

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P333731-840

Luminaire Tested: **S125RDIW-S1270D1050U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333731-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIW-S1270D1050U840-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8596.8 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

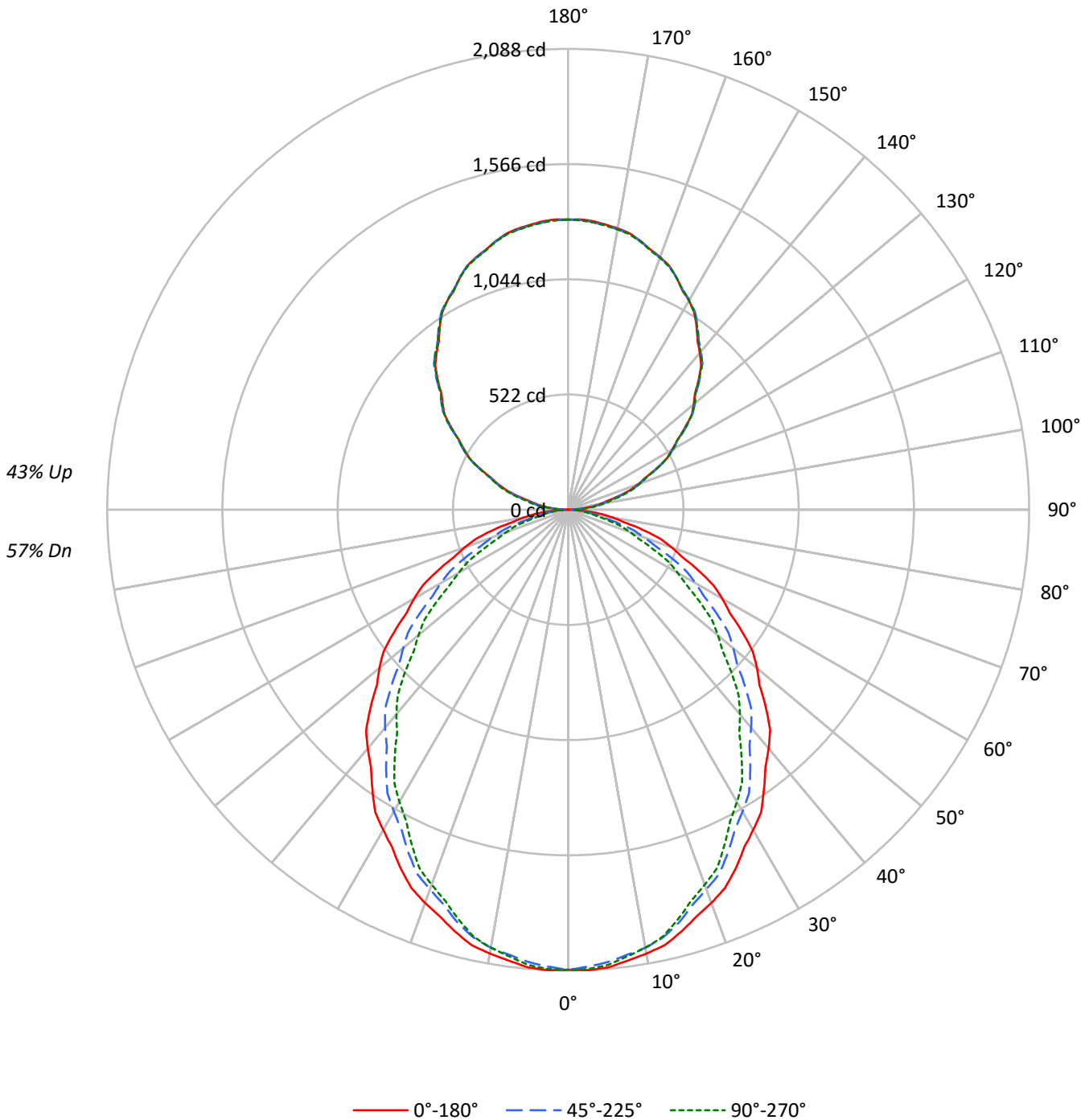
Input Watts (W): 67.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	109	109	109	109	101	101	101	101	87	87	87		75	75	75		63	63	63	57
1	100	95	92	88	93	89	86	83	77	75	72		66	64	63		56	55	54	49
2	91	84	78	72	84	78	73	68	68	64	60		58	55	53		50	47	46	41
3	83	74	66	61	77	69	63	57	60	55	51		52	48	45		44	41	39	35
4	76	65	57	51	71	61	54	49	53	48	44		46	42	39		40	36	34	30
5	70	58	50	44	65	55	48	42	48	42	38		42	37	34		36	32	30	27
6	65	53	44	39	60	49	42	37	43	38	33		38	33	30		32	29	26	23
7	60	48	40	34	56	45	38	32	39	34	29		34	30	26		30	26	23	21
8	56	43	35	30	52	41	34	29	36	30	26		32	27	24		27	24	21	19
9	52	40	32	27	48	37	30	26	33	27	23		29	24	21		25	22	19	17
10	48	36	29	24	45	34	28	23	31	25	21		27	22	19		23	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13464	13464	13464
5°	13494	13341	13422
10°	13392	13217	13217
15°	13233	12948	12843
20°	13029	12575	12423
25°	12790	12207	11938
30°	12493	11777	11401
35°	12191	11334	10800
40°	11907	10871	10208
45°	11562	10355	9563
50°	11216	9792	8890
55°	10815	9254	8173
60°	10413	8603	7403
65°	9938	7844	6521
70°	9396	6898	5620
75°	8644	5814	4674
80°	7613	4567	3924
85°	6417	3735	3505



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.0	2.3
10°-20°	547.8	6.4
20°-30°	794.4	9.2
30°-40°	905.3	10.5
40°-50°	882.5	10.3
50°-60°	742.8	8.6
60°-70°	520.7	6.1
70°-80°	267.7	3.1
80°-90°	70.5	0.8
90°-100°	88.1	1.0
100°-110°	260.1	3.0
110°-120°	440.5	5.1
120°-130°	579.7	6.7
130°-140°	649.6	7.6
140°-150°	636.6	7.4
150°-160°	534.7	6.2
160°-170°	355.4	4.1
170°-180°	124.4	1.4
0°-30°	1538.2	17.9
0°-40°	2443.5	28.4
0°-60°	4068.9	47.3
0°-90°	4927.7	57.3
90°-120°	788.6	9.2
90°-150°	2654.6	30.9
90°-180°	3669.0	42.7
0°-180°	8596.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2085	2085	2085	2085	2085	
5°	2082	2075	2058	2073	2070	197
15°	1979	1968	1937	1934	1921	558
25°	1795	1769	1713	1693	1675	826
35°	1546	1507	1438	1393	1370	968
45°	1266	1218	1134	1073	1047	976
55°	960	908	822	754	726	859
65°	650	595	513	452	427	644
75°	346	298	233	200	187	367
85°	87	59	50	49	47	97
90°	1	9	16	21	24	8
95°	67	69	79	86	88	71
105°	233	238	245	251	254	249
115°	441	445	447	446	445	436
125°	644	649	651	649	648	576
135°	837	843	844	844	840	645
145°	1014	1018	1021	1021	1018	634
155°	1160	1160	1161	1165	1160	534
165°	1262	1260	1261	1264	1259	356
175°	1312	1308	1308	1313	1307	125
180°	1315	1315	1315	1315	1315	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7
2.5°	2088.4	2087.6	2086.7	2085.9	2085.1	2083.3	2080.4	2077.6	2074.9	2072.0	2074.9
5°	2081.5	2080.1	2078.7	2077.3	2075.9	2073.3	2069.4	2065.6	2061.7	2057.9	2061.3
7.5°	2061.0	2059.7	2058.4	2057.0	2055.7	2052.8	2048.1	2043.5	2038.9	2034.3	2036.7
10°	2042.1	2041.0	2040.0	2039.0	2037.9	2035.0	2030.0	2025.2	2020.2	2015.4	2016.4
12.5°	2020.7	2019.4	2018.0	2016.7	2015.4	2011.4	2004.9	1998.3	1991.7	1985.1	1985.9
15°	1979.1	1977.0	1975.0	1972.9	1970.8	1966.0	1958.6	1951.4	1944.0	1936.6	1936.3
17.5°	1932.2	1929.0	1925.8	1922.6	1919.3	1913.1	1903.9	1894.6	1885.4	1876.1	1874.4
20°	1895.7	1892.2	1888.6	1885.2	1881.7	1874.3	1863.2	1852.0	1840.8	1829.6	1827.9
22.5°	1855.4	1851.9	1848.4	1844.9	1841.4	1833.8	1822.0	1810.3	1798.5	1786.8	1783.3
25°	1794.9	1789.7	1784.4	1779.2	1773.9	1764.8	1751.9	1739.0	1726.0	1713.0	1708.5
27.5°	1725.7	1719.3	1712.9	1706.6	1700.2	1690.1	1676.2	1662.3	1648.5	1634.7	1628.3
30°	1675.3	1668.6	1661.9	1655.4	1648.7	1638.0	1623.3	1608.6	1593.9	1579.2	1571.1
32.5°	1626.2	1618.4	1610.6	1602.9	1595.1	1583.7	1568.7	1553.8	1538.7	1523.8	1514.9
35°	1546.2	1537.7	1529.3	1521.0	1512.6	1500.5	1484.7	1469.1	1453.3	1437.5	1427.3
37.5°	1467.7	1457.5	1447.3	1437.1	1426.8	1413.6	1397.5	1381.2	1364.9	1348.7	1336.6
40°	1412.3	1401.8	1391.3	1380.8	1370.4	1356.7	1339.9	1323.1	1306.3	1289.5	1276.3
42.5°	1354.4	1343.6	1332.8	1322.0	1311.3	1297.2	1279.9	1262.5	1245.2	1227.8	1215.1
45°	1265.9	1255.8	1245.6	1235.5	1225.3	1210.6	1191.3	1172.2	1152.9	1133.7	1119.6
47.5°	1174.3	1163.6	1152.9	1142.2	1131.5	1116.4	1097.0	1077.6	1058.2	1038.8	1024.4
50°	1116.3	1104.8	1093.2	1081.7	1070.2	1054.4	1034.4	1014.5	994.5	974.6	959.9
52.5°	1053.3	1041.5	1029.7	1017.8	1006.0	990.7	971.9	953.1	934.2	915.4	899.6
55°	960.5	949.3	938.1	926.9	915.6	900.3	880.7	861.1	841.5	821.9	806.2
57.5°	866.6	854.6	842.6	830.7	818.7	803.3	784.5	765.5	746.6	727.7	712.4
60°	806.2	793.9	781.6	769.4	757.2	741.5	722.7	703.8	684.9	666.0	650.7
62.5°	741.9	730.2	718.5	706.8	695.2	679.7	660.6	641.4	622.2	603.0	588.8
65°	650.3	638.3	626.5	614.6	602.7	587.4	569.0	550.4	531.8	513.3	499.3
67.5°	559.3	547.3	535.4	523.6	511.7	496.9	479.1	461.3	443.5	425.8	412.9
70°	497.6	485.6	473.7	461.8	450.0	435.3	417.8	400.3	382.7	365.3	354.5
72.5°	437.1	425.5	413.8	402.2	390.6	376.6	360.2	343.9	327.5	311.1	301.1
75°	346.4	335.9	325.4	314.9	304.4	291.9	277.1	262.5	247.7	233.0	225.3
77.5°	256.3	247.9	239.5	231.2	222.8	212.7	200.9	189.1	177.4	165.6	160.3
80°	204.7	196.3	187.9	179.5	171.1	162.0	152.2	142.4	132.6	122.8	119.7
82.5°	154.3	146.7	139.2	131.6	124.1	116.9	110.2	103.5	96.7	90.1	88.6
85°	86.6	80.3	74.0	67.7	61.4	57.4	55.6	53.9	52.1	50.4	50.0
87.5°	29.2	27.6	26.0	24.4	22.8	22.0	22.0	22.1	22.1	22.2	22.4
90°	1.0	2.8	4.6	6.5	8.3	10.0	11.6	13.2	14.7	16.4	17.5
92.5°	24.7	26.1	27.3	28.6	29.9	31.5	33.4	35.3	37.4	39.3	40.8
95°	66.6	67.0	67.5	67.9	68.4	69.7	72.0	74.2	76.5	78.8	80.4
97.5°	110.5	110.7	110.9	111.1	111.3	112.9	116.0	119.2	122.3	125.4	126.9
100°	143.3	143.3	143.3	143.3	143.3	144.7	147.6	150.7	153.6	156.5	158.6
102.5°	178.4	179.4	180.3	181.2	182.1	183.3	184.8	186.3	187.8	189.3	191.6
105°	233.3	234.4	235.6	236.7	237.8	239.1	240.4	241.9	243.2	244.6	245.9
107.5°	293.9	295.0	296.2	297.3	298.4	299.5	300.5	301.6	302.7	303.7	304.4
110°	335.6	336.8	337.9	339.0	340.2	341.1	341.7	342.4	343.2	343.9	344.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	378.2	378.8	379.4	380.0	380.5	381.3	382.1	383.0	383.8	384.8	385.1
115°	441.0	441.9	442.8	443.7	444.6	445.4	445.8	446.3	446.7	447.2	447.0
117.5°	504.0	504.4	504.8	505.2	505.7	506.1	506.5	507.0	507.4	507.8	508.0
120°	543.3	544.5	545.6	546.7	547.9	548.6	548.8	549.1	549.3	549.5	549.5
122.5°	585.9	586.3	586.7	587.1	587.5	588.0	588.7	589.3	589.9	590.5	590.3
125°	643.6	645.0	646.3	647.7	649.0	649.8	650.2	650.4	650.6	650.8	650.4
127.5°	705.0	705.8	706.6	707.3	708.1	708.6	708.9	709.2	709.4	709.7	709.5
130°	741.8	743.0	744.2	745.3	746.4	747.2	747.7	748.1	748.6	749.0	748.8
132.5°	778.7	780.5	782.4	784.3	786.2	787.1	787.0	786.9	786.8	786.7	786.5
135°	837.0	838.4	839.7	841.1	842.5	843.2	843.5	843.7	843.9	844.1	844.1
137.5°	891.9	893.2	894.5	895.9	897.2	898.1	898.6	899.1	899.6	900.1	900.3
140°	927.1	928.2	929.4	930.5	931.6	932.5	933.2	933.9	934.5	935.2	935.7
142.5°	962.3	963.2	964.2	965.1	966.1	967.0	967.9	968.8	969.6	970.5	970.7
145°	1014.0	1014.9	1015.8	1016.7	1017.6	1018.4	1019.2	1019.9	1020.6	1021.2	1021.2
147.5°	1062.0	1062.5	1063.0	1063.4	1063.9	1064.5	1065.0	1065.5	1066.1	1066.6	1067.2
150°	1093.9	1093.7	1093.4	1093.2	1093.0	1093.3	1094.2	1095.1	1096.0	1096.9	1096.9
152.5°	1120.0	1120.3	1120.6	1121.1	1121.4	1121.7	1122.1	1122.4	1122.8	1123.2	1123.7
155°	1160.3	1160.3	1160.3	1160.3	1160.3	1160.4	1160.7	1160.9	1161.1	1161.4	1162.4
157.5°	1196.4	1195.9	1195.4	1194.9	1194.4	1194.3	1194.5	1194.7	1195.0	1195.2	1196.1
160°	1217.7	1217.0	1216.3	1215.7	1215.0	1214.8	1215.0	1215.2	1215.4	1215.7	1216.6
162.5°	1236.5	1236.0	1235.5	1235.0	1234.5	1234.3	1234.4	1234.4	1234.5	1234.5	1235.6
165°	1261.7	1261.2	1260.7	1260.3	1259.8	1259.7	1260.0	1260.2	1260.4	1260.6	1261.5
167.5°	1282.9	1282.0	1281.1	1280.2	1279.3	1278.9	1278.9	1278.9	1278.9	1278.9	1280.2
170°	1294.4	1293.5	1292.6	1291.7	1290.8	1290.3	1290.3	1290.3	1290.3	1290.3	1291.7
172.5°	1302.6	1301.7	1300.8	1299.9	1299.0	1298.5	1298.5	1298.5	1298.5	1298.5	1299.9
175°	1311.8	1310.9	1310.0	1309.1	1308.2	1307.7	1307.7	1307.7	1307.7	1307.7	1309.1
177.5°	1316.6	1315.8	1315.0	1314.3	1313.6	1313.1	1312.9	1312.8	1312.6	1312.4	1313.5
180°	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7
2.5°	2077.6	2080.4	2083.3	2084.5	2084.3	2084.0	2083.7	2083.4
5°	2064.9	2068.4	2071.8	2073.3	2072.5	2071.8	2071.1	2070.4
7.5°	2039.1	2041.6	2044.1	2044.9	2044.1	2043.4	2042.6	2041.8
10°	2017.4	2018.5	2019.5	2019.5	2018.5	2017.4	2016.4	2015.4
12.5°	1986.7	1987.4	1988.2	1987.8	1986.2	1984.6	1983.0	1981.4
15°	1935.9	1935.6	1935.2	1933.5	1930.4	1927.2	1924.0	1920.9
17.5°	1872.7	1870.9	1869.2	1867.0	1864.4	1861.8	1859.3	1856.6
20°	1826.0	1824.3	1822.6	1820.1	1816.9	1813.8	1810.7	1807.6
22.5°	1779.9	1776.5	1773.0	1770.0	1767.5	1764.8	1762.2	1759.7
25°	1703.9	1699.4	1694.9	1690.6	1686.8	1682.9	1679.1	1675.3
27.5°	1621.9	1615.6	1609.2	1604.2	1600.4	1596.7	1593.0	1589.3
30°	1563.2	1555.1	1547.0	1541.5	1538.3	1535.1	1532.0	1528.8
32.5°	1506.0	1497.1	1488.2	1481.8	1477.8	1473.8	1469.9	1465.8
35°	1417.2	1407.0	1396.9	1389.4	1384.5	1379.6	1374.7	1369.8
37.5°	1324.3	1312.2	1300.0	1291.5	1286.8	1282.0	1277.3	1272.5
40°	1262.9	1249.6	1236.4	1227.6	1223.4	1219.2	1215.0	1210.8
42.5°	1202.3	1189.6	1176.9	1167.4	1161.2	1155.1	1148.9	1142.8
45°	1105.6	1091.7	1077.6	1068.0	1062.8	1057.5	1052.3	1047.0
47.5°	1010.1	995.6	981.2	971.1	965.2	959.5	953.6	947.9
50°	945.2	930.5	915.8	905.8	900.6	895.3	890.1	884.8
52.5°	883.7	868.0	852.1	841.6	836.4	831.1	825.9	820.6
55°	790.4	774.7	758.9	748.2	742.7	737.0	731.4	725.9
57.5°	696.9	681.6	666.1	656.0	651.0	646.0	641.1	636.1
60°	635.2	619.9	604.4	594.1	588.9	583.6	578.3	573.1
62.5°	574.5	560.2	545.9	536.1	530.9	525.6	520.4	515.1
65°	485.3	471.3	457.3	447.7	442.4	437.2	431.9	426.7
67.5°	400.1	387.3	374.6	366.0	361.8	357.6	353.5	349.2
70°	343.6	332.8	321.9	314.4	310.1	306.0	301.7	297.6
72.5°	291.1	281.1	271.0	264.7	261.9	259.1	256.3	253.5
75°	217.6	210.0	202.3	197.1	194.7	192.3	189.9	187.3
77.5°	154.8	149.5	144.1	140.5	138.7	136.8	135.0	133.2
80°	116.5	113.4	110.2	108.3	107.6	106.8	106.2	105.5
82.5°	87.2	85.6	84.2	83.2	82.8	82.4	82.0	81.6
85°	49.7	49.4	49.0	48.7	48.3	48.0	47.6	47.3
87.5°	22.6	22.8	23.1	23.1	23.0	22.8	22.7	22.5
90°	18.7	19.8	20.9	21.8	22.5	23.2	23.8	24.5
92.5°	42.3	43.8	45.3	46.3	46.8	47.3	47.8	48.3
95°	82.0	83.5	85.1	86.1	86.6	87.1	87.6	88.0
97.5°	128.5	130.0	131.5	132.3	132.6	132.9	133.2	133.4
100°	160.7	162.7	164.7	166.0	166.4	166.9	167.3	167.8
102.5°	193.8	196.0	198.2	199.7	200.3	201.0	201.6	202.2
105°	247.3	248.6	250.0	251.1	251.8	252.4	253.1	253.8
107.5°	305.1	305.8	306.4	306.8	306.7	306.7	306.6	306.6
110°	345.2	345.9	346.6	346.8	346.6	346.3	346.1	345.9



TEST NUMBER: P333731-840

CATALOG NUMBER: S125RDIW-S1270D1050U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	385.4	385.7	386.0	386.0	385.6	385.2	384.8	384.4
115°	446.7	446.5	446.3	446.1	445.8	445.6	445.4	445.1
117.5°	508.1	508.3	508.5	508.1	507.2	506.2	505.3	504.4
120°	549.5	549.5	549.5	549.1	548.2	547.2	546.3	545.4
122.5°	590.1	589.9	589.7	589.3	588.5	587.7	587.0	586.3
125°	649.8	649.4	648.9	648.6	648.4	648.1	647.9	647.7
127.5°	709.2	709.0	708.8	708.5	708.0	707.6	707.1	706.7
130°	748.6	748.3	748.1	747.8	747.3	746.9	746.4	746.0
132.5°	786.2	786.0	785.8	785.4	784.7	784.1	783.5	782.7
135°	844.1	844.1	844.1	843.7	842.8	841.9	841.0	840.1
137.5°	900.6	900.9	901.1	900.7	899.6	898.5	897.3	896.2
140°	936.1	936.6	937.1	936.8	935.6	934.4	933.3	932.2
142.5°	971.0	971.3	971.6	971.1	970.0	968.9	967.8	966.5
145°	1021.2	1021.2	1021.2	1020.9	1020.2	1019.5	1018.9	1018.1
147.5°	1067.7	1068.2	1068.8	1068.3	1066.8	1065.2	1063.7	1062.2
150°	1096.9	1096.9	1096.9	1096.7	1096.2	1095.8	1095.3	1094.9
152.5°	1124.2	1124.8	1125.3	1125.2	1124.4	1123.6	1122.7	1121.9
155°	1163.3	1164.2	1165.1	1164.9	1163.8	1162.7	1161.5	1160.3
157.5°	1197.0	1197.9	1198.8	1198.5	1197.0	1195.5	1194.0	1192.5
160°	1217.5	1218.4	1219.3	1219.1	1218.0	1216.9	1215.8	1214.6
162.5°	1236.7	1237.7	1238.8	1238.7	1237.4	1236.1	1234.8	1233.4
165°	1262.4	1263.3	1264.3	1264.0	1262.7	1261.3	1260.0	1258.6
167.5°	1281.6	1282.9	1284.3	1284.3	1282.9	1281.5	1280.1	1278.7
170°	1293.0	1294.4	1295.8	1295.7	1294.0	1292.5	1290.9	1289.3
172.5°	1301.2	1302.6	1303.9	1303.9	1302.5	1301.1	1299.7	1298.3
175°	1310.4	1311.8	1313.2	1313.0	1311.5	1309.9	1308.3	1306.7
177.5°	1314.6	1315.8	1316.8	1316.7	1315.5	1314.1	1312.9	1311.6
180°	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8

(END OF REPORT)