

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: P333470-830

Luminaire Tested: **S125DIW-S1270D770U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333470-830
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: S125DIW-S1270D770U830-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7728.6 lumens
Efficiency: N/A
Efficacy: 129.2 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: Semi-Direct

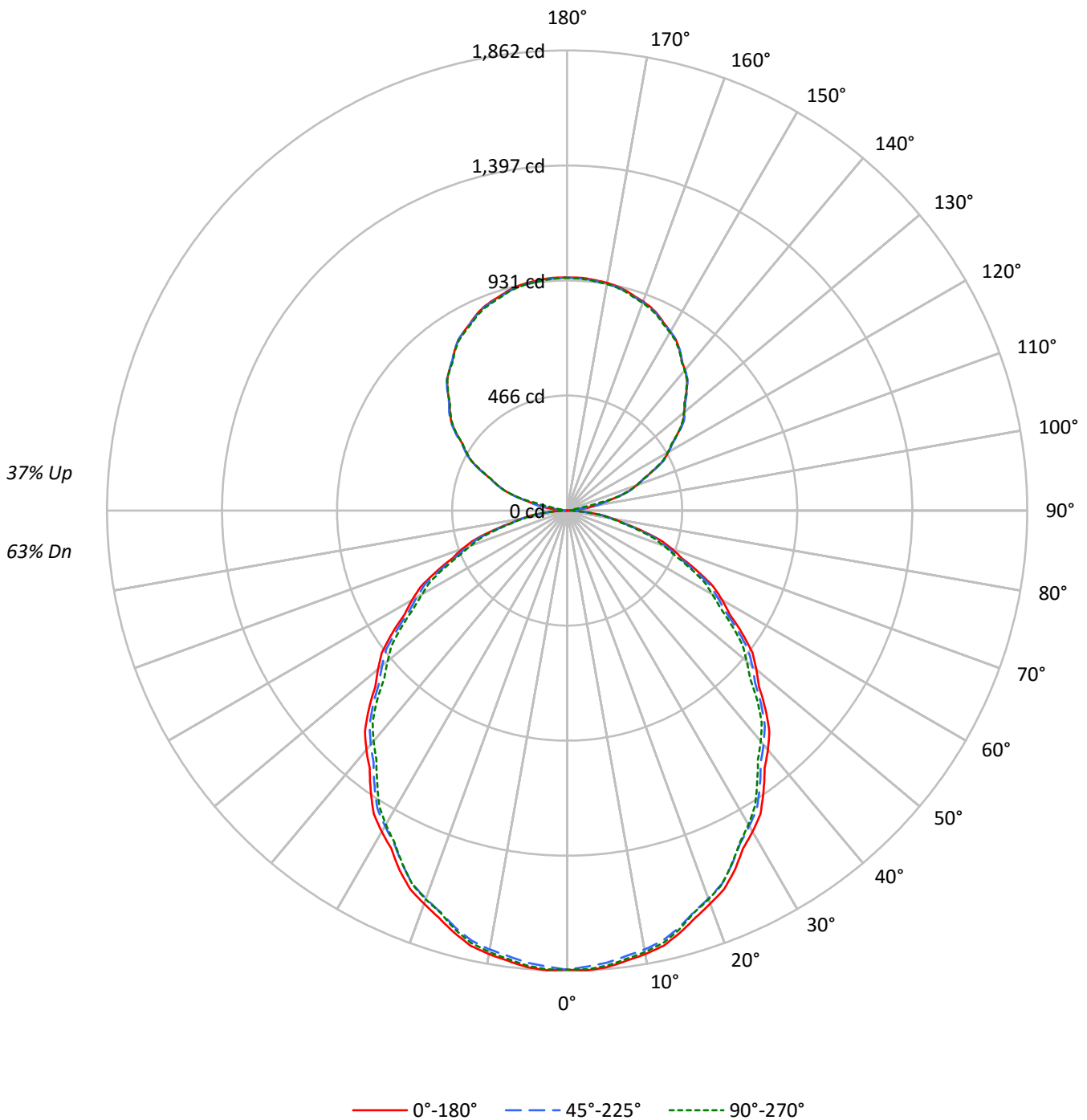
Input Watts (W): 59.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333470-830

CATALOG NUMBER: S125DIW-S1270D770U830-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P333470-830

CATALOG NUMBER: S125DIW-S1270D770U830-4F0-1E-UDD-F

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	110	110	110	110	103	103	103	103	90	90	90	79	79	79	68	68	68	63
1	101	96	92	88	94	90	87	84	79	77	74	69	67	65	60	58	57	53
2	92	84	78	72	85	79	73	69	69	65	61	61	57	54	53	50	48	44
3	83	74	66	60	78	69	63	57	61	56	52	54	49	46	46	43	41	37
4	76	65	57	51	71	62	54	49	54	49	44	48	43	39	42	38	35	32
5	70	58	50	44	66	55	47	42	49	43	38	43	38	34	37	34	31	28
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27	24
7	60	47	39	33	56	45	37	32	40	34	29	35	30	27	31	27	24	22
8	56	43	35	30	52	41	33	28	36	30	26	32	27	24	29	25	22	19
9	52	39	32	26	49	37	30	25	33	28	23	30	25	21	26	22	19	17
10	49	36	29	24	45	34	28	23	31	25	21	28	23	19	24	21	18	16

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



TEST NUMBER: P333470-830

CATALOG NUMBER: S125DIW-S1270D770U830-4F0-1E-UDD-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.1	2.3
10°-20°	494.7	6.4
20°-30°	730.5	9.5
30°-40°	852.4	11.0
40°-50°	856.1	11.1
50°-60°	751.5	9.7
60°-70°	559.9	7.2
70°-80°	320.2	4.1
80°-90°	95.1	1.2
90°-100°	34.2	0.4
100°-110°	211.0	2.7
110°-120°	382.7	5.0
120°-130°	491.1	6.4
130°-140°	528.2	6.8
140°-150°	495.8	6.4
150°-160°	401.1	5.2
160°-170°	259.4	3.4
170°-180°	89.5	1.2
0°-30°	1400.3	18.1
0°-40°	2252.7	29.1
0°-60°	3860.3	49.9
0°-90°	4835.5	62.6
90°-120°	627.9	8.1
90°-150°	2143.1	27.7
90°-180°	2893.0	37.4
0°-180°	7728.6	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	6	11	15	17	6
95°	40	36	11	14	15	51
105°	205	208	208	208	208	218
115°	386	389	390	387	383	382
125°	548	553	553	550	548	489
135°	684	688	686	685	681	527
145°	793	794	794	794	791	496
155°	873	869	870	872	867	402
165°	921	917	918	921	916	260
175°	942	938	939	944	938	90
180°	942	942	942	942	942	



TEST NUMBER: P333470-830

CATALOG NUMBER: S125DIW-S1270D770U830-4F0-1E-UDD-F

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°	31.9	32.1	32.4	32.6	32.9	33.0	32.9	32.9	32.8	32.8	33.0
90°	0.7	2.0	3.2	4.4	5.7	6.8	7.9	9.0	10.1	11.2	12.0
92.5°	10.7	9.9	9.0	8.1	7.3	7.4	8.3	9.2	10.2	11.2	12.0
95°	39.8	39.3	38.8	38.5	38.0	34.8	28.8	23.0	17.1	11.2	12.0
97.5°	83.1	84.0	84.8	85.6	86.4	81.1	69.4	57.7	46.0	34.4	30.0
100°	116.6	117.1	117.5	118.0	118.5	119.0	119.7	120.3	120.9	121.5	98.4
102.5°	150.7	151.3	151.9	152.5	153.1	153.5	153.9	154.3	154.7	155.0	150.7
105°	205.3	205.9	206.6	207.2	207.8	208.1	208.1	208.1	208.1	208.1	208.1
107.5°	262.0	262.0	262.0	262.0	262.0	262.2	262.5	262.8	263.2	263.4	263.4
110°	298.9	298.9	298.9	298.9	298.9	299.1	299.4	299.7	300.0	300.3	299.8



TEST NUMBER: P333470-830

CATALOG NUMBER: S125DIW-S1270D770U830-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	333.6	333.9	334.3	334.7	335.1	335.4	335.5	335.7	335.9	336.1	335.5
115°	385.5	386.3	387.1	387.9	388.6	389.1	389.3	389.4	389.6	389.7	389.1
117.5°	439.3	439.2	439.2	439.2	439.1	439.4	440.1	440.6	441.2	441.8	441.0
120°	472.8	472.7	472.5	472.3	472.2	472.3	472.8	473.3	473.7	474.2	473.9
122.5°	502.4	503.0	503.6	504.2	504.8	505.2	505.4	505.6	505.9	506.1	505.8
125°	548.3	549.3	550.4	551.5	552.6	553.1	553.1	553.1	553.1	553.1	552.5
127.5°	591.9	592.8	593.5	594.3	595.0	595.4	595.3	595.2	595.1	595.0	594.7
130°	618.8	619.5	620.3	621.1	621.9	622.4	622.5	622.6	622.8	622.9	622.5
132.5°	645.5	646.5	647.4	648.3	649.2	649.5	649.1	648.8	648.5	648.1	648.0
135°	683.7	684.7	685.6	686.5	687.5	687.8	687.5	687.1	686.8	686.5	686.2
137.5°	718.8	719.6	720.4	721.2	722.0	722.3	722.0	721.7	721.4	721.1	721.2
140°	741.7	742.0	742.3	742.6	742.9	743.0	742.8	742.7	742.5	742.3	742.7
142.5°	762.3	762.5	762.7	762.9	763.1	763.3	763.6	763.7	763.9	764.2	764.2
145°	792.7	793.0	793.3	793.6	793.9	794.1	794.1	794.1	794.1	794.1	794.2
147.5°	819.3	819.2	819.1	819.1	819.0	819.1	819.3	819.4	819.5	819.7	819.9
150°	835.9	835.7	835.4	835.0	834.7	834.7	835.0	835.4	835.7	835.9	836.3
152.5°	852.2	851.5	850.8	850.2	849.4	849.2	849.6	849.9	850.2	850.5	850.8
155°	873.0	872.0	871.1	870.2	869.3	868.9	869.3	869.6	869.9	870.2	870.6
157.5°	889.0	888.5	888.0	887.4	886.8	886.6	886.6	886.6	886.6	886.6	887.2
160°	900.2	899.3	898.3	897.4	896.5	896.1	896.3	896.5	896.5	896.7	897.4
162.5°	909.2	908.2	907.3	906.3	905.4	905.0	905.2	905.4	905.5	905.7	906.5
165°	921.1	920.2	919.4	918.4	917.5	917.1	917.2	917.4	917.6	917.7	918.6
167.5°	930.1	929.2	928.2	927.3	926.2	925.9	926.0	926.1	926.3	926.5	927.6
170°	935.2	934.1	932.9	931.9	930.8	930.3	930.5	930.7	930.8	930.9	932.2
172.5°	938.5	937.5	936.3	935.2	934.2	933.8	934.1	934.3	934.6	934.9	935.9
175°	942.2	941.2	940.3	939.3	938.4	938.0	938.2	938.3	938.5	938.7	939.9
177.5°	943.8	943.0	942.4	941.6	940.8	940.5	940.7	940.8	940.8	941.0	941.9
180°	942.2	942.2	942.2	942.2	942.2	942.2	942.2	942.2	942.2	942.2	942.2



TEST NUMBER: P333470-830

CATALOG NUMBER: S125DIW-S1270D770U830-4F0-1E-UDD-F

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°	33.1	33.3	33.5	33.3	32.9	32.4	32.0	31.6
90°	12.7	13.5	14.2	14.9	15.4	15.8	16.3	16.8
92.5°	12.7	13.5	14.2	14.8	15.0	15.2	15.5	15.6
95°	12.7	13.5	14.2	14.7	14.7	14.7	14.7	14.7
97.5°	25.6	21.2	16.9	14.7	14.7	14.7	14.7	14.7
100°	75.3	52.1	29.0	17.2	16.5	15.9	15.3	14.7
102.5°	146.3	141.9	137.5	130.1	119.5	109.0	98.4	87.8
105°	208.1	208.1	208.1	208.0	207.9	207.7	207.5	207.5
107.5°	263.5	263.5	263.5	263.3	262.9	262.4	261.9	261.5
110°	299.4	298.9	298.4	298.3	298.4	298.6	298.8	298.9



TEST NUMBER: P333470-830

CATALOG NUMBER: S125DIW-S1270D770U830-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	334.9	334.3	333.7	333.3	333.1	332.9	332.6	332.4
115°	388.4	387.9	387.2	386.4	385.5	384.6	383.6	382.7
117.5°	440.2	439.4	438.6	438.0	437.5	437.2	436.8	436.4
120°	473.6	473.3	473.0	472.4	471.6	470.9	470.1	469.3
122.5°	505.4	505.1	504.8	504.2	503.3	502.4	501.5	500.6
125°	551.9	551.3	550.6	550.1	549.6	549.1	548.7	548.3
127.5°	594.4	594.0	593.7	593.0	591.7	590.6	589.5	588.3
130°	622.1	621.6	621.1	620.5	619.7	619.0	618.1	617.4
132.5°	647.9	647.8	647.7	647.3	646.5	645.7	645.0	644.2
135°	685.9	685.6	685.3	684.7	683.7	682.8	681.8	680.9
137.5°	721.3	721.3	721.4	721.0	720.2	719.4	718.6	717.8
140°	743.0	743.3	743.7	743.3	742.3	741.5	740.6	739.6
142.5°	764.3	764.4	764.4	764.0	763.1	762.1	761.2	760.3
145°	794.4	794.6	794.7	794.3	793.3	792.4	791.5	790.6
147.5°	820.1	820.3	820.5	820.0	819.0	817.8	816.7	815.6
150°	836.6	836.9	837.3	836.8	835.5	834.2	833.0	831.8
152.5°	851.1	851.4	851.8	851.3	850.2	849.1	848.0	846.9
155°	871.1	871.6	872.0	871.7	870.4	869.2	868.0	866.7
157.5°	887.7	888.2	888.6	888.3	887.0	885.8	884.6	883.4
160°	898.0	898.6	899.2	898.9	897.7	896.5	895.2	893.9
162.5°	907.4	908.2	909.2	908.9	907.6	906.2	904.8	903.4
165°	919.5	920.5	921.4	921.2	920.0	918.8	917.6	916.2
167.5°	928.7	929.8	930.9	930.9	929.4	928.0	926.6	925.2
170°	933.4	934.7	935.9	935.9	934.4	933.0	931.6	930.3
172.5°	937.1	938.2	939.3	939.1	937.8	936.4	935.0	933.6
175°	941.1	942.4	943.6	943.5	942.2	940.8	939.3	937.9
177.5°	942.7	943.6	944.5	944.4	943.4	942.4	941.4	940.5
180°	942.2	942.2	942.2	942.2	942.2	942.2	942.2	942.2

(END OF REPORT)