

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: P333477-830

Luminaire Tested: **S125DIW-S1270D1050U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333477-830  
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: S125DIW-S1270D1050U830-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8260.7 lumens  
Efficiency: N/A  
Efficacy: 122.6 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

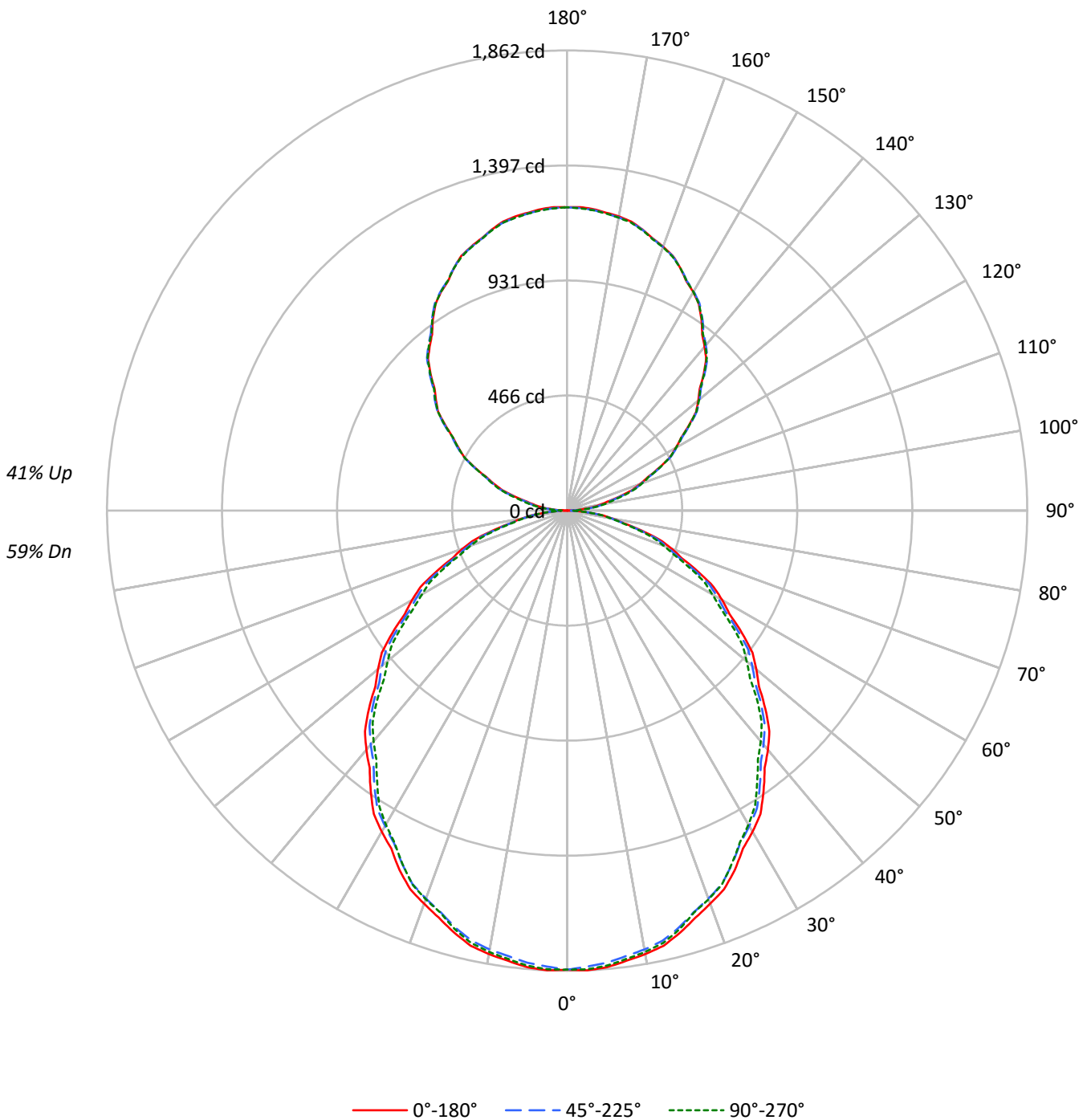
Input Watts (W): 67.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	76	76	76	64	64	64	59
1	100	95	91	88	93	89	85	82	77	75	72	66	65	63	56	55	54	49
2	91	83	77	72	84	78	72	68	68	63	60	58	55	52	50	47	45	41
3	83	73	66	60	77	68	62	56	60	54	50	51	48	44	44	41	39	35
4	76	65	57	50	70	61	53	48	53	47	43	46	41	38	39	36	33	30
5	70	58	49	43	65	54	47	41	47	42	37	41	37	33	35	32	29	26
6	64	52	44	38	60	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	26	29	26	23	20
8	55	43	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	21	26	22	19	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	6.0
20°-30°	730.5	8.8
30°-40°	852.4	10.3
40°-50°	856.1	10.4
50°-60°	751.5	9.1
60°-70°	559.9	6.8
70°-80°	320.2	3.9
80°-90°	95.8	1.2
90°-100°	82.2	1.0
100°-110°	242.7	2.9
110°-120°	411.1	5.0
120°-130°	541.1	6.5
130°-140°	606.3	7.3
140°-150°	594.2	7.2
150°-160°	499.1	6.0
160°-170°	331.7	4.0
170°-180°	116.1	1.4
0°-30°	1400.3	17.0
0°-40°	2252.7	27.3
0°-60°	3860.3	46.7
0°-90°	4836.2	58.5
90°-120°	736.0	8.9
90°-150°	2477.6	30.0
90°-180°	3424.0	41.4
0°-180°	8260.7	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	23	8
95°	62	64	74	80	82	66
105°	218	223	228	234	237	233
115°	412	415	417	416	416	407
125°	601	606	607	606	604	538
135°	781	787	788	788	784	602
145°	946	950	953	953	950	591
155°	1083	1083	1084	1087	1083	499
165°	1178	1176	1177	1180	1175	332
175°	1224	1221	1220	1226	1220	116
180°	1227	1227	1227	1227	1227	



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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	32.2	32.6	33.0	33.3	33.5	33.6	33.6	33.6	33.6	33.8
90°	0.9	2.6	4.3	6.0	7.7	9.3	10.8	12.3	13.8	15.3	16.3
92.5°	23.1	24.3	25.4	26.7	27.9	29.4	31.2	33.0	34.9	36.7	38.1
95°	62.1	62.5	63.0	63.3	63.8	65.0	67.2	69.3	71.4	73.5	75.0
97.5°	103.1	103.3	103.5	103.7	103.9	105.4	108.3	111.2	114.1	117.1	118.5
100°	133.7	133.7	133.7	133.7	133.7	135.1	137.8	140.6	143.4	146.1	148.1
102.5°	166.5	167.4	168.2	169.1	169.9	171.1	172.5	173.9	175.3	176.7	178.8
105°	217.7	218.8	219.9	220.9	222.0	223.2	224.4	225.7	227.0	228.3	229.5
107.5°	274.3	275.3	276.4	277.5	278.5	279.6	280.5	281.5	282.5	283.4	284.1
110°	313.2	314.3	315.4	316.4	317.5	318.4	319.0	319.6	320.3	320.9	321.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	353.0	353.5	354.1	354.7	355.2	355.9	356.7	357.5	358.3	359.1	359.4
115°	411.6	412.5	413.3	414.2	415.0	415.7	416.0	416.5	416.9	417.4	417.2
117.5°	470.4	470.8	471.2	471.6	472.0	472.4	472.8	473.2	473.5	473.9	474.1
120°	507.1	508.2	509.3	510.3	511.3	512.0	512.2	512.5	512.6	512.8	512.8
122.5°	546.9	547.2	547.6	548.0	548.4	548.8	549.4	550.0	550.5	551.1	550.9
125°	600.7	602.0	603.2	604.5	605.8	606.5	606.8	607.0	607.2	607.4	607.0
127.5°	658.0	658.7	659.5	660.2	660.9	661.4	661.7	661.9	662.1	662.4	662.2
130°	692.4	693.4	694.6	695.6	696.6	697.4	697.9	698.2	698.7	699.1	698.9
132.5°	726.8	728.5	730.3	732.0	733.8	734.6	734.5	734.4	734.3	734.2	734.1
135°	781.2	782.5	783.7	785.0	786.4	787.0	787.3	787.5	787.7	787.9	787.9
137.5°	832.5	833.7	834.9	836.1	837.4	838.2	838.7	839.1	839.6	840.1	840.3
140°	865.3	866.3	867.4	868.5	869.5	870.3	871.0	871.7	872.2	872.9	873.4
142.5°	898.1	899.0	899.9	900.8	901.7	902.6	903.3	904.2	904.9	905.8	906.0
145°	946.4	947.3	948.1	949.0	949.8	950.6	951.2	951.9	952.5	953.1	953.1
147.5°	991.2	991.6	992.1	992.5	993.0	993.5	994.0	994.5	995.0	995.5	996.1
150°	1021.0	1020.8	1020.5	1020.3	1020.1	1020.4	1021.2	1022.1	1022.9	1023.8	1023.8
152.5°	1045.4	1045.7	1045.9	1046.3	1046.6	1046.9	1047.3	1047.5	1047.9	1048.3	1048.8
155°	1083.0	1083.0	1083.0	1083.0	1083.0	1083.1	1083.4	1083.5	1083.7	1084.0	1084.9
157.5°	1116.6	1116.2	1115.7	1115.2	1114.7	1114.7	1114.8	1115.0	1115.3	1115.5	1116.3
160°	1136.5	1135.9	1135.2	1134.6	1134.0	1133.8	1134.0	1134.2	1134.3	1134.6	1135.5
162.5°	1154.0	1153.6	1153.1	1152.6	1152.2	1152.0	1152.1	1152.1	1152.2	1152.2	1153.2
165°	1177.6	1177.1	1176.7	1176.3	1175.8	1175.7	1176.0	1176.2	1176.4	1176.6	1177.4
167.5°	1197.4	1196.6	1195.7	1194.9	1194.0	1193.6	1193.6	1193.6	1193.6	1193.6	1194.9
170°	1208.2	1207.3	1206.5	1205.6	1204.8	1204.3	1204.3	1204.3	1204.3	1204.3	1205.6
172.5°	1215.8	1214.9	1214.1	1213.2	1212.4	1211.9	1211.9	1211.9	1211.9	1211.9	1213.2
175°	1224.4	1223.5	1222.7	1221.8	1221.0	1220.5	1220.5	1220.5	1220.5	1220.5	1221.8
177.5°	1228.8	1228.0	1227.4	1226.7	1226.1	1225.6	1225.4	1225.3	1225.1	1224.9	1226.0
180°	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2



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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°	34.0	34.2	34.5	34.4	34.0	33.6	33.2	32.8
90°	17.4	18.5	19.5	20.4	21.0	21.7	22.2	22.9
92.5°	39.5	40.9	42.3	43.2	43.6	44.1	44.6	45.1
95°	76.5	77.9	79.5	80.4	80.9	81.2	81.7	82.1
97.5°	119.9	121.3	122.7	123.5	123.8	124.0	124.3	124.5
100°	150.0	151.8	153.7	155.0	155.3	155.8	156.2	156.7
102.5°	180.9	182.9	185.0	186.3	186.9	187.6	188.1	188.7
105°	230.8	232.1	233.4	234.3	235.0	235.5	236.2	236.9
107.5°	284.7	285.4	286.0	286.3	286.3	286.3	286.2	286.2
110°	322.2	322.8	323.5	323.7	323.5	323.2	323.0	322.8





TEST NUMBER: P333477-830

CATALOG NUMBER: S125DIW-S1270D1050U830-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	359.7	360.0	360.2	360.2	359.9	359.5	359.1	358.7
115°	416.9	416.7	416.5	416.3	416.0	415.8	415.7	415.5
117.5°	474.2	474.4	474.6	474.2	473.3	472.5	471.6	470.8
120°	512.8	512.8	512.8	512.5	511.6	510.8	509.9	509.1
122.5°	550.7	550.5	550.4	550.0	549.3	548.6	547.9	547.2
125°	606.5	606.1	605.7	605.4	605.2	604.9	604.7	604.5
127.5°	661.9	661.8	661.6	661.3	660.8	660.4	660.0	659.6
130°	698.7	698.4	698.2	698.0	697.5	697.1	696.6	696.3
132.5°	733.8	733.6	733.4	733.0	732.4	731.8	731.2	730.6
135°	787.9	787.9	787.9	787.5	786.6	785.8	784.9	784.1
137.5°	840.6	840.8	841.0	840.7	839.6	838.6	837.4	836.4
140°	873.7	874.2	874.6	874.3	873.3	872.1	871.1	870.1
142.5°	906.3	906.5	906.8	906.3	905.3	904.3	903.2	902.1
145°	953.1	953.1	953.1	952.8	952.2	951.5	950.9	950.3
147.5°	996.6	997.0	997.6	997.1	995.7	994.2	992.8	991.4
150°	1023.8	1023.8	1023.8	1023.6	1023.1	1022.8	1022.3	1021.9
152.5°	1049.2	1049.8	1050.3	1050.2	1049.4	1048.7	1047.8	1047.1
155°	1085.7	1086.6	1087.4	1087.2	1086.2	1085.1	1084.1	1083.0
157.5°	1117.2	1118.0	1118.9	1118.6	1117.2	1115.8	1114.4	1113.0
160°	1136.3	1137.2	1138.0	1137.8	1136.8	1135.8	1134.7	1133.6
162.5°	1154.2	1155.2	1156.2	1156.1	1154.9	1153.7	1152.4	1151.2
165°	1178.3	1179.1	1180.0	1179.8	1178.6	1177.2	1176.0	1174.7
167.5°	1196.2	1197.4	1198.7	1198.7	1197.4	1196.1	1194.8	1193.4
170°	1206.8	1208.2	1209.4	1209.3	1207.8	1206.4	1204.9	1203.3
172.5°	1214.5	1215.8	1217.0	1217.0	1215.7	1214.4	1213.1	1211.7
175°	1223.0	1224.4	1225.7	1225.5	1224.1	1222.6	1221.1	1219.6
177.5°	1227.0	1228.0	1229.0	1228.9	1227.8	1226.5	1225.4	1224.2
180°	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2

(END OF REPORT)