

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: P242573

Luminaire Tested: S123RDRP-S1165D835-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242573
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-30)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1165D835-X4F0-XX-UDD-A-W
Description: DEFINE 3 REGRESSED DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

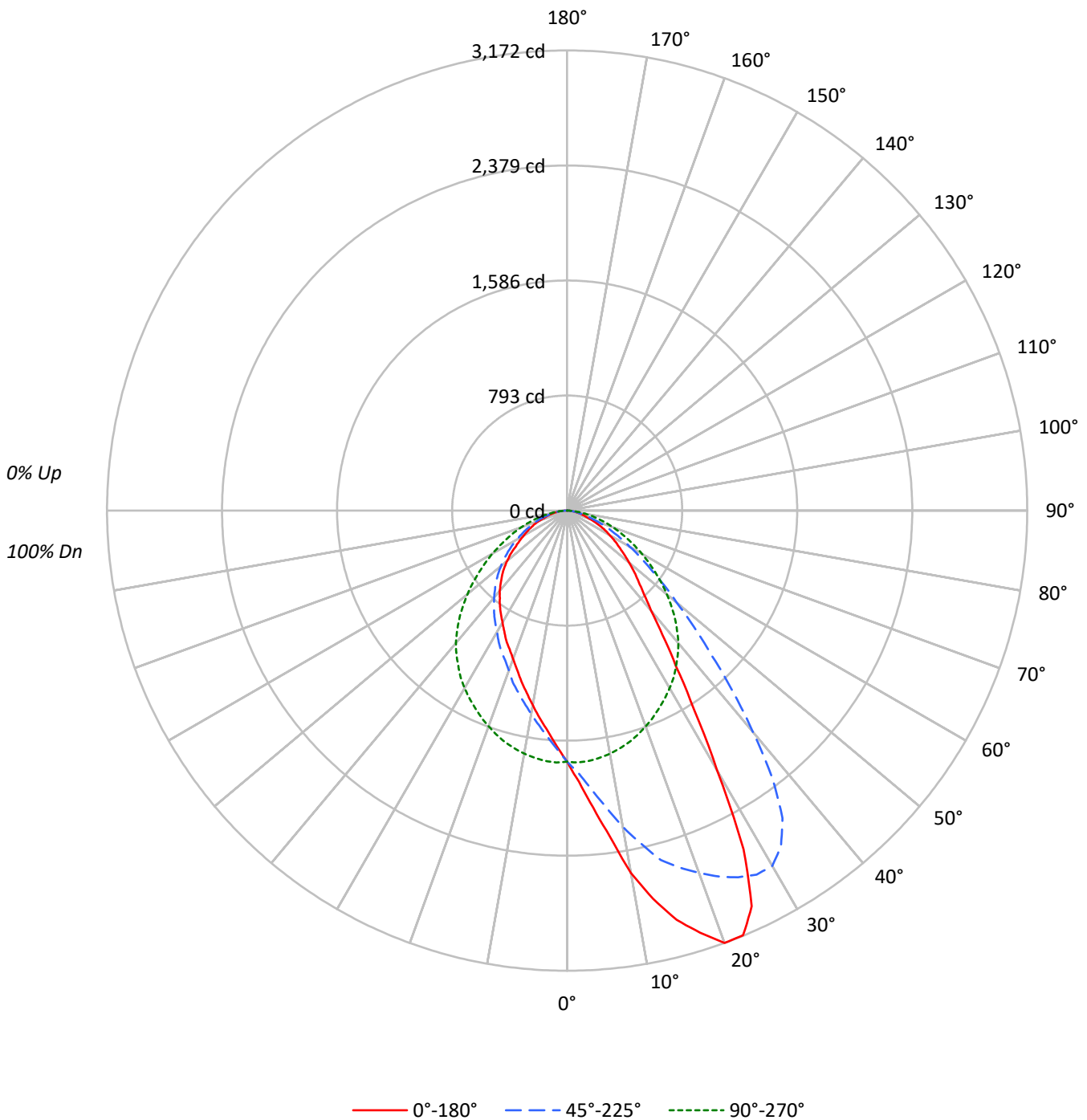
Lumens per Lamp: N/A
Luminaire Lumens: 4310.4 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.35
Luminous Opening: Rectangular (W 3.88' x L: 0.23' x H: 0')
CIE Type: Direct

Input Watts (W): 41.1
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

TEST NUMBER: P242573

CATALOG NUMBER: S123RDRP-S1165D835-X4F0-XX-UDD-A-W

Luminous Intensity Polar Plot





TEST NUMBER: P242573

CATALOG NUMBER: S123RDRP-S1165D835-X4F0-XX-UDD-A-W

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	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87					87			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	74					74			
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64					64			
4	86	75	67	61	84	74	66	61	71	65	60	69	64	59	67	62	58	56					56			
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	52	50					50			
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44					44			
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39					39			
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36					36			
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32					32			
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	20983	20983	20983	20983	20983
5°	25013	23461	21072	19025	18557
10°	31231	27254	20951	17531	16765
15°	36658	31302	20737	16302	15288
20°	40912	34278	20418	15151	14033
25°	40259	37305	20080	14351	13261
30°	28938	39580	19768	13525	12467
35°	19321	38292	19365	12961	11952
40°	14234	31566	18879	12394	11421
45°	11941	24085	18027	11864	10899
50°	10537	18573	16909	11222	10174
55°	9239	14814	15630	10556	9178
60°	8228	12090	14407	9702	8407
65°	7228	9904	13093	8949	7821
70°	5674	7956	11922	8219	7145
75°	4997	5863	10411	7428	6524
80°	4342	5019	8844	6520	6415
85°	3505	3811	7107	6592	6801

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 60°
 Vertical Angle: 45°
 Luminance: 33891 cd/sqm



TEST NUMBER: P242573

CATALOG NUMBER: S123RDRP-S1165D835-X4F0-XX-UDD-A-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.0	3.9
10°-20°	532.2	12.3
20°-30°	838.2	19.4
30°-40°	871.6	20.2
40°-50°	745.7	17.3
50°-60°	568.3	13.2
60°-70°	364.1	8.4
70°-80°	174.4	4.0
80°-90°	45.9	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°	1540.3	35.7
0°-40°	2412.0	56.0
0°-60°	3726.0	86.4
0°-90°	4310.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4310.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1731	1731	1731	1731	1731	
5°	2056	1928	1732	1564	1525	211
15°	2921	2494	1652	1299	1218	829
25°	3010	2789	1501	1073	992	1308
35°	1306	2588	1309	876	808	849
45°	697	1405	1052	692	636	546
55°	437	701	740	500	434	395
65°	252	345	456	312	273	248
75°	107	125	222	159	139	114
85°	25	27	51	47	49	29
90°	0	0	0	0	0	



TEST NUMBER: P242573

CATALOG NUMBER: S123RDRP-S1165D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1
2.5°	1871.9	1874.9	1865.2	1863.7	1852.6	1849.7	1849.7	1834.1	1824.5	1811.9	1804.5
5°	2055.7	2067.5	2061.6	2048.3	2026.0	2020.9	2006.8	1984.5	1959.3	1928.2	1913.4
7.5°	2266.1	2290.6	2286.2	2265.4	2241.7	2226.9	2187.6	2155.7	2107.6	2063.8	2029.7
10°	2537.4	2520.3	2507.0	2487.0	2465.5	2430.7	2389.2	2332.1	2266.1	2214.3	2156.5
12.5°	2740.4	2741.2	2723.4	2702.6	2670.0	2637.4	2584.1	2511.4	2432.1	2351.4	2283.2
15°	2921.2	2925.7	2914.6	2893.1	2850.1	2791.5	2714.5	2685.6	2575.9	2494.4	2412.9
17.5°	3050.2	3050.9	3048.7	3019.8	2973.1	2933.1	2861.2	2793.8	2690.0	2579.6	2470.7
20°	3171.7	3164.3	3165.8	3132.4	3099.8	3051.7	2982.0	2871.6	2790.1	2657.4	2544.0
22.5°	3168.7	3168.7	3175.4	3169.5	3148.0	3113.9	3062.8	2973.8	2864.2	2730.0	2598.9
25°	3010.2	3004.2	3039.1	3048.7	3086.5	3093.2	3076.9	3025.7	2927.2	2789.3	2631.5
27.5°	2632.2	2610.7	2683.4	2755.2	2850.8	2911.6	2973.8	2987.9	2941.2	2828.6	2663.3
30°	2067.5	2137.2	2169.8	2286.9	2417.3	2572.9	2709.3	2839.0	2870.8	2827.9	2698.2
32.5°	1628.8	1687.4	1713.3	1809.7	1929.0	2117.9	2339.5	2536.6	2690.8	2742.6	2677.4
35°	1305.7	1306.5	1368.7	1413.2	1525.8	1713.3	1911.9	2157.9	2402.5	2587.8	2607.0
37.5°	1077.5	1080.5	1120.5	1164.9	1255.3	1360.6	1545.1	1752.6	2046.8	2323.2	2467.0
40°	899.6	906.3	934.5	978.2	1039.0	1113.8	1250.2	1442.8	1678.5	1994.9	2253.5
42.5°	785.5	797.4	808.5	839.6	871.5	940.4	1044.1	1182.0	1391.0	1685.9	1994.2
45°	696.6	702.5	713.6	729.2	763.3	812.2	886.3	986.3	1164.2	1405.0	1703.7
47.5°	628.4	624.7	637.3	650.6	673.6	709.2	761.1	847.8	981.2	1182.7	1441.3
50°	558.8	558.0	566.2	575.8	597.3	621.7	662.5	724.0	824.8	984.9	1216.8
52.5°	493.5	497.2	502.4	515.0	529.1	547.6	583.2	623.2	706.2	838.9	1022.7
55°	437.2	439.4	447.6	454.3	465.4	485.4	508.4	545.4	604.7	701.0	860.4
57.5°	388.3	387.6	395.7	396.5	410.5	427.6	446.1	475.0	520.2	596.5	707.7
60°	339.4	337.2	343.8	349.0	355.7	369.0	383.9	412.0	446.1	498.7	590.6
62.5°	294.9	294.2	298.6	303.8	309.0	320.9	332.7	352.7	377.9	420.2	488.4
65°	252.0	254.2	256.4	258.6	261.6	269.0	280.9	295.7	314.2	345.3	397.9
67.5°	207.5	210.5	211.2	216.4	222.3	226.0	232.7	246.8	260.9	289.0	320.1
70°	160.1	159.3	160.1	162.3	170.4	178.6	188.2	197.9	206.0	224.5	249.7
72.5°	131.9	130.4	132.6	132.6	135.6	136.4	141.5	150.4	161.5	172.7	189.0
75°	106.7	106.7	106.7	106.7	109.7	111.2	113.4	115.6	119.3	125.2	138.6
77.5°	83.0	83.0	84.5	85.2	86.0	86.7	88.2	90.4	91.9	94.9	101.5
80°	62.2	63.0	62.2	63.0	63.0	64.5	65.2	67.4	68.2	71.9	74.1
82.5°	43.0	42.2	43.0	43.7	43.7	45.2	45.2	46.7	46.7	48.2	50.4
85°	25.2	23.7	25.2	24.5	25.9	24.5	25.2	26.7	26.7	27.4	30.4
87.5°	7.4	8.9	7.4	8.2	8.2	8.9	8.9	8.9	10.4	9.6	10.4
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: P242573

CATALOG NUMBER: S123RDRP-S1165D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1
2.5°	1801.5	1799.3	1788.9	1777.0	1761.5	1751.1	1743.0	1738.5	1725.2	1708.9	1697.8
5°	1897.8	1875.6	1851.9	1823.0	1796.3	1768.9	1751.9	1731.8	1707.4	1680.0	1660.7
7.5°	1993.4	1954.9	1912.7	1868.9	1824.5	1785.2	1748.9	1719.2	1682.2	1644.4	1618.5
10°	2106.8	2043.1	1977.1	1909.7	1848.2	1790.4	1745.9	1702.2	1655.5	1610.3	1576.2
12.5°	2209.8	2120.9	2042.3	1955.6	1872.6	1800.8	1731.8	1678.5	1619.9	1571.0	1531.0
15°	2293.6	2207.6	2115.7	1989.7	1885.2	1797.8	1720.0	1652.5	1584.4	1525.1	1487.3
17.5°	2381.0	2250.6	2129.8	2032.0	1895.6	1789.6	1698.5	1619.9	1545.8	1485.1	1437.6
20°	2431.4	2306.2	2172.0	2037.9	1904.5	1782.2	1671.8	1582.9	1505.1	1433.9	1391.0
22.5°	2461.8	2315.8	2172.8	2026.0	1882.3	1754.1	1645.1	1545.1	1459.1	1392.4	1336.9
25°	2484.0	2315.1	2159.4	2017.1	1872.6	1734.8	1605.1	1501.4	1410.2	1338.3	1282.0
27.5°	2501.8	2306.2	2127.6	1972.7	1826.7	1686.6	1569.6	1458.4	1367.2	1292.4	1230.9
30°	2506.2	2295.0	2089.8	1918.6	1769.6	1643.7	1517.7	1412.4	1314.6	1233.9	1177.5
32.5°	2512.2	2267.6	2038.6	1854.1	1700.7	1576.2	1465.1	1365.8	1265.0	1185.7	1127.9
35°	2491.4	2261.0	1986.8	1777.8	1625.1	1504.3	1401.3	1308.7	1210.1	1133.1	1074.5
37.5°	2428.4	2224.6	1934.9	1692.6	1534.7	1423.6	1337.6	1253.1	1162.0	1077.5	1023.4
40°	2322.5	2165.4	1872.6	1616.2	1449.5	1334.6	1259.1	1193.1	1105.7	1027.8	968.6
42.5°	2164.6	2084.6	1813.4	1536.2	1353.2	1243.5	1182.7	1122.0	1047.8	968.6	913.7
45°	1964.5	1977.1	1728.1	1450.2	1265.7	1154.6	1094.5	1051.6	983.4	918.2	861.1
47.5°	1721.5	1826.7	1637.0	1359.8	1170.9	1066.4	1013.8	974.5	927.1	859.6	807.0
50°	1484.3	1652.5	1522.9	1268.7	1082.7	978.9	927.1	896.7	856.7	806.3	756.6
52.5°	1265.7	1449.5	1385.0	1167.2	987.1	894.5	844.1	820.3	790.7	744.0	700.3
55°	1067.9	1250.9	1233.1	1064.9	891.5	806.3	767.7	739.6	718.1	682.5	646.9
57.5°	895.9	1073.0	1076.8	951.5	808.5	721.8	688.4	666.2	651.4	623.2	588.4
60°	735.1	894.5	925.6	836.6	718.1	644.0	611.4	594.3	583.2	561.7	536.5
62.5°	601.7	731.4	767.7	709.9	631.4	563.2	539.5	523.2	516.5	498.7	477.2
65°	480.9	593.6	627.7	592.1	546.9	491.3	470.6	456.5	449.8	439.4	423.1
67.5°	379.4	466.9	503.9	474.3	457.2	418.0	403.9	395.7	389.8	382.4	368.3
70°	290.5	351.3	389.8	383.1	369.8	351.3	341.6	336.4	330.5	324.6	312.7
72.5°	219.4	256.4	292.0	297.9	287.5	287.5	279.4	277.9	274.9	267.5	262.3
75°	154.9	183.8	209.0	218.6	223.1	226.8	223.1	222.3	221.6	215.6	211.9
77.5°	107.5	126.0	143.0	160.1	166.0	171.2	171.9	174.9	172.7	169.0	167.5
80°	77.8	81.5	92.6	106.7	117.8	122.3	125.2	126.7	126.0	125.2	122.3
82.5°	51.1	54.1	57.8	66.7	75.6	83.7	85.2	84.5	86.7	87.4	85.2
85°	30.4	31.1	32.6	34.1	39.3	47.4	49.7	51.1	52.6	52.6	48.2
87.5°	11.9	11.1	12.6	12.6	14.8	15.6	20.0	23.7	24.5	21.5	21.5
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: P242573

CATALOG NUMBER: S123RDRP-S1165D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1
2.5°	1694.0	1684.4	1677.7	1662.9	1653.3	1642.9	1632.5	1639.2	1638.5	1637.7	1637.7
5°	1644.4	1627.4	1611.8	1591.8	1579.2	1563.6	1551.8	1550.3	1553.2	1542.9	1536.9
7.5°	1597.7	1575.5	1553.2	1532.5	1509.5	1491.7	1480.6	1476.2	1468.0	1461.4	1455.4
10°	1548.1	1520.6	1499.2	1471.7	1446.5	1424.3	1410.2	1400.6	1395.4	1390.2	1380.6
12.5°	1496.9	1470.3	1441.3	1409.5	1385.8	1359.1	1349.5	1338.3	1327.2	1321.3	1307.2
15°	1447.3	1412.4	1383.5	1350.9	1324.3	1299.1	1284.2	1262.8	1259.8	1252.4	1239.0
17.5°	1399.1	1360.6	1318.3	1296.1	1269.4	1242.7	1219.0	1212.4	1190.1	1182.7	1170.1
20°	1339.8	1305.0	1274.6	1242.7	1199.0	1174.6	1156.8	1147.2	1130.1	1119.7	1112.3
22.5°	1288.7	1253.1	1216.8	1178.3	1144.2	1116.0	1104.2	1087.9	1080.5	1064.9	1056.7
25°	1240.5	1202.0	1159.7	1119.7	1093.8	1073.0	1052.3	1039.0	1025.6	1018.9	1004.1
27.5°	1182.0	1143.4	1102.7	1071.6	1041.9	1021.2	1001.2	990.0	973.0	961.9	953.7
30°	1135.3	1087.9	1053.8	1026.4	985.6	966.3	952.3	937.4	925.6	913.7	905.6
32.5°	1081.2	1039.0	1007.1	971.5	942.6	921.1	901.9	889.3	879.6	868.5	860.4
35°	1024.1	987.8	954.5	920.4	897.4	875.9	854.4	843.3	833.7	823.3	815.9
37.5°	972.3	938.2	907.0	874.4	846.3	827.8	810.0	802.6	789.2	781.8	774.4
40°	924.8	891.5	857.4	826.3	796.6	783.3	767.7	755.1	743.3	738.1	729.9
42.5°	873.0	839.6	812.2	778.1	755.1	735.9	721.8	707.7	699.6	691.4	687.7
45°	821.8	792.2	764.0	730.7	707.7	692.1	675.8	663.2	655.1	649.9	641.8
47.5°	772.9	742.5	714.4	684.7	662.5	644.7	627.7	619.5	608.4	602.5	596.5
50°	718.8	692.1	661.8	635.1	612.9	595.1	581.7	570.6	561.0	552.8	549.1
52.5°	669.2	640.3	615.1	590.6	566.9	546.2	534.3	522.4	515.8	506.1	501.7
55°	613.6	586.2	563.9	539.5	516.5	499.5	484.6	474.3	466.9	456.5	450.6
57.5°	562.5	538.7	511.3	489.8	465.4	452.0	439.4	424.6	415.7	407.6	401.7
60°	510.6	482.4	459.5	439.4	418.7	400.2	389.1	377.9	368.3	360.2	355.0
62.5°	456.5	432.8	411.3	389.1	370.5	355.0	341.6	332.7	324.6	320.1	314.9
65°	400.9	381.6	359.4	341.6	323.8	312.0	301.6	293.5	287.5	283.8	279.4
67.5°	349.8	331.3	311.2	292.7	280.9	271.2	263.8	256.4	253.4	249.0	246.0
70°	300.1	280.9	263.8	250.5	238.6	231.9	227.5	222.3	219.4	213.4	210.5
72.5°	246.0	233.4	222.3	211.9	203.0	197.1	191.2	184.5	179.3	172.7	169.7
75°	202.3	189.7	180.1	172.7	166.7	158.6	150.4	143.8	141.5	139.3	138.6
77.5°	157.8	149.7	142.3	136.4	128.2	120.8	118.6	117.1	116.3	114.9	114.9
80°	117.8	110.4	105.2	97.8	93.4	93.4	93.4	91.9	92.6	92.6	92.6
82.5°	80.0	73.4	71.1	69.7	69.7	70.4	70.4	71.1	70.4	71.9	71.1
85°	45.2	45.9	47.4	46.7	47.4	47.4	48.9	48.2	48.9	47.4	48.9
87.5°	20.7	23.0	23.7	24.5	25.2	24.5	25.2	25.2	25.9	25.9	25.9
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: P242573

CATALOG NUMBER: S123RDRP-S1165D835-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1731.1	1731.1	1731.1	1731.1
2.5°	1628.8	1628.1	1628.8	1625.9
5°	1534.7	1534.0	1531.8	1525.1
7.5°	1449.5	1448.0	1442.1	1443.6
10°	1375.4	1376.1	1367.2	1362.1
12.5°	1303.5	1299.1	1292.4	1286.5
15°	1242.0	1234.6	1216.8	1218.3
17.5°	1165.7	1159.7	1159.0	1148.6
20°	1100.5	1096.8	1098.2	1087.9
22.5°	1049.3	1045.6	1037.5	1036.0
25°	999.7	993.8	987.8	991.5
27.5°	949.3	944.8	938.2	938.2
30°	901.9	897.4	894.5	890.7
32.5°	853.7	853.7	847.8	847.8
35°	812.9	808.5	807.0	807.7
37.5°	773.7	767.7	764.8	761.8
40°	730.7	724.8	723.3	721.8
42.5°	682.5	681.0	680.3	677.3
45°	639.5	638.8	634.3	635.8
47.5°	593.6	589.9	587.7	589.9
50°	546.2	544.7	538.0	539.5
52.5°	498.7	492.1	490.6	489.1
55°	445.4	438.7	435.7	434.3
57.5°	392.8	390.5	387.6	389.8
60°	347.6	347.6	347.6	346.8
62.5°	312.7	310.5	309.8	311.2
65°	277.2	276.4	273.4	272.7
67.5°	244.5	241.6	241.6	240.1
70°	206.8	205.3	200.8	201.6
72.5°	166.0	164.5	164.5	163.0
75°	137.8	137.1	136.4	139.3
77.5°	114.9	114.9	115.6	114.1
80°	92.6	92.6	91.9	91.9
82.5°	69.7	70.4	71.1	69.7
85°	48.9	48.2	49.7	48.9
87.5°	27.4	25.9	25.9	26.7
90°	0.0	0.0	0.0	0.0



TEST NUMBER: P242573
 CATALOG NUMBER: S123RDRP-S1165D835-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	18.21	19.71	18.58	20.02	20.33	21.61	23.10	21.98	23.42	23.73
	3H	19.31	20.64	19.68	20.97	21.33	23.02	24.36	23.40	24.68	25.05
	4H	19.64	20.89	20.04	21.24	21.62	23.52	24.77	23.92	25.12	25.50
	6H	19.89	21.04	20.30	21.41	21.80	23.87	25.03	24.28	25.39	25.79
	8H	19.96	21.06	20.38	21.45	21.85	23.97	25.07	24.40	25.46	25.86
	12H	19.99	21.05	20.42	21.43	21.86	24.03	25.09	24.46	25.47	25.90
4H	2H	19.19	20.44	19.59	20.79	21.17	21.85	23.10	22.25	23.45	23.83
	3H	20.36	21.40	20.77	21.80	22.20	23.54	24.58	23.95	24.98	25.38
	4H	20.75	21.68	21.18	22.10	22.54	24.15	25.09	24.59	25.50	25.94
	6H	21.06	21.87	21.52	22.31	22.77	24.62	25.43	25.08	25.87	26.33
	8H	21.15	21.91	21.61	22.35	22.82	24.76	25.52	25.23	25.97	26.43
	12H	21.21	21.88	21.69	22.36	22.83	24.86	25.54	25.35	26.02	26.49
8H	4H	21.11	21.87	21.58	22.32	22.78	24.21	24.96	24.67	25.41	25.88
	6H	21.49	22.11	21.99	22.61	23.08	24.74	25.37	25.24	25.86	26.34
	8H	21.62	22.18	22.14	22.69	23.18	24.94	25.50	25.45	26.01	26.49
	12H	21.72	22.22	22.23	22.71	23.27	25.09	25.59	25.60	26.08	26.65
12H	4H	21.15	21.82	21.63	22.30	22.77	24.19	24.87	24.68	25.35	25.82
	6H	21.53	22.09	22.05	22.60	23.09	24.73	25.29	25.25	25.80	26.29
	8H	21.71	22.20	22.22	22.70	23.26	24.96	25.46	25.47	25.95	26.51