

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: P242646

Luminaire Tested: S124DRP-S1020D840-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242646
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-21)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DRP-S1020D840-X4F0-XX-UDD-A-W
Description: DEFINE 4 DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

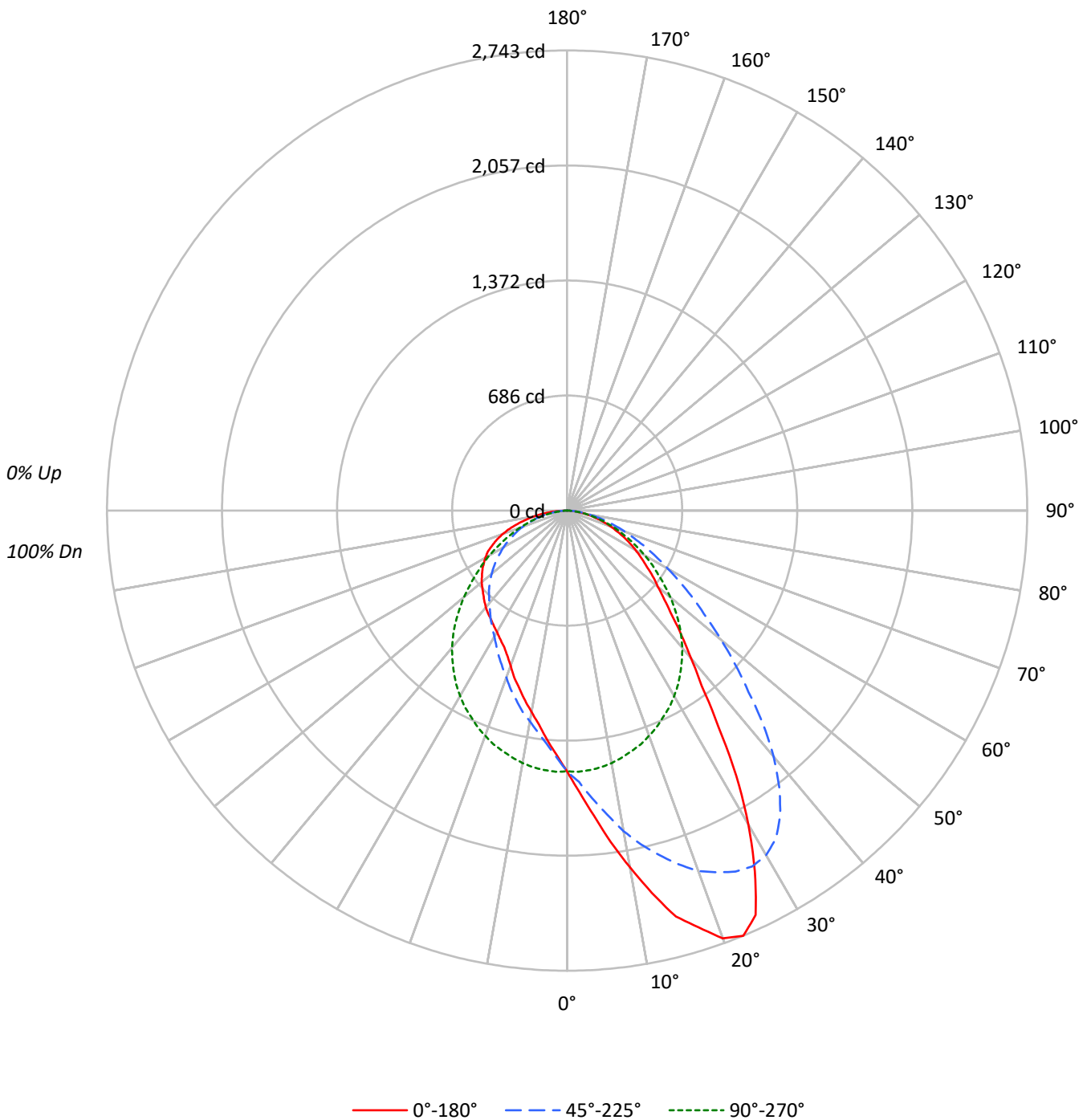
Lumens per Lamp: N/A
Luminaire Lumens: 4289.3 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.22 / 1.41
Luminous Opening: Rectangular (W 3.88' x L: 0.31' x H: 0')
CIE Type: Direct

Input Watts (W): 34.8
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

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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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87					85				
2	100	92	86	80	98	90	84	79	87	82	78	84	79	76	81	77	74					72				
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64					62				
4	84	73	64	58	82	72	64	58	69	62	57	67	61	56	65	60	55					53				
5	78	65	57	50	76	64	56	50	62	55	50	60	54	49	58	53	49					46				
6	72	59	51	44	70	58	50	44	56	49	44	55	48	43	53	47	43					41				
7	67	54	45	39	65	53	45	39	52	44	39	50	44	39	49	43	38					36				
8	62	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35					33				
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31					30				
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29					27				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	13817	13817	13817	13817	13817
5°	16272	15370	13853	12451	12227
10°	19482	17511	13792	11519	11008
15°	23050	19561	13653	10761	10109
20°	25668	21623	13510	10014	9307
25°	26083	23285	13300	9429	8753
30°	22194	24335	13099	8903	8579
35°	17063	24029	12773	8615	8580
40°	13300	22206	12388	8376	8742
45°	11090	19217	11810	8273	8888
50°	9759	16571	11104	8122	9189
55°	8940	14261	10258	7973	9560
60°	8379	12340	9502	7772	10005
65°	7801	10781	8655	7517	10373
70°	7129	9523	7815	7313	10609
75°	6367	8205	6879	6834	10482
80°	5339	6660	5636	6230	10151
85°	3937	5059	4069	5783	9720

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 55°
 Vertical Angle: 45°
 Luminance: 21216 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.3	3.5
10°-20°	467.0	10.9
20°-30°	741.8	17.3
30°-40°	824.2	19.2
40°-50°	749.6	17.5
50°-60°	612.5	14.3
60°-70°	437.3	10.2
70°-80°	240.6	5.6
80°-90°	65.0	1.5
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°	1360.0	31.7
0°-40°	2184.3	50.9
0°-60°	3546.4	82.7
0°-90°	4289.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4289.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1554	1554	1554	1554	1554	
5°	1824	1722	1552	1395	1370	185
15°	2505	2126	1484	1169	1098	708
25°	2659	2374	1356	961	892	1180
35°	1572	2214	1177	794	791	995
45°	882	1529	940	658	707	693
55°	577	920	662	514	617	521
65°	371	513	412	357	493	367
75°	185	239	200	199	305	197
85°	39	50	40	57	95	47
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°	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4
2.5°	1679.3	1678.7	1672.3	1671.0	1666.5	1660.7	1659.4	1649.1	1628.5	1618.8	1616.2
5°	1823.6	1836.5	1819.7	1816.5	1814.6	1793.3	1782.4	1769.5	1739.9	1722.5	1709.0
7.5°	1992.3	1992.9	1985.8	1978.8	1966.5	1948.5	1924.0	1895.7	1861.6	1826.8	1802.3
10°	2158.4	2163.6	2155.2	2153.9	2121.1	2100.5	2059.2	2024.5	1984.6	1940.1	1899.6
12.5°	2333.6	2323.3	2320.0	2285.9	2286.6	2244.7	2195.1	2159.1	2092.1	2039.3	1982.0
15°	2504.8	2490.7	2481.7	2443.7	2425.0	2372.8	2322.0	2282.7	2202.2	2125.6	2067.6
17.5°	2604.0	2621.4	2598.2	2582.8	2531.9	2497.8	2446.9	2366.4	2306.5	2211.2	2144.9
20°	2713.5	2714.8	2703.2	2687.1	2649.1	2602.7	2546.0	2455.9	2380.6	2285.9	2185.5
22.5°	2743.1	2743.1	2739.9	2725.1	2698.7	2663.2	2605.9	2534.5	2439.2	2334.2	2233.7
25°	2659.4	2656.8	2662.6	2679.3	2668.4	2656.8	2624.0	2567.9	2482.9	2374.1	2265.9
27.5°	2422.4	2439.2	2473.9	2515.1	2544.8	2571.2	2569.2	2545.4	2484.9	2390.9	2275.6
30°	2162.3	2184.2	2208.6	2249.8	2329.7	2375.4	2425.6	2463.6	2442.4	2370.9	2265.3
32.5°	1876.4	1877.7	1916.9	1965.2	2036.7	2135.2	2222.2	2309.1	2346.4	2317.5	2233.7
35°	1572.4	1581.5	1620.7	1667.1	1756.6	1864.1	1983.9	2090.8	2179.0	2214.4	2169.4
37.5°	1317.5	1345.8	1375.4	1428.2	1510.0	1607.2	1736.0	1869.3	1998.7	2077.3	2085.6
40°	1146.2	1162.3	1182.2	1220.2	1287.2	1382.5	1489.4	1647.8	1787.5	1913.7	1954.9
42.5°	1011.0	1018.7	1029.0	1062.5	1109.5	1204.1	1299.4	1434.0	1574.4	1731.5	1807.5
45°	882.2	891.8	912.4	932.4	971.0	1036.7	1127.5	1242.1	1383.1	1528.7	1656.2
47.5°	785.6	792.0	804.9	826.8	861.6	906.0	983.3	1080.5	1218.3	1359.3	1495.8
50°	705.7	710.9	720.5	739.9	765.0	803.6	864.1	953.6	1056.0	1198.3	1331.6
52.5°	642.6	643.9	650.4	661.9	680.6	711.5	758.5	828.7	922.1	1045.1	1177.7
55°	576.9	579.5	586.0	595.6	613.0	633.6	671.6	727.0	810.0	920.2	1035.4
57.5°	522.9	525.4	530.6	534.5	549.9	567.3	598.2	638.1	703.2	801.0	906.0
60°	471.3	470.1	476.5	479.7	489.4	503.5	526.1	564.1	618.8	694.1	788.8
62.5°	421.1	419.2	424.3	428.8	433.4	444.9	462.3	490.0	531.9	598.2	676.8
65°	370.9	368.3	371.5	376.7	381.8	388.3	401.8	428.2	463.6	512.6	575.0
67.5°	319.4	322.6	322.6	325.8	329.0	338.1	347.7	368.3	393.4	433.4	488.7
70°	274.3	275.0	277.5	277.5	279.5	287.2	294.9	305.9	330.3	366.4	409.5
72.5°	229.2	232.5	230.5	233.1	234.4	238.9	244.0	254.3	274.3	298.8	333.5
75°	185.4	187.4	187.4	188.0	190.0	191.9	196.4	204.1	218.9	238.9	264.0
77.5°	142.9	142.9	144.2	146.8	146.8	150.0	153.9	159.7	168.1	182.9	199.0
80°	104.3	105.6	105.0	106.2	106.2	108.8	110.1	117.8	121.1	130.1	142.3
82.5°	69.5	70.8	70.8	72.8	74.1	74.1	76.0	77.9	81.1	88.9	92.1
85°	38.6	39.9	38.6	39.9	41.9	42.5	44.4	45.1	47.6	49.6	54.1
87.5°	14.2	16.1	16.1	16.7	18.0	18.7	19.3	18.7	21.2	21.9	24.5
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°	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4
2.5°	1616.9	1607.9	1601.4	1596.3	1582.1	1573.7	1567.3	1558.3	1548.0	1537.0	1523.5
5°	1695.4	1673.5	1657.4	1633.0	1609.8	1590.5	1570.5	1552.5	1530.6	1506.8	1489.4
7.5°	1775.9	1745.7	1705.1	1673.5	1635.5	1602.7	1573.7	1543.5	1511.3	1480.4	1451.4
10°	1851.9	1810.1	1763.7	1709.0	1657.4	1611.7	1569.2	1528.0	1488.1	1448.2	1414.0
12.5°	1933.7	1879.0	1804.9	1738.6	1679.3	1614.3	1560.9	1508.1	1457.8	1415.3	1374.1
15°	2005.2	1929.8	1850.6	1765.0	1689.0	1617.5	1547.3	1483.6	1429.5	1374.1	1335.5
17.5°	2050.2	1956.9	1871.9	1782.4	1694.8	1605.3	1532.5	1461.0	1394.1	1340.0	1291.7
20°	2094.7	2001.9	1889.3	1799.7	1690.3	1597.6	1510.0	1428.2	1357.4	1298.8	1248.6
22.5°	2133.3	2022.5	1909.9	1784.9	1676.1	1576.3	1478.4	1396.0	1323.2	1260.8	1213.1
25°	2142.3	2019.3	1897.0	1779.8	1656.2	1539.6	1452.7	1356.1	1278.8	1213.8	1162.3
27.5°	2145.5	2015.5	1879.6	1752.1	1624.6	1518.4	1405.0	1320.7	1240.8	1171.9	1123.0
30°	2138.4	2001.3	1852.5	1711.5	1583.4	1465.6	1370.3	1276.2	1194.5	1126.2	1074.7
32.5°	2115.9	1971.7	1817.8	1666.5	1532.5	1417.9	1318.7	1230.5	1151.3	1084.4	1029.6
35°	2068.3	1927.2	1764.3	1609.1	1473.3	1356.7	1267.9	1177.1	1097.2	1033.5	981.3
37.5°	2004.5	1873.2	1707.7	1546.0	1415.3	1296.8	1207.3	1123.6	1051.5	985.8	931.7
40°	1915.7	1803.6	1637.5	1481.0	1336.8	1225.4	1143.0	1067.6	996.1	935.0	884.1
42.5°	1813.3	1719.3	1569.2	1401.2	1263.4	1151.3	1071.5	1005.8	939.5	884.1	833.2
45°	1687.7	1623.3	1479.1	1325.8	1180.9	1075.3	998.7	939.5	882.8	827.4	784.9
47.5°	1548.0	1511.9	1386.4	1239.5	1100.5	994.9	928.5	871.9	820.4	772.1	734.1
50°	1407.0	1391.5	1286.5	1146.2	1014.8	916.9	850.0	803.0	760.5	719.3	683.8
52.5°	1267.9	1271.1	1179.0	1053.4	934.3	841.0	774.6	731.5	696.1	664.5	633.6
55°	1125.6	1143.6	1069.5	954.9	846.1	761.1	701.2	661.9	636.2	608.5	584.7
57.5°	994.9	1025.1	960.7	855.8	763.7	682.6	629.8	599.5	571.2	553.1	534.5
60°	867.4	895.7	848.0	763.0	677.4	610.4	560.9	534.5	510.6	499.0	486.8
62.5°	754.0	778.5	746.3	669.0	597.6	533.8	493.9	468.8	454.6	441.7	434.6
65°	647.1	668.4	638.1	580.8	517.1	465.6	431.4	411.5	396.0	390.9	381.8
67.5°	541.5	560.9	544.8	494.5	440.4	399.9	372.8	351.6	342.6	337.4	331.6
70°	449.5	468.8	451.4	408.9	369.6	336.8	311.7	300.7	291.1	289.1	280.1
72.5°	371.5	383.1	365.7	334.8	302.6	276.2	258.2	246.6	242.8	238.9	235.0
75°	290.4	302.0	290.4	264.6	240.8	221.5	204.8	200.3	194.5	192.5	189.3
77.5°	217.6	228.6	219.6	202.2	183.5	167.4	157.8	151.3	150.7	146.8	148.1
80°	157.1	163.6	155.2	144.2	130.1	119.8	113.3	110.1	106.2	105.0	107.5
82.5°	101.7	103.7	100.5	94.0	84.4	78.6	74.7	70.8	70.8	71.5	70.8
85°	58.6	58.0	57.3	50.9	47.6	43.1	40.6	39.9	39.3	40.6	41.9
87.5°	24.5	25.1	24.5	21.9	20.0	18.0	17.4	16.7	17.4	18.0	18.7
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°	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4
2.5°	1517.1	1511.3	1502.9	1491.3	1481.7	1471.4	1468.8	1464.9	1472.6	1466.2	1464.3
5°	1474.6	1461.0	1443.7	1423.7	1412.1	1395.4	1392.1	1385.7	1379.3	1378.6	1372.2
7.5°	1430.1	1411.5	1389.6	1369.0	1350.9	1332.9	1321.3	1320.0	1309.7	1304.6	1298.1
10°	1387.6	1363.2	1336.8	1317.5	1295.6	1276.2	1262.7	1255.0	1248.6	1241.5	1235.0
12.5°	1337.4	1311.0	1290.4	1269.2	1242.1	1228.6	1204.1	1189.3	1189.3	1191.2	1171.9
15°	1300.7	1275.0	1241.5	1211.9	1197.7	1169.4	1157.1	1141.7	1132.0	1122.3	1114.6
17.5°	1255.6	1224.1	1198.3	1164.8	1138.4	1117.2	1100.5	1092.1	1076.6	1062.5	1052.8
20°	1213.8	1179.7	1152.0	1115.9	1086.3	1058.6	1045.1	1032.2	1021.3	1009.7	998.7
22.5°	1171.3	1135.2	1099.8	1065.0	1038.0	1008.4	995.5	976.8	966.5	961.4	950.4
25°	1126.2	1087.6	1048.9	1015.5	987.1	961.4	944.0	930.5	918.9	913.7	906.6
27.5°	1077.3	1039.3	1002.6	963.9	931.1	912.4	898.3	887.3	880.2	872.5	869.3
30°	1030.9	991.0	951.1	915.7	886.0	867.4	854.5	847.4	842.2	839.0	835.8
32.5°	983.9	944.6	902.1	870.6	844.8	828.7	819.7	812.6	810.7	810.0	809.4
35°	933.0	893.1	854.5	825.5	800.4	793.9	785.6	781.7	780.4	784.9	786.9
37.5°	884.1	846.8	810.7	781.7	765.0	754.7	751.5	750.8	755.3	759.2	763.7
40°	837.1	801.0	767.5	743.1	727.6	721.8	720.5	723.8	728.9	733.4	738.6
42.5°	791.4	756.0	726.3	703.8	694.1	689.0	690.3	693.5	701.2	707.0	715.4
45°	743.7	714.1	684.5	665.8	656.8	658.1	658.1	663.9	671.0	679.3	687.7
47.5°	699.3	669.0	643.9	627.8	623.3	621.4	624.6	632.3	642.0	651.6	663.2
50°	654.2	625.9	604.6	590.5	585.3	587.3	592.4	599.5	611.7	624.6	636.8
52.5°	608.5	583.4	564.1	551.2	548.0	551.8	557.0	569.2	579.5	593.7	609.1
55°	560.9	539.0	523.5	513.8	512.6	514.5	520.3	532.5	548.0	565.4	579.5
57.5°	513.8	495.2	480.4	473.3	473.9	475.2	484.2	499.0	514.5	533.2	551.2
60°	466.2	449.5	437.9	432.7	433.4	437.2	448.8	462.3	482.9	501.0	520.3
62.5°	421.1	407.0	396.0	391.5	390.2	399.9	410.8	425.0	445.6	466.2	487.4
65°	372.2	360.6	351.6	349.0	350.9	357.4	371.5	390.2	407.6	428.8	450.7
67.5°	324.5	314.9	308.4	309.7	311.7	320.7	332.9	349.0	368.3	390.2	412.8
70°	279.5	270.4	265.3	265.9	269.8	281.4	291.7	307.8	329.0	351.6	369.6
72.5°	233.1	227.9	223.4	226.7	230.5	237.6	251.1	267.2	285.3	305.9	325.2
75°	186.1	186.1	183.5	185.4	191.2	199.0	208.6	225.4	244.0	260.8	276.2
77.5°	146.2	144.2	145.5	147.5	151.3	161.0	171.9	184.2	199.0	216.4	229.2
80°	105.6	106.2	109.5	113.3	114.6	121.7	133.3	144.2	155.2	169.4	181.6
82.5°	72.8	73.4	74.7	79.8	81.1	88.9	95.3	106.2	115.9	124.3	133.9
85°	43.1	43.1	46.4	48.3	51.5	56.7	61.2	67.6	76.6	83.1	92.7
87.5°	20.6	20.6	23.2	24.5	26.4	29.6	30.9	38.0	40.6	43.8	49.6
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: P242646

CATALOG NUMBER: S124DRP-S1020D840-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1554.4	1554.4	1554.4	1554.4
2.5°	1463.0	1461.7	1457.2	1456.5
5°	1368.3	1365.1	1363.2	1370.3
7.5°	1296.8	1294.3	1288.5	1286.5
10°	1228.6	1226.0	1220.9	1219.6
12.5°	1162.9	1157.1	1157.1	1159.1
15°	1106.2	1103.7	1096.6	1098.5
17.5°	1048.3	1045.7	1036.1	1045.7
20°	994.2	989.1	984.5	983.9
22.5°	942.7	938.2	938.8	933.7
25°	901.5	897.0	895.7	892.5
27.5°	868.0	865.4	862.8	864.1
30°	837.7	837.1	835.8	835.8
32.5°	812.6	812.6	813.9	813.9
35°	789.4	791.4	792.7	790.7
37.5°	768.8	770.1	772.1	774.0
40°	744.4	748.9	750.2	753.4
42.5°	721.2	726.3	730.2	730.2
45°	697.4	702.5	707.0	707.0
47.5°	672.9	680.0	684.5	685.1
50°	647.8	656.8	661.3	664.5
52.5°	623.3	632.3	638.8	640.1
55°	594.3	607.2	614.3	616.9
57.5°	568.6	580.2	587.9	589.8
60°	537.7	550.5	560.9	562.8
62.5°	506.1	519.6	528.7	534.5
65°	468.8	482.3	491.3	493.2
67.5°	429.5	443.7	449.5	453.3
70°	387.6	398.6	405.0	408.2
72.5°	340.0	351.6	359.3	359.3
75°	291.1	301.4	305.2	305.2
77.5°	240.2	246.0	251.1	252.4
80°	191.2	194.5	198.3	198.3
82.5°	141.0	143.6	147.5	146.8
85°	91.4	97.2	96.6	95.3
87.5°	51.5	52.2	54.1	55.4
90°	0.0	0.0	0.0	0.0



TEST NUMBER: P242646
 CATALOG NUMBER: S124DRP-S1020D840-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	19.09	20.65	19.46	20.97	21.28	20.00	21.56	20.37	21.88	22.19
	3H	20.57	21.98	20.95	22.31	22.67	21.37	22.77	21.75	23.10	23.46
	4H	21.11	22.43	21.51	22.78	23.16	21.84	23.16	22.24	23.51	23.89
	6H	21.47	22.69	21.88	23.06	23.45	22.15	23.37	22.56	23.74	24.13
	8H	21.57	22.74	22.00	23.13	23.53	22.23	23.39	22.65	23.78	24.18
	12H	21.63	22.74	22.06	23.13	23.55	22.27	23.39	22.70	23.77	24.20
4H	2H	20.25	21.57	20.65	21.92	22.30	20.69	22.01	21.09	22.36	22.73
	3H	21.78	22.88	22.19	23.28	23.68	22.39	23.50	22.80	23.90	24.30
	4H	22.37	23.36	22.80	23.78	24.22	22.98	23.98	23.42	24.39	24.83
	6H	22.79	23.66	23.25	24.10	24.56	23.38	24.25	23.84	24.69	25.15
	8H	22.92	23.73	23.38	24.17	24.64	23.49	24.30	23.95	24.74	25.21
	12H	22.99	23.72	23.48	24.20	24.67	23.55	24.28	24.03	24.75	25.22
8H	4H	22.82	23.63	23.29	24.08	24.54	23.30	24.11	23.76	24.55	25.02
	6H	23.33	24.00	23.82	24.49	24.97	23.83	24.50	24.32	24.99	25.46
	8H	23.50	24.10	24.01	24.61	25.10	23.99	24.59	24.50	25.10	25.59
	12H	23.62	24.16	24.13	24.65	25.21	24.10	24.64	24.61	25.13	25.69
12H	4H	22.87	23.60	23.35	24.08	24.55	23.33	24.06	23.81	24.53	25.00
	6H	23.40	24.01	23.92	24.52	25.00	23.88	24.49	24.39	25.00	25.48
	8H	23.62	24.16	24.13	24.65	25.21	24.10	24.64	24.61	25.13	25.69