

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: P333330-830

Luminaire Tested: **S125DIP-S1270D1035U830-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333330-830  
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: S125DIP-S1270D1035U830-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

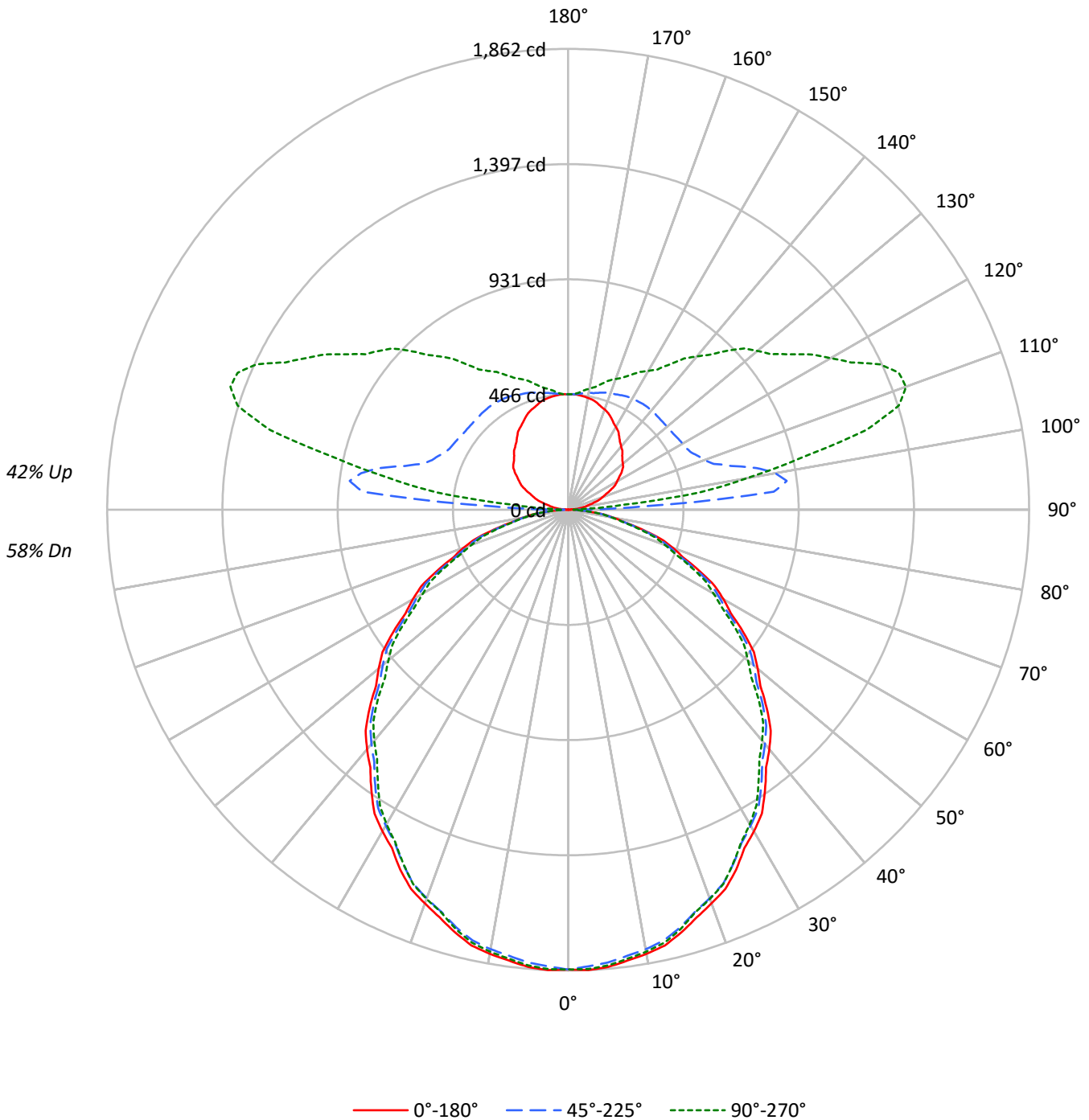
Lumens per Lamp: N/A  
Luminaire Lumens: 8335.9 lumens  
Efficiency: N/A  
Efficacy: 124.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 66.8  
Input Voltage (V): 120  
Input Current (Ain): 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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58
1	100	95	91	88	93	89	85	82	77	74	72	66	64	62	56	55	53	49
2	91	83	77	71	84	78	72	67	67	63	60	58	55	52	49	47	45	41
3	83	73	65	60	77	68	62	56	59	54	50	51	47	44	44	41	38	34
4	76	65	57	50	70	61	53	48	53	47	43	46	41	38	39	36	33	30
5	69	58	49	43	64	54	47	41	47	41	37	41	36	33	35	32	29	26
6	64	52	43	38	59	49	41	36	43	37	32	37	32	29	32	28	25	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	25	29	25	22	20
8	55	42	35	29	51	40	33	28	35	29	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	32	27	23	28	24	20	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	20	26	22	18	23	19	17	15

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11996	11996	11996
5°	12023	11909	11985
10°	11950	11825	11893
15°	11820	11683	11732
20°	11635	11483	11504
25°	11436	11247	11236
30°	11189	10992	10937
35°	10925	10717	10566
40°	10655	10420	10270
45°	10361	10147	9945
50°	10040	9818	9523
55°	9730	9448	9183
60°	9357	9074	8751
65°	8915	8623	8332
70°	8492	8103	7825
75°	7738	7481	7224
80°	6884	6776	6616
85°	5995	6099	5772



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.1	2.1
10°-20°	494.7	5.9
20°-30°	730.5	8.8
30°-40°	852.4	10.2
40°-50°	856.1	10.3
50°-60°	751.5	9.0
60°-70°	559.9	6.7
70°-80°	320.2	3.8
80°-90°	95.7	1.1
90°-100°	338.3	4.1
100°-110°	727.2	8.7
110°-120°	682.5	8.2
120°-130°	553.1	6.6
130°-140°	443.9	5.3
140°-150°	334.9	4.0
150°-160°	235.8	2.8
160°-170°	139.0	1.7
170°-180°	45.2	0.5
0°-30°	1400.3	16.8
0°-40°	2252.7	27.0
0°-60°	3860.3	46.3
0°-90°	4836.1	58.0
90°-120°	1747.9	21.0
90°-150°	3079.8	36.9
90°-180°	3500.0	42.0
0°-180°	8335.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1858	1858	1858	1858	1858	
5°	1854	1851	1837	1849	1849	176
15°	1768	1763	1747	1754	1755	498
25°	1605	1597	1578	1581	1577	738
35°	1386	1379	1359	1352	1340	866
45°	1134	1128	1111	1094	1089	874
55°	864	859	839	826	816	771
65°	583	580	564	551	545	579
75°	310	307	300	295	290	331
85°	81	82	82	81	78	90
90°	1	8	15	20	22	6
95°	31	92	834	378	221	33
105°	106	149	682	1343	1247	112
115°	190	229	548	1180	1389	187
125°	263	309	525	939	1094	234
135°	309	371	521	787	909	240
145°	359	412	523	652	717	225
155°	410	441	510	576	601	189
165°	448	460	489	519	527	126
175°	466	466	470	475	473	44
180°	467	467	467	467	467	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5
2.5°	1862.2	1861.4	1860.7	1859.8	1859.1	1857.4	1854.7	1852.1	1849.6	1846.9	1849.6
5°	1854.5	1853.9	1853.2	1852.6	1851.9	1850.0	1846.7	1843.4	1840.2	1836.9	1839.8
7.5°	1837.5	1836.8	1836.2	1835.5	1834.8	1832.8	1829.2	1825.6	1822.0	1818.4	1821.3
10°	1822.2	1821.6	1820.9	1820.2	1819.6	1817.5	1813.9	1810.3	1806.7	1803.1	1805.7
12.5°	1803.4	1802.2	1801.1	1799.9	1798.7	1796.5	1793.1	1789.8	1786.5	1783.1	1785.3
15°	1767.8	1766.9	1765.9	1764.9	1764.0	1761.6	1758.0	1754.4	1750.9	1747.3	1748.9
17.5°	1727.0	1725.6	1724.1	1722.7	1721.3	1718.6	1715.0	1711.2	1707.5	1703.7	1705.8
20°	1692.9	1692.2	1691.6	1690.9	1690.3	1687.8	1683.6	1679.3	1675.1	1670.8	1673.1
22.5°	1658.8	1657.6	1656.4	1655.3	1654.1	1651.5	1647.6	1643.6	1639.6	1635.6	1637.1
25°	1604.8	1603.1	1601.5	1599.9	1598.2	1595.3	1591.0	1586.8	1582.5	1578.3	1578.9
27.5°	1541.5	1540.6	1539.5	1538.6	1537.7	1534.9	1530.6	1526.2	1521.8	1517.4	1517.6
30°	1500.4	1499.4	1498.5	1497.4	1496.5	1493.6	1488.7	1483.8	1478.8	1473.9	1473.3
32.5°	1455.8	1454.2	1452.7	1451.2	1449.7	1446.8	1442.4	1438.0	1433.6	1429.3	1428.1
35°	1385.7	1384.5	1383.2	1381.9	1380.5	1377.6	1373.0	1368.5	1363.9	1359.3	1357.7
37.5°	1313.2	1311.5	1309.9	1308.2	1306.6	1303.6	1299.4	1295.1	1290.7	1286.5	1284.0
40°	1263.8	1262.2	1260.6	1258.9	1257.3	1254.1	1249.6	1245.0	1240.5	1235.9	1232.9
42.5°	1210.9	1209.6	1208.2	1206.7	1205.4	1202.4	1197.9	1193.3	1188.7	1184.1	1181.5
45°	1134.4	1133.2	1131.9	1130.6	1129.3	1126.6	1122.8	1118.8	1114.9	1111.0	1107.0
47.5°	1052.2	1052.3	1052.3	1052.3	1052.4	1050.1	1045.5	1040.8	1036.0	1031.3	1027.4
50°	999.3	998.3	997.3	996.4	995.3	992.9	989.0	985.1	981.2	977.2	973.0
52.5°	945.2	944.5	943.8	943.0	942.4	939.9	935.7	931.5	927.4	923.1	919.5
55°	864.1	863.1	862.1	861.1	860.2	857.4	852.8	848.3	843.7	839.1	836.1
57.5°	778.5	778.1	777.5	777.0	776.5	774.3	770.4	766.6	762.7	758.8	755.1
60°	724.4	723.2	721.9	720.6	719.3	716.8	713.2	709.6	706.1	702.5	699.2
62.5°	668.1	667.0	666.0	664.9	663.8	661.9	658.7	655.6	652.6	649.5	646.0
65°	583.4	582.8	582.1	581.5	580.8	578.6	575.0	571.5	567.9	564.3	561.4
67.5°	501.4	500.0	498.7	497.3	496.0	493.9	491.3	488.5	485.9	483.1	480.7
70°	449.7	448.1	446.4	444.8	443.2	440.8	437.9	435.0	432.1	429.1	427.2
72.5°	393.2	392.1	391.1	389.9	388.8	387.3	385.4	383.5	381.6	379.8	377.5
75°	310.1	309.4	308.8	308.1	307.5	306.3	304.7	303.0	301.4	299.8	298.8
77.5°	233.4	233.1	232.8	232.6	232.3	231.8	230.8	229.9	228.9	228.1	227.5
80°	185.1	185.1	185.1	185.1	185.1	184.8	184.2	183.5	182.9	182.2	181.9
82.5°	142.8	142.3	141.8	141.3	140.7	140.4	140.3	140.2	140.1	139.9	139.3
85°	80.9	81.2	81.4	81.8	82.1	82.3	82.3	82.3	82.3	82.3	82.0
87.5°	32.0	32.1	32.5	32.9	33.3	33.5	33.5	33.6	33.5	33.6	33.7
90°	0.9	1.9	3.8	5.7	7.5	9.4	10.4	12.3	13.2	15.1	16.0
92.5°	11.5	13.9	21.9	33.5	49.7	77.2	128.6	214.7	308.2	303.3	245.5
95°	31.0	32.0	39.5	49.9	70.6	112.9	213.6	420.6	680.3	833.7	815.8
97.5°	51.6	52.7	58.0	68.3	86.9	117.4	184.1	335.7	607.5	890.3	1032.2
100°	65.9	67.8	71.5	81.8	99.7	128.0	182.6	304.8	542.0	849.6	1084.9
102.5°	81.7	82.8	85.8	96.9	113.3	140.7	189.4	292.1	492.3	778.2	1053.3
105°	106.3	106.3	111.0	120.5	135.5	161.8	203.2	287.0	444.1	682.1	952.3
107.5°	130.4	132.3	136.8	144.5	160.1	183.9	223.9	295.7	423.8	616.1	849.0
110°	147.7	149.6	153.4	161.8	176.0	200.4	239.0	303.9	417.7	585.2	790.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	165.0	166.9	169.9	178.4	192.5	216.2	253.3	314.4	417.7	567.2	746.7
115°	190.1	191.9	194.7	203.2	217.4	240.9	275.7	330.3	420.6	547.6	699.1
117.5°	212.6	215.5	218.5	227.0	243.0	265.7	298.7	348.4	426.8	538.0	670.7
120°	227.7	230.5	234.3	242.8	258.7	282.3	315.2	360.3	432.8	533.5	654.9
122.5°	243.6	245.5	248.5	257.0	274.6	298.1	331.0	373.9	438.1	529.7	641.3
125°	263.4	265.3	270.0	278.5	296.4	320.8	351.9	392.4	447.0	525.0	622.9
127.5°	279.1	281.9	287.9	298.7	317.6	342.1	372.0	409.3	456.9	522.7	606.0
130°	288.9	291.7	299.3	311.4	331.2	355.6	384.8	420.6	463.0	521.2	594.7
132.5°	296.4	299.9	309.0	322.7	343.3	367.7	396.9	430.4	469.7	521.2	585.6
135°	308.6	312.4	323.7	338.7	358.4	383.9	413.0	444.1	478.9	521.2	574.9
137.5°	324.0	326.9	337.4	352.5	371.8	398.0	424.5	454.3	487.4	522.4	565.3
140°	333.1	335.9	347.2	362.2	380.1	405.6	432.8	461.1	491.2	523.1	560.8
142.5°	343.7	345.7	356.2	371.3	388.4	412.3	438.1	464.8	493.4	523.9	557.0
145°	359.4	361.3	370.7	383.9	400.9	422.4	447.0	470.4	495.9	523.1	551.4
147.5°	376.0	377.1	385.2	397.5	412.1	431.1	452.6	473.8	496.8	520.7	545.5
150°	385.8	387.7	394.3	406.5	419.6	435.6	456.4	476.1	496.8	518.4	541.0
152.5°	396.3	397.5	403.3	414.0	426.4	440.9	460.1	477.6	496.1	515.5	535.7
155°	410.2	410.2	415.8	425.3	434.7	447.9	463.8	478.9	494.0	510.0	526.9
157.5°	422.6	422.4	427.0	435.1	443.4	453.4	467.0	479.8	491.5	504.4	518.6
160°	430.9	430.0	433.8	440.4	447.9	456.4	468.5	479.8	489.3	500.6	511.9
162.5°	437.7	436.8	440.5	446.4	452.4	459.4	470.0	479.1	487.0	496.1	505.9
165°	447.9	446.0	448.8	453.6	457.3	463.0	470.4	478.0	483.6	489.3	496.8
167.5°	454.7	453.7	455.4	458.1	460.7	464.2	470.4	475.7	478.3	482.7	488.0
170°	459.2	458.3	459.2	461.1	463.0	465.7	470.4	474.2	476.1	478.9	482.7
172.5°	462.2	460.5	461.5	463.3	464.4	465.7	469.7	472.7	473.1	474.4	477.4
175°	465.7	463.8	464.8	465.7	465.7	465.7	468.5	470.4	469.5	469.5	470.4
177.5°	467.4	465.9	465.9	466.7	465.9	465.9	467.4	468.2	466.7	466.7	467.4
180°	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5
2.5°	1852.1	1854.7	1857.4	1858.5	1858.3	1858.0	1857.8	1857.5
5°	1842.8	1845.8	1848.7	1850.0	1849.6	1849.4	1849.0	1848.7
7.5°	1824.1	1827.0	1829.9	1831.2	1830.9	1830.5	1830.2	1829.9
10°	1808.4	1811.0	1813.5	1814.7	1814.4	1814.0	1813.7	1813.5
12.5°	1787.3	1789.4	1791.5	1792.5	1792.4	1792.3	1792.3	1792.2
15°	1750.6	1752.2	1753.8	1754.6	1754.6	1754.6	1754.6	1754.6
17.5°	1707.8	1709.9	1711.8	1712.0	1710.4	1708.8	1707.1	1705.5
20°	1675.5	1677.7	1680.0	1680.4	1678.7	1677.1	1675.5	1673.8
22.5°	1638.6	1640.1	1641.6	1641.8	1640.7	1639.6	1638.4	1637.4
25°	1579.6	1580.3	1580.9	1580.7	1579.8	1578.8	1577.8	1576.8
27.5°	1517.7	1517.9	1518.0	1517.5	1516.6	1515.6	1514.6	1513.6
30°	1472.6	1472.0	1471.3	1470.6	1469.5	1468.6	1467.5	1466.6
32.5°	1426.9	1425.8	1424.6	1423.1	1421.4	1419.6	1417.8	1416.1
35°	1356.0	1354.4	1352.8	1350.7	1348.0	1345.5	1342.8	1340.2
37.5°	1281.6	1279.2	1276.8	1274.8	1273.3	1271.8	1270.3	1268.8
40°	1230.0	1227.1	1224.1	1222.2	1221.2	1220.2	1219.2	1218.2
42.5°	1178.8	1176.1	1173.5	1171.4	1169.9	1168.4	1166.9	1165.4
45°	1103.2	1099.2	1095.3	1092.9	1091.8	1090.9	1089.9	1088.9
47.5°	1023.3	1019.4	1015.4	1012.3	1009.9	1007.7	1005.4	1003.1
50°	968.7	964.5	960.3	957.0	954.7	952.4	950.2	947.8
52.5°	915.7	912.0	908.2	905.1	902.6	900.0	897.5	894.9
55°	833.2	830.3	827.4	824.7	822.5	820.2	817.8	815.6
57.5°	751.3	747.5	743.8	741.2	740.0	738.8	737.4	736.2
60°	695.9	692.7	689.4	686.6	684.3	682.0	679.8	677.5
62.5°	642.4	638.9	635.5	632.8	631.0	629.2	627.5	625.8
65°	558.5	555.4	552.5	550.4	549.1	547.8	546.5	545.2
67.5°	478.2	475.7	473.3	471.6	470.8	470.0	469.3	468.4
70°	425.2	423.2	421.2	419.6	418.3	417.0	415.8	414.4
72.5°	375.3	373.1	370.9	369.1	367.8	366.5	365.1	363.8
75°	297.8	296.8	295.9	294.7	293.4	292.1	290.8	289.5
77.5°	226.9	226.3	225.7	225.0	224.0	223.1	222.3	221.3
80°	181.5	181.3	180.9	180.4	179.7	179.1	178.4	177.9
82.5°	138.7	138.2	137.5	137.2	137.0	137.0	136.8	136.7
85°	81.6	81.3	81.0	80.5	79.8	79.2	78.5	77.9
87.5°	33.9	34.1	34.3	34.4	33.9	33.4	33.1	32.5
90°	17.0	17.9	18.9	20.7	20.7	20.7	21.7	21.7
92.5°	166.7	121.0	91.0	77.2	65.1	62.9	61.5	60.0
95°	676.6	533.5	417.7	338.7	271.9	243.7	236.2	221.1
97.5°	1007.6	907.2	794.5	684.6	626.5	573.7	546.5	534.4
100°	1157.3	1111.3	1014.3	916.4	851.5	783.8	748.9	734.0
102.5°	1207.8	1236.1	1189.7	1123.4	1054.0	1005.9	968.0	956.7
105°	1178.0	1306.9	1348.3	1337.9	1307.9	1276.9	1258.0	1246.7
107.5°	1071.9	1243.9	1350.2	1399.3	1414.6	1414.4	1408.2	1400.6
110°	993.6	1172.3	1305.0	1385.1	1427.4	1445.2	1451.8	1451.8





TEST NUMBER: P333330-830

CATALOG NUMBER: S125DIP-S1270D1035U830-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	931.9	1101.6	1235.8	1330.1	1391.9	1422.7	1439.1	1445.8
115°	854.3	1000.2	1129.1	1231.6	1305.0	1350.2	1376.6	1388.8
117.5°	804.3	930.0	1041.0	1135.1	1208.5	1255.2	1281.3	1288.8
120°	777.2	890.1	993.6	1076.4	1146.0	1191.2	1216.6	1224.2
122.5°	756.9	861.5	953.7	1031.2	1093.3	1134.7	1160.2	1167.0
125°	727.4	823.3	905.1	972.9	1025.6	1064.1	1084.9	1094.3
127.5°	697.2	786.8	863.2	926.6	974.4	1008.4	1028.0	1032.2
130°	678.4	761.2	834.6	895.8	942.8	973.8	992.7	998.3
132.5°	659.6	737.1	803.7	862.6	909.6	940.8	958.0	964.4
135°	635.1	700.0	760.3	813.9	855.3	886.4	903.2	908.9
137.5°	614.4	666.9	717.0	762.5	799.6	827.8	843.5	849.6
140°	603.1	647.3	690.6	730.2	765.0	789.5	803.5	808.2
142.5°	593.3	630.7	668.1	702.3	731.9	752.5	765.9	769.9
145°	580.5	609.7	638.9	664.3	686.8	702.9	713.2	717.0
147.5°	568.5	592.2	614.6	633.8	651.7	664.5	670.5	672.2
150°	561.8	582.4	600.3	617.3	631.3	642.6	646.4	647.3
152.5°	554.2	572.6	589.0	602.2	614.1	623.1	626.8	627.7
155°	542.9	558.0	571.2	581.5	590.9	597.5	600.3	601.2
157.5°	531.6	544.0	554.2	562.3	569.7	575.0	577.7	577.5
160°	524.1	533.5	542.9	549.5	556.1	560.8	562.7	561.8
162.5°	515.9	524.4	532.3	538.2	543.3	547.2	547.6	547.4
165°	504.4	511.0	516.6	521.2	525.0	526.9	526.9	526.9
167.5°	493.4	497.8	502.1	505.5	507.4	509.1	508.3	508.1
170°	487.4	490.2	493.0	494.9	496.8	497.8	497.8	496.8
172.5°	480.6	483.4	485.5	486.6	487.0	488.7	487.2	486.3
175°	473.3	473.3	475.1	475.1	475.1	476.1	474.2	473.3
177.5°	468.2	468.9	468.9	468.9	468.2	468.9	466.7	466.7
180°	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7

(END OF REPORT)