

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: P333488-830

Luminaire Tested: **S125DIW-S1270D1560U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333488-830
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-S1270D1560U830-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10715.2 lumens
Efficiency: N/A
Efficacy: 129.3 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

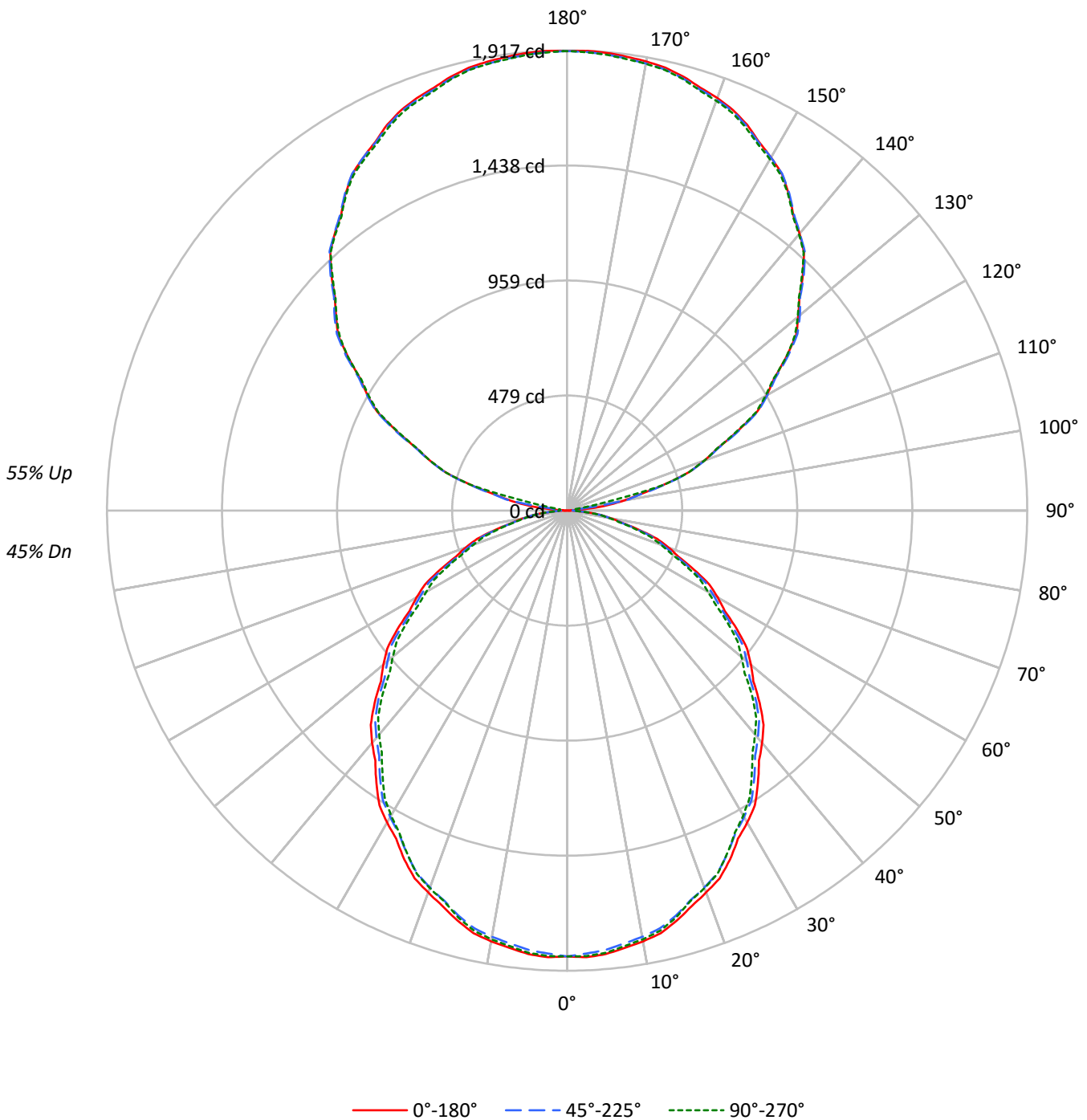
Input Watts (W): 82.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333488-830

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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	106	106	106	106	97	97	97	97	81	81	81		66	66	66		52	52	52	45
1	97	92	88	85	88	85	81	78	71	68	66		58	56	54		46	44	43	38
2	88	81	74	69	80	74	69	64	62	58	55		50	48	45		40	38	37	32
3	80	71	63	58	73	65	59	54	54	50	46		45	41	38		35	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39		40	36	33		32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34		36	32	28		29	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29		32	28	25		26	23	21	18
7	57	45	37	32	52	42	35	30	35	30	26		29	25	22		24	21	18	16
8	53	41	33	28	49	38	31	26	32	27	23		27	23	20		22	19	16	14
9	49	37	30	25	45	35	28	23	29	24	20		25	20	18		20	17	15	13
10	46	34	27	22	42	32	25	21	27	22	18		23	19	16		19	16	13	11

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	1.6
10°-20°	494.7	4.6
20°-30°	730.5	6.8
30°-40°	852.4	8.0
40°-50°	856.1	8.0
50°-60°	751.5	7.0
60°-70°	559.9	5.2
70°-80°	320.2	3.0
80°-90°	97.1	0.9
90°-100°	69.6	0.6
100°-110°	428.7	4.0
110°-120°	777.5	7.3
120°-130°	997.8	9.3
130°-140°	1073.2	10.0
140°-150°	1007.4	9.4
150°-160°	814.9	7.6
160°-170°	527.0	4.9
170°-180°	181.8	1.7
0°-30°	1400.3	13.1
0°-40°	2252.7	21.0
0°-60°	3860.3	36.0
0°-90°	4837.5	45.1
90°-120°	1275.7	11.9
90°-150°	4354.1	40.6
90°-180°	5878.0	54.9
0°-180°	10715.2	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	13	23	30	34	8
95°	81	74	23	29	30	103
105°	417	422	423	423	421	442
115°	783	790	792	786	778	776
125°	1114	1123	1124	1118	1114	994
135°	1389	1397	1395	1392	1383	1070
145°	1610	1613	1613	1614	1606	1007
155°	1774	1766	1768	1771	1761	817
165°	1872	1864	1864	1872	1862	528
175°	1914	1906	1907	1917	1906	182
180°	1914	1914	1914	1914	1914	



TEST NUMBER: P333488-830

CATALOG NUMBER: S125DIW-S1270D1560U830-4F0-1E-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°	32.0	32.5	33.0	33.6	34.0	34.4	34.6	34.8	35.0	35.1	35.4
90°	1.4	4.0	6.5	9.0	11.5	13.9	16.1	18.3	20.5	22.7	24.3
92.5°	21.9	20.1	18.3	16.6	14.8	14.9	16.9	18.8	20.7	22.7	24.3
95°	80.9	79.9	79.0	78.0	77.1	70.6	58.6	46.7	34.7	22.7	24.3
97.5°	168.8	170.5	172.2	174.0	175.7	164.7	140.9	117.3	93.5	69.8	60.9
100°	237.0	237.9	238.8	239.8	240.7	241.9	243.1	244.4	245.6	246.9	199.9
102.5°	306.2	307.4	308.6	309.8	310.9	312.0	312.7	313.5	314.2	315.0	306.1
105°	417.2	418.4	419.7	420.9	422.2	422.8	422.8	422.8	422.8	422.8	422.8
107.5°	532.3	532.3	532.3	532.3	532.3	532.6	533.3	534.0	534.6	535.2	535.3
110°	607.3	607.3	607.3	607.3	607.3	607.6	608.2	608.9	609.4	610.1	609.2



TEST NUMBER: P333488-830

CATALOG NUMBER: S125DIW-S1270D1560U830-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	677.7	678.4	679.2	680.0	680.7	681.3	681.6	682.0	682.4	682.8	681.6
115°	783.3	784.8	786.4	788.0	789.5	790.4	790.8	791.1	791.5	791.7	790.4
117.5°	892.5	892.4	892.3	892.3	892.2	892.8	894.0	895.1	896.4	897.6	895.9
120°	960.5	960.3	960.0	959.6	959.3	959.6	960.5	961.5	962.4	963.4	962.8
122.5°	1020.8	1021.9	1023.1	1024.4	1025.5	1026.3	1026.8	1027.2	1027.7	1028.1	1027.5
125°	1113.8	1116.0	1118.2	1120.4	1122.7	1123.7	1123.7	1123.7	1123.7	1123.7	1122.5
127.5°	1202.6	1204.2	1205.8	1207.4	1208.9	1209.7	1209.5	1209.3	1209.1	1208.9	1208.2
130°	1257.1	1258.7	1260.3	1261.9	1263.4	1264.3	1264.7	1265.0	1265.3	1265.6	1264.7
132.5°	1311.5	1313.4	1315.2	1317.1	1318.9	1319.5	1318.8	1318.1	1317.4	1316.7	1316.5
135°	1389.0	1390.9	1392.9	1394.8	1396.7	1397.2	1396.7	1396.0	1395.3	1394.8	1394.1
137.5°	1460.3	1461.9	1463.6	1465.2	1466.9	1467.4	1466.8	1466.2	1465.7	1465.1	1465.3
140°	1506.8	1507.5	1508.1	1508.7	1509.4	1509.5	1509.2	1508.9	1508.5	1508.3	1508.9
142.5°	1548.8	1549.2	1549.5	1549.9	1550.3	1550.8	1551.2	1551.6	1552.1	1552.6	1552.7
145°	1610.4	1611.0	1611.7	1612.3	1613.0	1613.3	1613.3	1613.3	1613.3	1613.3	1613.5
147.5°	1664.3	1664.2	1664.1	1664.0	1663.8	1664.0	1664.3	1664.7	1665.1	1665.5	1665.8
150°	1698.4	1697.7	1697.1	1696.5	1695.8	1695.8	1696.5	1697.1	1697.7	1698.4	1699.0
152.5°	1731.3	1729.9	1728.5	1727.1	1725.7	1725.3	1726.0	1726.6	1727.3	1727.9	1728.5
155°	1773.6	1771.7	1769.8	1767.9	1766.0	1765.4	1766.0	1766.6	1767.3	1767.9	1768.9
157.5°	1806.2	1805.1	1803.9	1802.8	1801.7	1801.1	1801.2	1801.3	1801.3	1801.4	1802.4
160°	1828.9	1827.0	1825.1	1823.3	1821.4	1820.5	1820.9	1821.2	1821.5	1821.8	1823.1
162.5°	1847.1	1845.2	1843.3	1841.4	1839.5	1838.7	1839.0	1839.4	1839.7	1839.9	1841.7
165°	1871.5	1869.6	1867.6	1865.8	1863.9	1863.1	1863.4	1863.8	1864.1	1864.3	1866.2
167.5°	1889.6	1887.7	1885.7	1883.8	1881.8	1881.0	1881.3	1881.6	1882.0	1882.3	1884.5
170°	1899.9	1897.6	1895.5	1893.2	1891.0	1890.1	1890.4	1890.7	1891.0	1891.3	1893.9
172.5°	1906.7	1904.5	1902.2	1900.1	1897.8	1897.1	1897.6	1898.2	1898.8	1899.3	1901.6
175°	1914.0	1912.1	1910.3	1908.4	1906.5	1905.7	1906.0	1906.3	1906.7	1907.0	1909.5
177.5°	1917.4	1915.9	1914.4	1912.9	1911.4	1910.7	1911.0	1911.3	1911.5	1911.8	1913.5
180°	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0



TEST NUMBER: P333488-830

CATALOG NUMBER: S125DIW-S1270D1560U830-4F0-1E-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°	35.7	36.1	36.4	36.4	36.0	35.7	35.3	35.1
90°	25.8	27.4	29.0	30.3	31.2	32.1	33.1	34.0
92.5°	25.8	27.4	29.0	30.0	30.4	30.9	31.4	31.8
95°	25.8	27.4	29.0	29.8	29.8	29.8	29.8	29.8
97.5°	52.0	43.2	34.2	29.8	29.8	29.8	29.8	29.8
100°	152.9	105.9	59.0	34.9	33.6	32.3	31.1	29.8
102.5°	297.2	288.3	279.5	264.3	242.8	221.4	199.9	178.5
105°	422.8	422.8	422.8	422.6	422.4	422.1	421.7	421.4
107.5°	535.4	535.4	535.5	535.0	534.0	533.1	532.2	531.2
110°	608.2	607.3	606.3	606.1	606.3	606.6	607.0	607.3



TEST NUMBER: P333488-830

CATALOG NUMBER: S125DIW-S1270D1560U830-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	680.3	679.2	678.0	677.1	676.7	676.3	675.8	675.3
115°	789.2	788.0	786.6	785.1	783.3	781.3	779.4	777.5
117.5°	894.3	892.7	891.0	889.8	889.0	888.2	887.3	886.5
120°	962.1	961.5	960.9	959.8	958.2	956.6	955.1	953.5
122.5°	1026.8	1026.2	1025.6	1024.4	1022.6	1020.7	1018.9	1017.0
125°	1121.2	1119.9	1118.7	1117.6	1116.6	1115.7	1114.7	1113.8
127.5°	1207.5	1206.8	1206.1	1204.6	1202.2	1200.0	1197.6	1195.2
130°	1263.8	1262.8	1261.9	1260.6	1259.0	1257.4	1255.8	1254.2
132.5°	1316.4	1316.2	1316.0	1315.0	1313.5	1311.9	1310.3	1308.7
135°	1393.5	1392.9	1392.2	1390.9	1389.0	1387.1	1385.3	1383.4
137.5°	1465.4	1465.5	1465.7	1464.9	1463.2	1461.6	1459.9	1458.3
140°	1509.5	1510.1	1510.8	1510.1	1508.3	1506.4	1504.5	1502.6
142.5°	1552.7	1552.9	1553.0	1552.2	1550.2	1548.3	1546.4	1544.5
145°	1613.9	1614.2	1614.5	1613.7	1611.8	1610.0	1608.1	1606.2
147.5°	1666.2	1666.6	1667.0	1666.0	1663.8	1661.5	1659.3	1657.0
150°	1699.6	1700.3	1700.9	1700.0	1697.4	1694.9	1692.4	1689.9
152.5°	1729.2	1729.8	1730.4	1729.6	1727.3	1725.0	1722.8	1720.5
155°	1769.8	1770.8	1771.7	1770.8	1768.4	1765.9	1763.3	1760.8
157.5°	1803.4	1804.4	1805.4	1804.7	1802.1	1799.6	1797.1	1794.6
160°	1824.3	1825.6	1826.8	1826.3	1823.7	1821.2	1818.6	1816.2
162.5°	1843.5	1845.3	1847.0	1846.5	1843.8	1841.0	1838.2	1835.4
165°	1868.1	1870.1	1872.0	1871.6	1869.2	1866.6	1864.1	1861.5
167.5°	1886.8	1889.0	1891.3	1891.0	1888.2	1885.4	1882.5	1879.7
170°	1896.4	1898.9	1901.4	1901.3	1898.5	1895.6	1892.7	1889.9
172.5°	1903.8	1906.1	1908.4	1908.1	1905.3	1902.4	1899.6	1896.8
175°	1911.9	1914.5	1917.0	1916.8	1914.0	1911.2	1908.4	1905.5
177.5°	1915.3	1917.0	1918.8	1918.7	1916.7	1914.7	1912.6	1910.6
180°	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0

(END OF REPORT)