

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: P333639

Luminaire Tested: **S125RDIP-S1270D1205U835-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333639
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S1270D1205U835-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9201.9 lumens
Efficiency: N/A
Efficacy: 128.3 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

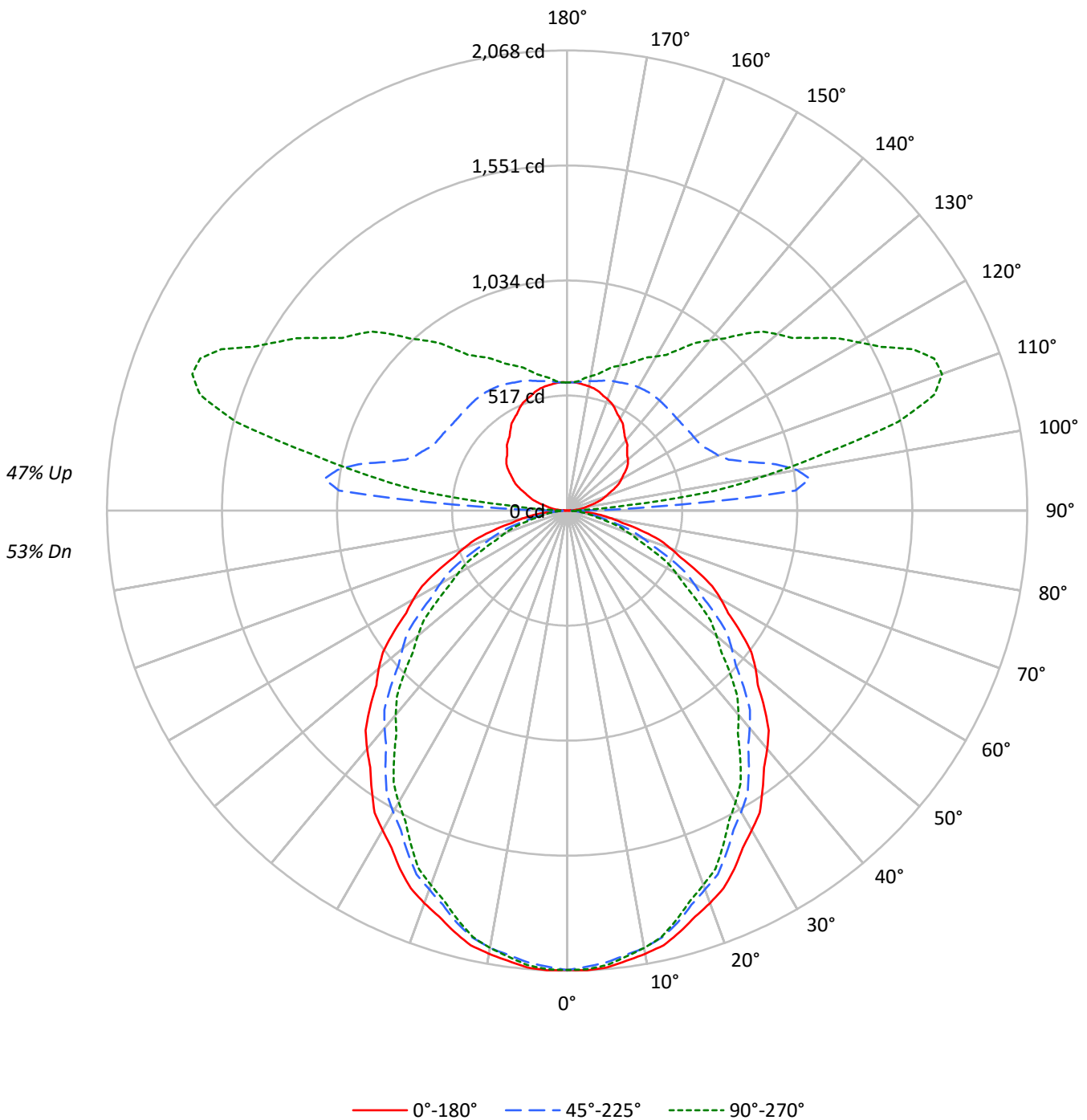
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53
1	99	94	91	87	91	88	84	81	75	73	70	63	62	60	52	51	50	45
2	90	83	77	72	83	77	72	67	66	62	59	56	53	50	46	44	43	38
3	82	73	66	60	76	68	61	56	58	53	50	49	46	43	41	39	37	33
4	75	65	57	51	70	60	53	48	52	47	42	44	40	37	37	34	32	28
5	69	58	50	44	64	54	47	41	47	41	37	40	35	32	33	30	28	25
6	64	52	44	38	59	48	41	36	42	36	32	36	32	28	30	27	24	22
7	59	47	39	33	55	44	37	32	38	33	28	33	28	25	28	24	22	19
8	55	43	35	30	51	40	33	28	35	29	25	30	26	22	26	22	20	17
9	51	39	32	26	47	37	30	25	32	27	23	28	23	20	24	20	18	16
10	48	36	29	24	44	34	27	23	30	24	20	26	21	18	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13332	13332	13332
5°	13363	13211	13291
10°	13262	13088	13088
15°	13104	12822	12718
20°	12902	12451	12302
25°	12666	12088	11821
30°	12371	11662	11290
35°	12071	11223	10694
40°	11790	10765	10108
45°	11449	10253	9470
50°	11106	9697	8804
55°	10709	9164	8094
60°	10311	8519	7330
65°	9840	7768	6457
70°	9304	6830	5565
75°	8559	5757	4629
80°	7539	4523	3887
85°	6358	3698	3468



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.1	2.1
10°-20°	542.5	5.9
20°-30°	786.6	8.5
30°-40°	896.5	9.7
40°-50°	873.9	9.5
50°-60°	735.6	8.0
60°-70°	515.6	5.6
70°-80°	265.0	2.9
80°-90°	70.2	0.8
90°-100°	417.8	4.5
100°-110°	898.0	9.8
110°-120°	842.8	9.2
120°-130°	683.0	7.4
130°-140°	548.1	6.0
140°-150°	413.6	4.5
150°-160°	291.2	3.2
160°-170°	171.6	1.9
170°-180°	55.8	0.6
0°-30°	1523.2	16.6
0°-40°	2419.7	26.3
0°-60°	4029.1	43.8
0°-90°	4879.9	53.0
90°-120°	2158.6	23.5
90°-150°	3803.4	41.3
90°-180°	4322.0	47.0
0°-180°	9201.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2064	2064	2064	2064	2064	
5°	2061	2054	2038	2052	2050	195
15°	1960	1949	1918	1915	1902	552
25°	1777	1752	1696	1676	1659	817
35°	1531	1492	1424	1380	1356	958
45°	1254	1206	1123	1062	1037	967
55°	951	899	814	746	719	850
65°	644	589	508	448	422	638
75°	343	295	231	198	186	363
85°	86	59	50	48	47	96
90°	1	10	19	24	27	6
95°	38	113	1030	467	273	41
105°	131	184	842	1659	1540	138
115°	235	283	676	1458	1715	231
125°	325	381	648	1160	1351	289
135°	381	458	644	972	1122	296
145°	444	508	646	805	885	278
155°	507	545	630	712	742	233
165°	553	568	604	641	651	156
175°	575	575	580	587	584	55
180°	576	576	576	576	576	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3
2.5°	2068.0	2067.2	2066.3	2065.5	2064.7	2062.9	2060.1	2057.3	2054.6	2051.8	2054.6
5°	2061.2	2059.8	2058.4	2057.0	2055.6	2053.0	2049.2	2045.4	2041.6	2037.8	2041.2
7.5°	2040.9	2039.6	2038.3	2036.9	2035.6	2032.7	2028.1	2023.5	2019.0	2014.4	2016.8
10°	2022.2	2021.1	2020.1	2019.1	2018.0	2015.1	2010.2	2005.4	2000.5	1995.7	1996.7
12.5°	2001.0	1999.7	1998.3	1997.0	1995.7	1991.8	1985.3	1978.8	1972.2	1965.7	1966.5
15°	1959.8	1957.7	1955.7	1953.6	1951.5	1946.8	1939.5	1932.3	1925.0	1917.7	1917.4
17.5°	1913.3	1910.2	1907.0	1903.8	1900.6	1894.4	1885.3	1876.1	1867.0	1857.8	1856.1
20°	1877.2	1873.7	1870.2	1866.8	1863.3	1856.0	1845.0	1833.9	1822.8	1811.7	1810.0
22.5°	1837.3	1833.8	1830.3	1826.9	1823.4	1815.9	1804.2	1792.6	1780.9	1769.3	1765.9
25°	1777.4	1772.2	1767.0	1761.8	1756.6	1747.6	1734.8	1722.0	1709.1	1696.3	1691.8
27.5°	1708.8	1702.5	1696.2	1689.9	1683.6	1673.6	1659.8	1646.1	1632.4	1618.7	1612.4
30°	1658.9	1652.3	1645.7	1639.2	1632.6	1622.0	1607.4	1592.9	1578.3	1563.8	1555.8
32.5°	1610.3	1602.6	1594.9	1587.2	1579.5	1568.2	1553.4	1538.6	1523.7	1508.9	1500.1
35°	1531.1	1522.7	1514.4	1506.1	1497.8	1485.8	1470.2	1454.7	1439.1	1423.5	1413.4
37.5°	1453.4	1443.3	1433.2	1423.1	1412.9	1399.8	1383.8	1367.7	1351.6	1335.5	1323.5
40°	1398.5	1388.1	1377.7	1367.3	1357.0	1343.4	1326.8	1310.2	1293.5	1276.9	1263.8
42.5°	1341.2	1330.5	1319.8	1309.1	1298.5	1284.5	1267.4	1250.2	1233.0	1215.8	1203.2
45°	1253.5	1243.5	1233.4	1223.4	1213.3	1198.8	1179.7	1160.7	1141.6	1122.6	1108.7
47.5°	1162.8	1152.2	1141.6	1131.0	1120.4	1105.5	1086.3	1067.1	1047.9	1028.7	1014.4
50°	1105.4	1094.0	1082.5	1071.1	1059.7	1044.1	1024.3	1004.6	984.8	965.1	950.5
52.5°	1043.0	1031.3	1019.6	1007.9	996.2	981.0	962.4	943.8	925.1	906.5	890.8
55°	951.1	940.0	928.9	917.8	906.7	891.5	872.1	852.7	833.3	813.9	798.3
57.5°	858.1	846.3	834.4	822.6	810.7	795.5	776.8	758.0	739.3	720.6	705.4
60°	798.3	786.1	774.0	761.9	749.8	734.3	715.6	696.9	678.2	659.5	644.3
62.5°	734.7	723.1	711.5	699.9	688.4	673.1	654.1	635.1	616.1	597.1	583.0
65°	643.9	632.1	620.4	608.6	596.8	581.7	563.4	545.0	526.6	508.3	494.4
67.5°	553.8	542.0	530.2	518.5	506.7	492.0	474.4	456.8	439.2	421.6	408.9
70°	492.7	480.9	469.1	457.3	445.6	431.0	413.7	396.4	379.0	361.7	351.0
72.5°	432.8	421.3	409.8	398.3	386.8	372.9	356.7	340.5	324.3	308.1	298.2
75°	343.0	332.6	322.2	311.8	301.4	289.0	274.4	259.9	245.3	230.7	223.1
77.5°	253.8	245.5	237.2	228.9	220.6	210.6	198.9	187.3	175.7	164.0	158.7
80°	202.7	194.4	186.1	177.7	169.4	160.4	150.7	141.0	131.3	121.6	118.5
82.5°	152.8	145.3	137.8	130.3	122.9	115.8	109.1	102.5	95.8	89.2	87.7
85°	85.8	79.5	73.3	67.0	60.8	56.8	55.1	53.4	51.6	49.9	49.5
87.5°	28.9	27.2	25.7	24.3	22.8	22.1	22.1	22.3	22.2	22.4	22.7
90°	1.2	2.3	4.6	7.0	9.3	11.6	12.8	15.1	16.3	18.6	19.8
92.5°	14.2	17.2	27.0	41.4	61.4	95.3	158.7	265.2	380.7	374.6	303.3
95°	38.3	39.5	48.8	61.6	87.1	139.4	263.8	519.4	840.1	1029.5	1007.4
97.5°	63.7	65.1	71.6	84.4	107.4	145.0	227.3	414.6	750.2	1099.4	1274.7
100°	81.3	83.7	88.3	101.1	123.2	158.0	225.4	376.5	669.3	1049.2	1339.7
102.5°	100.9	102.3	106.0	119.7	139.9	173.8	233.8	360.7	607.9	960.9	1300.7
105°	131.3	131.3	137.1	148.7	167.3	199.9	251.0	354.4	548.4	842.4	1175.9
107.5°	161.0	163.4	168.9	178.5	197.8	227.0	276.5	365.1	523.3	760.8	1048.6
110°	182.4	184.8	189.4	199.9	217.3	247.5	295.1	375.3	515.9	722.7	976.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	203.8	206.1	209.8	220.3	237.7	267.0	312.8	388.3	515.9	700.4	922.1
115°	234.7	237.0	240.5	251.0	268.4	297.5	340.5	407.8	519.4	676.3	863.3
117.5°	262.6	266.1	269.8	280.3	300.0	328.1	368.8	430.2	527.1	664.4	828.2
120°	281.2	284.7	289.3	299.8	319.5	348.6	389.3	445.0	534.5	658.8	808.7
122.5°	300.7	303.3	307.0	317.4	339.1	368.1	408.8	461.8	541.0	654.2	792.0
125°	325.3	327.7	333.5	343.9	366.0	396.2	434.6	484.5	551.9	648.4	769.2
127.5°	344.6	348.1	355.6	368.8	392.3	422.5	459.4	505.5	564.2	645.6	748.3
130°	356.7	360.2	369.5	384.6	409.0	439.2	475.2	519.4	571.7	643.7	734.4
132.5°	366.0	370.4	381.6	398.6	423.9	454.1	490.1	531.5	580.0	643.7	723.2
135°	381.1	385.8	399.7	418.3	442.7	474.1	510.1	548.4	591.4	643.7	710.0
137.5°	400.2	403.7	416.7	435.3	459.2	491.5	524.3	561.0	601.9	645.1	698.1
140°	411.3	414.8	428.8	447.4	469.4	500.8	534.5	569.4	606.5	646.0	692.5
142.5°	424.3	426.9	439.9	458.5	479.7	509.2	541.0	574.0	609.3	647.0	687.9
145°	443.9	446.2	457.8	474.1	495.0	521.7	551.9	581.0	612.4	646.0	680.9
147.5°	464.3	465.7	475.7	490.8	508.9	532.4	558.9	585.2	613.5	643.0	673.7
150°	476.4	478.7	486.9	502.0	518.2	538.0	563.5	588.0	613.5	640.2	668.1
152.5°	489.4	490.8	498.0	511.3	526.6	544.5	568.2	589.8	612.6	636.5	661.6
155°	506.6	506.6	513.6	525.2	536.8	553.1	572.8	591.4	610.0	629.8	650.7
157.5°	522.0	521.7	527.3	537.3	547.5	559.8	576.8	592.6	607.0	622.8	640.5
160°	532.2	531.0	535.7	543.8	553.1	563.5	578.7	592.6	604.2	618.2	632.1
162.5°	540.5	539.4	544.0	551.2	558.7	567.3	580.5	591.7	601.4	612.6	624.7
165°	553.1	550.8	554.3	560.1	564.7	571.7	581.0	590.3	597.2	604.2	613.5
167.5°	561.5	560.3	562.4	565.6	568.9	573.3	581.0	587.5	590.7	596.1	602.6
170°	567.0	565.9	567.0	569.4	571.7	575.2	581.0	585.6	588.0	591.4	596.1
172.5°	570.8	568.7	569.8	572.1	573.5	575.2	580.0	583.8	584.2	585.9	589.6
175°	575.2	572.8	574.0	575.2	575.2	575.2	578.7	581.0	579.8	579.8	581.0
177.5°	577.3	575.4	575.4	576.3	575.4	575.4	577.3	578.2	576.3	576.3	577.3
180°	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3
2.5°	2057.3	2060.1	2062.9	2064.1	2063.9	2063.6	2063.3	2063.0
5°	2044.7	2048.2	2051.6	2053.0	2052.3	2051.6	2050.9	2050.2
7.5°	2019.2	2021.7	2024.1	2024.9	2024.1	2023.4	2022.6	2021.9
10°	1997.7	1998.8	1999.8	1999.8	1998.8	1997.7	1996.7	1995.7
12.5°	1967.3	1968.0	1968.8	1968.4	1966.8	1965.2	1963.6	1962.0
15°	1917.0	1916.7	1916.3	1914.6	1911.5	1908.4	1905.2	1902.1
17.5°	1854.4	1852.6	1850.9	1848.8	1846.2	1843.6	1841.1	1838.5
20°	1808.2	1806.5	1804.8	1802.3	1799.2	1796.1	1793.0	1789.9
22.5°	1762.5	1759.1	1755.7	1752.7	1750.2	1747.6	1745.0	1742.5
25°	1687.3	1682.8	1678.3	1674.1	1670.3	1666.5	1662.7	1658.9
27.5°	1606.1	1599.8	1593.5	1588.5	1584.8	1581.1	1577.4	1573.8
30°	1547.9	1539.9	1531.9	1526.4	1523.3	1520.1	1517.0	1513.9
32.5°	1491.3	1482.5	1473.7	1467.3	1463.4	1459.4	1455.5	1451.5
35°	1403.4	1393.3	1383.3	1375.8	1371.0	1366.1	1361.3	1356.4
37.5°	1311.4	1299.4	1287.3	1278.9	1274.2	1269.5	1264.8	1260.1
40°	1250.6	1237.4	1224.3	1215.6	1211.4	1207.3	1203.1	1199.0
42.5°	1190.6	1178.0	1165.4	1156.0	1149.9	1143.8	1137.7	1131.6
45°	1094.8	1081.0	1067.1	1057.6	1052.4	1047.2	1042.0	1036.8
47.5°	1000.2	985.9	971.6	961.6	955.8	950.1	944.3	938.6
50°	936.0	921.4	906.9	897.0	891.8	886.6	881.4	876.2
52.5°	875.1	859.5	843.8	833.4	828.2	823.0	817.8	812.6
55°	782.7	767.1	751.5	740.9	735.4	729.8	724.3	718.8
57.5°	690.1	674.9	659.6	649.6	644.6	639.7	634.8	629.9
60°	629.0	613.8	598.5	588.3	583.1	577.9	572.7	567.5
62.5°	568.9	554.7	540.6	530.9	525.7	520.5	515.3	510.1
65°	480.6	466.7	452.8	443.3	438.1	432.9	427.7	422.5
67.5°	396.2	383.5	370.9	362.4	358.3	354.1	350.0	345.8
70°	340.2	329.5	318.8	311.3	307.1	303.0	298.8	294.7
72.5°	288.3	278.4	268.4	262.1	259.3	256.6	253.8	251.0
75°	215.5	207.9	200.3	195.2	192.8	190.4	188.0	185.5
77.5°	153.3	148.0	142.7	139.1	137.3	135.5	133.7	131.9
80°	115.4	112.3	109.1	107.2	106.5	105.8	105.2	104.5
82.5°	86.3	84.8	83.4	82.4	82.0	81.6	81.2	80.8
85°	49.2	48.9	48.5	48.2	47.8	47.5	47.1	46.8
87.5°	22.9	23.1	23.4	23.7	23.4	23.1	23.1	22.8
90°	20.9	22.1	23.2	25.6	25.6	25.6	26.7	26.7
92.5°	205.9	149.4	112.5	95.3	80.4	77.6	76.0	74.1
95°	835.4	658.8	515.9	418.3	335.8	300.9	291.7	273.1
97.5°	1244.2	1120.4	981.2	845.4	773.6	708.6	674.9	660.0
100°	1429.2	1372.3	1252.6	1131.7	1051.6	967.9	924.9	906.3
102.5°	1491.5	1526.6	1469.2	1387.4	1301.6	1242.1	1195.4	1181.5
105°	1454.8	1614.0	1665.1	1652.3	1615.1	1576.8	1553.5	1539.6
107.5°	1323.7	1536.1	1667.4	1728.1	1746.9	1746.7	1739.0	1729.7
110°	1227.0	1447.8	1611.6	1710.4	1762.7	1784.8	1792.9	1792.9



TEST NUMBER: P333639

CATALOG NUMBER: S125RDIP-S1270D1205U835-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1150.8	1360.4	1526.1	1642.5	1719.0	1756.9	1777.1	1785.5
115°	1055.1	1235.2	1394.3	1521.0	1611.6	1667.4	1699.9	1715.0
117.5°	993.2	1148.5	1285.6	1401.8	1492.4	1550.1	1582.4	1591.6
120°	959.8	1099.2	1227.0	1329.3	1415.3	1471.0	1502.4	1511.7
122.5°	934.7	1063.9	1177.8	1273.5	1350.2	1401.3	1432.7	1441.1
125°	898.2	1016.7	1117.8	1201.5	1266.5	1314.2	1339.7	1351.4
127.5°	861.0	971.6	1066.0	1144.3	1203.3	1245.4	1269.6	1274.7
130°	837.8	940.0	1030.7	1106.2	1164.3	1202.6	1225.9	1232.8
132.5°	814.5	910.3	992.5	1065.3	1123.4	1161.7	1183.1	1191.0
135°	784.3	864.5	938.9	1005.1	1056.2	1094.6	1115.5	1122.5
137.5°	758.8	823.6	885.4	941.7	987.4	1022.3	1041.6	1049.2
140°	744.8	799.4	852.9	901.7	944.7	974.9	992.3	998.1
142.5°	732.7	779.0	825.0	867.3	903.8	929.3	945.8	950.7
145°	716.9	752.9	789.0	820.3	848.2	868.0	880.8	885.4
147.5°	702.1	731.3	759.0	782.7	804.8	820.6	828.0	830.1
150°	693.7	719.3	741.3	762.2	779.7	793.6	798.3	799.4
152.5°	684.4	707.2	727.4	743.7	758.3	769.4	774.1	775.3
155°	670.4	689.0	705.3	718.1	729.7	737.8	741.3	742.5
157.5°	656.5	671.8	684.4	694.4	703.4	710.2	713.4	713.2
160°	647.2	658.8	670.4	678.6	686.7	692.5	694.9	693.7
162.5°	637.0	647.7	657.4	664.6	670.9	675.8	676.3	676.0
165°	622.8	630.9	637.9	643.7	648.4	650.7	650.7	650.7
167.5°	609.3	614.7	620.0	624.2	626.5	628.6	627.7	627.5
170°	601.9	605.4	608.9	611.2	613.5	614.7	614.7	613.5
172.5°	593.5	597.0	599.6	601.0	601.4	603.5	601.7	600.5
175°	584.5	584.5	586.8	586.8	586.8	588.0	585.6	584.5
177.5°	578.2	579.1	579.1	579.1	578.2	579.1	576.3	576.3
180°	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3

(END OF REPORT)