

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: P333738-830

Luminaire Tested: **S125RDIW-S1270D1560U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333738-830
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: S125RDIW-S1270D1560U830-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1560 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10478.2 lumens
Efficiency: N/A
Efficacy: 126.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

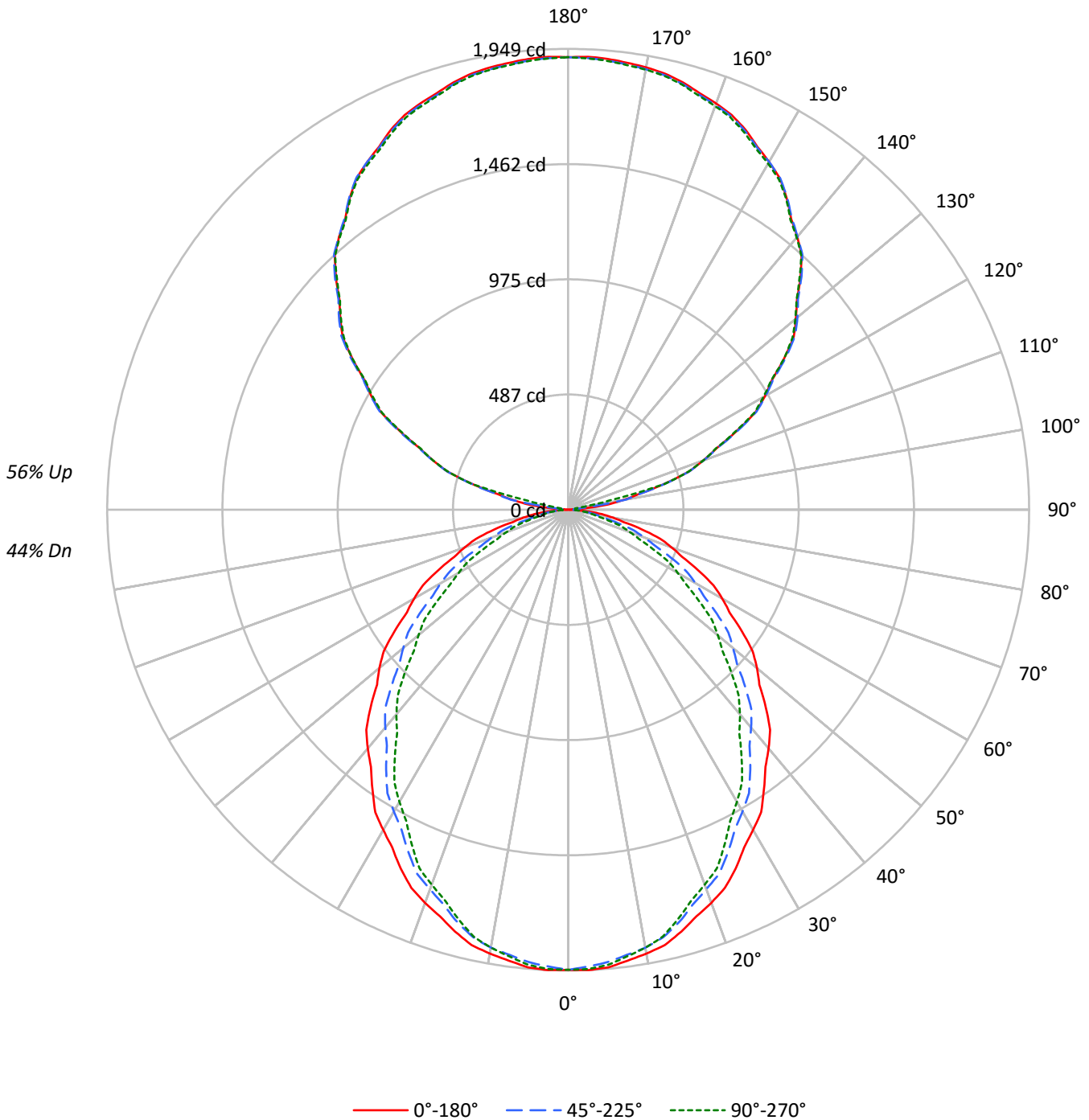
Input Watts (W): 82.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	92	89	85	88	85	82	79	70	68	66	57	56	54	45	44	43	37
2	88	81	75	70	80	74	69	65	62	58	55	50	48	45	40	38	37	32
3	80	71	64	58	73	65	59	54	55	50	46	45	41	39	35	33	31	27
4	74	63	55	49	67	58	51	46	49	44	40	40	36	33	32	29	27	23
5	68	56	48	42	62	52	45	40	44	38	34	36	32	29	29	26	24	20
6	62	50	43	37	57	47	40	34	39	34	30	32	28	25	26	23	21	18
7	58	46	38	32	53	42	35	30	36	30	26	30	25	22	24	21	19	16
8	53	41	34	29	49	38	32	27	32	27	23	27	23	20	22	19	17	14
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	20	17	15	13
10	46	35	28	23	43	32	26	21	27	22	19	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12566	12566	12566
5°	12595	12452	12528
10°	12499	12336	12336
15°	12351	12085	11987
20°	12160	11736	11595
25°	11938	11393	11142
30°	11660	10992	10641
35°	11378	10578	10080
40°	11113	10146	9528
45°	10791	9664	8925
50°	10468	9139	8298
55°	10094	8637	7629
60°	9719	8029	6909
65°	9274	7321	6085
70°	8769	6437	5246
75°	8067	5425	4362
80°	7107	4262	3663
85°	5995	3483	3268



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.0	1.7
10°-20°	511.3	4.9
20°-30°	741.4	7.1
30°-40°	845.0	8.1
40°-50°	823.6	7.9
50°-60°	693.3	6.6
60°-70°	486.0	4.6
70°-80°	249.8	2.4
80°-90°	67.1	0.6
90°-100°	69.6	0.7
100°-110°	428.7	4.1
110°-120°	777.5	7.4
120°-130°	997.8	9.5
130°-140°	1073.2	10.2
140°-150°	1007.4	9.6
150°-160°	814.9	7.8
160°-170°	527.0	5.0
170°-180°	181.8	1.7
0°-30°	1435.7	13.7
0°-40°	2280.6	21.8
0°-60°	3797.6	36.2
0°-90°	4600.5	43.9
90°-120°	1275.7	12.2
90°-150°	4354.1	41.6
90°-180°	5878.0	56.1
0°-180°	10478.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1946	1946	1946	1946	1946	
5°	1943	1936	1921	1934	1932	184
15°	1847	1837	1808	1805	1793	520
25°	1675	1651	1599	1580	1564	770
35°	1443	1406	1342	1300	1278	903
45°	1182	1137	1058	1001	977	911
55°	896	847	767	703	678	802
65°	607	555	479	422	398	601
75°	323	278	217	186	175	342
85°	81	55	47	46	44	91
90°	1	13	23	30	34	7
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	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7
2.5°	1949.2	1948.4	1947.6	1946.8	1946.1	1944.4	1941.7	1939.1	1936.5	1933.9	1936.5
5°	1942.8	1941.4	1940.1	1938.8	1937.5	1935.0	1931.5	1927.9	1924.3	1920.7	1923.9
7.5°	1923.6	1922.4	1921.2	1919.9	1918.6	1915.9	1911.6	1907.2	1903.0	1898.7	1900.9
10°	1906.0	1905.0	1904.0	1903.1	1902.1	1899.3	1894.7	1890.2	1885.6	1881.0	1882.0
12.5°	1886.0	1884.8	1883.5	1882.3	1881.0	1877.4	1871.2	1865.1	1858.9	1852.8	1853.5
15°	1847.2	1845.2	1843.3	1841.4	1839.4	1834.9	1828.1	1821.3	1814.4	1807.5	1807.2
17.5°	1803.4	1800.4	1797.4	1794.4	1791.4	1785.6	1777.0	1768.3	1759.7	1751.1	1749.5
20°	1769.3	1766.0	1762.7	1759.5	1756.2	1749.4	1739.0	1728.5	1718.1	1707.6	1706.0
22.5°	1731.7	1728.4	1725.1	1721.9	1718.6	1711.6	1700.5	1689.6	1678.6	1667.6	1664.4
25°	1675.3	1670.4	1665.5	1660.6	1655.7	1647.2	1635.1	1623.1	1610.9	1598.8	1594.6
27.5°	1610.6	1604.7	1598.7	1592.8	1586.9	1577.4	1564.4	1551.5	1538.6	1525.7	1519.8
30°	1563.6	1557.4	1551.1	1545.0	1538.8	1528.8	1515.0	1501.4	1487.6	1473.9	1466.4
32.5°	1517.8	1510.5	1503.3	1496.0	1488.7	1478.1	1464.1	1450.2	1436.2	1422.2	1413.9
35°	1443.1	1435.2	1427.4	1419.6	1411.7	1400.4	1385.7	1371.1	1356.4	1341.7	1332.2
37.5°	1369.9	1360.4	1350.9	1341.3	1331.7	1319.4	1304.3	1289.1	1273.9	1258.8	1247.5
40°	1318.1	1308.3	1298.5	1288.7	1279.0	1266.2	1250.6	1234.9	1219.2	1203.5	1191.2
42.5°	1264.1	1254.1	1244.0	1233.9	1223.9	1210.7	1194.6	1178.4	1162.2	1145.9	1134.1
45°	1181.5	1172.1	1162.5	1153.1	1143.6	1129.9	1111.9	1094.0	1076.0	1058.1	1045.0
47.5°	1096.0	1086.0	1076.0	1066.0	1056.0	1042.0	1023.9	1005.8	987.7	969.6	956.1
50°	1041.9	1031.1	1020.3	1009.6	998.8	984.1	965.4	946.9	928.2	909.6	895.9
52.5°	983.1	972.0	961.0	950.0	939.0	924.6	907.1	889.6	871.9	854.4	839.6
55°	896.5	886.0	875.5	865.1	854.6	840.3	822.0	803.7	785.4	767.1	752.4
57.5°	808.8	797.7	786.5	775.3	764.1	749.8	732.2	714.4	696.8	679.2	664.9
60°	752.4	740.9	729.5	718.1	706.7	692.1	674.5	656.9	639.2	621.6	607.3
62.5°	692.5	681.6	670.6	659.7	648.8	634.4	616.5	598.6	580.7	562.8	549.5
65°	606.9	595.8	584.8	573.6	562.5	548.3	531.0	513.7	496.3	479.1	466.0
67.5°	522.0	510.9	499.7	488.7	477.6	463.7	447.1	430.6	414.0	397.4	385.4
70°	464.4	453.3	442.1	431.0	420.0	406.2	389.9	373.6	357.2	340.9	330.8
72.5°	407.9	397.1	386.3	375.4	364.6	351.5	336.2	320.9	305.7	290.4	281.1
75°	323.3	313.5	303.7	293.9	284.1	272.4	258.6	245.0	231.2	217.4	210.3
77.5°	239.2	231.4	223.6	215.7	207.9	198.5	187.5	176.5	165.6	154.6	149.6
80°	191.1	183.2	175.4	167.5	159.7	151.2	142.0	132.9	123.8	114.6	111.7
82.5°	144.0	137.0	129.9	122.8	115.8	109.1	102.8	96.6	90.3	84.1	82.7
85°	80.9	74.9	69.1	63.2	57.3	53.5	51.9	50.3	48.6	47.0	46.7
87.5°	27.3	26.0	24.7	23.4	22.1	21.5	21.7	21.8	22.0	22.1	22.5
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



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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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7
2.5°	1939.1	1941.7	1944.4	1945.5	1945.3	1945.0	1944.7	1944.5
5°	1927.2	1930.5	1933.7	1935.0	1934.4	1933.7	1933.1	1932.4
7.5°	1903.2	1905.5	1907.8	1908.6	1907.8	1907.1	1906.4	1905.7
10°	1882.9	1884.0	1884.9	1884.9	1884.0	1882.9	1882.0	1881.0
12.5°	1854.3	1854.9	1855.7	1855.3	1853.8	1852.3	1850.8	1849.3
15°	1806.9	1806.6	1806.2	1804.6	1801.7	1798.7	1795.7	1792.8
17.5°	1747.9	1746.2	1744.6	1742.6	1740.1	1737.7	1735.3	1732.9
20°	1704.3	1702.7	1701.1	1698.7	1695.8	1692.9	1690.0	1687.1
22.5°	1661.2	1658.0	1654.8	1652.0	1649.6	1647.2	1644.7	1642.4
25°	1590.4	1586.1	1581.9	1577.9	1574.3	1570.7	1567.2	1563.6
27.5°	1513.8	1507.9	1501.9	1497.2	1493.7	1490.3	1486.8	1483.4
30°	1459.0	1451.4	1443.9	1438.7	1435.8	1432.8	1429.8	1426.9
32.5°	1405.6	1397.3	1389.0	1383.0	1379.3	1375.5	1371.9	1368.1
35°	1322.8	1313.2	1303.8	1296.8	1292.2	1287.6	1283.1	1278.5
37.5°	1236.1	1224.7	1213.3	1205.4	1201.0	1196.6	1192.1	1187.7
40°	1178.7	1166.3	1154.0	1145.8	1141.8	1137.9	1134.0	1130.1
42.5°	1122.2	1110.3	1098.4	1089.6	1083.8	1078.1	1072.3	1066.6
45°	1031.9	1018.9	1005.8	996.8	991.9	987.0	982.1	977.2
47.5°	942.7	929.3	915.8	906.3	900.9	895.5	890.0	884.7
50°	882.2	868.5	854.8	845.5	840.6	835.7	830.8	825.9
52.5°	824.8	810.1	795.3	785.5	780.6	775.7	770.8	765.9
55°	737.7	723.0	708.3	698.3	693.1	687.9	682.7	677.5
57.5°	650.4	636.1	621.7	612.3	607.6	602.9	598.3	593.7
60°	592.9	578.5	564.1	554.5	549.6	544.7	539.8	534.9
62.5°	536.2	522.8	509.5	500.4	495.5	490.6	485.7	480.8
65°	453.0	439.9	426.8	417.8	412.9	408.0	403.1	398.2
67.5°	373.4	361.5	349.6	341.6	337.7	333.8	329.9	325.9
70°	320.7	310.6	300.5	293.4	289.5	285.6	281.6	277.8
72.5°	271.7	262.4	253.0	247.0	244.4	241.9	239.2	236.6
75°	203.1	196.0	188.8	184.0	181.7	179.5	177.2	174.8
77.5°	144.5	139.5	134.5	131.1	129.4	127.7	126.0	124.3
80°	108.8	105.8	102.8	101.0	100.4	99.7	99.2	98.5
82.5°	81.3	79.9	78.6	77.7	77.3	76.9	76.5	76.2
85°	46.4	46.1	45.7	45.4	45.1	44.8	44.4	44.1
87.5°	22.8	23.1	23.5	23.6	23.5	23.4	23.4	23.3
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: P333738-830

CATALOG NUMBER: S125RDIW-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)