

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: P242567

Luminaire Tested: S123RDRP-S1000D830-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2024  
Report Number: P242567  
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-S1000D830-X4F0-XX-UDD-A-W  
Description: DEFINE 3 REGRESSED DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

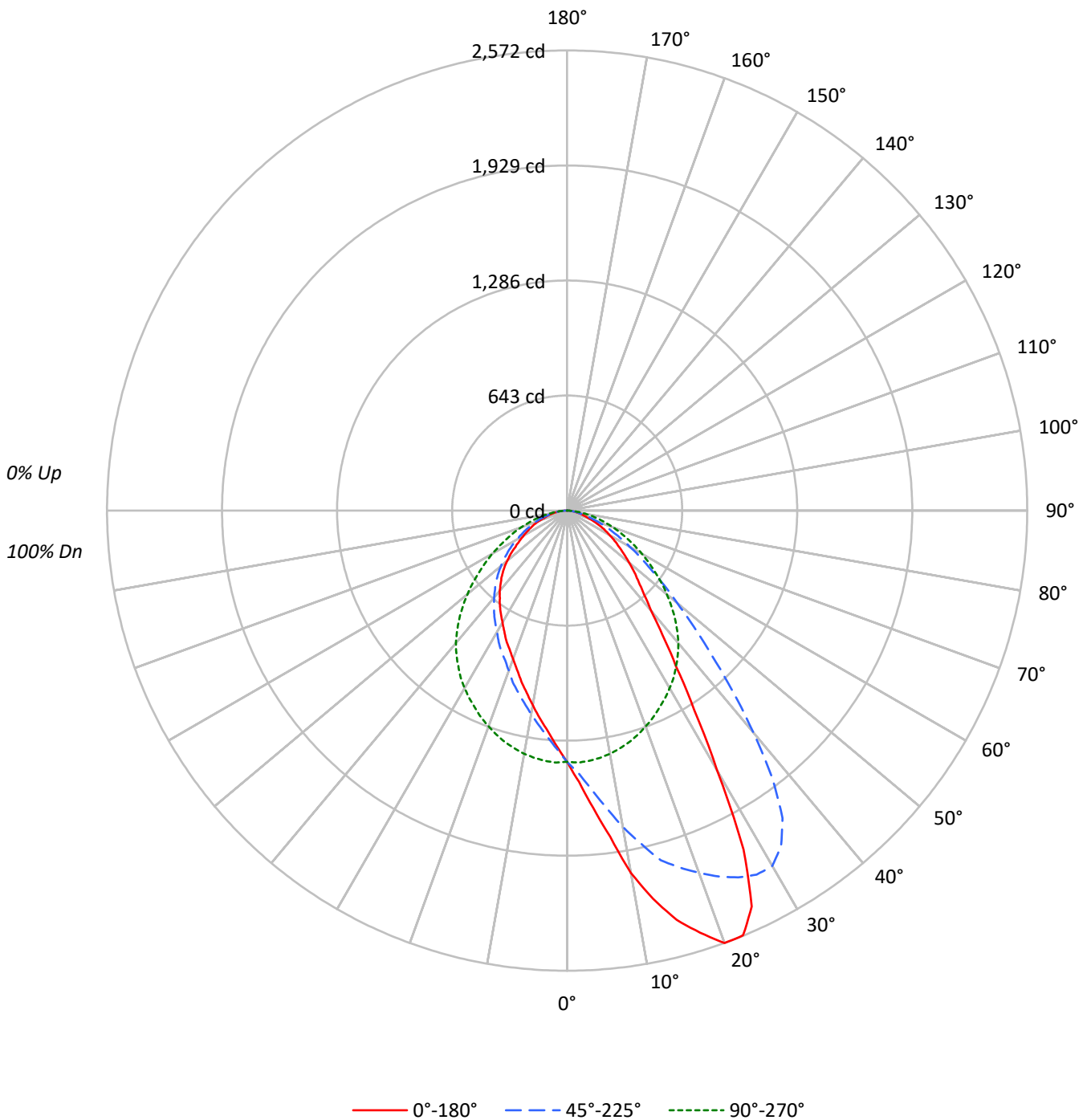
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3495.8 lumens  
Efficiency: N/A  
Efficacy: 100.5 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): 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	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°	17017	17017	17017	17017	17017
5°	20286	19028	17089	15430	15050
10°	25328	22103	16991	14217	13596
15°	29729	25386	16818	13221	12398
20°	33180	27800	16559	12288	11381
25°	32651	30255	16285	11638	10754
30°	23469	32099	16033	10969	10111
35°	15670	31055	15706	10512	9694
40°	11545	25600	15310	10052	9263
45°	9684	19533	14619	9622	8840
50°	8546	15061	13713	9101	8250
55°	7494	12014	12675	8561	7443
60°	6674	9806	11685	7867	6819
65°	5860	8034	10618	7256	6344
70°	4600	6454	9672	6666	5794
75°	4051	4758	8444	6023	5292
80°	3525	4070	7176	5284	5200
85°	2837	3087	5772	5354	5521

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 60°  
 Vertical Angle: 45°  
 Luminance: 27487 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.9	3.9
10°-20°	431.6	12.3
20°-30°	679.8	19.4
30°-40°	706.9	20.2
40°-50°	604.8	17.3
50°-60°	460.9	13.2
60°-70°	295.3	8.4
70°-80°	141.5	4.0
80°-90°	37.2	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°	1249.2	35.7
0°-40°	1956.1	56.0
0°-60°	3021.8	86.4
0°-90°	3495.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3495.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1404	1404	1404	1404	1404	
5°	1667	1564	1404	1268	1237	171
15°	2369	2023	1340	1054	988	672
25°	2441	2262	1218	870	804	1061
35°	1059	2099	1061	710	655	689
45°	565	1140	853	561	516	443
55°	355	568	600	405	352	320
65°	204	280	370	253	221	201
75°	86	102	180	129	113	93
85°	20	22	42	38	40	24
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°	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9
2.5°	1518.1	1520.5	1512.7	1511.5	1502.5	1500.1	1500.1	1487.5	1479.7	1469.4	1463.4
5°	1667.2	1676.8	1672.0	1661.2	1643.1	1638.9	1627.5	1609.5	1589.0	1563.8	1551.8
7.5°	1837.9	1857.7	1854.1	1837.3	1818.0	1806.0	1774.1	1748.3	1709.2	1673.8	1646.1
10°	2057.8	2044.0	2033.2	2017.0	1999.5	1971.3	1937.6	1891.3	1837.9	1795.8	1748.9
12.5°	2222.5	2223.1	2208.7	2191.8	2165.4	2139.0	2095.7	2036.8	1972.5	1907.0	1851.7
15°	2369.1	2372.7	2363.7	2346.3	2311.4	2264.0	2201.5	2178.0	2089.1	2023.0	1956.9
17.5°	2473.7	2474.3	2472.5	2449.1	2411.2	2378.8	2320.5	2265.8	2181.6	2092.1	2003.7
20°	2572.3	2566.3	2567.5	2540.4	2514.0	2474.9	2418.4	2328.9	2262.8	2155.2	2063.2
22.5°	2569.9	2569.9	2575.3	2570.5	2553.0	2525.4	2483.9	2411.8	2322.9	2214.1	2107.7
25°	2441.3	2436.4	2464.7	2472.5	2503.2	2508.6	2495.3	2453.9	2373.9	2262.2	2134.1
27.5°	2134.7	2117.3	2176.2	2234.5	2312.0	2361.3	2411.8	2423.2	2385.4	2294.0	2160.0
30°	1676.8	1733.3	1759.7	1854.7	1960.5	2086.7	2197.3	2302.4	2328.3	2293.4	2188.2
32.5°	1321.0	1368.5	1389.5	1467.6	1564.4	1717.7	1897.4	2057.2	2182.2	2224.3	2171.4
35°	1059.0	1059.6	1110.0	1146.1	1237.5	1389.5	1550.6	1750.1	1948.4	2098.7	2114.3
37.5°	873.9	876.3	908.7	944.8	1018.1	1103.4	1253.1	1421.4	1660.0	1884.1	2000.7
40°	729.6	735.0	757.9	793.3	842.6	903.3	1013.9	1170.1	1361.3	1617.9	1827.6
42.5°	637.1	646.7	655.7	680.9	706.8	762.7	846.8	958.6	1128.1	1367.3	1617.3
45°	564.9	569.7	578.8	591.4	619.0	658.7	718.8	799.9	944.2	1139.5	1381.7
47.5°	509.6	506.6	516.9	527.7	546.3	575.2	617.2	687.5	795.7	959.2	1168.9
50°	453.2	452.6	459.2	467.0	484.4	504.2	537.3	587.2	668.9	798.7	986.8
52.5°	400.3	403.3	407.5	417.7	429.1	444.1	473.0	505.4	572.8	680.3	829.4
55°	354.6	356.4	363.0	368.4	377.4	393.7	412.3	442.3	490.4	568.5	697.8
57.5°	314.9	314.3	320.9	321.5	333.0	346.8	361.8	385.2	421.9	483.8	574.0
60°	275.3	273.5	278.9	283.1	288.5	299.3	311.3	334.2	361.8	404.5	479.0
62.5°	239.2	238.6	242.2	246.4	250.6	260.2	269.8	286.1	306.5	340.8	396.1
65°	204.3	206.1	207.9	209.7	212.2	218.2	227.8	239.8	254.8	280.1	322.7
67.5°	168.3	170.7	171.3	175.5	180.3	183.3	188.7	200.1	211.6	234.4	259.6
70°	129.8	129.2	129.8	131.6	138.2	144.8	152.7	160.5	167.1	182.1	202.5
72.5°	107.0	105.8	107.6	107.6	110.0	110.6	114.8	122.0	131.0	140.0	153.3
75°	86.5	86.5	86.5	86.5	88.9	90.1	92.0	93.8	96.8	101.6	112.4
77.5°	67.3	67.3	68.5	69.1	69.7	70.3	71.5	73.3	74.5	76.9	82.3
80°	50.5	51.1	50.5	51.1	51.1	52.3	52.9	54.7	55.3	58.3	60.1
82.5°	34.9	34.3	34.9	35.5	35.5	36.7	36.7	37.9	37.9	39.1	40.9
85°	20.4	19.2	20.4	19.8	21.0	19.8	20.4	21.6	21.6	22.2	24.6
87.5°	6.0	7.2	6.0	6.6	6.6	7.2	7.2	7.2	8.4	7.8	8.4
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°	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9
2.5°	1461.0	1459.2	1450.8	1441.2	1428.6	1420.2	1413.5	1409.9	1399.1	1385.9	1376.9
5°	1539.2	1521.1	1501.9	1478.5	1456.8	1434.6	1420.8	1404.5	1384.7	1362.5	1346.8
7.5°	1616.7	1585.4	1551.2	1515.7	1479.7	1447.8	1418.4	1394.3	1364.3	1333.6	1312.6
10°	1708.6	1657.0	1603.5	1548.8	1498.9	1452.0	1416.0	1380.5	1342.6	1306.0	1278.3
12.5°	1792.2	1720.1	1656.4	1586.0	1518.7	1460.4	1404.5	1361.3	1313.8	1274.1	1241.7
15°	1860.1	1790.4	1715.9	1613.7	1528.9	1458.0	1394.9	1340.2	1284.9	1236.9	1206.2
17.5°	1931.0	1825.2	1727.3	1647.9	1537.4	1451.4	1377.5	1313.8	1253.7	1204.4	1165.9
20°	1971.9	1870.3	1761.5	1652.7	1544.6	1445.4	1355.9	1283.7	1220.6	1162.9	1128.1
22.5°	1996.5	1878.1	1762.1	1643.1	1526.5	1422.6	1334.2	1253.1	1183.4	1129.3	1084.2
25°	2014.5	1877.5	1751.3	1635.9	1518.7	1406.9	1301.8	1217.6	1143.7	1085.4	1039.7
27.5°	2029.0	1870.3	1725.5	1599.9	1481.5	1367.9	1272.9	1182.8	1108.8	1048.1	998.3
30°	2032.6	1861.3	1694.8	1556.0	1435.2	1333.0	1230.8	1145.5	1066.2	1000.7	955.0
32.5°	2037.4	1839.1	1653.3	1503.7	1379.3	1278.3	1188.2	1107.6	1025.9	961.6	914.7
35°	2020.6	1833.6	1611.3	1441.8	1318.0	1220.0	1136.5	1061.4	981.4	918.9	871.4
37.5°	1969.5	1804.2	1569.2	1372.7	1244.7	1154.5	1084.8	1016.3	942.4	873.9	830.0
40°	1883.5	1756.1	1518.7	1310.8	1175.6	1082.4	1021.1	967.6	896.7	833.6	785.5
42.5°	1755.5	1690.6	1470.6	1245.9	1097.4	1008.5	959.2	909.9	849.8	785.5	741.0
45°	1593.2	1603.5	1401.5	1176.2	1026.5	936.4	887.7	852.8	797.5	744.6	698.4
47.5°	1396.1	1481.5	1327.6	1102.8	949.6	864.8	822.2	790.3	751.8	697.2	654.5
50°	1203.8	1340.2	1235.1	1028.9	878.1	793.9	751.8	727.2	694.8	653.9	613.6
52.5°	1026.5	1175.6	1123.3	946.6	800.5	725.4	684.5	665.3	641.3	603.4	567.9
55°	866.0	1014.5	1000.1	863.6	723.0	653.9	622.6	599.8	582.4	553.5	524.7
57.5°	726.6	870.2	873.3	771.7	655.7	585.4	558.3	540.3	528.3	505.4	477.2
60°	596.2	725.4	750.6	678.5	582.4	522.3	495.8	482.0	473.0	455.6	435.1
62.5°	488.0	593.2	622.6	575.8	512.1	456.8	437.5	424.3	418.9	404.5	387.0
65°	390.0	481.4	509.0	480.2	443.5	398.5	381.6	370.2	364.8	356.4	343.2
67.5°	307.7	378.6	408.7	384.6	370.8	339.0	327.5	320.9	316.1	310.1	298.7
70°	235.6	284.9	316.1	310.7	299.9	284.9	277.1	272.9	268.0	263.2	253.6
72.5°	177.9	207.9	236.8	241.6	233.2	233.2	226.6	225.4	223.0	217.0	212.8
75°	125.6	149.0	169.5	177.3	180.9	183.9	180.9	180.3	179.7	174.9	171.9
77.5°	87.1	102.2	116.0	129.8	134.6	138.8	139.4	141.8	140.0	137.0	135.8
80°	63.1	66.1	75.1	86.5	95.6	99.2	101.6	102.8	102.2	101.6	99.2
82.5°	41.5	43.9	46.9	54.1	61.3	67.9	69.1	68.5	70.3	70.9	69.1
85°	24.6	25.2	26.4	27.6	31.9	38.5	40.3	41.5	42.7	42.7	39.1
87.5°	9.6	9.0	10.2	10.2	12.0	12.6	16.2	19.2	19.8	17.4	17.4
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°	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9
2.5°	1373.9	1366.1	1360.7	1348.6	1340.8	1332.4	1324.0	1329.4	1328.8	1328.2	1328.2
5°	1333.6	1319.8	1307.2	1290.9	1280.7	1268.1	1258.5	1257.3	1259.7	1251.3	1246.5
7.5°	1295.8	1277.7	1259.7	1242.9	1224.2	1209.8	1200.8	1197.2	1190.6	1185.2	1180.4
10°	1255.5	1233.2	1215.8	1193.6	1173.1	1155.1	1143.7	1135.9	1131.7	1127.5	1119.7
12.5°	1214.0	1192.4	1168.9	1143.1	1123.9	1102.2	1094.4	1085.4	1076.4	1071.6	1060.2
15°	1173.8	1145.5	1122.1	1095.6	1074.0	1053.6	1041.5	1024.1	1021.7	1015.7	1004.9
17.5°	1134.7	1103.4	1069.2	1051.1	1029.5	1007.9	988.6	983.2	965.2	959.2	949.0
20°	1086.6	1058.4	1033.7	1007.9	972.4	952.6	938.2	930.3	916.5	908.1	902.1
22.5°	1045.1	1016.3	986.8	955.6	927.9	905.1	895.5	882.3	876.3	863.6	857.0
25°	1006.1	974.8	940.6	908.1	887.1	870.2	853.4	842.6	831.8	826.4	814.4
27.5°	958.6	927.3	894.3	869.0	845.0	828.2	811.9	802.9	789.1	780.1	773.5
30°	920.7	882.3	854.6	832.4	799.3	783.7	772.3	760.3	750.6	741.0	734.4
32.5°	876.9	842.6	816.8	787.9	764.5	747.0	731.4	721.2	713.4	704.4	697.8
35°	830.6	801.1	774.1	746.4	727.8	710.4	693.0	683.9	676.1	667.7	661.7
37.5°	788.5	760.9	735.6	709.2	686.3	671.3	656.9	650.9	640.1	634.1	628.0
40°	750.0	723.0	695.4	670.1	646.1	635.3	622.6	612.4	602.8	598.6	592.0
42.5°	708.0	680.9	658.7	631.0	612.4	596.8	585.4	574.0	567.3	560.7	557.7
45°	666.5	642.5	619.6	592.6	574.0	561.3	548.1	537.9	531.3	527.1	520.5
47.5°	626.8	602.2	579.4	555.3	537.3	522.9	509.0	502.4	493.4	488.6	483.8
50°	583.0	561.3	536.7	515.1	497.0	482.6	471.8	462.8	455.0	448.3	445.3
52.5°	542.7	519.3	498.8	479.0	459.8	442.9	433.3	423.7	418.3	410.5	406.9
55°	497.6	475.4	457.4	437.5	418.9	405.1	393.1	384.6	378.6	370.2	365.4
57.5°	456.2	436.9	414.7	397.3	377.4	366.6	356.4	344.4	337.2	330.5	325.7
60°	414.1	391.3	372.6	356.4	339.6	324.5	315.5	306.5	298.7	292.1	287.9
62.5°	370.2	351.0	333.6	315.5	300.5	287.9	277.1	269.8	263.2	259.6	255.4
65°	325.1	309.5	291.5	277.1	262.6	253.0	244.6	238.0	233.2	230.2	226.6
67.5°	283.7	268.6	252.4	237.4	227.8	220.0	214.0	207.9	205.5	201.9	199.5
70°	243.4	227.8	214.0	203.1	193.5	188.1	184.5	180.3	177.9	173.1	170.7
72.5°	199.5	189.3	180.3	171.9	164.7	159.9	155.1	149.6	145.4	140.0	137.6
75°	164.1	153.9	146.0	140.0	135.2	128.6	122.0	116.6	114.8	113.0	112.4
77.5°	128.0	121.4	115.4	110.6	104.0	98.0	96.2	95.0	94.4	93.2	93.2
80°	95.6	89.5	85.3	79.3	75.7	75.7	75.7	74.5	75.1	75.1	75.1
82.5°	64.9	59.5	57.7	56.5	56.5	57.1	57.1	57.7	57.1	58.3	57.7
85°	36.7	37.3	38.5	37.9	38.5	38.5	39.7	39.1	39.7	38.5	39.7
87.5°	16.8	18.6	19.2	19.8	20.4	19.8	20.4	20.4	21.0	21.0	21.0
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: P242567

CATALOG NUMBER: S123RDRP-S1000D830-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	1403.9	1403.9	1403.9	1403.9
2.5°	1321.0	1320.4	1321.0	1318.6
5°	1244.7	1244.1	1242.3	1236.9
7.5°	1175.6	1174.4	1169.5	1170.7
10°	1115.5	1116.1	1108.8	1104.6
12.5°	1057.2	1053.6	1048.1	1043.3
15°	1007.3	1001.3	986.8	988.0
17.5°	945.4	940.6	940.0	931.5
20°	892.5	889.5	890.7	882.3
22.5°	851.0	848.0	841.4	840.2
25°	810.7	805.9	801.1	804.1
27.5°	769.9	766.3	760.9	760.9
30°	731.4	727.8	725.4	722.4
32.5°	692.4	692.4	687.5	687.5
35°	659.3	655.7	654.5	655.1
37.5°	627.4	622.6	620.2	617.8
40°	592.6	587.8	586.6	585.4
42.5°	553.5	552.3	551.7	549.3
45°	518.7	518.1	514.5	515.7
47.5°	481.4	478.4	476.6	478.4
50°	442.9	441.7	436.3	437.5
52.5°	404.5	399.1	397.9	396.7
55°	361.2	355.8	353.4	352.2
57.5°	318.5	316.7	314.3	316.1
60°	281.9	281.9	281.9	281.3
62.5°	253.6	251.8	251.2	252.4
65°	224.8	224.2	221.8	221.2
67.5°	198.3	195.9	195.9	194.7
70°	167.7	166.5	162.9	163.5
72.5°	134.6	133.4	133.4	132.2
75°	111.8	111.2	110.6	113.0
77.5°	93.2	93.2	93.8	92.6
80°	75.1	75.1	74.5	74.5
82.5°	56.5	57.1	57.7	56.5
85°	39.7	39.1	40.3	39.7
87.5°	22.2	21.0	21.0	21.6
90°	0.0	0.0	0.0	0.0

TEST NUMBER: P242567

CATALOG NUMBER: S123RDRP-S1000D830-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	17.49	18.98	17.85	19.29	19.61	20.88	22.38	21.25	22.69	23.00
	3H	18.58	19.91	18.96	20.24	20.61	22.29	23.63	22.67	23.96	24.32
	4H	18.91	20.17	19.31	20.52	20.89	22.79	24.04	23.19	24.39	24.77
	6H	19.16	20.32	19.57	20.68	21.08	23.14	24.30	23.55	24.67	25.06
	8H	19.23	20.33	19.66	20.72	21.12	23.24	24.34	23.67	24.73	25.14
	12H	19.27	20.32	19.70	20.70	21.13	23.31	24.36	23.74	24.74	25.17
4H	2H	18.46	19.72	18.86	20.07	20.45	21.12	22.37	21.52	22.72	23.10
	3H	19.63	20.67	20.04	21.07	21.47	22.81	23.85	23.22	24.25	24.65
	4H	20.02	20.95	20.45	21.37	21.81	23.43	24.36	23.86	24.78	25.21
	6H	20.33	21.14	20.79	21.59	22.05	23.89	24.70	24.35	25.15	25.61
	8H	20.42	21.18	20.89	21.62	22.09	24.04	24.79	24.50	25.24	25.71
	12H	20.48	21.15	20.96	21.63	22.10	24.14	24.81	24.62	25.29	25.76
8H	4H	20.39	21.14	20.85	21.59	22.06	23.48	24.24	23.94	24.68	25.15
	6H	20.76	21.39	21.26	21.88	22.36	24.02	24.64	24.51	25.13	25.61
	8H	20.89	21.45	21.41	21.96	22.45	24.21	24.77	24.72	25.28	25.77
	12H	20.99	21.49	21.50	21.98	22.55	24.36	24.86	24.88	25.35	25.92
12H	4H	20.42	21.09	20.90	21.57	22.04	23.47	24.14	23.95	24.62	25.09
	6H	20.81	21.37	21.32	21.88	22.37	24.00	24.56	24.52	25.07	25.56
	8H	20.98	21.48	21.49	21.97	22.53	24.23	24.73	24.74	25.22	25.79