

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: P243781

Luminaire Tested: S125RDRP-H1090D840-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2024  
Report Number: P243781  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-71)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-H1090D840-X4F0-XX-UDD-A-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

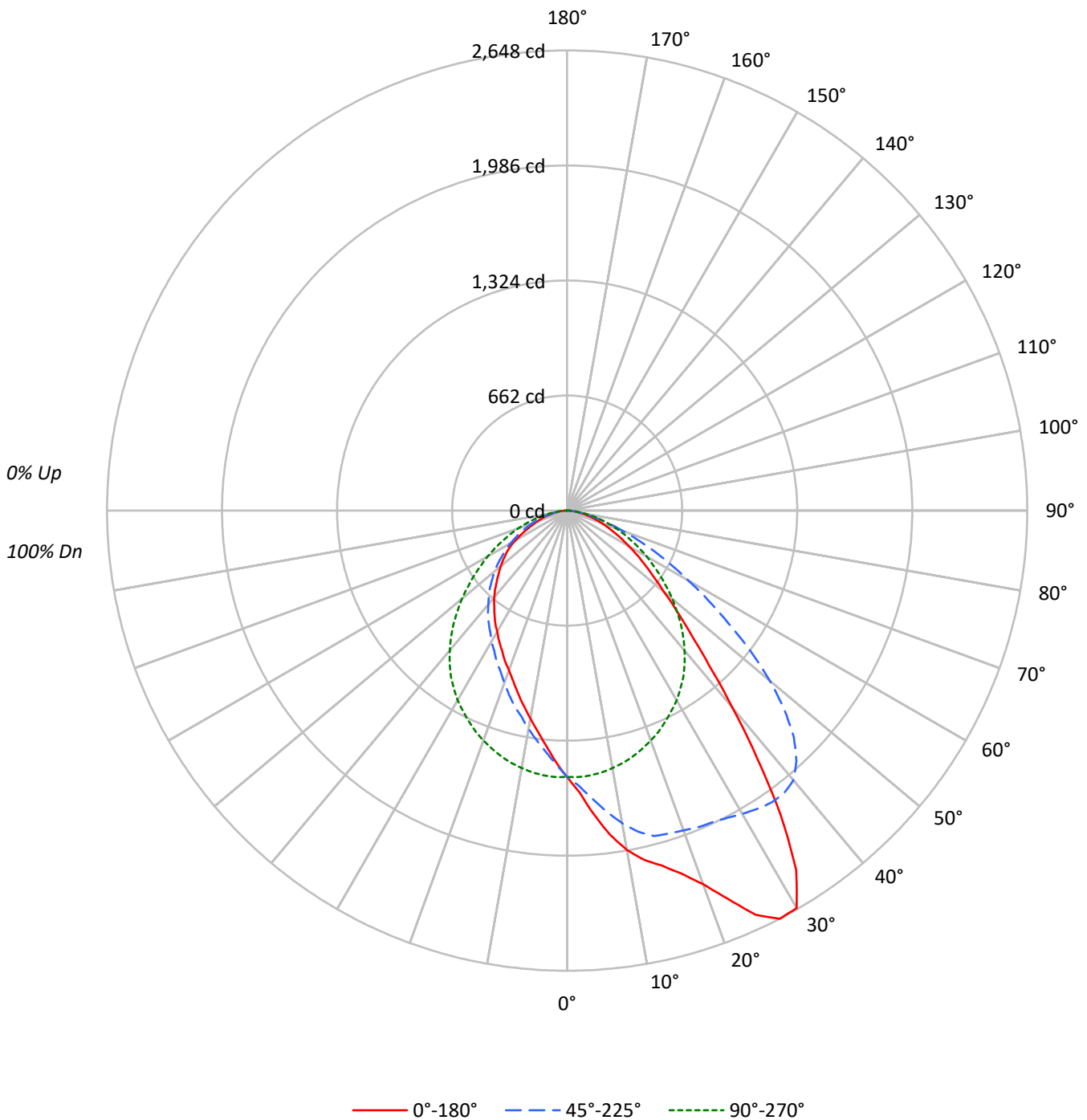
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4080.6 lumens  
Efficiency: N/A  
Efficacy: 129.5 lumens/watt  
Spacing Criteria (0/90/45): 1.42 / 1.22 / 1.5  
Luminous Opening: Rectangular (W 3.88' x L: 0.39' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 31.5  
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	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	91	86	81	88	83	79	85	81	77	82	78	75				73	
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65				63	
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	66	61	56				54	
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50				48	
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44				42	
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39				37	
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35				33	
9	59	46	38	32	57	45	38	32	44	37	32	43	37	32	42	36	32				30	
10	55	42	35	29	54	42	34	29	41	34	29	40	34	29	39	33	29				27	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°	135°	180°
0°	10898	10898	10898	10898	10898
5°	12510	11885	10913	9950	9707
10°	14313	13185	10859	9210	8775
15°	15567	14266	10772	8576	8025
20°	17299	14812	10650	7982	7394
25°	20129	15514	10498	7524	6961
30°	21674	16540	10343	7135	6606
35°	18621	17793	10112	6826	6319
40°	13718	18801	9747	6548	6059
45°	10132	18547	9294	6306	5744
50°	8026	16832	8740	6044	5512
55°	6781	14050	8099	5673	5303
60°	5842	11477	7501	5323	4908
65°	5072	9263	6830	4887	4273
70°	4447	7036	6253	4422	3740
75°	3773	5124	5476	3908	3540
80°	2935	3708	4580	3434	2935
85°	2577	2724	3670	2928	2675

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 18547 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.6	3.6
10°-20°	436.6	10.7
20°-30°	696.4	17.1
30°-40°	845.6	20.7
40°-50°	762.0	18.7
50°-60°	585.9	14.4
60°-70°	380.2	9.3
70°-80°	183.0	4.5
80°-90°	43.3	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°	1280.7	31.4
0°-40°	2126.3	52.1
0°-60°	3474.2	85.1
0°-90°	4080.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4080.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1533	1533	1533	1533	1533	
5°	1753	1666	1530	1395	1361	174
15°	2116	1939	1464	1166	1091	607
25°	2567	1978	1339	959	888	1174
35°	2146	2051	1166	787	728	1313
45°	1008	1845	925	627	572	801
55°	547	1134	654	458	428	496
65°	302	551	406	291	254	302
75°	137	187	199	142	129	148
85°	32	33	45	36	33	36
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°	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3
2.5°	1622.1	1628.1	1623.3	1626.3	1621.4	1619.0	1612.9	1603.8	1594.7	1586.2	1585.6
5°	1753.4	1752.2	1747.3	1740.6	1735.7	1723.6	1717.5	1696.8	1682.9	1665.8	1657.3
7.5°	1878.6	1875.6	1868.3	1859.2	1854.9	1839.1	1822.1	1795.9	1774.0	1747.3	1727.2
10°	1983.2	1982.6	1977.1	1971.0	1954.6	1937.0	1920.6	1893.2	1860.4	1826.9	1799.0
12.5°	2059.8	2056.8	2050.1	2039.7	2026.4	2014.2	1992.3	1967.4	1927.3	1893.2	1854.9
15°	2115.7	2114.5	2104.8	2101.1	2075.0	2058.0	2028.8	2003.9	1972.9	1938.8	1897.5
17.5°	2189.9	2192.3	2183.8	2163.1	2139.4	2113.3	2071.9	2031.2	1988.0	1948.5	1915.1
20°	2287.2	2281.1	2266.5	2241.6	2199.0	2166.8	2125.5	2075.0	2016.6	1958.3	1910.2
22.5°	2417.3	2410.6	2387.5	2357.1	2303.6	2244.6	2181.4	2106.0	2039.1	1972.2	1909.0
25°	2566.8	2554.1	2520.0	2487.2	2411.2	2348.6	2254.3	2164.4	2067.1	1978.3	1907.2
27.5°	2648.3	2648.3	2632.5	2596.6	2536.4	2444.0	2348.0	2228.2	2115.7	1994.1	1893.2
30°	2641.0	2636.7	2642.8	2627.6	2588.7	2519.4	2424.0	2298.1	2154.6	2015.4	1894.4
32.5°	2452.5	2454.4	2490.8	2515.8	2535.2	2518.2	2456.2	2342.5	2199.6	2036.1	1889.6
35°	2146.1	2151.0	2215.4	2258.0	2344.9	2394.8	2409.4	2348.0	2219.7	2050.7	1881.0
37.5°	1795.9	1795.9	1870.7	1935.2	2032.4	2155.2	2247.0	2270.1	2207.5	2050.1	1873.8
40°	1478.6	1476.8	1535.7	1614.8	1718.7	1854.3	1991.1	2108.4	2123.6	2026.4	1848.2
42.5°	1209.9	1206.8	1271.3	1315.0	1424.5	1545.5	1727.2	1893.2	1988.0	1952.8	1810.5
45°	1008.0	1005.6	1047.5	1097.4	1174.6	1300.4	1453.0	1637.3	1796.5	1845.2	1740.0
47.5°	856.0	857.2	879.7	921.7	987.3	1077.3	1214.1	1384.9	1581.9	1694.4	1651.2
50°	725.9	730.2	747.2	778.8	826.8	899.2	1016.5	1170.9	1373.4	1522.3	1531.5
52.5°	628.6	634.7	653.0	670.0	710.1	761.2	852.4	986.1	1153.3	1332.1	1395.9
55°	547.2	550.2	560.5	578.8	608.6	651.1	717.4	819.5	974.6	1133.9	1246.3
57.5°	479.1	479.1	485.8	498.5	522.2	560.5	604.9	689.4	820.1	964.2	1084.0
60°	411.0	413.4	418.3	432.3	448.1	477.3	520.4	573.9	687.0	807.4	936.3
62.5°	353.8	358.1	363.0	369.6	384.2	404.9	435.3	484.5	560.5	671.8	786.7
65°	301.6	305.8	306.4	314.3	324.0	341.1	364.2	400.0	463.3	550.8	645.7
67.5°	255.3	257.2	259.0	265.1	274.2	285.1	300.3	327.1	376.9	435.9	528.3
70°	214.0	215.2	215.8	222.5	226.8	236.5	244.4	261.4	293.0	338.6	410.4
72.5°	175.1	173.3	172.7	178.1	180.0	187.9	197.6	209.7	226.8	259.0	312.5
75°	137.4	138.0	138.6	141.7	142.3	145.9	152.0	159.9	167.8	186.6	220.7
77.5°	105.8	103.4	103.4	107.0	108.2	108.8	113.1	117.3	121.6	132.5	145.9
80°	71.7	73.0	73.0	73.0	73.6	74.8	77.2	80.9	83.9	90.6	93.0
82.5°	51.1	51.1	50.5	51.7	52.3	52.9	52.9	52.9	54.7	56.5	59.0
85°	31.6	32.2	30.4	31.6	32.2	32.2	32.2	32.2	34.0	33.4	34.0
87.5°	13.4	14.0	14.0	14.6	14.6	15.2	14.6	15.2	14.6	14.6	15.2
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°	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3
2.5°	1583.8	1576.5	1572.8	1565.5	1555.8	1549.7	1543.6	1535.1	1528.4	1518.1	1509.0
5°	1642.1	1627.5	1614.2	1595.9	1578.3	1563.1	1547.3	1529.6	1513.8	1496.2	1477.4
7.5°	1707.2	1684.1	1656.1	1623.9	1596.5	1572.8	1546.1	1519.9	1496.2	1468.2	1442.7
10°	1769.8	1732.7	1695.6	1652.5	1612.3	1577.1	1541.2	1504.7	1473.7	1439.1	1407.4
12.5°	1818.4	1783.2	1727.8	1674.3	1622.1	1576.5	1531.5	1487.1	1446.4	1408.1	1370.4
15°	1861.0	1802.6	1755.8	1697.4	1633.6	1571.6	1515.7	1464.0	1414.7	1369.7	1331.4
17.5°	1873.1	1820.9	1769.8	1701.7	1633.0	1562.5	1498.0	1436.6	1381.9	1332.1	1288.9
20°	1871.9	1819.0	1763.7	1698.7	1625.7	1548.5	1476.8	1408.1	1346.0	1288.9	1242.7
22.5°	1853.7	1802.6	1746.7	1681.0	1606.9	1527.2	1451.8	1375.8	1308.3	1248.8	1201.3
25°	1834.2	1769.8	1711.4	1645.2	1574.6	1501.1	1420.8	1338.7	1268.2	1206.2	1152.7
27.5°	1817.2	1740.0	1668.3	1603.2	1530.9	1464.6	1384.9	1299.2	1226.9	1161.8	1106.5
30°	1789.9	1708.4	1621.4	1550.3	1480.4	1411.1	1338.1	1260.3	1181.3	1115.0	1059.7
32.5°	1766.1	1663.4	1569.2	1488.9	1419.0	1358.2	1288.3	1213.5	1136.3	1073.1	1013.5
35°	1740.0	1617.2	1518.7	1424.5	1354.5	1288.3	1233.0	1165.5	1088.9	1022.0	968.5
37.5°	1709.0	1569.8	1456.7	1360.6	1288.3	1220.2	1170.3	1110.1	1040.8	974.6	921.7
40°	1674.3	1521.1	1391.0	1291.9	1214.1	1146.0	1104.1	1050.6	991.6	925.9	876.7
42.5°	1630.6	1469.5	1331.4	1223.2	1136.9	1075.5	1033.5	989.2	935.1	877.9	824.4
45°	1575.2	1405.0	1260.3	1146.0	1060.9	1001.3	957.5	924.7	881.6	828.1	777.6
47.5°	1507.8	1337.5	1187.4	1068.8	986.7	929.6	888.8	856.0	823.2	777.0	729.0
50°	1418.4	1260.3	1116.2	995.2	908.3	853.0	816.5	790.4	760.6	722.9	679.1
52.5°	1319.9	1173.4	1032.3	919.2	835.3	780.0	742.3	720.4	697.9	666.9	629.2
55°	1205.6	1086.4	952.1	841.4	759.3	704.6	674.8	653.6	634.7	611.0	579.4
57.5°	1084.6	980.0	863.3	761.2	684.0	632.3	606.1	588.5	572.7	555.7	529.5
60°	957.5	883.4	772.7	679.1	611.6	569.1	544.1	527.7	513.1	499.1	479.7
62.5°	825.0	763.6	680.9	601.3	541.1	501.0	482.7	468.7	453.5	441.4	427.4
65°	690.6	655.4	598.2	523.5	468.1	435.3	417.7	406.1	398.8	384.8	373.9
67.5°	568.4	549.0	500.4	449.9	407.3	377.5	361.1	352.6	344.7	338.0	325.9
70°	452.3	438.3	410.4	374.5	341.1	315.5	303.4	300.9	290.0	283.3	277.2
72.5°	344.7	341.1	318.0	302.2	283.3	263.2	254.1	249.3	242.0	235.9	233.5
75°	245.0	250.5	243.2	235.3	226.2	209.7	201.8	199.4	192.7	190.9	187.9
77.5°	167.2	175.1	177.5	173.9	169.6	164.2	158.7	156.2	149.6	148.3	146.5
80°	105.2	116.7	121.0	120.4	118.6	119.2	112.5	111.9	108.8	107.0	108.8
82.5°	63.8	69.9	77.8	79.6	77.2	78.4	76.6	74.2	74.2	75.4	73.0
85°	34.7	35.3	38.9	41.3	44.4	46.8	44.4	45.0	44.4	44.4	42.6
87.5°	15.2	15.8	15.8	15.2	16.4	17.6	20.1	21.3	20.7	18.8	16.4
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°	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3	1533.3
2.5°	1501.7	1497.4	1490.1	1484.0	1470.1	1460.3	1459.1	1459.7	1458.5	1457.3	1456.7
5°	1465.2	1451.2	1437.8	1426.3	1410.5	1394.7	1387.4	1384.3	1383.1	1376.4	1380.1
7.5°	1426.3	1405.0	1389.2	1367.3	1348.5	1335.1	1322.3	1316.2	1315.0	1305.9	1303.5
10°	1384.9	1359.4	1335.7	1313.8	1295.0	1276.1	1260.9	1255.5	1248.2	1240.9	1229.9
12.5°	1344.2	1312.6	1286.5	1262.1	1236.6	1215.3	1203.2	1195.3	1186.1	1179.5	1175.8
15°	1295.6	1268.8	1236.6	1210.5	1184.3	1165.5	1149.1	1134.5	1126.0	1120.5	1105.3
17.5°	1251.8	1216.5	1186.1	1161.2	1132.6	1111.4	1094.3	1082.2	1067.6	1056.6	1046.9
20°	1205.0	1168.5	1140.5	1110.8	1081.6	1055.4	1034.2	1024.4	1014.1	1003.8	998.3
22.5°	1154.5	1122.9	1091.3	1060.3	1029.3	1001.3	987.9	974.0	964.8	954.5	947.2
25°	1110.8	1076.1	1044.5	1009.8	975.8	959.4	941.1	927.1	919.9	909.5	901.6
27.5°	1063.9	1030.5	992.8	956.9	936.9	908.9	896.8	885.8	876.1	865.7	860.3
30°	1020.2	981.3	943.6	915.6	889.5	869.4	857.8	844.5	831.1	826.2	818.9
32.5°	974.0	932.0	899.2	871.2	849.3	825.0	814.1	803.1	790.4	784.3	777.6
35°	925.9	885.2	853.0	827.4	804.9	786.7	774.5	763.0	755.1	746.0	741.1
37.5°	875.5	840.2	809.2	783.7	763.0	748.4	733.2	724.1	713.1	704.6	701.0
40°	827.4	795.8	766.0	742.3	723.5	705.8	692.5	680.9	674.2	666.9	660.9
42.5°	784.3	751.4	725.9	701.0	684.0	666.9	653.6	645.1	633.5	630.5	621.9
45°	738.1	707.7	682.1	659.0	641.4	627.4	611.6	601.3	594.0	586.7	583.6
47.5°	691.3	663.3	639.6	618.3	600.1	584.3	572.1	561.2	553.2	546.6	542.9
50°	645.7	621.3	597.6	577.0	558.1	546.6	532.0	519.8	513.7	506.4	502.2
52.5°	597.6	577.6	552.0	534.4	516.8	501.6	487.0	479.1	473.0	466.9	463.9
55°	552.6	531.4	509.5	490.6	473.6	457.8	446.2	440.2	432.3	428.6	428.0
57.5°	506.4	484.5	466.3	449.3	429.8	417.7	407.3	400.0	393.4	390.3	390.3
60°	456.0	438.3	421.3	402.5	388.5	374.5	363.6	358.7	352.0	350.8	346.5
62.5°	409.8	393.4	376.9	359.3	346.5	332.6	324.7	318.0	314.3	309.5	304.6
65°	361.7	347.1	331.3	316.1	305.8	290.6	283.3	275.4	271.2	265.7	259.6
67.5°	315.5	301.6	287.0	273.0	264.5	249.9	245.0	235.3	232.2	226.2	220.7
70°	266.9	257.2	245.6	231.6	224.3	212.8	207.9	198.8	193.9	190.3	187.3
72.5°	224.9	215.8	202.5	193.3	184.2	176.9	169.0	164.8	160.5	157.5	156.9
75°	183.6	172.1	164.2	155.6	149.6	142.3	138.6	135.6	133.8	131.9	130.1
77.5°	140.4	135.6	127.7	119.2	114.3	111.3	108.8	107.6	105.8	105.2	103.4
80°	104.6	97.9	93.0	90.0	86.3	83.9	82.1	77.8	75.4	74.2	73.0
82.5°	69.3	67.5	63.8	60.8	57.8	57.1	55.3	54.1	53.5	53.5	52.9
85°	41.9	37.1	37.1	36.5	36.5	35.9	34.7	34.7	33.4	35.3	35.3
87.5°	17.0	17.0	15.8	15.8	16.4	15.2	14.6	14.6	14.6	14.0	14.6
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: P243781

CATALOG NUMBER: S125RDRP-H1090D840-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	1533.3	1533.3	1533.3	1533.3
2.5°	1456.7	1453.6	1454.3	1450.6
5°	1373.4	1371.6	1365.5	1360.6
7.5°	1297.4	1289.5	1288.9	1284.0
10°	1226.3	1219.0	1215.3	1215.9
12.5°	1164.3	1156.4	1156.4	1151.5
15°	1098.0	1090.1	1091.3	1090.7
17.5°	1043.3	1037.8	1033.5	1029.9
20°	989.8	983.1	980.6	977.6
22.5°	940.5	935.7	936.3	936.3
25°	893.7	894.3	888.8	887.6
27.5°	852.4	851.2	849.9	847.5
30°	813.5	808.6	807.4	804.9
32.5°	773.3	772.7	767.9	769.7
35°	732.6	730.8	729.6	728.3
37.5°	694.9	691.3	690.6	689.4
40°	656.6	655.4	649.9	653.0
42.5°	615.3	612.8	612.8	612.8
45°	580.6	573.9	573.9	571.5
47.5°	541.7	539.3	538.1	533.8
50°	503.4	499.7	498.5	498.5
52.5°	463.9	463.3	464.5	462.1
55°	429.2	429.8	429.2	428.0
57.5°	391.5	388.5	388.5	389.1
60°	346.5	346.5	347.8	345.3
62.5°	303.4	302.2	297.9	296.7
65°	259.0	254.1	253.5	254.1
67.5°	219.5	217.7	214.6	215.2
70°	185.4	184.8	181.8	180.0
72.5°	155.0	155.0	153.2	153.2
75°	129.5	128.3	127.7	128.9
77.5°	99.7	96.7	97.9	96.1
80°	72.3	73.6	72.3	71.7
82.5°	53.5	52.3	52.9	52.3
85°	34.0	32.8	33.4	32.8
87.5°	14.0	14.6	14.6	13.4
90°	0.0	0.0	0.0	0.0



TEST NUMBER: P243781  
 CATALOG NUMBER: S125RDRP-H1090D840-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	18.22	19.76	18.58	20.07	20.39	18.92	20.46	19.28	20.77	21.09
	3H	19.30	20.68	19.68	21.01	21.37	20.39	21.78	20.77	22.10	22.46
	4H	19.66	20.96	20.06	21.31	21.68	20.92	22.21	21.32	22.56	22.94
	6H	19.88	21.08	20.29	21.44	21.83	21.28	22.47	21.69	22.84	23.23
	8H	19.94	21.08	20.36	21.46	21.87	21.37	22.51	21.80	22.90	23.30
	12H	19.97	21.06	20.40	21.44	21.87	21.43	22.52	21.86	22.91	23.34
4H	2H	19.74	21.04	20.14	21.39	21.76	19.79	21.09	20.19	21.43	21.81
	3H	20.79	21.86	21.20	22.26	22.66	21.45	22.53	21.86	22.93	23.33
	4H	21.15	22.11	21.58	22.53	22.97	22.05	23.02	22.48	23.43	23.87
	6H	21.39	22.23	21.85	22.67	23.13	22.48	23.32	22.94	23.77	24.23
	8H	21.45	22.24	21.92	22.68	23.15	22.61	23.39	23.07	23.84	24.30
	12H	21.50	22.20	21.98	22.68	23.15	22.69	23.39	23.17	23.87	24.34
8H	4H	21.51	22.29	21.97	22.74	23.20	22.20	22.99	22.67	23.43	23.90
	6H	21.80	22.45	22.30	22.94	23.42	22.73	23.37	23.22	23.86	24.34
	8H	21.90	22.48	22.41	22.99	23.48	22.90	23.48	23.42	23.99	24.48
	12H	21.98	22.50	22.49	22.99	23.55	23.04	23.56	23.55	24.05	24.61
12H	4H	21.53	22.23	22.01	22.71	23.18	22.19	22.89	22.68	23.37	23.84
	6H	21.83	22.42	22.35	22.93	23.41	22.72	23.30	23.23	23.81	24.30
	8H	21.97	22.48	22.48	22.97	23.54	22.94	23.45	23.44	23.94	24.51