

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: P333727

Luminaire Tested: **S125RDIW-S1270D770U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333727
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-S1270D770U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7540.7 lumens
Efficiency: N/A
Efficacy: 126.1 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

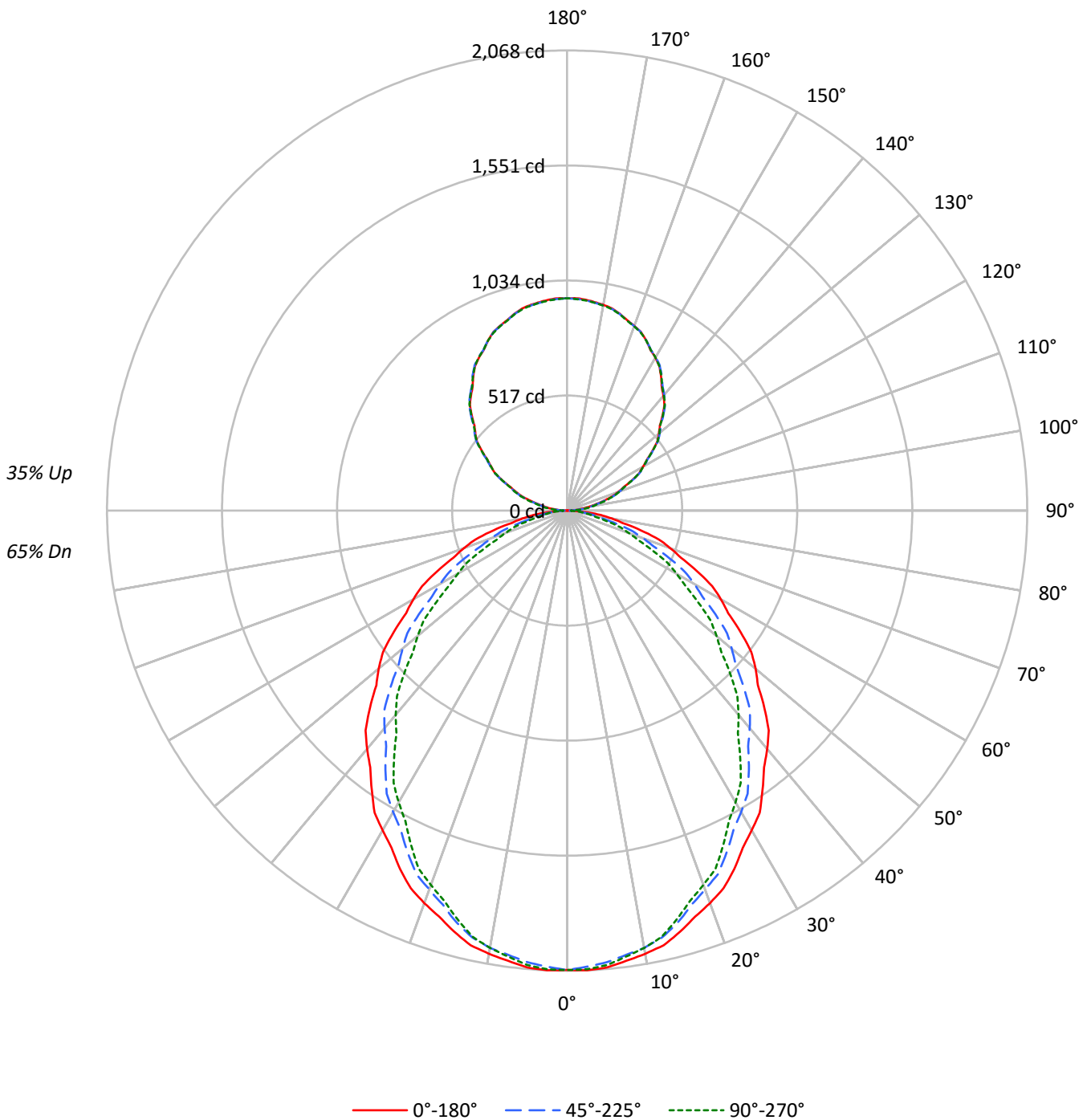
Input Watts (W): 59.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	104	104	104	104	92	92	92	80	80	80	70	70	70	65
1	101	97	93	90	95	91	88	85	81	78	76	71	69	67	62	61	59	55
2	93	85	79	74	87	80	75	70	71	67	63	63	60	57	55	53	50	47
3	85	75	68	62	79	71	64	59	63	58	54	56	52	48	49	46	43	40
4	78	67	59	53	73	63	56	50	56	50	46	50	45	42	44	40	37	34
5	71	60	51	45	67	56	49	43	50	44	40	45	40	36	40	36	33	30
6	66	54	45	40	62	51	43	38	46	39	35	41	36	32	36	32	29	26
7	61	49	41	35	57	46	39	34	41	35	31	37	32	28	33	29	26	23
8	57	44	36	31	53	42	35	30	38	32	28	34	29	25	30	26	23	21
9	53	41	33	28	50	39	32	27	35	29	25	31	26	23	28	24	21	19
10	50	37	30	25	47	36	29	24	32	27	23	29	24	21	26	22	19	17

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	2.6
10°-20°	542.5	7.2
20°-30°	786.6	10.4
30°-40°	896.5	11.9
40°-50°	873.9	11.6
50°-60°	735.6	9.8
60°-70°	515.6	6.8
70°-80°	265.0	3.5
80°-90°	69.0	0.9
90°-100°	63.9	0.8
100°-110°	188.7	2.5
110°-120°	319.6	4.2
120°-130°	420.6	5.6
130°-140°	471.2	6.2
140°-150°	461.9	6.1
150°-160°	387.9	5.1
160°-170°	257.9	3.4
170°-180°	90.2	1.2
0°-30°	1523.2	20.2
0°-40°	2419.7	32.1
0°-60°	4029.1	53.4
0°-90°	4878.8	64.7
90°-120°	572.1	7.6
90°-150°	1925.8	25.5
90°-180°	2662.0	35.3
0°-180°	7540.7	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	7	12	16	18	7
95°	48	50	57	62	64	52
105°	169	173	177	182	184	181
115°	320	323	324	324	323	316
125°	467	471	472	471	470	418
135°	607	612	612	612	610	468
145°	736	739	741	741	739	460
155°	842	842	843	845	842	388
165°	915	914	915	917	913	258
175°	952	949	949	953	948	90
180°	954	954	954	954	954	



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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	27.2	25.5	23.8	22.1	21.3	21.2	21.2	21.1	21.1	21.2
90°	0.7	2.1	3.4	4.7	6.0	7.3	8.4	9.6	10.7	11.9	12.7
92.5°	18.0	18.9	19.8	20.7	21.7	22.8	24.3	25.7	27.1	28.5	29.6
95°	48.3	48.6	48.9	49.2	49.6	50.6	52.2	53.9	55.5	57.2	58.3
97.5°	80.2	80.3	80.4	80.6	80.7	81.9	84.2	86.5	88.7	91.0	92.1
100°	103.9	103.9	103.9	103.9	103.9	105.0	107.1	109.3	111.4	113.6	115.1
102.5°	129.5	130.1	130.8	131.4	132.1	133.0	134.1	135.2	136.2	137.3	139.0
105°	169.3	170.1	170.9	171.7	172.6	173.5	174.5	175.4	176.4	177.4	178.4
107.5°	213.2	214.0	214.9	215.7	216.5	217.3	218.1	218.8	219.6	220.3	220.8
110°	243.5	244.3	245.1	246.0	246.8	247.4	247.9	248.4	248.9	249.4	249.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	274.4	274.8	275.2	275.7	276.1	276.6	277.2	277.9	278.5	279.1	279.4
115°	320.0	320.6	321.3	321.9	322.6	323.1	323.4	323.7	324.1	324.4	324.2
117.5°	365.7	366.0	366.3	366.6	366.9	367.2	367.5	367.8	368.1	368.4	368.5
120°	394.2	395.0	395.8	396.7	397.5	398.0	398.1	398.3	398.5	398.6	398.6
122.5°	425.1	425.4	425.7	426.0	426.3	426.6	427.0	427.5	427.9	428.3	428.2
125°	466.9	467.9	468.9	469.9	470.9	471.5	471.6	471.8	472.0	472.1	471.8
127.5°	511.5	512.0	512.6	513.2	513.7	514.1	514.3	514.5	514.7	514.9	514.7
130°	538.2	539.0	539.9	540.7	541.5	542.1	542.4	542.7	543.1	543.4	543.2
132.5°	564.9	566.3	567.6	569.0	570.3	571.0	570.9	570.8	570.8	570.7	570.6
135°	607.2	608.2	609.2	610.2	611.2	611.8	611.9	612.1	612.3	612.4	612.4
137.5°	647.0	648.0	648.9	649.9	650.9	651.5	651.9	652.2	652.6	653.0	653.2
140°	672.6	673.4	674.2	675.0	675.9	676.5	677.0	677.5	678.0	678.5	678.8
142.5°	698.1	698.8	699.5	700.2	700.9	701.5	702.2	702.8	703.4	704.0	704.2
145°	735.7	736.3	737.0	737.6	738.3	738.9	739.4	739.9	740.4	740.9	740.9
147.5°	770.4	770.8	771.1	771.5	771.9	772.2	772.6	773.0	773.4	773.8	774.2
150°	793.6	793.4	793.2	793.1	792.9	793.2	793.8	794.5	795.1	795.8	795.8
152.5°	812.6	812.8	813.0	813.3	813.5	813.7	814.0	814.3	814.5	814.8	815.2
155°	841.8	841.8	841.8	841.8	841.8	841.9	842.1	842.2	842.4	842.6	843.2
157.5°	868.0	867.6	867.2	866.9	866.5	866.4	866.6	866.7	866.9	867.1	867.7
160°	883.4	882.9	882.4	881.9	881.4	881.2	881.4	881.6	881.7	881.9	882.6
162.5°	897.1	896.7	896.3	896.0	895.6	895.4	895.5	895.5	895.5	895.6	896.4
165°	915.3	915.0	914.7	914.3	914.0	913.9	914.1	914.2	914.4	914.6	915.2
167.5°	930.8	930.1	929.4	928.8	928.1	927.8	927.8	927.8	927.8	927.8	928.8
170°	939.1	938.4	937.7	937.1	936.4	936.1	936.1	936.1	936.1	936.1	937.1
172.5°	945.0	944.3	943.7	943.0	942.4	942.0	942.0	942.0	942.0	942.0	943.0
175°	951.7	951.0	950.4	949.7	949.0	948.7	948.7	948.7	948.7	948.7	949.7
177.5°	955.1	954.6	954.0	953.5	953.0	952.7	952.5	952.4	952.3	952.1	952.9
180°	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9



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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°	21.4	21.6	21.7	21.7	21.6	21.4	21.2	21.0
90°	13.5	14.4	15.2	15.8	16.3	16.8	17.3	17.8
92.5°	30.7	31.8	32.9	33.6	34.0	34.3	34.7	35.0
95°	59.5	60.6	61.8	62.5	62.9	63.2	63.5	63.8
97.5°	93.2	94.3	95.4	96.0	96.2	96.4	96.6	96.8
100°	116.5	118.0	119.5	120.4	120.8	121.1	121.4	121.7
102.5°	140.6	142.2	143.8	144.8	145.3	145.8	146.2	146.7
105°	179.4	180.4	181.4	182.1	182.6	183.1	183.6	184.1
107.5°	221.3	221.8	222.3	222.5	222.5	222.5	222.4	222.4
110°	250.4	250.9	251.4	251.6	251.4	251.2	251.1	250.9



TEST NUMBER: P333727

CATALOG NUMBER: S125RDIW-S1270D770U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	279.6	279.8	280.0	280.0	279.7	279.4	279.1	278.8
115°	324.1	323.9	323.7	323.6	323.4	323.3	323.1	322.9
117.5°	368.6	368.7	368.9	368.6	368.0	367.3	366.6	366.0
120°	398.6	398.6	398.6	398.3	397.7	397.0	396.3	395.7
122.5°	428.1	427.9	427.8	427.5	426.9	426.4	425.9	425.4
125°	471.5	471.1	470.8	470.6	470.4	470.2	470.1	469.9
127.5°	514.6	514.4	514.2	514.0	513.7	513.3	513.0	512.7
130°	543.1	542.9	542.7	542.5	542.2	541.8	541.5	541.2
132.5°	570.4	570.2	570.1	569.7	569.3	568.8	568.4	567.9
135°	612.4	612.4	612.4	612.1	611.4	610.8	610.1	609.5
137.5°	653.4	653.6	653.8	653.4	652.6	651.8	651.0	650.1
140°	679.2	679.5	679.8	679.6	678.8	677.9	677.1	676.3
142.5°	704.4	704.6	704.8	704.5	703.7	702.9	702.0	701.2
145°	740.9	740.9	740.9	740.6	740.1	739.6	739.1	738.6
147.5°	774.6	775.0	775.4	775.0	773.9	772.8	771.7	770.6
150°	795.8	795.8	795.8	795.6	795.3	795.0	794.6	794.3
152.5°	815.6	816.0	816.4	816.3	815.7	815.1	814.5	813.9
155°	843.9	844.5	845.2	845.1	844.3	843.5	842.6	841.8
157.5°	868.4	869.0	869.7	869.5	868.4	867.3	866.2	865.1
160°	883.2	883.9	884.5	884.5	883.6	882.8	882.0	881.2
162.5°	897.2	897.9	898.7	898.7	897.7	896.7	895.8	894.8
165°	915.9	916.6	917.2	917.0	916.1	915.1	914.1	913.1
167.5°	929.8	930.8	931.7	931.7	930.7	929.7	928.7	927.6
170°	938.1	939.1	940.1	940.0	938.8	937.7	936.5	935.4
172.5°	944.0	945.0	946.0	946.0	945.0	943.9	942.9	941.9
175°	950.7	951.7	952.7	952.6	951.4	950.3	949.1	948.0
177.5°	953.7	954.5	955.3	955.2	954.3	953.4	952.5	951.5
180°	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9

(END OF REPORT)