

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: P333722

Luminaire Tested: **S125RDIW-S1270D470U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333722
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIW-S1270D470U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6752.1 lumens
Efficiency: N/A
Efficacy: 128.9 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

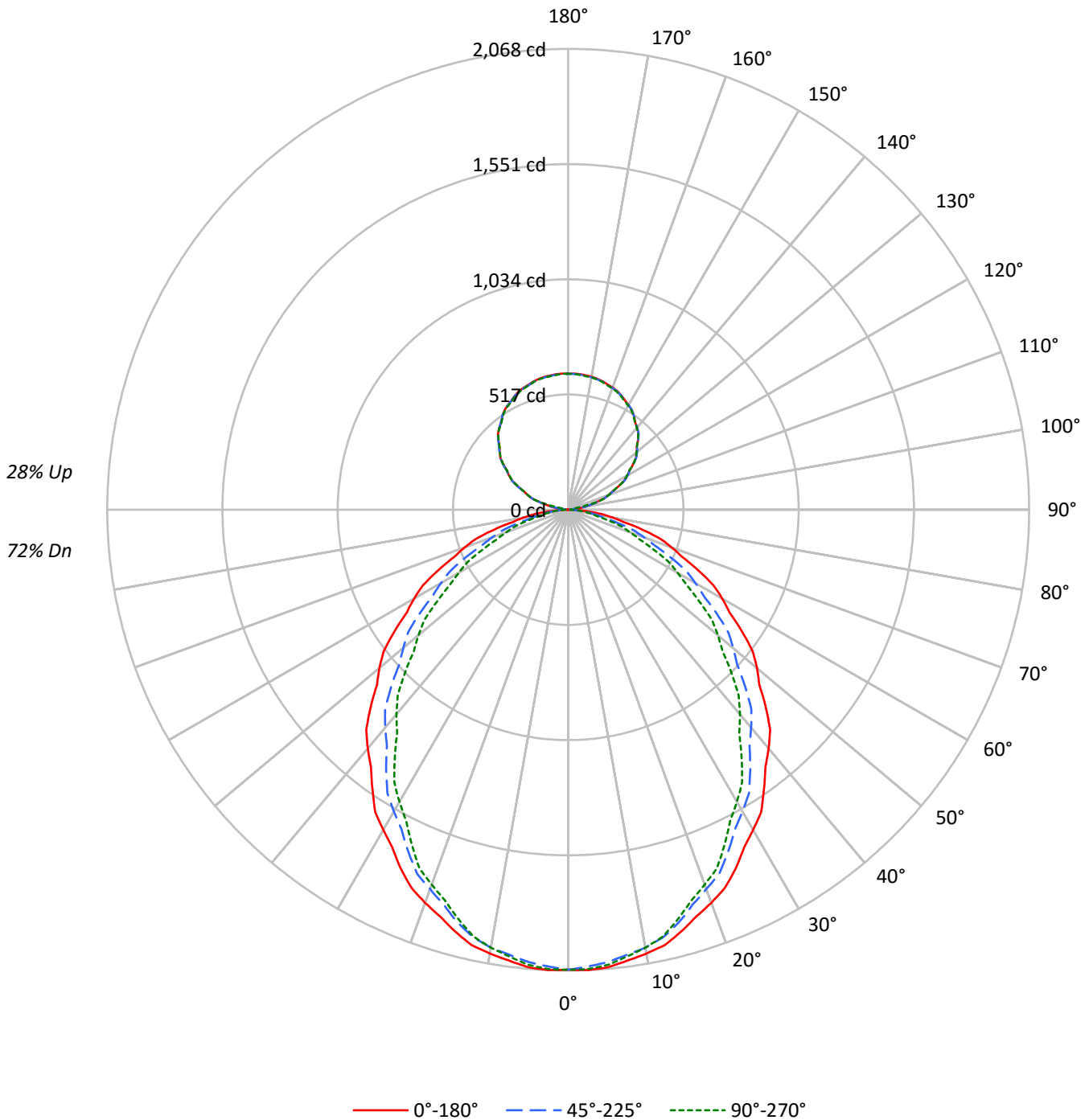
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	107	107	107	107	96	96	96	86	86	86	77	77	77	72
1	103	99	95	91	98	94	90	87	85	82	80	76	74	72	68	67	65	62
2	94	87	80	75	89	82	77	72	74	70	66	67	64	61	60	58	56	52
3	86	76	69	63	81	73	66	61	66	61	56	60	55	52	54	50	48	44
4	79	68	60	54	75	65	57	52	59	53	48	53	49	45	48	44	41	38
5	73	61	52	46	69	58	51	45	53	47	42	48	43	39	44	39	36	33
6	67	55	46	41	64	52	45	39	48	42	37	44	38	34	40	35	32	29
7	62	50	42	36	59	48	40	35	44	37	33	40	35	31	36	32	29	26
8	58	45	37	32	55	43	36	31	40	34	29	37	31	27	33	29	26	24
9	54	42	34	29	51	40	33	28	37	31	26	34	29	25	31	27	23	21
10	51	38	31	26	48	37	30	25	34	28	24	31	26	23	29	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	2.9
10°-20°	542.5	8.0
20°-30°	786.6	11.7
30°-40°	896.5	13.3
40°-50°	873.9	12.9
50°-60°	735.6	10.9
60°-70°	515.6	7.6
70°-80°	265.0	3.9
80°-90°	68.2	1.0
90°-100°	22.2	0.3
100°-110°	136.7	2.0
110°-120°	247.9	3.7
120°-130°	318.1	4.7
130°-140°	342.2	5.1
140°-150°	321.2	4.8
150°-160°	259.8	3.8
160°-170°	168.0	2.5
170°-180°	58.0	0.9
0°-30°	1523.2	22.6
0°-40°	2419.7	35.8
0°-60°	4029.1	59.7
0°-90°	4878.0	72.2
90°-120°	406.7	6.0
90°-150°	1388.2	20.6
90°-180°	1874.0	27.8
0°-180°	6752.1	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°	0	4	7	9	11	5
95°	26	24	7	9	10	33
105°	133	135	135	135	134	141
115°	250	252	252	251	248	247
125°	355	358	358	356	355	317
135°	443	445	445	444	441	341
145°	514	514	514	515	512	321
155°	566	563	564	565	561	260
165°	597	594	594	597	594	168
175°	610	608	608	611	608	58
180°	610	610	610	610	610	



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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	27.0	25.2	23.4	21.7	20.7	20.6	20.4	20.3	20.2	20.3
90°	0.5	1.3	2.1	2.9	3.7	4.4	5.1	5.8	6.5	7.2	7.7
92.5°	7.0	6.4	5.8	5.3	4.7	4.7	5.4	6.0	6.6	7.2	7.7
95°	25.8	25.5	25.2	24.9	24.6	22.5	18.7	14.9	11.1	7.2	7.7
97.5°	53.8	54.4	54.9	55.5	56.0	52.5	44.9	37.4	29.8	22.3	19.4
100°	75.5	75.9	76.2	76.5	76.8	77.1	77.5	77.9	78.3	78.7	63.7
102.5°	97.6	98.0	98.4	98.8	99.2	99.5	99.7	99.9	100.2	100.4	97.6
105°	133.0	133.4	133.8	134.2	134.6	134.8	134.8	134.8	134.8	134.8	134.8
107.5°	169.7	169.7	169.7	169.7	169.7	169.8	170.0	170.2	170.4	170.6	170.7
110°	193.6	193.6	193.6	193.6	193.6	193.7	193.9	194.1	194.3	194.5	194.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	216.1	216.3	216.5	216.8	217.0	217.2	217.3	217.5	217.6	217.7	217.3
115°	249.7	250.2	250.7	251.2	251.7	252.0	252.1	252.2	252.3	252.4	252.0
117.5°	284.6	284.5	284.5	284.5	284.5	284.7	285.0	285.4	285.8	286.2	285.7
120°	306.3	306.2	306.1	306.0	305.9	306.0	306.3	306.6	306.9	307.2	307.0
122.5°	325.5	325.8	326.2	326.6	327.0	327.2	327.4	327.5	327.7	327.8	327.6
125°	355.1	355.8	356.5	357.2	357.9	358.3	358.3	358.3	358.3	358.3	357.9
127.5°	383.4	384.0	384.5	385.0	385.5	385.7	385.6	385.6	385.5	385.4	385.2
130°	400.8	401.3	401.8	402.3	402.8	403.1	403.2	403.3	403.4	403.5	403.2
132.5°	418.2	418.8	419.4	419.9	420.5	420.7	420.5	420.3	420.0	419.8	419.8
135°	442.9	443.5	444.1	444.7	445.3	445.5	445.3	445.1	444.9	444.7	444.5
137.5°	465.6	466.1	466.6	467.2	467.7	467.9	467.7	467.5	467.3	467.1	467.2
140°	480.4	480.6	480.8	481.0	481.2	481.3	481.2	481.1	481.0	480.9	481.1
142.5°	493.8	494.0	494.1	494.2	494.3	494.4	494.6	494.7	494.9	495.0	495.0
145°	513.5	513.7	513.9	514.1	514.3	514.4	514.4	514.4	514.4	514.4	514.5
147.5°	530.7	530.6	530.6	530.5	530.5	530.5	530.7	530.8	530.9	531.0	531.1
150°	541.5	541.3	541.1	540.9	540.7	540.7	540.9	541.1	541.3	541.5	541.7
152.5°	552.0	551.6	551.1	550.7	550.2	550.1	550.3	550.5	550.7	550.9	551.1
155°	565.5	564.9	564.3	563.7	563.1	562.9	563.1	563.3	563.5	563.7	564.0
157.5°	575.9	575.5	575.2	574.8	574.4	574.3	574.3	574.3	574.3	574.4	574.7
160°	583.1	582.5	581.9	581.3	580.7	580.5	580.6	580.7	580.8	580.9	581.3
162.5°	588.9	588.3	587.7	587.1	586.5	586.3	586.4	586.5	586.6	586.7	587.2
165°	596.7	596.1	595.5	594.9	594.3	594.0	594.1	594.2	594.3	594.4	595.0
167.5°	602.5	601.9	601.3	600.6	600.0	599.7	599.8	599.9	600.0	600.1	600.9
170°	605.8	605.1	604.3	603.6	602.9	602.6	602.7	602.8	602.9	603.0	603.8
172.5°	607.9	607.2	606.5	605.8	605.1	604.9	605.0	605.2	605.4	605.6	606.3
175°	610.3	609.7	609.1	608.5	607.9	607.6	607.7	607.8	607.9	608.0	608.8
177.5°	611.4	610.9	610.4	609.9	609.4	609.2	609.3	609.4	609.5	609.6	610.1
180°	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3



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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°	20.4	20.5	20.6	20.5	20.3	20.1	19.9	19.6
90°	8.2	8.7	9.2	9.7	10.0	10.3	10.6	10.9
92.5°	8.2	8.7	9.2	9.6	9.7	9.9	10.0	10.1
95°	8.2	8.7	9.2	9.5	9.5	9.5	9.5	9.5
97.5°	16.6	13.8	10.9	9.5	9.5	9.5	9.5	9.5
100°	48.8	33.8	18.8	11.1	10.7	10.3	9.9	9.5
102.5°	94.8	91.9	89.1	84.3	77.4	70.6	63.7	56.9
105°	134.8	134.8	134.8	134.8	134.7	134.6	134.5	134.4
107.5°	170.7	170.7	170.7	170.6	170.3	170.0	169.7	169.4
110°	193.9	193.6	193.3	193.2	193.3	193.4	193.5	193.6



TEST NUMBER: P333722

CATALOG NUMBER: S125RDIW-S1270D470U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	216.9	216.5	216.2	215.9	215.8	215.6	215.5	215.3
115°	251.6	251.2	250.8	250.3	249.7	249.1	248.5	247.9
117.5°	285.1	284.6	284.1	283.7	283.4	283.2	282.9	282.7
120°	306.8	306.6	306.4	306.0	305.5	305.0	304.5	304.0
122.5°	327.4	327.2	327.0	326.6	326.0	325.4	324.9	324.3
125°	357.5	357.1	356.7	356.3	356.0	355.7	355.4	355.1
127.5°	385.0	384.8	384.6	384.1	383.3	382.6	381.8	381.1
130°	402.9	402.6	402.3	401.9	401.4	400.9	400.4	399.9
132.5°	419.7	419.6	419.6	419.3	418.8	418.3	417.8	417.3
135°	444.3	444.1	443.9	443.5	442.9	442.3	441.7	441.1
137.5°	467.2	467.3	467.3	467.1	466.5	466.0	465.5	465.0
140°	481.3	481.5	481.7	481.5	480.9	480.3	479.7	479.1
142.5°	495.1	495.1	495.2	494.9	494.3	493.7	493.1	492.5
145°	514.6	514.7	514.8	514.5	513.9	513.3	512.7	512.1
147.5°	531.3	531.4	531.5	531.2	530.5	529.8	529.0	528.3
150°	541.9	542.1	542.3	542.0	541.2	540.4	539.6	538.8
152.5°	551.3	551.5	551.7	551.5	550.7	550.0	549.3	548.6
155°	564.3	564.6	564.9	564.6	563.8	563.0	562.2	561.4
157.5°	575.0	575.3	575.6	575.4	574.6	573.8	573.0	572.2
160°	581.7	582.1	582.5	582.3	581.5	580.7	579.9	579.1
162.5°	587.8	588.4	588.9	588.8	587.9	587.0	586.1	585.2
165°	595.7	596.3	596.9	596.8	596.0	595.1	594.3	593.5
167.5°	601.6	602.3	603.0	603.0	602.0	601.1	600.2	599.3
170°	604.6	605.5	606.3	606.2	605.3	604.4	603.5	602.6
172.5°	607.0	607.7	608.5	608.4	607.5	606.6	605.7	604.8
175°	609.6	610.4	611.2	611.2	610.3	609.4	608.5	607.6
177.5°	610.7	611.2	611.8	611.8	611.1	610.5	609.8	609.2
180°	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3

(END OF REPORT)