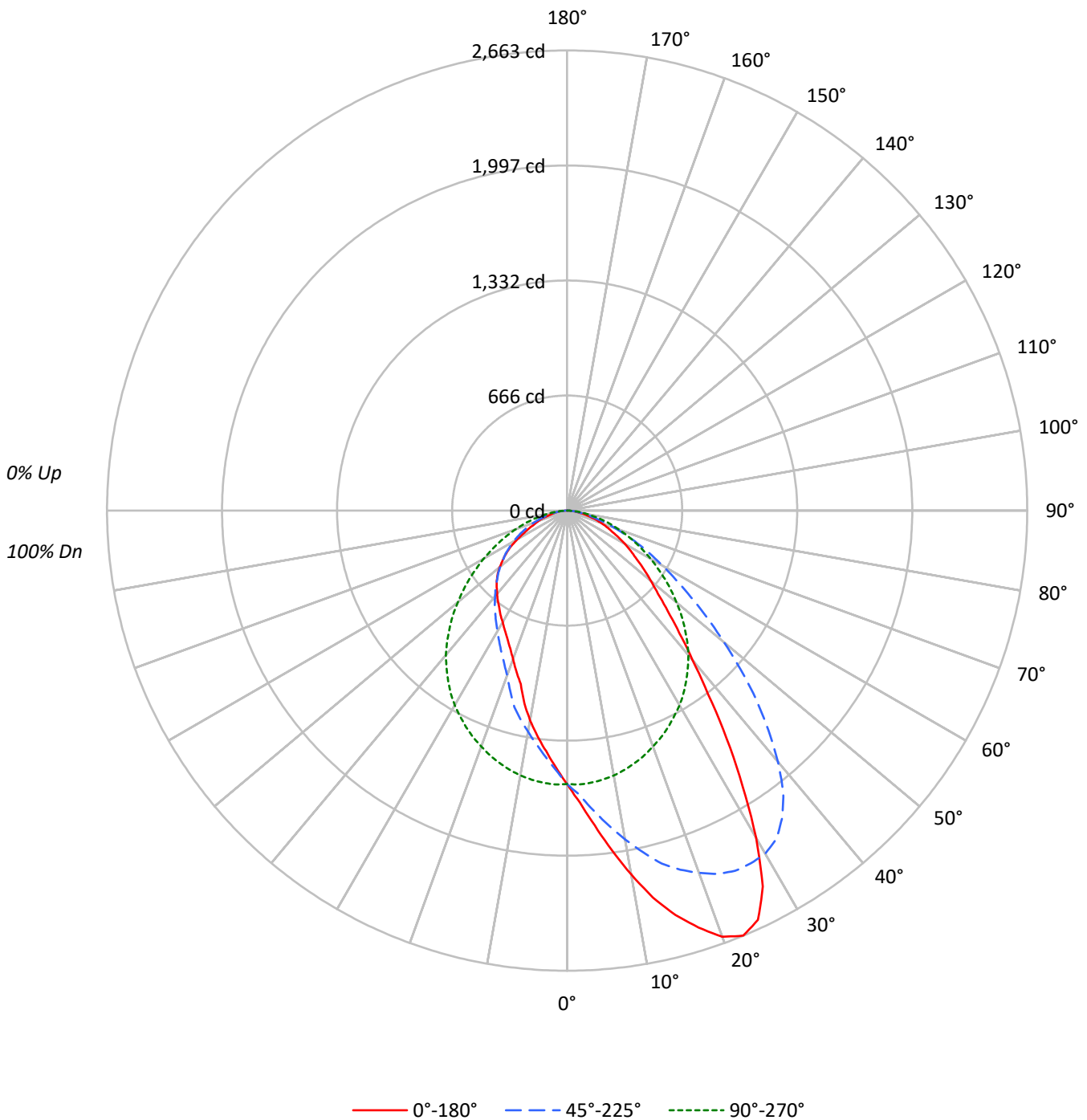
Lumens per Lamp: N/A
Luminaire Lumens: 4000.6 lumens
Efficiency: N/A
Efficacy: 115.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.22 / 1.39
Luminous Opening: Rectangular (W 3.88' x L: 0.31' x H: 0')
CIE Type: Direct

Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74					74			
3	93	83	76	70	90	81	75	69	79	73	68	76	71	67	73	69	65	63					63			
4	85	74	66	60	83	73	65	59	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	64	57	51	62	56	51	60	55	50	48					48			
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38					38			
8	64	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34					34			
9	59	47	39	33	58	46	38	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	35	30	55	43	35	30	42	35	30	41	34	30	40	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	14068	14068	14068	14068	14068
5°	16317	15532	14110	12767	12471
10°	19303	17438	14048	11735	11131
15°	22298	19469	13918	10843	9564
20°	24826	21111	13740	9590	8650
25°	25628	22564	13564	8837	8030
30°	22435	23534	13351	8279	7657
35°	17464	23545	13036	7860	7431
40°	13096	22026	12675	7525	7310
45°	10339	19437	12096	7238	7246
50°	8729	16357	11428	6992	7036
55°	7609	13557	10692	6729	6661
60°	6846	11348	9931	6348	5895
65°	6034	9454	9105	5914	5069
70°	5434	7558	8252	5336	4574
75°	4554	5869	7315	4688	3898
80°	3849	4438	6235	3885	3655
85°	3253	3508	4875	3447	3253

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 55°
 Vertical Angle: 45°
 Luminance: 20759 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.2	3.8
10°-20°	462.8	11.6
20°-30°	724.9	18.1
30°-40°	805.0	20.1
40°-50°	713.3	17.8
50°-60°	555.9	13.9
60°-70°	363.6	9.1
70°-80°	178.4	4.5
80°-90°	43.4	1.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1340.9	33.5
0°-40°	2145.9	53.6
0°-60°	3415.1	85.4
0°-90°	4000.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4000.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1583	1583	1583	1583	1583	
5°	1829	1741	1581	1431	1398	184
15°	2423	2116	1512	1178	1039	689
25°	2613	2301	1383	901	819	1167
35°	1609	2170	1201	724	685	1007
45°	822	1546	962	576	576	649
55°	491	875	690	434	430	446
65°	287	450	433	281	241	288
75°	133	171	213	136	114	146
85°	32	34	48	34	32	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6
2.5°	1691.0	1696.7	1691.0	1690.3	1684.0	1682.1	1679.5	1671.2	1655.9	1647.0	1648.9
5°	1828.7	1844.6	1835.7	1834.4	1820.4	1806.4	1797.5	1777.1	1755.4	1740.7	1728.6
7.5°	1981.7	1991.3	1984.9	1977.9	1953.7	1946.0	1925.0	1900.8	1864.4	1837.0	1812.1
10°	2138.6	2146.2	2143.7	2127.1	2110.5	2076.7	2057.6	2020.0	1970.9	1932.0	1895.7
12.5°	2292.9	2301.2	2273.8	2278.9	2243.8	2218.9	2185.8	2136.0	2077.4	2024.5	1976.6
15°	2423.0	2412.8	2412.8	2400.0	2365.0	2328.0	2296.7	2247.0	2175.6	2115.6	2052.5
17.5°	2530.1	2534.6	2529.5	2496.9	2471.4	2433.8	2377.7	2321.0	2259.1	2178.8	2116.3
20°	2624.5	2624.5	2618.7	2598.3	2562.6	2521.8	2460.0	2396.8	2312.7	2231.7	2159.0
22.5°	2662.7	2665.3	2658.3	2642.3	2611.1	2571.5	2521.2	2456.8	2369.4	2275.7	2181.3
25°	2613.0	2625.1	2626.4	2621.9	2612.4	2588.1	2542.8	2477.2	2399.4	2300.6	2203.6
27.5°	2452.3	2468.2	2474.6	2488.7	2514.8	2524.4	2518.6	2474.6	2399.4	2301.8	2205.5
30°	2185.8	2198.5	2240.0	2294.2	2336.3	2374.5	2407.7	2416.6	2378.3	2292.9	2190.2
32.5°	1889.9	1908.4	1949.9	2009.2	2086.3	2157.7	2242.5	2287.8	2296.1	2253.4	2160.3
35°	1609.4	1622.1	1660.4	1721.6	1805.8	1902.0	2020.0	2111.8	2174.3	2169.8	2111.8
37.5°	1340.3	1358.1	1397.0	1447.4	1530.3	1653.4	1764.9	1888.0	2000.2	2055.1	2025.7
40°	1128.6	1129.2	1166.9	1219.1	1295.7	1399.6	1523.9	1664.2	1793.0	1898.2	1918.6
42.5°	961.5	961.5	983.2	1040.6	1090.3	1186.6	1303.9	1442.9	1599.2	1724.8	1787.3
45°	822.5	828.3	848.7	882.5	925.8	1008.7	1103.7	1233.2	1402.1	1546.2	1636.1
47.5°	712.9	723.1	735.2	765.8	801.5	859.5	940.5	1061.6	1201.9	1362.0	1486.3
50°	631.2	632.5	649.1	664.4	694.4	738.4	807.2	904.2	1030.4	1182.8	1325.0
52.5°	561.1	560.5	568.8	589.2	612.1	644.0	696.3	782.4	890.8	1023.4	1171.3
55°	491.0	494.2	501.8	517.1	535.6	559.8	603.8	670.1	758.1	874.8	1008.1
57.5°	437.4	439.3	446.3	452.1	469.9	487.8	523.5	571.3	648.5	746.0	876.7
60°	385.1	385.8	387.7	397.2	410.6	427.2	449.5	488.4	550.9	638.3	736.5
62.5°	334.1	335.4	338.6	345.0	354.5	364.7	388.3	417.6	466.7	538.2	624.2
65°	286.9	287.6	292.0	294.6	302.9	313.1	330.3	351.3	387.0	449.5	516.5
67.5°	247.4	247.4	247.4	251.2	257.6	264.6	276.1	293.9	322.6	362.8	425.3
70°	209.1	209.1	210.4	212.3	215.5	221.3	227.0	239.7	259.5	290.8	336.0
72.5°	173.4	174.1	175.3	175.3	176.6	181.1	184.9	191.9	205.3	227.0	261.4
75°	132.6	134.5	137.7	140.3	143.5	142.8	147.3	152.4	156.9	170.9	191.9
77.5°	104.6	103.3	103.3	105.8	106.5	107.1	110.3	114.8	118.6	126.2	133.9
80°	75.2	75.2	77.2	77.8	77.2	77.8	81.0	82.9	84.2	86.7	93.7
82.5°	52.3	53.6	52.3	52.9	53.6	54.2	56.7	56.7	58.0	58.7	60.6
85°	31.9	32.5	33.2	31.9	31.9	31.9	33.2	33.8	35.1	34.4	35.7
87.5°	14.0	13.4	14.0	14.0	14.7	14.0	14.7	15.9	14.7	15.3	15.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6
2.5°	1642.5	1633.6	1629.1	1618.9	1606.8	1600.4	1594.7	1586.4	1575.6	1564.1	1555.8
5°	1713.3	1698.0	1678.9	1655.9	1635.5	1615.7	1598.5	1581.3	1561.5	1541.1	1520.7
7.5°	1783.4	1756.0	1726.7	1691.6	1657.8	1626.6	1598.5	1571.1	1539.9	1511.8	1485.7
10°	1857.4	1816.6	1771.3	1723.5	1675.7	1634.2	1593.4	1556.4	1515.6	1479.3	1448.7
12.5°	1917.3	1867.6	1810.9	1748.4	1688.4	1636.1	1587.7	1536.7	1488.9	1448.7	1405.3
15°	1984.9	1919.3	1845.9	1774.5	1699.9	1631.7	1568.6	1512.4	1459.5	1404.1	1365.2
17.5°	2031.5	1955.6	1868.9	1786.0	1700.5	1621.5	1550.1	1485.0	1424.5	1369.0	1323.1
20°	2072.3	1986.2	1887.4	1789.8	1691.0	1604.9	1526.5	1452.5	1389.4	1328.2	1280.4
22.5°	2095.2	1997.7	1887.4	1784.1	1680.8	1585.8	1497.8	1420.0	1349.9	1288.6	1234.4
25°	2096.5	1994.5	1884.2	1766.9	1654.6	1555.8	1466.5	1383.0	1306.5	1245.3	1189.2
27.5°	2091.4	1973.5	1862.5	1743.3	1627.9	1522.6	1430.2	1341.6	1265.7	1200.6	1143.3
30°	2076.1	1947.3	1826.2	1701.2	1583.9	1483.8	1384.9	1300.8	1221.1	1152.8	1094.8
32.5°	2043.0	1915.4	1782.8	1654.0	1534.8	1430.8	1338.4	1253.6	1175.8	1105.6	1043.2
35°	1997.0	1867.6	1726.1	1594.7	1478.0	1370.9	1282.9	1201.3	1126.7	1052.1	987.0
37.5°	1944.1	1808.9	1669.3	1525.2	1409.2	1307.1	1224.9	1146.5	1073.8	1005.5	933.5
40°	1862.5	1742.0	1596.6	1453.8	1333.9	1236.4	1161.8	1092.3	1018.9	951.3	879.3
42.5°	1763.7	1665.5	1518.2	1374.7	1256.8	1163.7	1095.4	1027.9	962.8	897.8	821.9
45°	1651.4	1573.7	1435.9	1298.2	1179.0	1085.9	1022.1	962.2	903.5	841.0	770.3
47.5°	1526.5	1469.1	1349.2	1205.1	1093.5	1008.1	946.9	897.1	845.5	782.4	718.6
50°	1395.1	1361.3	1246.6	1117.8	1012.5	935.4	872.3	826.4	784.9	725.0	669.5
52.5°	1254.8	1240.8	1148.4	1026.6	925.8	850.6	798.9	758.8	716.7	669.5	618.5
55°	1112.0	1121.6	1039.3	932.8	837.2	773.4	724.3	689.9	654.2	612.1	571.9
57.5°	963.5	999.8	938.6	842.3	749.8	689.9	652.3	621.7	591.7	556.0	519.7
60°	832.7	862.1	830.8	748.6	670.1	615.3	580.9	558.6	528.6	496.7	470.6
62.5°	705.2	737.1	721.8	659.3	587.9	542.6	513.3	492.9	472.5	445.7	418.3
65°	602.6	623.0	614.0	568.1	516.5	476.3	448.3	432.9	412.5	392.1	367.9
67.5°	482.0	522.2	515.8	490.3	440.6	408.7	389.0	374.9	355.8	340.5	323.3
70°	379.4	415.7	415.1	395.3	371.1	341.8	329.0	317.5	301.0	286.3	272.9
72.5°	293.3	325.8	332.2	318.2	303.5	283.1	271.0	264.0	248.0	239.1	228.9
75°	217.4	241.7	248.0	248.0	240.4	228.9	218.1	213.0	201.5	192.6	186.2
77.5°	153.0	169.6	179.2	181.1	181.7	177.3	167.1	163.2	154.3	151.1	144.1
80°	100.7	110.9	122.4	126.2	129.4	128.2	124.3	121.8	113.5	110.3	107.8
82.5°	61.8	66.3	75.2	84.8	82.9	87.4	84.2	82.3	76.5	75.9	73.3
85°	36.3	37.0	38.3	44.0	47.2	48.5	49.1	47.8	45.9	45.9	41.4
87.5°	15.3	14.7	15.9	15.9	16.6	19.1	21.0	21.7	19.8	17.9	15.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6	1582.6
2.5°	1546.9	1540.5	1532.2	1522.6	1511.2	1501.0	1496.5	1500.3	1502.2	1497.1	1496.5
5°	1506.7	1490.8	1478.0	1458.9	1443.6	1430.8	1421.9	1418.1	1419.4	1409.2	1406.6
7.5°	1462.1	1444.9	1423.8	1402.1	1381.7	1363.9	1354.3	1349.9	1339.0	1334.5	1327.5
10°	1419.4	1393.8	1373.4	1346.7	1322.4	1300.1	1289.3	1280.4	1269.5	1264.4	1253.6
12.5°	1375.4	1344.8	1321.8	1293.7	1268.9	1240.8	1230.6	1212.1	1193.6	1181.5	1166.9
15°	1334.5	1298.8	1271.4	1238.3	1208.9	1178.3	1150.9	1120.3	1108.8	1084.6	1070.6
17.5°	1286.1	1249.1	1218.5	1175.8	1131.8	1094.8	1064.2	1032.3	1015.1	998.5	991.5
20°	1238.3	1205.1	1157.9	1106.3	1055.9	1013.8	990.2	971.1	952.0	941.1	933.5
22.5°	1193.0	1148.4	1091.6	1034.9	984.5	953.9	934.8	915.0	900.3	890.1	879.3
25°	1141.3	1085.9	1027.9	964.1	929.7	901.0	879.3	863.3	853.8	840.4	835.3
27.5°	1091.0	1024.0	958.4	915.0	879.3	851.9	832.1	820.6	807.9	798.9	791.9
30°	1031.0	962.8	905.4	864.6	828.3	806.6	791.3	777.3	767.7	760.7	755.6
32.5°	971.7	903.5	857.6	813.0	786.2	765.2	748.6	739.0	732.0	722.4	719.9
35°	915.0	854.4	812.3	772.8	743.5	724.3	711.6	700.8	694.4	691.8	689.9
37.5°	859.5	809.1	762.6	730.7	703.3	688.6	672.1	667.0	662.5	656.8	659.3
40°	807.2	760.7	720.5	686.1	665.0	648.5	639.5	633.2	629.3	629.3	629.3
42.5°	762.0	716.7	677.8	647.8	626.8	613.4	603.2	598.1	597.5	596.8	600.6
45°	714.8	672.7	633.2	607.7	589.8	575.8	570.0	565.6	565.6	568.1	568.8
47.5°	667.6	628.1	596.2	566.8	550.3	541.3	536.2	533.7	533.7	536.9	539.4
50°	624.9	586.0	554.7	529.2	513.9	505.6	501.2	499.9	501.2	501.2	505.6
52.5°	578.3	544.5	513.9	493.5	475.7	468.0	466.1	464.2	464.8	467.4	468.7
55°	533.1	501.8	472.5	452.1	439.3	434.2	428.5	429.1	427.8	429.1	429.1
57.5°	487.1	459.7	431.0	414.5	403.6	396.0	389.6	391.5	389.6	389.6	389.0
60°	443.1	412.5	390.9	376.2	363.4	357.1	351.3	352.6	350.7	349.4	346.9
62.5°	395.3	371.1	350.7	336.7	327.1	319.5	313.7	311.8	306.7	301.6	295.2
65°	349.4	328.4	309.9	296.5	286.9	281.2	276.7	272.9	263.3	253.1	248.0
67.5°	304.1	288.8	271.0	259.5	251.9	244.2	235.9	228.9	219.3	213.0	209.8
70°	260.8	246.1	231.5	220.6	212.3	205.3	195.8	191.3	184.9	182.4	179.2
72.5°	219.3	206.0	192.6	183.0	174.1	169.0	162.0	157.5	155.6	154.9	151.8
75°	177.3	166.4	156.2	147.3	140.3	136.5	133.3	130.1	128.8	123.1	119.9
77.5°	136.5	128.8	122.4	115.4	110.9	108.4	101.4	96.9	94.4	91.2	90.5
80°	100.7	95.6	89.3	85.4	78.4	75.9	73.3	72.7	72.1	71.4	70.8
82.5°	69.5	64.4	58.0	56.1	55.5	54.2	52.9	52.3	51.6	52.3	52.3
85°	38.3	35.7	35.7	35.1	34.4	33.8	33.2	33.2	32.5	33.2	32.5
87.5°	15.9	15.3	15.3	14.0	14.7	14.7	14.0	14.0	14.7	13.4	13.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P242744

CATALOG NUMBER: S124RDRP-S1020D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1582.6	1582.6	1582.6	1582.6
2.5°	1492.7	1494.0	1489.5	1488.2
5°	1401.5	1400.2	1397.0	1397.7
7.5°	1322.4	1318.0	1321.2	1316.1
10°	1251.0	1244.0	1238.3	1233.2
12.5°	1153.5	1147.7	1139.4	1142.6
15°	1062.3	1052.7	1037.4	1039.3
17.5°	980.7	981.9	973.0	975.6
20°	920.1	915.6	916.3	914.4
22.5°	878.0	872.3	866.5	862.1
25°	829.6	825.7	820.0	818.7
27.5°	786.8	786.2	783.6	780.5
30°	750.5	749.2	747.9	746.0
32.5°	718.0	717.3	716.1	716.7
35°	687.4	686.7	685.4	684.8
37.5°	658.7	660.6	659.3	659.3
40°	628.7	629.3	630.6	630.0
42.5°	603.8	603.8	605.7	603.2
45°	573.2	577.1	576.4	576.4
47.5°	540.7	545.2	545.8	545.8
50°	508.8	507.5	509.5	508.8
52.5°	469.9	470.6	469.9	469.3
55°	429.8	430.4	429.1	429.8
57.5°	387.0	384.5	386.4	385.1
60°	340.5	335.4	334.1	331.6
62.5°	288.2	285.0	279.9	283.1
65°	242.9	240.4	238.5	241.0
67.5°	206.6	205.3	205.3	204.0
70°	179.2	177.3	177.3	176.0
72.5°	151.1	149.2	149.8	149.2
75°	116.0	112.9	112.9	113.5
77.5°	90.5	89.9	91.2	89.3
80°	70.8	70.1	69.5	71.4
82.5°	51.0	51.0	51.0	53.6
85°	33.2	31.9	33.2	31.9
87.5°	14.7	14.0	13.4	14.0
90°	0.0	0.0	0.0	0.0



TEST NUMBER: P242744
 CATALOG NUMBER: S124RDRP-S1020D835-X4F0-XX-UDD-A-W

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	18.29	19.81	18.65	20.12	20.44	20.11	21.63	20.47	21.94	22.26
	3H	19.51	20.88	19.89	21.21	21.57	21.56	22.93	21.94	23.25	23.61
	4H	19.95	21.23	20.35	21.58	21.95	22.08	23.36	22.47	23.70	24.08
	6H	20.22	21.40	20.63	21.77	22.16	22.43	23.61	22.84	23.98	24.37
	8H	20.30	21.43	20.73	21.82	22.22	22.53	23.66	22.96	24.05	24.45
	12H	20.35	21.43	20.78	21.81	22.24	22.59	23.67	23.02	24.05	24.48
4H	2H	19.55	20.83	19.95	21.18	21.56	20.61	21.89	21.01	22.24	22.62
	3H	20.78	21.85	21.19	22.24	22.65	22.35	23.42	22.76	23.82	24.22
	4H	21.25	22.20	21.68	22.62	23.06	22.98	23.94	23.41	24.35	24.79
	6H	21.57	22.40	22.03	22.84	23.30	23.44	24.27	23.89	24.71	25.17
	8H	21.66	22.44	22.13	22.88	23.35	23.57	24.35	24.04	24.79	25.26
	12H	21.73	22.43	22.22	22.91	23.38	23.66	24.36	24.15	24.83	25.31
8H	4H	21.65	22.43	22.11	22.87	23.34	23.09	23.87	23.56	24.31	24.78
	6H	22.04	22.68	22.53	23.17	23.64	23.64	24.28	24.13	24.77	25.24
	8H	22.17	22.75	22.69	23.26	23.74	23.83	24.40	24.34	24.91	25.40
	12H	22.28	22.79	22.79	23.28	23.85	23.97	24.48	24.48	24.97	25.54
12H	4H	21.68	22.38	22.17	22.86	23.33	23.08	23.77	23.56	24.25	24.72
	6H	22.08	22.66	22.60	23.17	23.66	23.62	24.20	24.14	24.71	25.20
	8H	22.26	22.77	22.77	23.26	23.83	23.85	24.36	24.36	24.85	25.42