

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: P243678

Luminaire Tested: S125DRP-H1090D840-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243678
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-61)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-H1090D840-X4F0-XX-UDD-A-W
Description: DEFINE 5 DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

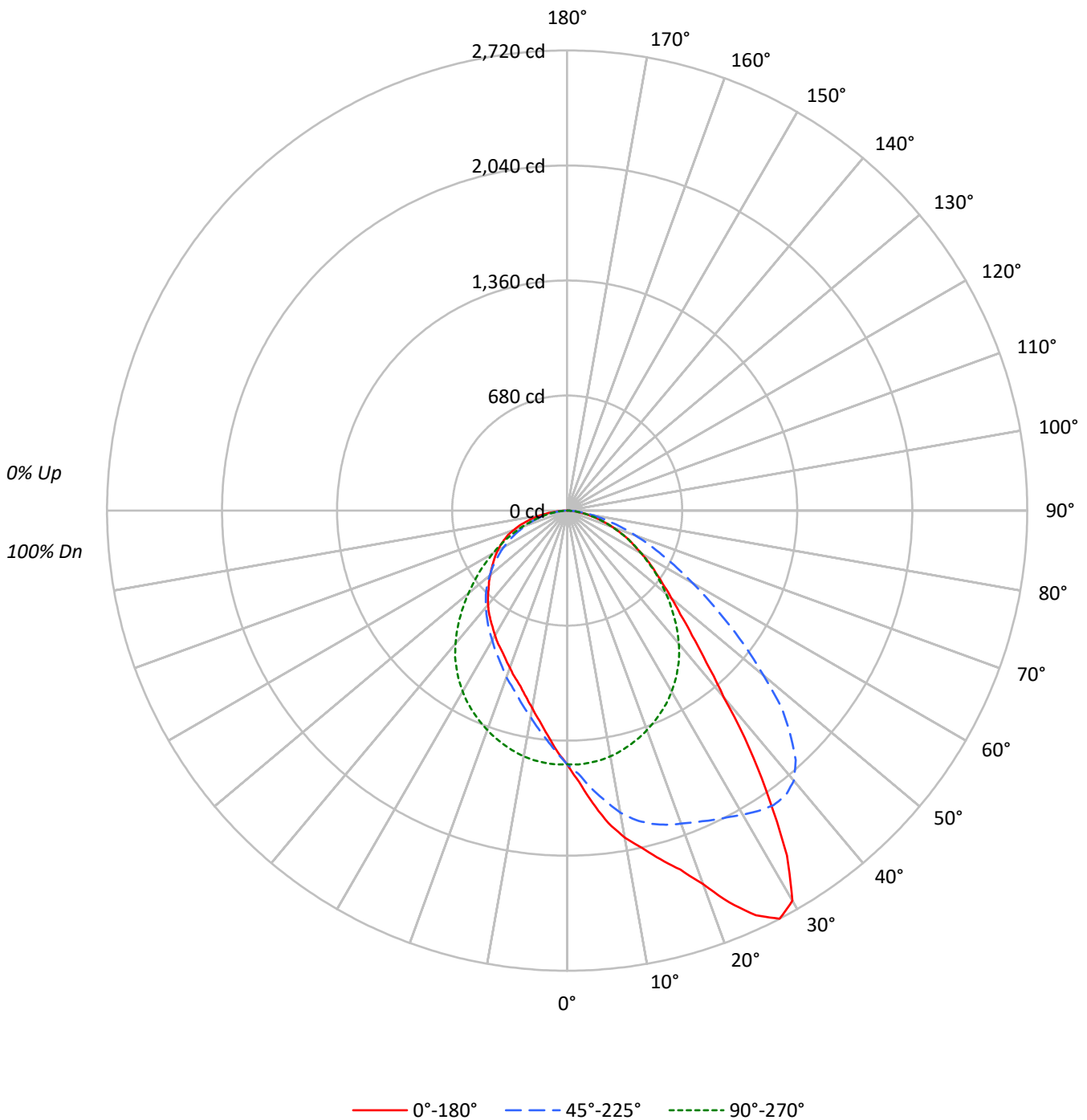
Lumens per Lamp: N/A
Luminaire Lumens: 4272.9 lumens
Efficiency: N/A
Efficacy: 135.6 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.22 / 1.53
Luminous Opening: Rectangular (W 3.88' x L: 0.39' x H: 0')
CIE Type: Direct

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	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	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	63	61					61			
4	84	73	64	58	82	71	63	57	69	62	56	66	61	56	64	59	55	53					53			
5	78	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48	46					46			
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	40					40			
7	67	53	45	39	65	53	44	39	51	44	38	50	43	38	48	42	38	36					36			
8	62	49	40	35	60	48	40	35	47	40	34	46	39	34	44	38	34	32					32			
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	10655	10655	10655	10655	10655
5°	12379	11755	10679	9716	9490
10°	14163	13089	10644	8946	8564
15°	15702	14100	10549	8343	7891
20°	17777	14894	10443	7936	7486
25°	20702	15833	10308	7528	7171
30°	21854	17029	10139	7275	6996
35°	18072	18447	9890	7090	6847
40°	13369	19336	9533	6938	6746
45°	10511	18736	9013	6802	6600
50°	8900	16732	8430	6614	6575
55°	7925	14337	7850	6404	6600
60°	7190	12151	7207	6145	6741
65°	6666	10388	6604	5827	6932
70°	5989	8882	5912	5444	6974
75°	5108	7513	5193	4976	6879
80°	4179	6070	4257	4330	6422
85°	2879	4265	3025	3417	5456

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 18736 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.8	3.4
10°-20°	432.8	10.1
20°-30°	703.6	16.5
30°-40°	856.0	20.0
40°-50°	783.3	18.3
50°-60°	626.9	14.7
60°-70°	436.6	10.2
70°-80°	232.0	5.4
80°-90°	57.0	1.3
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°	1281.2	30.0
0°-40°	2137.2	50.0
0°-60°	3547.3	83.0
0°-90°	4272.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4272.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1499	1499	1499	1499	1499	
5°	1735	1648	1497	1362	1330	173
15°	2134	1916	1434	1134	1072	612
25°	2640	2019	1314	960	914	1205
35°	2083	2126	1140	817	789	1291
45°	1046	1864	897	677	657	825
55°	640	1157	634	517	533	577
65°	396	618	393	346	412	390
75°	186	274	189	181	250	201
85°	35	52	37	42	67	46
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°	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2
2.5°	1605.0	1598.3	1596.5	1597.1	1593.5	1590.4	1583.1	1573.4	1566.7	1558.2	1555.8
5°	1735.1	1718.7	1721.8	1716.9	1709.0	1698.7	1689.5	1674.9	1661.0	1647.6	1630.0
7.5°	1862.8	1859.8	1851.3	1850.0	1837.3	1819.6	1801.4	1781.3	1751.5	1730.9	1707.2
10°	1962.5	1968.6	1956.4	1957.0	1934.5	1916.9	1901.1	1875.0	1841.5	1813.6	1778.9
12.5°	2042.8	2045.2	2043.4	2035.5	2020.9	1991.1	1975.9	1948.5	1912.0	1873.7	1847.0
15°	2134.0	2127.3	2116.9	2107.2	2085.9	2064.6	2033.0	2000.8	1954.6	1916.3	1877.4
17.5°	2225.1	2223.9	2211.2	2190.5	2163.7	2135.8	2088.4	2047.0	1997.8	1947.3	1898.7
20°	2350.4	2343.7	2324.9	2301.1	2251.9	2212.4	2153.4	2096.9	2032.4	1969.2	1912.7
22.5°	2507.2	2485.4	2466.5	2430.0	2373.5	2304.8	2238.5	2156.4	2066.5	1992.3	1921.8
25°	2639.8	2630.1	2610.0	2569.3	2504.8	2422.1	2323.6	2230.6	2117.5	2019.0	1927.2
27.5°	2720.0	2715.8	2703.6	2665.3	2611.8	2529.7	2424.6	2306.0	2177.7	2044.6	1934.5
30°	2662.9	2663.5	2670.2	2665.9	2642.2	2589.3	2495.7	2376.5	2228.2	2075.0	1936.4
32.5°	2417.3	2433.7	2486.0	2510.9	2544.3	2555.3	2513.3	2414.2	2270.7	2105.4	1942.4
35°	2082.9	2123.0	2158.3	2231.2	2318.2	2389.3	2430.6	2398.4	2288.4	2126.1	1945.5
37.5°	1768.0	1764.9	1819.6	1898.7	1991.1	2112.1	2229.4	2293.8	2258.0	2121.8	1940.0
40°	1440.9	1468.8	1502.9	1572.8	1681.0	1830.0	1969.8	2107.8	2157.7	2084.1	1918.7
42.5°	1217.1	1229.9	1264.0	1318.7	1396.5	1548.5	1686.5	1864.0	1991.7	2000.2	1871.9
45°	1045.7	1059.7	1069.4	1123.5	1195.9	1298.0	1439.7	1618.4	1789.8	1864.0	1795.9
47.5°	908.3	916.2	937.5	970.3	1017.7	1108.3	1221.4	1383.7	1570.4	1714.5	1691.4
50°	804.9	811.0	828.0	846.3	885.2	952.1	1043.3	1176.4	1355.8	1513.2	1564.9
52.5°	713.8	721.7	730.2	747.8	783.7	828.7	902.8	1006.8	1173.4	1334.5	1416.6
55°	639.6	642.6	651.7	665.1	692.5	726.5	785.5	879.7	996.5	1157.0	1270.0
57.5°	575.1	572.1	581.8	590.9	609.2	637.8	680.3	750.2	861.5	998.3	1116.2
60°	505.8	508.9	516.2	523.5	536.2	561.2	594.6	650.5	732.0	854.8	975.2
62.5°	446.2	448.7	450.5	460.8	472.4	490.0	517.4	563.0	630.5	732.0	839.6
65°	396.4	392.1	394.6	401.9	411.0	425.6	451.1	484.5	535.0	617.7	707.1
67.5°	338.0	339.2	339.9	344.1	352.0	366.0	384.2	411.6	452.9	518.0	596.4
70°	288.2	288.8	289.4	293.0	299.7	307.6	320.4	341.7	376.9	427.4	488.8
72.5°	237.1	239.5	239.5	242.6	247.4	251.7	263.9	281.5	308.2	348.4	400.0
75°	186.0	190.3	191.5	195.2	199.4	200.6	209.7	223.7	240.8	273.6	314.3
77.5°	144.7	144.7	147.1	151.4	151.4	155.0	164.8	170.8	184.2	206.7	237.7
80°	102.1	104.0	104.0	105.2	107.6	110.6	114.9	120.4	131.9	148.3	164.8
82.5°	66.9	67.5	68.1	71.1	69.9	73.0	74.8	81.5	86.9	94.8	105.2
85°	35.3	35.3	35.9	37.7	39.5	40.1	41.3	44.4	48.6	52.3	58.4
87.5°	14.6	14.0	14.0	15.2	15.2	15.8	16.4	17.6	20.1	20.1	22.5
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°	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2
2.5°	1554.0	1549.1	1540.6	1533.3	1524.2	1517.5	1510.8	1502.3	1493.8	1484.6	1474.9
5°	1616.0	1601.4	1585.0	1568.5	1549.1	1533.3	1516.3	1496.8	1480.4	1462.2	1442.7
7.5°	1687.1	1661.6	1633.0	1600.8	1570.4	1543.0	1515.0	1488.3	1464.0	1436.6	1409.9
10°	1755.8	1711.4	1675.6	1631.8	1588.6	1548.5	1510.2	1474.9	1439.7	1405.6	1372.8
12.5°	1802.6	1752.2	1707.2	1656.7	1606.2	1555.8	1505.3	1456.7	1414.7	1373.4	1338.7
15°	1834.8	1799.6	1740.0	1679.2	1612.9	1547.3	1490.1	1433.6	1383.7	1335.7	1294.4
17.5°	1854.9	1809.3	1750.9	1687.1	1614.1	1545.4	1476.7	1409.3	1352.1	1300.4	1253.6
20°	1860.4	1806.9	1746.1	1679.8	1606.9	1531.5	1454.3	1380.7	1318.7	1259.7	1212.3
22.5°	1854.9	1792.9	1727.8	1663.4	1586.8	1510.2	1429.3	1349.1	1277.9	1217.1	1167.3
25°	1845.8	1771.0	1702.9	1626.9	1555.8	1482.8	1399.5	1314.4	1240.2	1177.0	1121.1
27.5°	1834.2	1748.5	1664.6	1589.8	1512.6	1440.9	1364.3	1277.3	1200.1	1130.8	1078.5
30°	1820.9	1718.7	1625.7	1536.9	1464.0	1392.2	1317.5	1235.4	1157.6	1091.3	1034.8
32.5°	1805.7	1687.1	1577.7	1482.2	1404.4	1338.1	1268.2	1189.8	1113.2	1042.1	992.8
35°	1784.4	1643.9	1526.0	1422.6	1341.8	1270.0	1208.6	1139.9	1063.9	997.7	946.6
37.5°	1759.4	1605.6	1473.7	1361.8	1273.7	1200.1	1143.6	1087.6	1016.5	952.7	903.4
40°	1726.0	1559.4	1418.4	1297.4	1203.2	1130.8	1075.5	1027.5	968.5	904.0	859.7
42.5°	1682.2	1508.4	1355.8	1226.9	1135.7	1058.5	1006.8	963.0	912.6	856.6	812.8
45°	1632.4	1450.0	1285.8	1159.4	1060.3	986.7	936.3	896.7	858.4	808.6	767.9
47.5°	1554.6	1381.3	1222.6	1082.8	985.5	914.4	867.0	829.3	800.7	761.2	721.0
50°	1462.2	1303.5	1147.8	1007.4	908.9	840.2	795.2	762.4	738.1	707.7	677.3
52.5°	1360.6	1215.9	1065.8	934.4	836.0	770.9	723.5	694.3	678.5	654.2	630.5
55°	1242.1	1117.4	977.6	857.8	761.2	694.9	654.2	633.5	615.9	603.7	582.4
57.5°	1122.9	1017.7	893.1	774.5	685.8	626.8	590.3	567.2	554.5	546.0	530.8
60°	992.8	910.1	795.8	693.1	614.0	558.1	525.9	507.0	495.5	490.6	480.3
62.5°	868.8	805.6	701.6	615.9	545.3	496.1	463.9	448.7	441.4	435.9	429.8
65°	746.6	696.7	614.7	534.4	474.8	430.4	404.9	392.7	387.3	381.2	380.6
67.5°	636.5	590.9	525.3	459.6	409.8	372.1	349.6	337.4	331.3	331.9	328.9
70°	528.3	493.1	439.6	386.1	343.5	313.7	292.4	284.5	282.1	281.5	279.1
72.5°	427.4	407.3	360.5	315.5	282.1	259.0	242.0	235.3	232.2	231.0	231.0
75°	338.6	324.0	283.9	249.9	224.3	205.5	193.9	189.1	184.8	187.3	185.4
77.5°	254.1	242.0	214.6	190.3	170.8	155.0	149.6	145.3	142.9	142.3	144.7
80°	178.7	171.4	154.4	135.0	120.4	111.3	107.6	104.0	102.1	100.9	102.1
82.5°	114.9	110.6	98.5	86.9	78.4	73.6	69.9	68.1	65.1	65.7	66.9
85°	62.6	61.4	53.5	49.9	41.9	41.3	38.9	37.1	37.7	36.5	38.3
87.5°	25.5	24.3	22.5	20.7	18.2	16.4	15.2	16.4	14.6	16.4	15.8
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°	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2	1499.2
2.5°	1470.1	1463.4	1455.5	1448.2	1437.2	1429.9	1426.3	1427.5	1423.2	1422.0	1421.4
5°	1431.1	1415.9	1401.4	1389.2	1376.4	1361.8	1351.5	1348.5	1347.2	1344.2	1337.5
7.5°	1391.0	1371.6	1352.7	1335.1	1316.9	1299.8	1289.5	1281.0	1276.1	1267.6	1265.8
10°	1348.5	1324.8	1304.7	1279.2	1257.3	1239.6	1226.3	1219.0	1214.7	1206.8	1200.1
12.5°	1307.7	1282.8	1251.8	1228.7	1205.6	1187.4	1172.2	1160.0	1157.0	1146.6	1141.1
15°	1264.0	1233.6	1205.6	1178.8	1157.0	1133.9	1124.7	1113.8	1102.8	1093.7	1091.9
17.5°	1222.0	1185.5	1158.2	1132.0	1105.3	1088.3	1076.1	1068.8	1060.3	1055.4	1046.9
20°	1171.5	1141.8	1111.4	1087.0	1063.9	1049.3	1032.9	1026.2	1020.2	1008.6	1005.0
22.5°	1129.0	1093.1	1067.6	1043.3	1022.6	1001.9	990.4	983.7	974.6	968.5	963.6
25°	1084.6	1054.8	1022.6	998.3	980.6	960.0	952.1	943.6	935.7	930.2	925.3
27.5°	1041.4	1008.6	982.5	958.2	939.9	925.3	914.4	905.3	899.8	895.5	892.5
30°	996.5	966.1	941.7	919.2	898.6	886.4	876.1	872.4	866.3	863.3	858.4
32.5°	955.7	924.7	901.6	882.2	863.9	851.8	845.7	840.2	834.1	828.7	828.0
35°	909.5	882.8	861.5	840.2	826.8	817.1	810.4	804.9	800.1	795.8	793.4
37.5°	868.8	843.2	819.5	804.3	789.7	781.2	773.9	772.1	767.3	767.9	764.2
40°	825.0	801.9	781.8	766.6	756.9	747.8	742.9	736.9	733.8	734.4	731.4
42.5°	782.5	761.2	742.9	728.9	718.6	711.9	707.7	702.8	699.2	696.7	696.1
45°	739.3	720.4	705.2	691.3	682.7	676.7	671.2	665.1	662.1	660.9	660.2
47.5°	696.7	679.7	663.3	653.6	645.7	640.2	634.7	629.9	627.4	625.6	622.6
50°	653.0	635.9	624.4	612.2	605.5	598.2	592.2	589.7	586.7	586.1	589.1
52.5°	607.4	594.0	583.6	573.9	566.0	558.1	552.0	549.0	550.8	550.8	554.5
55°	564.2	550.2	540.5	532.6	524.1	516.8	510.7	510.7	510.7	514.3	519.2
57.5°	516.2	504.0	496.7	487.6	479.7	474.8	470.6	470.0	472.4	478.5	483.9
60°	467.5	459.0	451.1	443.8	435.9	432.3	431.7	430.4	434.1	440.2	451.7
62.5°	419.5	414.0	404.3	400.6	394.0	389.7	389.7	390.9	396.4	406.1	416.5
65°	373.3	365.4	358.1	354.4	350.2	346.5	346.5	351.4	359.3	368.4	381.2
67.5°	325.9	319.2	314.3	310.7	305.8	304.0	305.8	311.3	321.0	330.1	343.5
70°	274.8	273.6	269.3	264.5	262.0	262.0	263.9	269.9	277.2	291.2	302.8
72.5°	228.0	228.0	225.6	222.5	220.7	222.5	223.7	229.8	238.9	251.1	263.9
75°	185.4	183.6	181.8	180.6	180.0	181.2	183.0	187.9	198.8	210.4	220.7
77.5°	143.5	142.3	140.4	141.7	141.7	142.3	147.7	153.2	159.3	168.4	179.3
80°	103.4	104.0	102.1	101.5	104.6	105.8	110.0	114.3	118.6	128.9	136.8
82.5°	68.1	69.3	68.7	69.9	71.1	71.1	76.0	80.3	83.9	91.2	97.3
85°	38.9	39.5	39.5	41.3	42.6	41.9	46.2	48.6	50.5	55.9	59.6
87.5°	17.0	17.6	18.2	18.2	18.2	20.7	21.3	22.5	23.1	24.3	26.1
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: P243678

CATALOG NUMBER: S125DRP-H1090D840-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1499.2	1499.2	1499.2	1499.2
2.5°	1415.9	1415.3	1418.4	1420.2
5°	1333.3	1331.4	1329.0	1330.2
7.5°	1259.7	1254.8	1253.6	1253.6
10°	1194.7	1189.8	1188.6	1186.7
12.5°	1139.3	1132.0	1129.0	1126.0
15°	1087.0	1085.8	1079.1	1072.4
17.5°	1039.0	1040.8	1034.1	1031.1
20°	998.9	993.4	991.0	989.8
22.5°	958.2	953.9	953.9	949.6
25°	921.7	918.0	918.6	914.4
27.5°	887.6	887.0	886.4	885.2
30°	856.0	853.6	851.2	852.4
32.5°	825.6	822.0	820.1	819.5
35°	794.0	792.8	790.4	789.1
37.5°	763.0	763.6	760.6	760.0
40°	729.6	728.9	728.3	727.1
42.5°	694.3	692.5	693.7	693.1
45°	659.0	657.2	658.4	656.6
47.5°	624.4	625.6	625.6	626.2
50°	590.3	592.8	592.8	594.6
52.5°	558.7	563.6	563.6	563.0
55°	524.7	530.1	532.0	532.6
57.5°	492.5	497.9	503.4	504.6
60°	457.8	467.5	473.0	474.2
62.5°	426.8	435.9	443.2	443.8
65°	392.1	403.1	409.8	412.2
67.5°	356.9	365.4	374.5	378.2
70°	316.7	327.1	333.2	335.6
72.5°	274.8	286.4	294.3	295.5
75°	234.7	243.2	249.3	250.5
77.5°	189.1	197.6	203.1	204.3
80°	143.5	150.8	154.4	156.9
82.5°	101.5	106.4	108.2	110.6
85°	62.6	66.3	66.9	66.9
87.5°	27.4	28.0	28.0	29.2
90°	0.0	0.0	0.0	0.0

TEST NUMBER: P243678
 CATALOG NUMBER: S125DRP-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	19.06	20.63	19.42	20.94	21.26	18.80	20.37	19.16	20.68	21.00
	3H	20.41	21.82	20.79	22.15	22.51	20.22	21.64	20.60	21.96	22.32
	4H	20.89	22.22	21.29	22.57	22.94	20.71	22.04	21.11	22.39	22.76
	6H	21.20	22.43	21.61	22.79	23.18	21.03	22.25	21.44	22.62	23.01
	8H	21.27	22.44	21.70	22.83	23.23	21.10	22.28	21.53	22.66	23.06
	12H	21.31	22.43	21.74	22.81	23.24	21.14	22.26	21.57	22.65	23.08
4H	2H	20.44	21.77	20.84	22.12	22.50	19.86	21.19	20.26	21.54	21.91
	3H	21.80	22.91	22.21	23.31	23.71	21.52	22.62	21.93	23.02	23.42
	4H	22.31	23.30	22.74	23.72	24.16	22.08	23.07	22.51	23.49	23.93
	6H	22.66	23.53	23.12	23.97	24.43	22.46	23.32	22.91	23.77	24.22
	8H	22.75	23.56	23.21	24.01	24.47	22.55	23.36	23.01	23.81	24.27
	12H	22.80	23.53	23.28	24.00	24.47	22.61	23.33	23.09	23.81	24.28
8H	4H	22.76	23.57	23.22	24.02	24.48	22.43	23.24	22.89	23.69	24.15
	6H	23.19	23.86	23.69	24.35	24.83	22.93	23.60	23.43	24.09	24.57
	8H	23.32	23.92	23.83	24.43	24.92	23.08	23.68	23.59	24.19	24.68
	12H	23.41	23.94	23.91	24.43	24.99	23.18	23.71	23.69	24.20	24.77
12H	4H	22.80	23.53	23.28	24.01	24.48	22.45	23.18	22.93	23.65	24.12
	6H	23.26	23.87	23.77	24.37	24.86	22.98	23.58	23.49	24.09	24.58
	8H	23.44	23.97	23.95	24.46	25.03	23.18	23.72	23.69	24.21	24.77