

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: P333620

Luminaire Tested: **S125RDIP-S1270D590U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333620
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: S125RDIP-S1270D590U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6923.9 lumens
Efficiency: N/A
Efficacy: 125.7 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: Semi-Direct

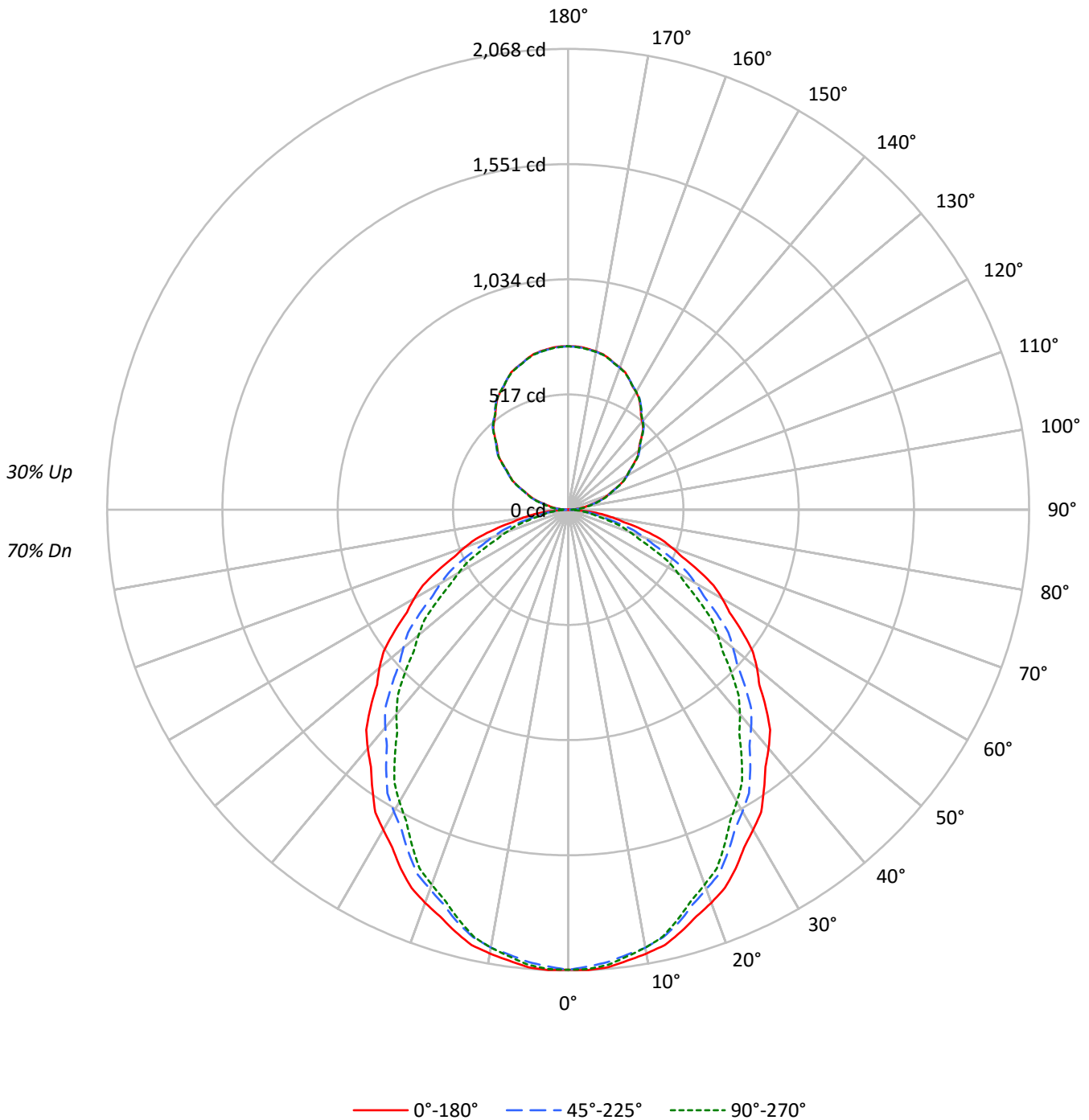
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75	70
1	103	98	94	91	97	93	90	87	84	81	79	75	73	71	67	65	64	60
2	94	86	80	75	88	82	76	72	74	69	66	66	63	60	59	57	54	51
3	86	76	69	63	81	72	66	60	65	60	56	59	55	51	53	49	47	43
4	79	68	60	53	74	64	57	51	58	52	48	53	48	44	47	43	40	37
5	72	61	52	46	68	58	50	45	52	46	41	47	42	38	43	39	35	33
6	67	55	46	40	63	52	44	39	47	41	36	43	38	34	39	35	31	29
7	62	49	41	36	59	47	40	34	43	37	32	39	34	30	36	31	28	26
8	58	45	37	32	55	43	36	31	39	33	29	36	31	27	33	28	25	23
9	54	41	34	28	51	40	32	28	36	30	26	33	28	24	30	26	23	21
10	50	38	31	26	48	36	30	25	34	28	24	31	26	22	28	24	21	19

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	2.8
10°-20°	542.5	7.8
20°-30°	786.6	11.4
30°-40°	896.5	12.9
40°-50°	873.9	12.6
50°-60°	735.6	10.6
60°-70°	515.6	7.4
70°-80°	265.0	3.8
80°-90°	68.5	1.0
90°-100°	49.1	0.7
100°-110°	145.0	2.1
110°-120°	245.6	3.5
120°-130°	323.2	4.7
130°-140°	362.1	5.2
140°-150°	354.9	5.1
150°-160°	298.1	4.3
160°-170°	198.2	2.9
170°-180°	69.4	1.0
0°-30°	1523.2	22.0
0°-40°	2419.7	34.9
0°-60°	4029.1	58.2
0°-90°	4878.3	70.5
90°-120°	439.7	6.3
90°-150°	1479.9	21.4
90°-180°	2046.0	29.5
0°-180°	6923.9	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	5	9	12	14	6
95°	37	38	44	48	49	40
105°	130	133	136	140	142	139
115°	246	248	249	249	248	243
125°	359	362	363	362	361	321
135°	467	470	471	470	468	360
145°	565	568	569	569	568	353
155°	647	647	648	650	647	298
165°	703	702	703	705	702	198
175°	731	729	729	732	728	69
180°	733	733	733	733	733	



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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°	28.8	27.1	25.3	23.6	21.9	20.9	20.8	20.7	20.6	20.5	20.7
90°	0.6	1.6	2.6	3.6	4.6	5.6	6.5	7.4	8.2	9.1	9.8
92.5°	13.8	14.5	15.2	15.9	16.6	17.5	18.6	19.7	20.8	21.9	22.7
95°	37.1	37.3	37.6	37.8	38.1	38.9	40.1	41.4	42.7	43.9	44.8
97.5°	61.6	61.7	61.8	61.9	62.0	62.9	64.7	66.4	68.2	69.9	70.8
100°	79.9	79.9	79.9	79.9	79.9	80.7	82.3	84.0	85.6	87.3	88.4
102.5°	99.5	100.0	100.5	101.0	101.5	102.2	103.0	103.9	104.7	105.5	106.8
105°	130.1	130.7	131.3	132.0	132.6	133.3	134.1	134.8	135.6	136.3	137.1
107.5°	163.8	164.5	165.1	165.7	166.4	167.0	167.6	168.1	168.7	169.3	169.7
110°	187.1	187.7	188.4	189.0	189.7	190.2	190.5	190.9	191.3	191.7	192.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	210.8	211.2	211.5	211.8	212.2	212.6	213.1	213.5	214.0	214.5	214.7
115°	245.9	246.4	246.9	247.4	247.9	248.3	248.5	248.8	249.0	249.3	249.2
117.5°	281.0	281.2	281.5	281.7	281.9	282.2	282.4	282.6	282.8	283.1	283.2
120°	302.9	303.6	304.2	304.8	305.5	305.8	306.0	306.1	306.2	306.3	306.3
122.5°	326.7	326.9	327.1	327.3	327.6	327.8	328.2	328.5	328.8	329.2	329.1
125°	358.8	359.6	360.3	361.1	361.9	362.3	362.4	362.6	362.7	362.8	362.6
127.5°	393.1	393.5	393.9	394.3	394.8	395.1	395.2	395.4	395.5	395.7	395.6
130°	413.6	414.2	414.9	415.5	416.1	416.6	416.8	417.1	417.3	417.6	417.5
132.5°	434.1	435.2	436.2	437.2	438.3	438.8	438.7	438.7	438.6	438.6	438.5
135°	466.6	467.4	468.2	468.9	469.7	470.1	470.3	470.4	470.5	470.6	470.6
137.5°	497.2	498.0	498.7	499.4	500.2	500.7	501.0	501.2	501.5	501.8	501.9
140°	516.8	517.5	518.1	518.7	519.4	519.9	520.3	520.7	521.0	521.4	521.7
142.5°	536.5	537.0	537.5	538.1	538.6	539.1	539.6	540.1	540.6	541.0	541.2
145°	565.3	565.8	566.4	566.9	567.4	567.8	568.2	568.6	569.0	569.3	569.3
147.5°	592.0	592.3	592.6	592.9	593.2	593.4	593.7	594.1	594.4	594.7	595.0
150°	609.8	609.7	609.6	609.5	609.3	609.5	610.0	610.5	611.0	611.5	611.5
152.5°	624.4	624.6	624.8	625.0	625.1	625.3	625.5	625.7	625.9	626.2	626.5
155°	646.9	646.9	646.9	646.9	646.9	647.0	647.1	647.2	647.4	647.5	648.0
157.5°	667.0	666.7	666.4	666.2	665.9	665.8	665.9	666.1	666.2	666.3	666.8
160°	678.9	678.5	678.1	677.7	677.3	677.2	677.3	677.5	677.6	677.7	678.2
162.5°	689.4	689.1	688.8	688.5	688.2	688.1	688.1	688.2	688.2	688.2	688.8
165°	703.4	703.1	702.9	702.6	702.4	702.3	702.4	702.6	702.7	702.8	703.3
167.5°	715.3	714.8	714.2	713.7	713.2	713.0	713.0	713.0	713.0	713.0	713.7
170°	721.6	721.1	720.6	720.1	719.6	719.4	719.4	719.4	719.4	719.4	720.1
172.5°	726.2	725.7	725.2	724.7	724.2	723.9	723.9	723.9	723.9	723.9	724.7
175°	731.3	730.8	730.3	729.8	729.3	729.1	729.1	729.1	729.1	729.1	729.8
177.5°	734.0	733.6	733.2	732.8	732.3	732.1	732.0	731.9	731.8	731.7	732.3
180°	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1



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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°	20.8	20.9	21.0	21.0	20.8	20.6	20.4	20.2
90°	10.4	11.0	11.7	12.2	12.6	12.9	13.3	13.7
92.5°	23.6	24.4	25.3	25.8	26.1	26.4	26.6	26.9
95°	45.7	46.6	47.5	48.0	48.3	48.6	48.8	49.1
97.5°	71.6	72.5	73.3	73.8	73.9	74.1	74.2	74.4
100°	89.6	90.7	91.8	92.5	92.8	93.1	93.3	93.6
102.5°	108.0	109.3	110.5	111.3	111.7	112.0	112.4	112.7
105°	137.9	138.6	139.4	140.0	140.3	140.7	141.1	141.5
107.5°	170.1	170.5	170.8	171.0	171.0	171.0	170.9	170.9
110°	192.4	192.8	193.2	193.3	193.2	193.1	192.9	192.8



TEST NUMBER: P333620

CATALOG NUMBER: S125RDIP-S1270D590U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	214.9	215.0	215.2	215.2	215.0	214.7	214.5	214.3
115°	249.0	248.9	248.8	248.7	248.5	248.4	248.3	248.2
117.5°	283.3	283.4	283.5	283.3	282.8	282.3	281.8	281.2
120°	306.3	306.3	306.3	306.1	305.6	305.1	304.6	304.1
122.5°	329.0	328.9	328.8	328.5	328.1	327.7	327.3	326.9
125°	362.3	362.1	361.8	361.6	361.5	361.4	361.2	361.1
127.5°	395.4	395.3	395.2	395.0	394.7	394.5	394.2	394.0
130°	417.3	417.2	417.1	416.9	416.6	416.4	416.1	415.9
132.5°	438.3	438.2	438.1	437.8	437.5	437.1	436.8	436.4
135°	470.6	470.6	470.6	470.4	469.9	469.4	468.9	468.4
137.5°	502.1	502.2	502.4	502.2	501.5	500.9	500.3	499.6
140°	521.9	522.2	522.4	522.2	521.6	521.0	520.3	519.7
142.5°	541.3	541.5	541.6	541.4	540.8	540.1	539.5	538.9
145°	569.3	569.3	569.3	569.1	568.8	568.4	568.0	567.6
147.5°	595.3	595.6	595.9	595.6	594.7	593.9	593.0	592.2
150°	611.5	611.5	611.5	611.4	611.2	610.9	610.7	610.4
152.5°	626.8	627.1	627.4	627.3	626.8	626.4	625.9	625.5
155°	648.5	649.0	649.5	649.5	648.8	648.2	647.5	646.9
157.5°	667.3	667.8	668.3	668.2	667.3	666.5	665.7	664.8
160°	678.7	679.2	679.7	679.7	679.1	678.4	677.8	677.2
162.5°	689.4	690.0	690.7	690.6	689.9	689.1	688.4	687.6
165°	703.8	704.3	704.9	704.7	704.0	703.2	702.4	701.7
167.5°	714.5	715.3	716.0	716.0	715.2	714.4	713.6	712.9
170°	720.9	721.6	722.4	722.3	721.5	720.6	719.7	718.8
172.5°	725.5	726.2	727.0	727.0	726.2	725.4	724.6	723.8
175°	730.6	731.3	732.1	732.0	731.2	730.3	729.4	728.5
177.5°	732.9	733.5	734.1	734.1	733.4	732.7	731.9	731.2
180°	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1

(END OF REPORT)