

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: P243599

Luminaire Tested: S124RDRP-H1020D830-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243599
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-70)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-H1020D830-X4F0-XX-UDD-A-W
Description: DEFINE 4 REGRESSED DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

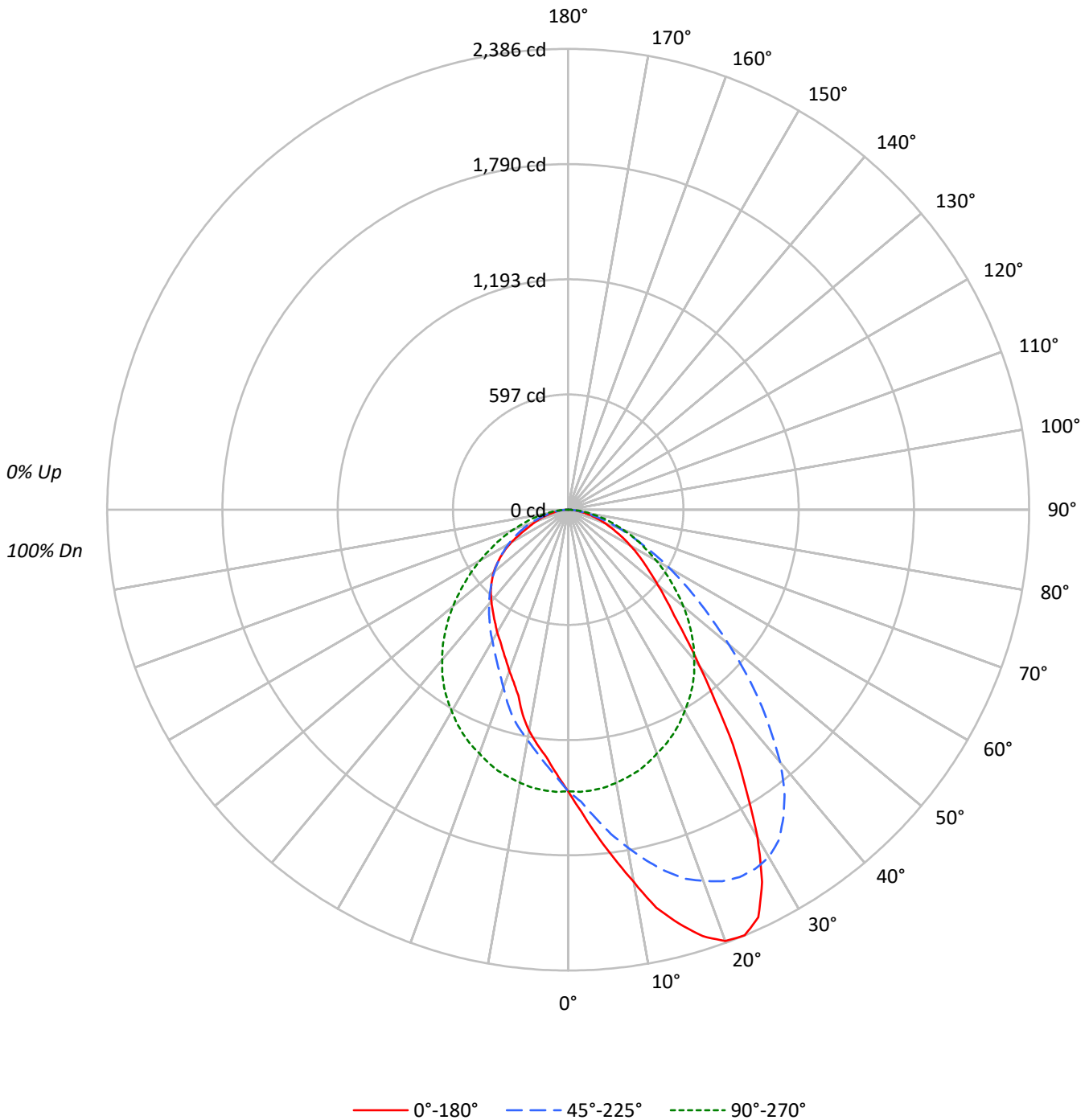
Lumens per Lamp: N/A
Luminaire Lumens: 3761.0 lumens
Efficiency: N/A
Efficacy: 119.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.23 / 1.39
Luminous Opening: Rectangular (W 3.88' x L: 0.31' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P243599

CATALOG NUMBER: S124RDRP-H1020D830-X4F0-XX-UDD-A-W

Luminous Intensity Polar Plot



TEST NUMBER: P243599

CATALOG NUMBER: S124RDRP-H1020D830-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	105	102	98	107	103	100	97	99	96	93	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	76	70	66	73	69	65					63				
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57					55				
5	79	66	58	52	77	65	57	51	63	56	51	61	55	50	60	54	50					48				
6	73	60	52	46	71	59	51	45	58	50	45	56	50	45	54	49	44					42				
7	68	55	46	41	66	54	46	40	53	45	40	51	45	40	50	44	40					38				
8	63	50	42	36	62	50	42	36	48	41	36	47	41	36	46	40	36					34				
9	59	46	38	33	58	46	38	33	45	38	33	43	37	33	42	37	32					31				
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	39	34	30					28				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	12953	12953	12953	12953	12953
5°	15089	14274	13008	11808	11484
10°	17670	16027	12953	10925	10500
15°	20418	17818	12888	10209	9170
20°	22480	19351	12706	9270	8406
25°	22840	20587	12589	8554	7858
30°	20106	21317	12365	8049	7537
35°	16133	21078	12156	7691	7291
40°	12273	19799	11766	7381	7177
45°	9744	17590	11335	7126	7091
50°	8365	14996	10774	6898	6968
55°	7388	12734	10078	6658	6631
60°	6619	10764	9351	6356	6073
65°	5824	8857	8640	5921	5109
70°	5190	7300	7846	5427	4600
75°	4523	5729	7133	4774	4094
80°	3834	4387	6127	4039	3778
85°	3355	3590	5263	3937	3825

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 55°
 Vertical Angle: 45°
 Luminance: 18932 cd/sqm



TEST NUMBER: P243599

CATALOG NUMBER: S124RDRP-H1020D830-X4F0-XX-UDD-A-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.4	3.8
10°-20°	428.8	11.4
20°-30°	669.2	17.8
30°-40°	746.2	19.8
40°-50°	670.8	17.8
50°-60°	530.0	14.1
60°-70°	352.0	9.4
70°-80°	176.5	4.7
80°-90°	46.0	1.2
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°	1239.4	33.0
0°-40°	1985.6	52.8
0°-60°	3186.5	84.7
0°-90°	3761.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3761.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1457	1457	1457	1457	1457	
5°	1691	1600	1458	1323	1287	169
15°	2219	1936	1400	1109	996	630
25°	2329	2099	1284	872	801	1042
35°	1487	1942	1120	709	672	924
45°	775	1399	902	567	564	614
55°	477	822	650	430	428	430
65°	277	421	411	282	243	277
75°	132	167	208	139	119	141
85°	33	35	52	39	38	37
90°	0	0	0	0	0	



TEST NUMBER: P243599

CATALOG NUMBER: S124RDRP-H1020D830-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2
2.5°	1565.0	1559.4	1558.8	1551.4	1550.9	1543.5	1541.2	1535.0	1522.5	1512.8	1513.4
5°	1691.0	1686.5	1685.9	1678.5	1676.3	1667.2	1653.0	1636.0	1616.1	1599.7	1588.9
7.5°	1820.4	1828.3	1819.8	1819.8	1803.4	1792.6	1764.8	1750.6	1716.6	1692.7	1667.8
10°	1957.7	1965.1	1961.7	1954.9	1933.3	1911.2	1882.3	1854.5	1813.0	1775.6	1750.6
12.5°	2110.9	2088.8	2103.0	2082.0	2064.4	2029.2	2001.4	1945.8	1912.9	1858.4	1809.6
15°	2218.8	2210.2	2209.7	2195.5	2176.2	2137.6	2107.5	2049.7	1993.5	1936.2	1881.1
17.5°	2315.2	2316.4	2308.4	2285.7	2260.7	2223.3	2182.4	2130.8	2066.7	2003.1	1937.9
20°	2376.5	2377.1	2371.4	2359.5	2332.2	2298.2	2256.2	2188.7	2116.0	2045.7	1980.4
22.5°	2385.6	2387.3	2385.6	2378.2	2359.5	2331.7	2293.1	2235.8	2162.6	2082.0	2004.3
25°	2328.8	2334.5	2335.1	2345.3	2335.7	2324.9	2296.5	2248.3	2180.7	2099.0	2014.5
27.5°	2173.4	2189.2	2204.0	2222.2	2238.6	2253.4	2255.6	2230.1	2172.2	2096.2	2015.6
30°	1958.9	1977.6	2007.1	2026.4	2077.5	2109.8	2153.5	2163.1	2135.3	2076.9	1999.2
32.5°	1709.2	1729.0	1740.4	1803.9	1877.1	1929.9	2002.6	2045.7	2056.5	2028.7	1965.1
35°	1486.7	1490.1	1498.7	1570.7	1643.4	1723.4	1813.6	1888.5	1939.6	1942.4	1911.2
37.5°	1248.4	1252.4	1285.9	1340.9	1403.9	1491.8	1595.7	1702.4	1796.0	1839.1	1830.0
40°	1057.7	1056.6	1092.4	1140.0	1201.3	1292.7	1399.9	1516.2	1616.1	1706.3	1727.9
42.5°	903.4	907.4	938.0	965.8	1024.8	1089.0	1203.6	1324.4	1452.7	1551.4	1617.3
45°	775.1	785.4	806.4	832.5	876.7	935.7	1029.4	1149.7	1280.8	1399.3	1478.2
47.5°	686.6	689.5	700.2	732.6	762.1	809.8	889.8	991.9	1108.2	1241.0	1344.9
50°	604.9	611.7	615.7	635.0	663.9	709.3	771.2	847.2	962.4	1084.4	1214.4
52.5°	534.5	538.5	545.9	563.5	586.2	618.0	666.8	733.7	829.6	942.5	1065.1
55°	476.7	477.2	484.6	497.1	514.7	539.1	585.6	633.8	719.0	821.7	932.9
57.5°	424.5	421.1	427.9	435.2	452.3	473.3	503.3	552.7	619.1	706.5	806.9
60°	372.3	375.1	374.5	383.0	392.1	413.1	438.6	471.0	525.5	605.5	690.6
62.5°	323.5	322.9	328.6	333.7	339.9	356.9	377.9	404.6	447.2	506.2	588.5
65°	276.9	278.1	282.6	286.6	293.4	304.2	320.0	341.6	375.7	421.1	490.3
67.5°	234.9	238.9	241.2	242.3	248.5	256.5	270.1	287.7	311.0	347.3	405.2
70°	199.7	200.9	202.0	206.0	208.8	213.4	223.6	233.2	254.2	280.9	322.9
72.5°	166.8	165.7	169.1	170.2	171.4	175.9	182.2	187.3	200.9	223.6	249.7
75°	131.7	132.2	132.8	134.5	139.0	139.6	142.4	148.1	157.8	166.8	184.4
77.5°	98.7	100.4	99.9	101.6	103.3	105.0	106.1	111.2	118.0	125.4	133.9
80°	74.9	74.9	74.9	76.0	74.9	78.9	78.9	80.6	82.3	85.7	91.9
82.5°	51.1	52.2	52.8	53.3	53.9	53.9	54.5	55.6	57.9	59.0	60.7
85°	32.9	31.8	32.3	32.3	32.3	32.3	33.5	34.6	34.6	35.2	36.9
87.5°	14.8	14.8	14.8	14.8	14.2	14.8	15.3	15.3	15.9	15.9	17.0
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: P243599

CATALOG NUMBER: S124RDRP-H1020D830-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2
2.5°	1510.0	1508.3	1499.8	1490.7	1482.2	1473.7	1470.8	1462.3	1452.1	1443.0	1432.8
5°	1577.5	1563.9	1545.2	1525.9	1506.0	1487.9	1473.7	1457.8	1439.6	1418.1	1401.1
7.5°	1645.6	1620.7	1590.0	1561.6	1527.6	1500.4	1473.1	1450.4	1424.3	1393.7	1370.4
10°	1712.0	1670.6	1633.1	1588.3	1545.2	1507.7	1473.1	1435.1	1400.5	1367.6	1335.2
12.5°	1764.8	1723.4	1669.5	1614.4	1558.8	1510.0	1463.5	1418.6	1375.5	1335.8	1300.0
15°	1824.9	1765.4	1699.0	1638.2	1562.2	1502.1	1448.7	1400.5	1351.1	1302.9	1263.7
17.5°	1869.2	1798.8	1716.6	1646.8	1573.6	1498.7	1434.5	1373.8	1317.1	1266.6	1226.3
20°	1903.3	1819.8	1737.6	1649.0	1561.6	1485.0	1413.0	1343.2	1285.9	1230.8	1188.3
22.5°	1918.0	1830.0	1738.7	1642.8	1549.7	1462.9	1388.0	1315.9	1251.2	1194.5	1145.1
25°	1924.2	1827.8	1733.0	1624.1	1529.9	1441.3	1357.9	1283.6	1217.2	1153.1	1104.3
27.5°	1919.1	1815.9	1706.9	1604.2	1497.5	1410.7	1322.2	1246.7	1177.5	1115.6	1061.1
30°	1905.5	1788.6	1680.2	1565.0	1462.3	1371.0	1284.7	1204.7	1134.9	1071.9	1018.0
32.5°	1870.3	1758.0	1634.8	1522.5	1411.8	1321.6	1243.3	1164.4	1093.5	1027.7	975.5
35°	1826.6	1716.6	1587.7	1470.3	1360.8	1269.4	1190.5	1120.2	1050.4	980.6	927.2
37.5°	1771.6	1659.8	1535.5	1409.0	1301.7	1213.2	1141.2	1070.2	1001.0	936.9	877.3
40°	1697.3	1595.1	1470.3	1343.2	1235.4	1150.2	1079.3	1014.0	952.8	889.8	825.7
42.5°	1604.8	1527.0	1398.2	1272.8	1167.3	1082.7	1019.7	961.3	902.3	837.6	779.7
45°	1506.0	1439.6	1322.7	1196.2	1095.8	1013.5	953.3	901.7	846.1	788.8	728.0
47.5°	1394.8	1345.4	1244.4	1119.0	1013.5	943.1	887.5	840.4	789.9	738.8	679.8
50°	1269.4	1239.3	1153.1	1039.0	938.6	867.1	821.1	779.1	736.0	684.9	634.4
52.5°	1144.0	1138.3	1057.7	957.3	862.5	796.1	751.3	712.7	677.5	629.3	586.8
55°	1012.3	1029.4	962.4	869.9	785.4	721.2	681.5	650.3	619.7	578.8	537.9
57.5°	895.4	914.7	868.8	783.7	704.8	650.3	616.3	587.9	561.2	523.8	496.5
60°	766.1	801.2	776.8	699.1	629.3	580.5	548.7	526.0	503.9	471.6	447.7
62.5°	663.9	688.3	674.1	616.3	554.4	514.7	486.3	465.3	447.7	422.8	399.5
65°	554.4	585.0	577.7	539.7	485.2	448.9	427.3	410.8	392.7	372.8	353.5
67.5°	455.7	487.4	485.7	459.6	419.4	389.3	368.8	356.9	342.2	322.9	311.0
70°	366.6	396.1	397.2	384.2	355.8	327.4	312.7	301.9	290.5	276.4	267.8
72.5°	284.9	311.5	316.1	309.8	291.7	272.9	259.9	252.5	242.9	231.0	223.6
75°	212.8	232.1	242.9	240.0	232.7	220.2	212.8	207.7	198.0	189.5	183.3
77.5°	151.5	166.8	177.6	182.2	178.7	173.6	166.8	162.9	152.6	148.7	145.3
80°	101.6	115.2	124.8	127.7	129.4	128.2	122.0	119.7	114.6	112.9	109.5
82.5°	62.4	69.8	76.6	84.0	87.4	87.4	84.0	84.6	80.0	77.7	76.6
85°	38.0	39.7	40.9	46.5	51.1	52.8	51.1	51.6	49.9	48.2	46.5
87.5°	17.6	17.6	18.2	19.3	20.4	23.8	25.0	26.7	24.4	24.4	20.4
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: P243599

CATALOG NUMBER: S124RDRP-H1020D830-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2
2.5°	1426.6	1419.2	1413.5	1404.5	1397.1	1385.2	1381.2	1381.2	1383.5	1380.6	1383.5
5°	1389.1	1375.5	1360.8	1347.7	1333.5	1323.3	1313.1	1310.8	1309.7	1302.9	1303.4
7.5°	1351.7	1333.5	1314.8	1297.8	1280.2	1264.3	1253.5	1249.0	1245.0	1240.5	1235.4
10°	1311.4	1290.4	1268.3	1249.0	1231.9	1210.4	1199.6	1196.2	1184.9	1182.6	1174.6
12.5°	1268.8	1247.3	1225.1	1200.2	1183.7	1162.7	1146.8	1139.5	1128.7	1120.7	1108.8
15°	1235.4	1208.1	1178.6	1154.2	1132.6	1109.4	1087.8	1073.6	1059.4	1037.3	1026.5
17.5°	1193.9	1162.7	1137.2	1111.1	1079.9	1045.8	1020.3	999.3	984.0	965.8	955.0
20°	1149.1	1120.2	1088.4	1051.5	1018.6	980.0	956.7	939.1	927.2	916.4	910.8
22.5°	1109.4	1075.9	1032.2	997.0	951.1	920.4	901.7	890.3	879.0	867.6	862.0
25°	1066.3	1027.1	973.8	930.6	896.0	872.2	854.0	843.2	831.3	824.5	816.0
27.5°	1023.7	973.2	919.8	880.7	853.5	825.7	810.3	801.8	792.7	783.1	776.3
30°	972.1	914.7	870.5	834.7	807.5	784.2	772.9	760.4	752.4	746.8	742.8
32.5°	918.1	863.1	822.8	792.2	765.5	747.9	733.7	725.8	719.0	712.7	708.2
35°	867.6	814.3	780.3	750.7	728.6	708.8	698.0	690.6	684.9	679.8	677.5
37.5°	817.7	772.3	735.4	712.2	688.9	673.0	662.8	656.0	652.6	647.5	648.0
40°	768.3	727.5	698.0	671.3	649.7	636.1	628.2	625.3	620.2	618.5	620.2
42.5°	724.1	686.6	658.3	633.3	614.6	601.5	595.3	591.3	589.6	589.0	589.6
45°	680.9	645.8	618.5	598.1	578.8	566.9	561.8	558.9	557.2	560.1	560.6
47.5°	637.8	606.0	581.6	557.8	541.9	533.4	528.3	526.0	527.7	528.9	532.8
50°	595.3	565.8	540.2	519.2	506.7	498.8	497.1	493.1	496.0	497.7	500.5
52.5°	552.1	525.5	502.8	482.9	469.9	464.7	460.8	459.1	463.0	463.0	465.9
55°	508.4	485.2	464.2	446.0	435.8	429.6	426.7	424.5	426.7	427.3	426.7
57.5°	467.6	445.5	423.3	408.0	399.5	392.7	389.8	388.7	388.1	390.4	389.8
60°	424.5	403.5	385.9	370.0	361.5	357.5	351.3	352.4	352.4	352.4	346.7
62.5°	381.3	360.3	345.0	334.2	324.0	317.2	316.1	314.4	311.0	310.4	303.0
65°	337.1	321.2	308.1	297.3	287.1	281.5	279.8	274.6	270.7	263.3	258.2
67.5°	296.2	284.9	269.5	260.5	252.0	245.1	238.9	234.9	227.0	219.6	215.1
70°	255.4	243.4	233.2	223.6	215.1	208.8	201.4	194.1	189.0	184.4	181.0
72.5°	214.5	204.3	195.8	186.7	177.6	171.4	165.7	160.0	157.8	155.5	153.8
75°	176.5	166.8	158.9	151.5	146.4	139.0	136.2	133.9	131.7	128.8	125.4
77.5°	139.6	132.2	126.0	119.7	115.2	111.2	109.0	102.1	96.5	95.3	94.2
80°	103.8	98.2	94.2	89.7	84.6	78.9	77.2	74.9	73.8	73.8	74.3
82.5°	72.6	69.2	64.7	60.7	59.0	56.7	56.7	56.2	55.6	56.2	56.2
85°	44.3	39.7	38.6	38.0	38.6	38.6	38.6	38.6	38.0	38.6	37.5
87.5°	19.3	21.0	21.6	19.9	20.4	19.3	19.9	19.9	19.9	20.4	19.9
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: P243599

CATALOG NUMBER: S124RDRP-H1020D830-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1457.2	1457.2	1457.2	1457.2
2.5°	1380.1	1380.1	1374.4	1369.8
5°	1302.3	1294.9	1293.8	1287.0
7.5°	1229.7	1228.5	1225.7	1225.7
10°	1171.8	1167.8	1163.9	1163.3
12.5°	1090.1	1095.8	1089.0	1087.2
15°	1018.6	1014.0	1008.4	996.5
17.5°	952.2	943.7	941.4	936.3
20°	900.0	893.7	891.5	888.6
22.5°	850.6	849.5	842.7	841.0
25°	814.3	808.6	804.1	801.2
27.5°	774.6	770.6	768.3	763.8
30°	738.3	737.1	734.3	734.3
32.5°	705.3	701.9	701.9	701.4
35°	675.3	676.4	673.0	671.9
37.5°	646.9	645.2	645.8	644.6
40°	619.1	618.0	618.0	618.5
42.5°	590.7	591.3	592.4	592.4
45°	562.4	562.9	564.1	564.1
47.5°	535.7	534.5	535.7	534.5
50°	501.6	505.0	504.5	503.9
52.5°	467.0	465.9	468.2	467.6
55°	429.6	427.9	430.1	427.9
57.5°	387.6	388.1	388.1	387.0
60°	345.6	343.9	341.6	341.6
62.5°	296.8	291.7	288.3	290.5
65°	249.7	245.7	244.6	242.9
67.5°	212.2	207.7	206.0	205.4
70°	179.9	177.6	177.0	177.0
72.5°	152.6	152.6	150.9	149.8
75°	124.3	122.0	119.2	119.2
77.5°	93.1	92.5	91.9	91.9
80°	72.6	72.6	73.2	73.8
82.5°	54.5	55.0	55.6	55.6
85°	36.9	36.9	37.5	37.5
87.5°	19.9	19.9	19.9	19.3
90°	0.0	0.0	0.0	0.0



TEST NUMBER: P243599
 CATALOG NUMBER: S124RDRP-H1020D830-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	18.24	19.77	18.60	20.09	20.40	19.94	21.47	20.30	21.78	22.10
	3H	19.47	20.85	19.85	21.18	21.54	21.42	22.80	21.80	23.12	23.49
	4H	19.91	21.20	20.30	21.55	21.92	21.96	23.25	22.36	23.60	23.98
	6H	20.18	21.38	20.60	21.74	22.14	22.35	23.54	22.76	23.91	24.30
	8H	20.27	21.41	20.70	21.80	22.20	22.47	23.60	22.89	23.99	24.39
	12H	20.32	21.41	20.75	21.79	22.22	22.54	23.63	22.97	24.01	24.44
4H	2H	19.45	20.74	19.85	21.09	21.47	20.46	21.76	20.86	22.10	22.48
	3H	20.72	21.79	21.13	22.19	22.59	22.24	23.31	22.65	23.71	24.11
	4H	21.19	22.15	21.62	22.57	23.01	22.90	23.86	23.33	24.28	24.72
	6H	21.52	22.36	21.98	22.80	23.26	23.40	24.24	23.85	24.68	25.14
	8H	21.62	22.41	22.09	22.85	23.32	23.55	24.34	24.01	24.78	25.25
	12H	21.70	22.40	22.18	22.88	23.35	23.66	24.37	24.15	24.84	25.31
8H	4H	21.60	22.38	22.06	22.83	23.29	23.03	23.81	23.49	24.25	24.72
	6H	22.00	22.65	22.49	23.14	23.61	23.62	24.27	24.12	24.76	25.24
	8H	22.14	22.72	22.66	23.23	23.72	23.84	24.42	24.36	24.93	25.42
	12H	22.26	22.78	22.77	23.27	23.83	24.02	24.54	24.53	25.03	25.59
12H	4H	21.64	22.34	22.12	22.82	23.29	23.02	23.72	23.50	24.20	24.67
	6H	22.05	22.64	22.57	23.14	23.63	23.62	24.20	24.13	24.71	25.20
	8H	22.24	22.76	22.75	23.25	23.82	23.88	24.39	24.39	24.88	25.45