

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: P333633-830

Luminaire Tested: **S125RDIP-S1270D1035U830-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333633-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S1270D1035U830-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8098.9 lumens
Efficiency: N/A
Efficacy: 121.2 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

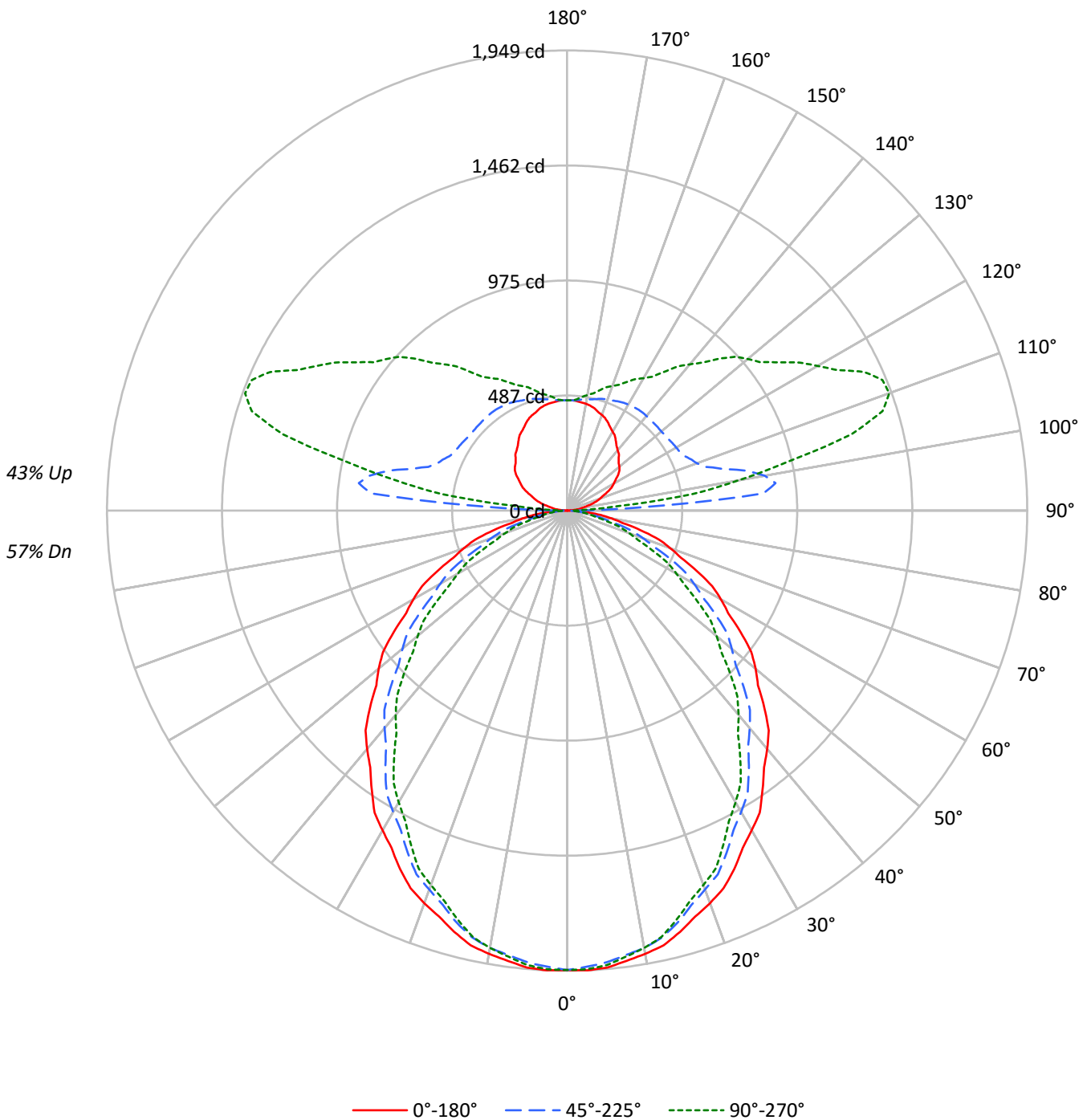
Input Watts (W): 66.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333633-830

CATALOG NUMBER: S125RDIP-S1270D1035U830-4F0-1E-UDD-F4

Luminous Intensity Polar Plot





TEST NUMBER: P333633-830

CATALOG NUMBER: S125RDIP-S1270D1035U830-4F0-1E-UDD-F4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	100	95	91	88	93	89	86	83	77	74	72	66	64	62	56	54	53	48
2	91	83	77	72	84	78	73	68	68	64	60	58	55	52	49	47	45	41
3	83	74	66	60	77	69	62	57	60	55	51	51	48	45	44	41	39	35
4	76	65	57	51	71	61	54	49	53	48	44	46	42	38	39	36	34	30
5	70	58	50	44	65	55	47	42	48	42	38	41	37	33	35	32	29	26
6	65	52	44	39	60	49	42	37	43	37	33	38	33	29	32	29	26	23
7	60	47	39	34	56	45	37	32	39	33	29	34	30	26	29	26	23	21
8	55	43	35	30	52	41	34	29	36	30	26	31	27	23	27	24	21	19
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19	17
10	48	36	29	24	45	34	28	23	30	25	21	27	22	19	23	20	17	15

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



TEST NUMBER: P333633-830

CATALOG NUMBER: S125RDIP-S1270D1035U830-4F0-1E-UDD-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.0	2.3
10°-20°	511.3	6.3
20°-30°	741.4	9.2
30°-40°	845.0	10.4
40°-50°	823.6	10.2
50°-60°	693.3	8.6
60°-70°	486.0	6.0
70°-80°	249.8	3.1
80°-90°	65.7	0.8
90°-100°	338.3	4.2
100°-110°	727.2	9.0
110°-120°	682.5	8.4
120°-130°	553.1	6.8
130°-140°	443.9	5.5
140°-150°	334.9	4.1
150°-160°	235.8	2.9
160°-170°	139.0	1.7
170°-180°	45.2	0.6
0°-30°	1435.7	17.7
0°-40°	2280.6	28.2
0°-60°	3797.6	46.9
0°-90°	4599.1	56.8
90°-120°	1747.9	21.6
90°-150°	3079.8	38.0
90°-180°	3500.0	43.2
0°-180°	8098.9	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	8	15	20	22	6
95°	31	92	834	378	221	33
105°	106	149	682	1343	1247	112
115°	190	229	548	1180	1389	187
125°	263	309	525	939	1094	234
135°	309	371	521	787	909	240
145°	359	412	523	652	717	225
155°	410	441	510	576	601	189
165°	448	460	489	519	527	126
175°	466	466	470	475	473	44
180°	467	467	467	467	467	



TEST NUMBER: P333633-830

CATALOG NUMBER: S125RDIP-S1270D1035U830-4F0-1E-UDD-F4

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°	27.2	25.5	24.1	22.7	21.2	20.5	20.5	20.6	20.5	20.6	20.8
90°	0.9	1.9	3.8	5.7	7.5	9.4	10.4	12.3	13.2	15.1	16.0
92.5°	11.5	13.9	21.9	33.5	49.7	77.2	128.6	214.7	308.2	303.3	245.5
95°	31.0	32.0	39.5	49.9	70.6	112.9	213.6	420.6	680.3	833.7	815.8
97.5°	51.6	52.7	58.0	68.3	86.9	117.4	184.1	335.7	607.5	890.3	1032.2
100°	65.9	67.8	71.5	81.8	99.7	128.0	182.6	304.8	542.0	849.6	1084.9
102.5°	81.7	82.8	85.8	96.9	113.3	140.7	189.4	292.1	492.3	778.2	1053.3
105°	106.3	106.3	111.0	120.5	135.5	161.8	203.2	287.0	444.1	682.1	952.3
107.5°	130.4	132.3	136.8	144.5	160.1	183.9	223.9	295.7	423.8	616.1	849.0
110°	147.7	149.6	153.4	161.8	176.0	200.4	239.0	303.9	417.7	585.2	790.3



TEST NUMBER: P333633-830

CATALOG NUMBER: S125RDIP-S1270D1035U830-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	165.0	166.9	169.9	178.4	192.5	216.2	253.3	314.4	417.7	567.2	746.7
115°	190.1	191.9	194.7	203.2	217.4	240.9	275.7	330.3	420.6	547.6	699.1
117.5°	212.6	215.5	218.5	227.0	243.0	265.7	298.7	348.4	426.8	538.0	670.7
120°	227.7	230.5	234.3	242.8	258.7	282.3	315.2	360.3	432.8	533.5	654.9
122.5°	243.6	245.5	248.5	257.0	274.6	298.1	331.0	373.9	438.1	529.7	641.3
125°	263.4	265.3	270.0	278.5	296.4	320.8	351.9	392.4	447.0	525.0	622.9
127.5°	279.1	281.9	287.9	298.7	317.6	342.1	372.0	409.3	456.9	522.7	606.0
130°	288.9	291.7	299.3	311.4	331.2	355.6	384.8	420.6	463.0	521.2	594.7
132.5°	296.4	299.9	309.0	322.7	343.3	367.7	396.9	430.4	469.7	521.2	585.6
135°	308.6	312.4	323.7	338.7	358.4	383.9	413.0	444.1	478.9	521.2	574.9
137.5°	324.0	326.9	337.4	352.5	371.8	398.0	424.5	454.3	487.4	522.4	565.3
140°	333.1	335.9	347.2	362.2	380.1	405.6	432.8	461.1	491.2	523.1	560.8
142.5°	343.7	345.7	356.2	371.3	388.4	412.3	438.1	464.8	493.4	523.9	557.0
145°	359.4	361.3	370.7	383.9	400.9	422.4	447.0	470.4	495.9	523.1	551.4
147.5°	376.0	377.1	385.2	397.5	412.1	431.1	452.6	473.8	496.8	520.7	545.5
150°	385.8	387.7	394.3	406.5	419.6	435.6	456.4	476.1	496.8	518.4	541.0
152.5°	396.3	397.5	403.3	414.0	426.4	440.9	460.1	477.6	496.1	515.5	535.7
155°	410.2	410.2	415.8	425.3	434.7	447.9	463.8	478.9	494.0	510.0	526.9
157.5°	422.6	422.4	427.0	435.1	443.4	453.4	467.0	479.8	491.5	504.4	518.6
160°	430.9	430.0	433.8	440.4	447.9	456.4	468.5	479.8	489.3	500.6	511.9
162.5°	437.7	436.8	440.5	446.4	452.4	459.4	470.0	479.1	487.0	496.1	505.9
165°	447.9	446.0	448.8	453.6	457.3	463.0	470.4	478.0	483.6	489.3	496.8
167.5°	454.7	453.7	455.4	458.1	460.7	464.2	470.4	475.7	478.3	482.7	488.0
170°	459.2	458.3	459.2	461.1	463.0	465.7	470.4	474.2	476.1	478.9	482.7
172.5°	462.2	460.5	461.5	463.3	464.4	465.7	469.7	472.7	473.1	474.4	477.4
175°	465.7	463.8	464.8	465.7	465.7	465.7	468.5	470.4	469.5	469.5	470.4
177.5°	467.4	465.9	465.9	466.7	465.9	465.9	467.4	468.2	466.7	466.7	467.4
180°	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7



TEST NUMBER: P333633-830

CATALOG NUMBER: S125RDIP-S1270D1035U830-4F0-1E-UDD-F4

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°	21.0	21.2	21.4	21.7	21.4	21.1	21.0	20.8
90°	17.0	17.9	18.9	20.7	20.7	20.7	21.7	21.7
92.5°	166.7	121.0	91.0	77.2	65.1	62.9	61.5	60.0
95°	676.6	533.5	417.7	338.7	271.9	243.7	236.2	221.1
97.5°	1007.6	907.2	794.5	684.6	626.5	573.7	546.5	534.4
100°	1157.3	1111.3	1014.3	916.4	851.5	783.8	748.9	734.0
102.5°	1207.8	1236.1	1189.7	1123.4	1054.0	1005.9	968.0	956.7
105°	1178.0	1306.9	1348.3	1337.9	1307.9	1276.9	1258.0	1246.7
107.5°	1071.9	1243.9	1350.2	1399.3	1414.6	1414.4	1408.2	1400.6
110°	993.6	1172.3	1305.0	1385.1	1427.4	1445.2	1451.8	1451.8



TEST NUMBER: P333633-830

CATALOG NUMBER: S125RDIP-S1270D1035U830-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	931.9	1101.6	1235.8	1330.1	1391.9	1422.7	1439.1	1445.8
115°	854.3	1000.2	1129.1	1231.6	1305.0	1350.2	1376.6	1388.8
117.5°	804.3	930.0	1041.0	1135.1	1208.5	1255.2	1281.3	1288.8
120°	777.2	890.1	993.6	1076.4	1146.0	1191.2	1216.6	1224.2
122.5°	756.9	861.5	953.7	1031.2	1093.3	1134.7	1160.2	1167.0
125°	727.4	823.3	905.1	972.9	1025.6	1064.1	1084.9	1094.3
127.5°	697.2	786.8	863.2	926.6	974.4	1008.4	1028.0	1032.2
130°	678.4	761.2	834.6	895.8	942.8	973.8	992.7	998.3
132.5°	659.6	737.1	803.7	862.6	909.6	940.8	958.0	964.4
135°	635.1	700.0	760.3	813.9	855.3	886.4	903.2	908.9
137.5°	614.4	666.9	717.0	762.5	799.6	827.8	843.5	849.6
140°	603.1	647.3	690.6	730.2	765.0	789.5	803.5	808.2
142.5°	593.3	630.7	668.1	702.3	731.9	752.5	765.9	769.9
145°	580.5	609.7	638.9	664.3	686.8	702.9	713.2	717.0
147.5°	568.5	592.2	614.6	633.8	651.7	664.5	670.5	672.2
150°	561.8	582.4	600.3	617.3	631.3	642.6	646.4	647.3
152.5°	554.2	572.6	589.0	602.2	614.1	623.1	626.8	627.7
155°	542.9	558.0	571.2	581.5	590.9	597.5	600.3	601.2
157.5°	531.6	544.0	554.2	562.3	569.7	575.0	577.7	577.5
160°	524.1	533.5	542.9	549.5	556.1	560.8	562.7	561.8
162.5°	515.9	524.4	532.3	538.2	543.3	547.2	547.6	547.4
165°	504.4	511.0	516.6	521.2	525.0	526.9	526.9	526.9
167.5°	493.4	497.8	502.1	505.5	507.4	509.1	508.3	508.1
170°	487.4	490.2	493.0	494.9	496.8	497.8	497.8	496.8
172.5°	480.6	483.4	485.5	486.6	487.0	488.7	487.2	486.3
175°	473.3	473.3	475.1	475.1	475.1	476.1	474.2	473.3
177.5°	468.2	468.9	468.9	468.9	468.2	468.9	466.7	466.7
180°	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7

(END OF REPORT)