

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: P333465-830

Luminaire Tested: **S125DIW-S1270D470U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333465-830
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-S1270D470U830-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6366.6 lumens
Efficiency: N/A
Efficacy: 121.5 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

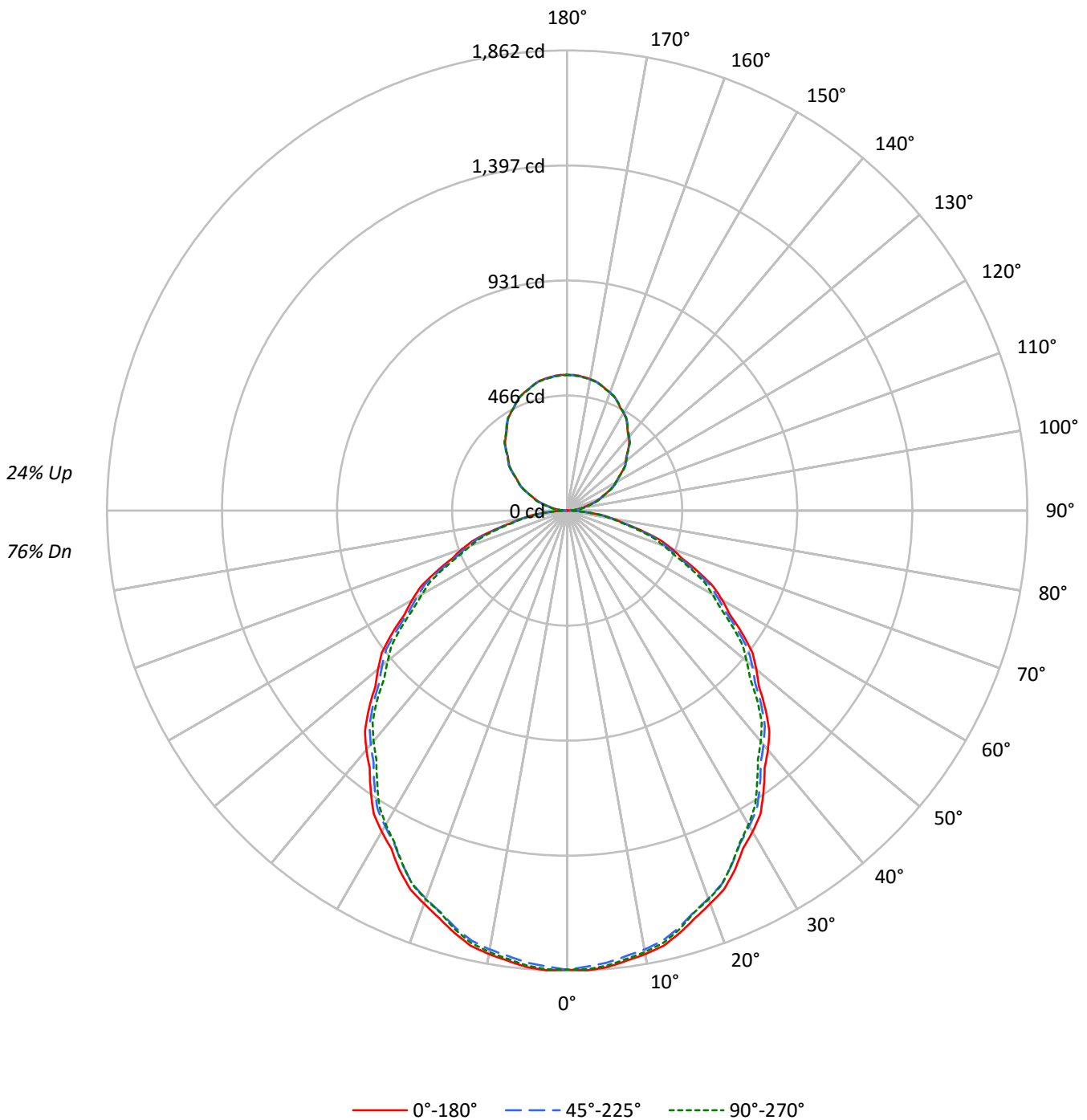
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80	76
1	104	99	95	91	98	94	91	87	86	83	80	78	76	74	71	69	67	64
2	94	86	80	74	89	82	77	72	75	71	67	68	65	61	62	59	57	53
3	86	76	68	62	82	73	66	60	66	61	56	60	56	52	55	51	48	45
4	79	67	59	53	75	64	57	51	59	53	48	54	49	45	49	45	42	39
5	72	60	52	45	69	58	50	44	53	46	41	48	43	39	44	40	36	34
6	67	54	46	40	63	52	44	38	48	41	36	44	38	34	40	36	32	29
7	62	49	41	35	59	47	39	34	43	37	32	40	34	30	37	32	28	26
8	58	45	37	31	55	43	35	30	40	33	29	37	31	27	34	29	26	23
9	54	41	33	28	51	39	32	27	37	30	26	34	28	24	31	27	23	21
10	50	38	30	25	48	36	29	25	34	28	23	31	26	22	29	24	21	19

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	2.8
10°-20°	494.7	7.8
20°-30°	730.5	11.5
30°-40°	852.4	13.4
40°-50°	856.1	13.4
50°-60°	751.5	11.8
60°-70°	559.9	8.8
70°-80°	320.2	5.0
80°-90°	94.3	1.5
90°-100°	36.8	0.6
100°-110°	108.6	1.7
110°-120°	183.9	2.9
120°-130°	242.0	3.8
130°-140°	271.2	4.3
140°-150°	265.8	4.2
150°-160°	223.2	3.5
160°-170°	148.4	2.3
170°-180°	51.9	0.8
0°-30°	1400.3	22.0
0°-40°	2252.7	35.4
0°-60°	3860.3	60.6
0°-90°	4834.7	75.9
90°-120°	329.3	5.2
90°-150°	1108.3	17.4
90°-180°	1532.0	24.1
0°-180°	6366.6	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°	0	4	7	9	10	6
95°	28	29	33	36	37	30
105°	97	100	102	105	106	104
115°	184	186	187	186	186	182
125°	269	271	272	271	270	241
135°	349	352	352	352	351	269
145°	423	425	426	426	425	265
155°	484	484	485	486	484	223
165°	527	526	526	528	526	149
175°	548	546	546	548	546	52
180°	549	549	549	549	549	



TEST NUMBER: P333465-830

CATALOG NUMBER: S125DIW-S1270D470U830-4F0-1E-UDD-F1

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	32.0	32.1	32.3	32.4	32.4	32.3	32.2	32.0	32.0	32.0
90°	0.5	1.2	2.0	2.7	3.5	4.1	4.8	5.5	6.1	6.9	7.4
92.5°	10.4	10.8	11.4	12.0	12.4	13.1	13.9	14.8	15.6	16.4	17.1
95°	27.8	28.0	28.2	28.4	28.6	29.1	30.1	31.0	32.0	32.9	33.6
97.5°	46.1	46.2	46.3	46.4	46.5	47.1	48.4	49.8	51.1	52.4	53.0
100°	59.9	59.9	59.9	59.9	59.9	60.4	61.6	62.9	64.1	65.3	66.3
102.5°	74.5	74.8	75.3	75.7	76.1	76.5	77.2	77.8	78.4	79.0	79.9
105°	97.4	97.8	98.3	98.8	99.3	99.8	100.4	100.9	101.5	102.1	102.6
107.5°	122.7	123.2	123.7	124.1	124.6	125.1	125.5	125.9	126.4	126.8	127.1
110°	140.2	140.6	141.1	141.6	142.0	142.4	142.7	143.0	143.3	143.5	143.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	157.9	158.2	158.3	158.6	158.9	159.2	159.6	159.9	160.2	160.6	160.8
115°	184.1	184.5	184.9	185.3	185.7	186.0	186.2	186.3	186.5	186.7	186.6
117.5°	210.5	210.6	210.8	210.9	211.1	211.3	211.5	211.6	211.8	212.0	212.1
120°	226.9	227.3	227.8	228.3	228.8	229.0	229.1	229.2	229.3	229.4	229.4
122.5°	244.6	244.8	245.0	245.2	245.2	245.5	245.7	246.0	246.3	246.5	246.4
125°	268.7	269.3	269.8	270.4	271.0	271.4	271.5	271.5	271.6	271.7	271.5
127.5°	294.4	294.6	295.0	295.3	295.7	295.9	296.0	296.1	296.1	296.3	296.2
130°	309.7	310.2	310.7	311.1	311.6	312.0	312.2	312.4	312.5	312.7	312.6
132.5°	325.1	325.8	326.7	327.4	328.2	328.6	328.6	328.5	328.5	328.4	328.3
135°	349.4	350.1	350.6	351.2	351.8	352.0	352.1	352.2	352.3	352.4	352.4
137.5°	372.3	372.9	373.4	374.0	374.6	374.9	375.1	375.3	375.5	375.8	375.9
140°	387.0	387.5	388.0	388.4	388.9	389.4	389.6	389.9	390.2	390.5	390.7
142.5°	401.7	402.1	402.6	402.9	403.3	403.7	404.1	404.4	404.8	405.2	405.3
145°	423.4	423.8	424.1	424.5	424.9	425.2	425.5	425.7	426.0	426.3	426.3
147.5°	443.4	443.6	443.7	443.9	444.2	444.4	444.6	444.9	445.1	445.4	445.5
150°	456.7	456.6	456.5	456.4	456.3	456.5	456.9	457.2	457.6	458.0	458.0
152.5°	467.6	467.8	467.9	468.0	468.2	468.3	468.4	468.6	468.7	468.9	469.1
155°	484.5	484.5	484.5	484.5	484.5	484.5	484.6	484.7	484.7	484.8	485.2
157.5°	499.5	499.3	499.1	498.9	498.6	498.6	498.7	498.8	498.9	499.0	499.4
160°	508.4	508.1	507.7	507.5	507.2	507.1	507.2	507.3	507.4	507.5	507.9
162.5°	516.2	516.0	515.9	515.6	515.4	515.3	515.3	515.3	515.4	515.4	515.9
165°	526.7	526.5	526.3	526.1	525.9	525.9	526.0	526.1	526.2	526.3	526.7
167.5°	535.6	535.3	534.9	534.5	534.1	534.0	534.0	534.0	534.0	534.0	534.5
170°	540.4	540.0	539.6	539.2	538.9	538.7	538.7	538.7	538.7	538.7	539.2
172.5°	543.8	543.5	543.1	542.7	542.3	542.2	542.2	542.2	542.2	542.2	542.7
175°	547.7	547.2	546.9	546.5	546.1	545.9	545.9	545.9	545.9	545.9	546.5
177.5°	549.6	549.3	549.0	548.7	548.4	548.2	548.2	548.1	548.0	547.9	548.4
180°	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9



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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°	32.1	32.2	32.3	32.1	31.7	31.2	30.7	30.3
90°	7.8	8.3	8.8	9.1	9.4	9.7	10.0	10.3
92.5°	17.6	18.3	18.9	19.3	19.5	19.7	20.0	20.2
95°	34.2	34.9	35.5	36.0	36.2	36.4	36.6	36.8
97.5°	53.6	54.3	54.9	55.2	55.3	55.5	55.6	55.7
100°	67.1	68.0	68.8	69.3	69.5	69.7	69.8	70.0
102.5°	80.9	81.8	82.8	83.3	83.6	83.9	84.2	84.5
105°	103.2	103.8	104.3	104.8	105.1	105.4	105.7	105.9
107.5°	127.3	127.6	127.9	128.1	128.1	128.0	128.0	128.0
110°	144.1	144.4	144.7	144.8	144.7	144.6	144.5	144.4



TEST NUMBER: P333465-830

CATALOG NUMBER: S125DIW-S1270D470U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	160.9	161.0	161.2	161.2	161.0	160.8	160.6	160.4
115°	186.5	186.4	186.3	186.2	186.2	186.1	186.0	185.9
117.5°	212.2	212.2	212.3	212.2	211.8	211.4	210.9	210.6
120°	229.4	229.4	229.4	229.2	228.8	228.5	228.1	227.7
122.5°	246.4	246.3	246.2	246.0	245.7	245.4	245.1	244.8
125°	271.4	271.2	271.0	270.8	270.7	270.6	270.5	270.4
127.5°	296.1	296.1	296.0	295.8	295.6	295.4	295.2	295.0
130°	312.5	312.5	312.4	312.2	312.0	311.8	311.6	311.4
132.5°	328.2	328.1	328.0	327.9	327.6	327.3	327.1	326.8
135°	352.4	352.4	352.4	352.2	351.9	351.5	351.1	350.7
137.5°	376.0	376.1	376.3	376.1	375.6	375.1	374.6	374.1
140°	390.9	391.1	391.2	391.1	390.6	390.1	389.6	389.2
142.5°	405.4	405.5	405.6	405.4	404.9	404.4	404.0	403.5
145°	426.3	426.3	426.3	426.2	425.9	425.7	425.4	425.1
147.5°	445.7	446.0	446.2	446.0	445.4	444.7	444.0	443.5
150°	458.0	458.0	458.0	457.9	457.7	457.5	457.3	457.1
152.5°	469.4	469.6	469.8	469.8	469.4	469.1	468.7	468.3
155°	485.6	486.0	486.4	486.4	485.9	485.4	484.9	484.5
157.5°	499.7	500.1	500.5	500.4	499.7	499.1	498.5	497.9
160°	508.3	508.7	509.1	509.0	508.5	508.0	507.6	507.1
162.5°	516.3	516.7	517.2	517.2	516.6	516.0	515.5	514.9
165°	527.1	527.4	527.8	527.7	527.2	526.6	526.0	525.5
167.5°	535.1	535.6	536.2	536.2	535.6	535.0	534.4	533.9
170°	539.8	540.4	541.0	540.9	540.3	539.6	538.9	538.3
172.5°	543.3	543.8	544.4	544.4	543.8	543.2	542.6	542.1
175°	547.1	547.7	548.3	548.2	547.5	546.9	546.2	545.5
177.5°	548.8	549.3	549.8	549.7	549.2	548.7	548.1	547.6
180°	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9

(END OF REPORT)