

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: P333614-840

Luminaire Tested: **S125RDIP-S1270D365U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333614-840  
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: S125RDIP-S1270D365U840-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6205.7 lumens  
Efficiency: N/A  
Efficacy: 124.6 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

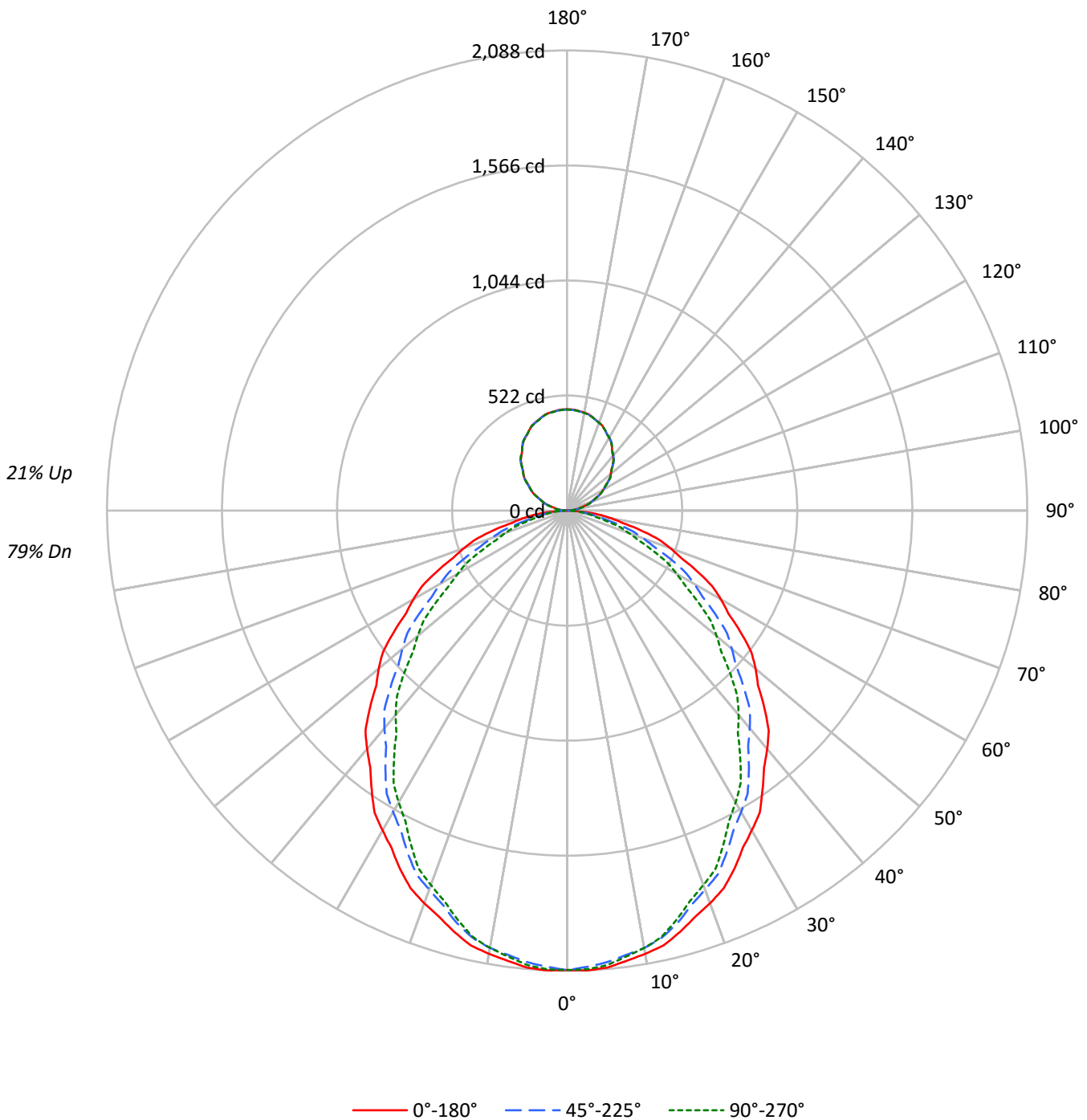
Input Watts (W): 49.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83	79				
1	105	100	96	93	100	96	93	89	88	85	83	81	79	77	74	72	71	68				
2	96	88	82	77	91	84	79	74	78	73	69	71	68	65	66	63	60	57				
3	88	78	70	64	83	75	68	62	69	63	59	63	59	55	58	55	52	49				
4	80	69	61	55	77	67	59	53	61	55	50	57	52	48	52	48	45	42				
5	74	62	54	47	70	60	52	46	55	49	44	51	46	42	47	43	39	37				
6	68	56	47	41	65	54	46	40	50	43	39	46	41	37	43	38	35	32				
7	63	51	42	37	61	49	41	36	46	39	34	42	37	33	39	35	31	29				
8	59	46	38	33	56	45	37	32	42	35	31	39	33	29	36	32	28	26				
9	55	42	35	29	53	41	34	29	38	32	28	36	30	26	34	29	25	23				
10	52	39	32	27	49	38	31	26	36	29	25	33	28	24	31	27	23	21				

**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	3.2
10°-20°	547.8	8.8
20°-30°	794.4	12.8
30°-40°	905.3	14.6
40°-50°	882.5	14.2
50°-60°	742.8	12.0
60°-70°	520.7	8.4
70°-80°	267.7	4.3
80°-90°	68.6	1.1
90°-100°	30.7	0.5
100°-110°	90.7	1.5
110°-120°	153.6	2.5
120°-130°	202.2	3.3
130°-140°	226.6	3.7
140°-150°	222.1	3.6
150°-160°	186.5	3.0
160°-170°	124.0	2.0
170°-180°	43.4	0.7
0°-30°	1538.2	24.8
0°-40°	2443.5	39.4
0°-60°	4068.9	65.6
0°-90°	4925.9	79.4
90°-120°	275.1	4.4
90°-150°	925.9	14.9
90°-180°	1280.0	20.6
0°-180°	6205.7	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°	0	3	6	7	9	5
95°	23	24	28	30	31	25
105°	81	83	85	87	89	87
115°	154	155	156	156	155	152
125°	224	227	227	226	226	201
135°	292	294	294	294	293	225
145°	354	355	356	356	355	221
155°	405	405	405	406	405	186
165°	440	439	440	441	439	124
175°	458	456	456	458	456	43
180°	459	459	459	459	459	



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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°	29.1	27.2	25.3	23.5	21.7	20.7	20.5	20.4	20.2	20.0	20.1
90°	0.4	1.0	1.6	2.2	2.9	3.5	4.0	4.6	5.2	5.8	6.1
92.5°	8.7	9.1	9.5	10.0	10.4	11.0	11.6	12.3	13.0	13.7	14.2
95°	23.2	23.3	23.5	23.6	23.8	24.3	25.1	25.9	26.7	27.5	28.1
97.5°	38.6	38.6	38.7	38.8	38.8	39.4	40.5	41.6	42.6	43.7	44.3
100°	50.0	50.0	50.0	50.0	50.0	50.5	51.5	52.5	53.6	54.6	55.3
102.5°	62.2	62.6	62.9	63.2	63.5	63.9	64.4	64.9	65.5	66.0	66.9
105°	81.4	81.8	82.2	82.6	83.0	83.4	83.9	84.3	84.8	85.3	85.7
107.5°	102.5	102.9	103.3	103.7	104.1	104.5	104.8	105.2	105.5	105.9	106.1
110°	117.0	117.4	117.9	118.3	118.7	119.0	119.2	119.5	119.7	120.0	120.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	131.9	132.1	132.3	132.5	132.7	133.0	133.3	133.6	133.9	134.2	134.3
115°	153.8	154.1	154.5	154.8	155.1	155.3	155.5	155.6	155.8	156.0	155.9
117.5°	175.8	175.9	176.1	176.2	176.4	176.5	176.7	176.8	176.9	177.1	177.1
120°	189.6	190.0	190.4	190.8	191.1	191.4	191.5	191.5	191.6	191.7	191.7
122.5°	204.4	204.5	204.7	204.8	204.9	205.1	205.3	205.5	205.7	205.9	205.9
125°	224.5	225.0	225.5	225.9	226.4	226.7	226.8	226.8	226.9	227.0	226.8
127.5°	245.9	246.2	246.5	246.7	247.0	247.2	247.3	247.4	247.5	247.5	247.5
130°	258.7	259.1	259.5	259.9	260.3	260.6	260.7	260.9	261.2	261.3	261.2
132.5°	271.7	272.3	273.0	273.6	274.2	274.6	274.5	274.5	274.5	274.4	274.3
135°	292.0	292.5	293.0	293.4	293.9	294.2	294.3	294.3	294.4	294.5	294.5
137.5°	311.1	311.5	312.0	312.5	313.0	313.3	313.5	313.6	313.8	314.0	314.1
140°	323.4	323.8	324.2	324.6	325.0	325.3	325.5	325.8	326.0	326.2	326.4
142.5°	335.7	336.0	336.3	336.7	337.0	337.3	337.6	337.9	338.2	338.5	338.6
145°	353.8	354.1	354.4	354.7	355.0	355.3	355.5	355.8	356.0	356.2	356.2
147.5°	370.4	370.6	370.7	370.9	371.1	371.3	371.5	371.7	371.8	372.0	372.2
150°	381.5	381.5	381.4	381.3	381.2	381.3	381.6	382.0	382.3	382.6	382.6
152.5°	390.7	390.8	390.9	391.0	391.1	391.2	391.4	391.5	391.6	391.7	391.9
155°	404.8	404.8	404.8	404.8	404.8	404.8	404.9	405.0	405.1	405.2	405.5
157.5°	417.3	417.2	417.0	416.8	416.7	416.6	416.7	416.8	416.8	416.9	417.2
160°	424.7	424.5	424.2	424.0	423.8	423.7	423.8	423.8	423.9	424.0	424.3
162.5°	431.3	431.1	431.0	430.8	430.6	430.5	430.5	430.6	430.6	430.6	431.0
165°	440.1	439.9	439.8	439.6	439.5	439.4	439.5	439.6	439.7	439.7	440.1
167.5°	447.5	447.2	446.9	446.6	446.3	446.1	446.1	446.1	446.1	446.1	446.6
170°	451.5	451.2	450.9	450.6	450.2	450.1	450.1	450.1	450.1	450.1	450.6
172.5°	454.3	454.0	453.7	453.4	453.1	452.9	452.9	452.9	452.9	452.9	453.4
175°	457.6	457.3	457.0	456.7	456.4	456.2	456.2	456.2	456.2	456.2	456.7
177.5°	459.2	459.0	458.7	458.5	458.2	458.1	458.0	458.0	457.9	457.8	458.2
180°	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7



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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°	20.2	20.3	20.4	20.3	20.0	19.8	19.6	19.4
90°	6.5	6.9	7.3	7.6	7.9	8.1	8.3	8.6
92.5°	14.7	15.2	15.8	16.2	16.4	16.5	16.7	16.9
95°	28.6	29.2	29.7	30.1	30.2	30.4	30.5	30.7
97.5°	44.8	45.3	45.8	46.2	46.3	46.4	46.5	46.6
100°	56.0	56.8	57.5	57.9	58.1	58.3	58.4	58.6
102.5°	67.6	68.4	69.2	69.7	69.9	70.1	70.3	70.5
105°	86.2	86.7	87.3	87.6	87.8	88.1	88.3	88.6
107.5°	106.4	106.6	106.8	107.0	106.9	106.9	106.9	106.9
110°	120.4	120.7	120.9	121.0	120.9	120.8	120.7	120.7





TEST NUMBER: P333614-840

CATALOG NUMBER: S125RDIP-S1270D365U840-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	134.4	134.5	134.6	134.6	134.5	134.3	134.2	134.1
115°	155.8	155.7	155.6	155.6	155.5	155.4	155.3	155.2
117.5°	177.2	177.3	177.3	177.2	176.9	176.6	176.3	175.9
120°	191.7	191.7	191.7	191.5	191.2	190.9	190.6	190.3
122.5°	205.8	205.7	205.7	205.5	205.3	205.0	204.8	204.5
125°	226.7	226.5	226.4	226.2	226.2	226.1	226.0	225.9
127.5°	247.4	247.3	247.2	247.1	247.0	246.8	246.6	246.5
130°	261.2	261.1	260.9	260.8	260.6	260.5	260.3	260.2
132.5°	274.3	274.2	274.1	274.0	273.7	273.5	273.3	273.1
135°	294.5	294.5	294.5	294.3	294.0	293.7	293.4	293.1
137.5°	314.2	314.3	314.4	314.2	313.8	313.4	313.0	312.6
140°	326.6	326.7	326.9	326.8	326.4	326.0	325.6	325.2
142.5°	338.7	338.8	338.9	338.7	338.3	337.9	337.6	337.2
145°	356.2	356.2	356.2	356.1	355.9	355.6	355.4	355.2
147.5°	372.4	372.6	372.8	372.6	372.1	371.5	371.0	370.5
150°	382.6	382.6	382.6	382.5	382.4	382.2	382.0	381.9
152.5°	392.1	392.3	392.5	392.4	392.2	391.9	391.6	391.3
155°	405.8	406.1	406.4	406.4	406.0	405.6	405.2	404.8
157.5°	417.5	417.9	418.2	418.1	417.6	417.0	416.5	416.0
160°	424.6	425.0	425.3	425.3	424.9	424.4	424.0	423.6
162.5°	431.3	431.7	432.1	432.1	431.6	431.1	430.7	430.2
165°	440.4	440.7	441.0	440.9	440.4	440.0	439.5	439.0
167.5°	447.1	447.5	448.0	448.0	447.5	447.0	446.5	446.1
170°	451.0	451.5	452.0	451.9	451.4	450.8	450.3	449.7
172.5°	453.9	454.3	454.8	454.8	454.3	453.8	453.3	452.8
175°	457.1	457.6	458.1	458.0	457.5	456.9	456.4	455.8
177.5°	458.6	459.0	459.3	459.3	458.9	458.4	458.0	457.5
180°	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7

(END OF REPORT)