

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: P242745

Luminaire Tested: S124RDRP-S1195D835-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242745
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-S1195D835-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

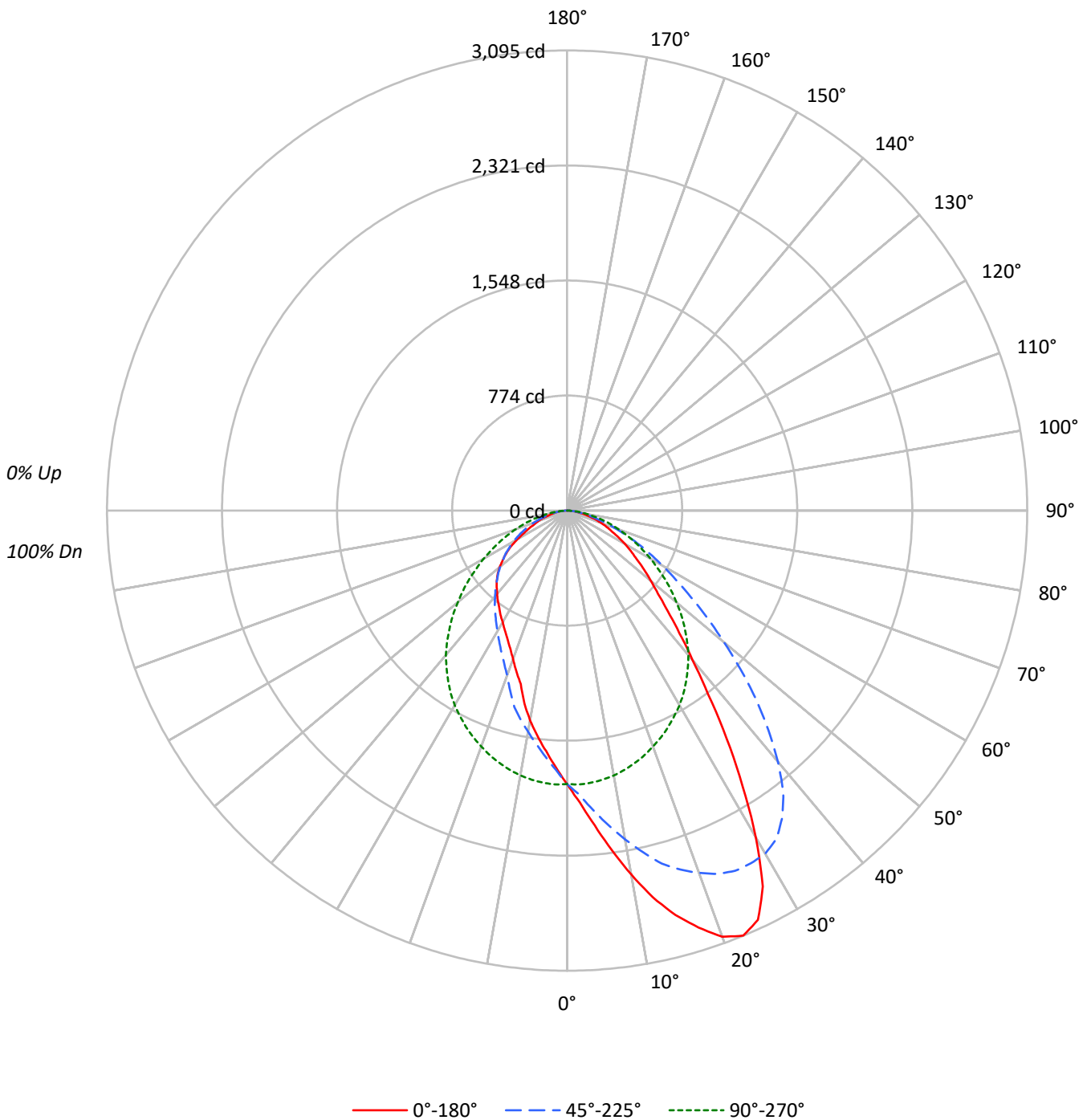
Lumens per Lamp: N/A
Luminaire Lumens: 4649.4 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.22 / 1.39
Luminous Opening: Rectangular (W 3.88' x L: 0.31' x H: 0')
CIE Type: Direct

Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): 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

TEST NUMBER: P242745

CATALOG NUMBER: S124RDRP-S1195D835-X4F0-XX-UDD-A-W

Luminous Intensity Polar Plot





TEST NUMBER: P242745

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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				
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76					74				
3	93	83	76	70	90	81	75	69	79	73	68	76	71	67	73	69	65					63				
4	85	74	66	60	83	73	65	59	71	64	59	68	63	58	66	61	57					55				
5	79	67	58	52	77	66	58	52	64	57	51	62	56	51	60	55	50					48				
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45					43				
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40					38				
8	64	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36					34				
9	59	47	39	33	58	46	38	33	45	38	33	44	38	33	43	37	33					31				
10	56	43	35	30	55	43	35	30	42	35	30	41	34	30	40	34	30					28				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	16349	16349	16349	16349	16349
5°	18964	18051	16398	14838	14494
10°	22434	20267	16327	13638	12936
15°	25914	22627	16175	12602	11116
20°	28852	24534	15968	11146	10052
25°	29784	26223	15764	10270	9332
30°	26074	27352	15516	9622	8899
35°	20296	27365	15150	9135	8637
40°	15219	25599	14730	8745	8495
45°	12016	22590	14057	8412	8421
50°	10145	19009	13281	8126	8178
55°	8843	15756	12426	7820	7741
60°	7957	13188	11541	7378	6850
65°	7014	10988	10584	6874	5891
70°	6318	8782	9590	6201	5315
75°	5292	6821	8500	5447	4530
80°	4474	5160	7243	4515	4249
85°	3784	4080	5671	4008	3784

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 55°
 Vertical Angle: 45°
 Luminance: 24127 cd/sqm

TEST NUMBER: P242745

CATALOG NUMBER: S124RDRP-S1195D835-X4F0-XX-UDD-A-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.1	3.8
10°-20°	537.8	11.6
20°-30°	842.5	18.1
30°-40°	935.5	20.1
40°-50°	829.0	17.8
50°-60°	646.1	13.9
60°-70°	422.6	9.1
70°-80°	207.3	4.5
80°-90°	50.5	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°	1558.4	33.5
0°-40°	2493.9	53.6
0°-60°	3969.0	85.4
0°-90°	4649.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4649.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1839	1839	1839	1839	1839	
5°	2125	2023	1838	1663	1624	214
15°	2816	2459	1758	1369	1208	801
25°	3037	2674	1607	1047	952	1356
35°	1870	2522	1396	842	796	1171
45°	956	1797	1118	669	670	754
55°	571	1017	802	505	500	518
65°	334	522	503	327	280	335
75°	154	199	248	159	132	169
85°	37	40	56	39	37	43
90°	0	0	0	0	0	



TEST NUMBER: P242745

CATALOG NUMBER: S124RDRP-S1195D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3
2.5°	1965.2	1971.9	1965.2	1964.5	1957.1	1954.9	1951.9	1942.3	1924.5	1914.1	1916.3
5°	2125.3	2143.8	2133.5	2132.0	2115.7	2099.4	2089.0	2065.3	2040.1	2023.0	2009.0
7.5°	2303.2	2314.3	2306.9	2298.7	2270.6	2261.7	2237.2	2209.0	2166.8	2134.9	2106.0
10°	2485.5	2494.3	2491.4	2472.1	2452.8	2413.6	2391.3	2347.6	2290.6	2245.4	2203.1
12.5°	2664.8	2674.4	2642.6	2648.5	2607.7	2578.8	2540.3	2482.5	2414.3	2352.8	2297.2
15°	2816.0	2804.1	2804.1	2789.3	2748.5	2705.5	2669.2	2611.4	2528.4	2458.8	2385.4
17.5°	2940.5	2945.6	2939.7	2901.9	2872.3	2828.6	2763.3	2697.4	2625.5	2532.1	2459.5
20°	3050.1	3050.1	3043.5	3019.7	2978.2	2930.8	2858.9	2785.6	2687.8	2593.6	2509.2
22.5°	3094.6	3097.6	3089.4	3070.9	3034.6	2988.6	2930.1	2855.2	2753.7	2644.8	2535.1
25°	3036.8	3050.9	3052.3	3047.2	3036.0	3007.9	2955.3	2878.9	2788.5	2673.7	2561.0
27.5°	2850.0	2868.6	2876.0	2892.3	2922.7	2933.8	2927.1	2876.0	2788.5	2675.2	2563.3
30°	2540.3	2555.1	2603.3	2666.3	2715.2	2759.6	2798.2	2808.5	2764.1	2664.8	2545.5
32.5°	2196.4	2217.9	2266.1	2335.0	2424.7	2507.7	2606.2	2658.9	2668.5	2618.8	2510.6
35°	1870.4	1885.2	1929.7	2000.8	2098.6	2210.5	2347.6	2454.3	2527.0	2521.8	2454.3
37.5°	1557.7	1578.4	1623.6	1682.2	1778.5	1921.5	2051.2	2194.2	2324.6	2388.4	2354.3
40°	1311.6	1312.4	1356.1	1416.9	1505.8	1626.6	1771.1	1934.1	2083.8	2206.1	2229.8
42.5°	1117.5	1117.5	1142.7	1209.4	1267.2	1379.1	1515.4	1677.0	1858.5	2004.5	2077.1
45°	955.9	962.6	986.3	1025.6	1076.0	1172.3	1282.7	1433.2	1629.5	1797.0	1901.5
47.5°	828.5	840.3	854.4	890.0	931.5	998.9	1093.0	1233.8	1396.9	1582.9	1727.4
50°	733.6	735.1	754.4	772.2	807.0	858.1	938.2	1050.8	1197.5	1374.6	1539.9
52.5°	652.1	651.4	661.0	684.7	711.4	748.5	809.2	909.3	1035.2	1189.4	1361.3
55°	570.6	574.3	583.2	601.0	622.5	650.6	701.8	778.8	881.1	1016.7	1171.6
57.5°	508.4	510.6	518.7	525.4	546.1	566.9	608.4	664.0	753.6	867.0	1018.9
60°	447.6	448.3	450.6	461.7	477.2	496.5	522.4	567.6	640.3	741.8	855.9
62.5°	388.3	389.8	393.5	400.9	412.0	423.9	451.3	485.4	542.4	625.4	725.5
65°	333.5	334.2	339.4	342.4	352.0	363.9	383.9	408.3	449.8	522.4	600.2
67.5°	287.5	287.5	287.5	292.0	299.4	307.5	320.9	341.6	375.0	421.7	494.3
70°	243.1	243.1	244.5	246.8	250.5	257.1	263.8	278.6	301.6	337.9	390.5
72.5°	201.6	202.3	203.8	203.8	205.3	210.5	214.9	223.1	238.6	263.8	303.8
75°	154.1	156.4	160.1	163.0	166.7	166.0	171.2	177.1	182.3	198.6	223.1
77.5°	121.5	120.0	120.0	123.0	123.8	124.5	128.2	133.4	137.8	146.7	155.6
80°	87.4	87.4	89.7	90.4	89.7	90.4	94.1	96.3	97.8	100.8	108.9
82.5°	60.8	62.2	60.8	61.5	62.2	63.0	66.0	66.0	67.4	68.2	70.4
85°	37.1	37.8	38.5	37.1	37.1	37.1	38.5	39.3	40.8	40.0	41.5
87.5°	16.3	15.6	16.3	16.3	17.0	16.3	17.0	18.5	17.0	17.8	17.8
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: P242745

CATALOG NUMBER: S124RDRP-S1195D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3
2.5°	1908.9	1898.5	1893.4	1881.5	1867.4	1860.0	1853.3	1843.7	1831.1	1817.8	1808.1
5°	1991.2	1973.4	1951.2	1924.5	1900.8	1877.8	1857.8	1837.8	1814.8	1791.1	1767.4
7.5°	2072.7	2040.8	2006.7	1966.0	1926.7	1890.4	1857.8	1825.9	1789.6	1757.0	1726.6
10°	2158.7	2111.2	2058.6	2003.0	1947.5	1899.3	1851.9	1808.9	1761.5	1719.2	1683.6
12.5°	2228.3	2170.5	2104.6	2031.9	1962.3	1901.5	1845.2	1785.9	1730.3	1683.6	1633.3
15°	2306.9	2230.5	2145.3	2062.3	1975.6	1896.3	1823.0	1757.7	1696.2	1631.8	1586.6
17.5°	2361.0	2272.8	2172.0	2075.7	1976.4	1884.5	1801.5	1725.9	1655.5	1591.0	1537.7
20°	2408.4	2308.3	2193.5	2080.1	1965.2	1865.2	1774.1	1688.1	1614.7	1543.6	1488.0
22.5°	2435.1	2321.7	2193.5	2073.4	1953.4	1843.0	1740.7	1650.3	1568.8	1497.6	1434.7
25°	2436.5	2318.0	2189.8	2053.4	1923.0	1808.1	1704.4	1607.3	1518.4	1447.3	1382.0
27.5°	2430.6	2293.5	2164.6	2026.0	1891.9	1769.6	1662.2	1559.2	1471.0	1395.4	1328.7
30°	2412.8	2263.1	2122.3	1977.1	1840.7	1724.4	1609.5	1511.7	1419.1	1339.8	1272.4
32.5°	2374.3	2226.1	2072.0	1922.3	1783.7	1662.9	1555.4	1456.9	1366.5	1285.0	1212.3
35°	2320.9	2170.5	2006.0	1853.3	1717.7	1593.2	1491.0	1396.1	1309.4	1222.7	1147.1
37.5°	2259.4	2102.3	1940.0	1772.6	1637.7	1519.1	1423.5	1332.4	1247.9	1168.6	1084.9
40°	2164.6	2024.5	1855.6	1689.6	1550.3	1436.9	1350.2	1269.4	1184.2	1105.6	1021.9
42.5°	2049.7	1935.6	1764.4	1597.7	1460.6	1352.4	1273.1	1194.6	1119.0	1043.4	955.2
45°	1919.3	1828.9	1668.8	1508.8	1370.2	1262.0	1187.9	1118.2	1050.1	977.4	895.2
47.5°	1774.1	1707.4	1568.0	1400.6	1270.9	1171.6	1100.4	1042.6	982.6	909.3	835.2
50°	1621.4	1582.1	1448.7	1299.0	1176.8	1087.1	1013.7	960.4	912.2	842.6	778.1
52.5°	1458.4	1442.1	1334.6	1193.1	1076.0	988.5	928.5	881.8	832.9	778.1	718.8
55°	1292.4	1303.5	1207.9	1084.1	973.0	898.9	841.8	801.8	760.3	711.4	664.7
57.5°	1119.7	1162.0	1090.8	978.9	871.5	801.8	758.1	722.5	687.7	646.2	603.9
60°	967.8	1001.9	965.6	870.0	778.8	715.1	675.1	649.2	614.3	577.3	546.9
62.5°	819.6	856.6	838.9	766.2	683.2	630.6	596.5	572.8	549.1	518.0	486.1
65°	700.3	724.0	713.6	660.3	600.2	553.6	521.0	503.2	479.5	455.7	427.6
67.5°	560.2	606.9	599.5	569.9	512.1	475.0	452.0	435.7	413.5	395.7	375.7
70°	440.9	483.2	482.4	459.4	431.3	397.2	382.4	369.0	349.8	332.7	317.2
72.5°	340.9	378.7	386.1	369.8	352.7	329.0	314.9	306.8	288.3	277.9	266.0
75°	252.7	280.9	288.3	288.3	279.4	266.0	253.4	247.5	234.2	223.8	216.4
77.5°	177.8	197.1	208.2	210.5	211.2	206.0	194.2	189.7	179.3	175.6	167.5
80°	117.1	128.9	142.3	146.7	150.4	148.9	144.5	141.5	131.9	128.2	125.2
82.5°	71.9	77.1	87.4	98.6	96.3	101.5	97.8	95.6	88.9	88.2	85.2
85°	42.2	43.0	44.5	51.1	54.8	56.3	57.1	55.6	53.4	53.4	48.2
87.5°	17.8	17.0	18.5	18.5	19.3	22.2	24.5	25.2	23.0	20.7	18.5
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: P242745

CATALOG NUMBER: S124RDRP-S1195D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3	1839.3
2.5°	1797.8	1790.4	1780.7	1769.6	1756.3	1744.4	1739.2	1743.7	1745.9	1740.0	1739.2
5°	1751.1	1732.6	1717.7	1695.5	1677.7	1662.9	1652.5	1648.1	1649.6	1637.7	1634.7
7.5°	1699.2	1679.2	1654.7	1629.5	1605.8	1585.1	1574.0	1568.8	1556.2	1551.0	1542.8
10°	1649.6	1619.9	1596.2	1565.1	1536.9	1511.0	1498.4	1488.0	1475.4	1469.5	1456.9
12.5°	1598.4	1562.9	1536.2	1503.6	1474.7	1442.1	1430.2	1408.7	1387.2	1373.1	1356.1
15°	1551.0	1509.5	1477.6	1439.1	1405.0	1369.4	1337.6	1302.0	1288.7	1260.5	1244.2
17.5°	1494.7	1451.7	1416.1	1366.5	1315.3	1272.4	1236.8	1199.7	1179.7	1160.5	1152.3
20°	1439.1	1400.6	1345.7	1285.7	1227.2	1178.3	1150.8	1128.6	1106.4	1093.8	1084.9
22.5°	1386.5	1334.6	1268.7	1202.7	1144.2	1108.6	1086.4	1063.4	1046.4	1034.5	1021.9
25°	1326.5	1262.0	1194.6	1120.5	1080.4	1047.1	1021.9	1003.4	992.3	976.7	970.8
27.5°	1267.9	1190.1	1113.8	1063.4	1021.9	990.0	967.1	953.7	938.9	928.5	920.4
30°	1198.3	1119.0	1052.3	1004.9	962.6	937.4	919.6	903.3	892.2	884.1	878.1
32.5°	1129.3	1050.1	996.7	944.8	913.7	889.2	870.0	858.9	850.7	839.6	836.6
35°	1063.4	993.0	944.1	898.1	864.1	841.8	827.0	814.4	807.0	804.0	801.8
37.5°	998.9	940.4	886.3	849.2	817.4	800.3	781.1	775.1	769.9	763.3	766.2
40°	938.2	884.1	837.4	797.4	772.9	753.6	743.3	735.9	731.4	731.4	731.4
42.5°	885.5	832.9	787.7	752.9	728.4	712.9	701.0	695.1	694.4	693.6	698.1
45°	830.7	781.8	735.9	706.2	685.5	669.2	662.5	657.3	657.3	660.3	661.0
47.5°	775.9	729.9	692.9	658.8	639.5	629.1	623.2	620.3	620.3	624.0	626.9
50°	726.2	681.0	644.7	615.1	597.3	587.6	582.5	581.0	582.5	582.5	587.6
52.5°	672.1	632.8	597.3	573.6	552.8	543.9	541.7	539.5	540.2	543.2	544.7
55°	619.5	583.2	549.1	525.4	510.6	504.6	498.0	498.7	497.2	498.7	498.7
57.5°	566.2	534.3	500.9	481.7	469.1	460.2	452.8	455.0	452.8	452.8	452.0
60°	515.0	479.5	454.3	437.2	422.4	415.0	408.3	409.8	407.6	406.1	403.1
62.5°	459.4	431.3	407.6	391.3	380.2	371.3	364.6	362.4	356.4	350.5	343.1
65°	406.1	381.6	360.1	344.6	333.5	326.8	321.6	317.2	306.1	294.2	288.3
67.5°	353.5	335.7	314.9	301.6	292.7	283.8	274.2	266.0	254.9	247.5	243.8
70°	303.1	286.0	269.0	256.4	246.8	238.6	227.5	222.3	214.9	211.9	208.2
72.5°	254.9	239.4	223.8	212.7	202.3	196.4	188.2	183.0	180.8	180.1	176.4
75°	206.0	193.4	181.6	171.2	163.0	158.6	154.9	151.2	149.7	143.0	139.3
77.5°	158.6	149.7	142.3	134.1	128.9	126.0	117.8	112.6	109.7	106.0	105.2
80°	117.1	111.2	103.7	99.3	91.1	88.2	85.2	84.5	83.7	83.0	82.3
82.5°	80.8	74.8	67.4	65.2	64.5	63.0	61.5	60.8	60.0	60.8	60.8
85°	44.5	41.5	41.5	40.8	40.0	39.3	38.5	38.5	37.8	38.5	37.8
87.5°	18.5	17.8	17.8	16.3	17.0	17.0	16.3	16.3	17.0	15.6	15.6
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: P242745

CATALOG NUMBER: S124RDRP-S1195D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1839.3	1839.3	1839.3	1839.3
2.5°	1734.8	1736.3	1731.1	1729.6
5°	1628.8	1627.3	1623.6	1624.4
7.5°	1536.9	1531.7	1535.4	1529.5
10°	1453.9	1445.8	1439.1	1433.2
12.5°	1340.5	1333.9	1324.2	1327.9
15°	1234.6	1223.5	1205.7	1207.9
17.5°	1139.7	1141.2	1130.8	1133.8
20°	1069.3	1064.1	1064.9	1062.7
22.5°	1020.4	1013.7	1007.1	1001.9
25°	964.1	959.6	953.0	951.5
27.5°	914.4	913.7	910.7	907.0
30°	872.2	870.7	869.2	867.0
32.5°	834.4	833.7	832.2	832.9
35°	798.8	798.1	796.6	795.9
37.5°	765.5	767.7	766.2	766.2
40°	730.7	731.4	732.9	732.1
42.5°	701.8	701.8	704.0	701.0
45°	666.2	670.6	669.9	669.9
47.5°	628.4	633.6	634.3	634.3
50°	591.4	589.9	592.1	591.4
52.5°	546.1	546.9	546.1	545.4
55°	499.5	500.2	498.7	499.5
57.5°	449.8	446.8	449.1	447.6
60°	395.7	389.8	388.3	385.3
62.5°	335.0	331.2	325.3	329.0
65°	282.3	279.4	277.1	280.1
67.5°	240.1	238.6	238.6	237.1
70°	208.2	206.0	206.0	204.5
72.5°	175.6	173.4	174.1	173.4
75°	134.9	131.2	131.2	131.9
77.5°	105.2	104.5	106.0	103.7
80°	82.3	81.5	80.8	83.0
82.5°	59.3	59.3	59.3	62.2
85°	38.5	37.1	38.5	37.1
87.5°	17.0	16.3	15.6	16.3
90°	0.0	0.0	0.0	0.0



TEST NUMBER: P242745
 CATALOG NUMBER: S124RDRP-S1195D835-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	18.81	20.33	19.17	20.65	20.96	20.63	22.15	20.99	22.46	22.78
	3H	20.04	21.40	20.41	21.73	22.09	22.08	23.45	22.46	23.78	24.14
	4H	20.47	21.75	20.87	22.10	22.48	22.60	23.88	23.00	24.23	24.61
	6H	20.74	21.92	21.15	22.29	22.68	22.95	24.13	23.36	24.50	24.89
	8H	20.82	21.95	21.25	22.34	22.74	23.05	24.18	23.48	24.57	24.97
	12H	20.87	21.95	21.30	22.33	22.76	23.11	24.19	23.54	24.57	25.00
4H	2H	20.07	21.35	20.47	21.70	22.08	21.14	22.42	21.54	22.76	23.14
	3H	21.31	22.37	21.72	22.77	23.17	22.88	23.94	23.29	24.34	24.74
	4H	21.77	22.72	22.20	23.14	23.58	23.50	24.46	23.94	24.87	25.31
	6H	22.09	22.92	22.55	23.37	23.83	23.96	24.79	24.42	25.23	25.69
	8H	22.19	22.96	22.65	23.41	23.87	24.10	24.87	24.56	25.32	25.78
	12H	22.26	22.95	22.74	23.43	23.90	24.19	24.88	24.67	25.36	25.83
8H	4H	22.17	22.95	22.64	23.39	23.86	23.62	24.39	24.08	24.84	25.30
	6H	22.56	23.20	23.05	23.69	24.17	24.16	24.80	24.65	25.29	25.77
	8H	22.69	23.27	23.21	23.78	24.27	24.35	24.92	24.86	25.43	25.92
	12H	22.81	23.31	23.31	23.81	24.37	24.50	25.00	25.01	25.50	26.06
12H	4H	22.21	22.90	22.69	23.38	23.85	23.60	24.30	24.09	24.77	25.25
	6H	22.61	23.18	23.12	23.69	24.18	24.15	24.72	24.66	25.23	25.72
	8H	22.79	23.29	23.30	23.79	24.35	24.38	24.88	24.89	25.38	25.94