

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: P333638-830

Luminaire Tested: **S125RDIP-S1270D1205U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333638-830  
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: S125RDIP-S1270D1205U830-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8526.9 lumens  
Efficiency: N/A  
Efficacy: 118.9 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

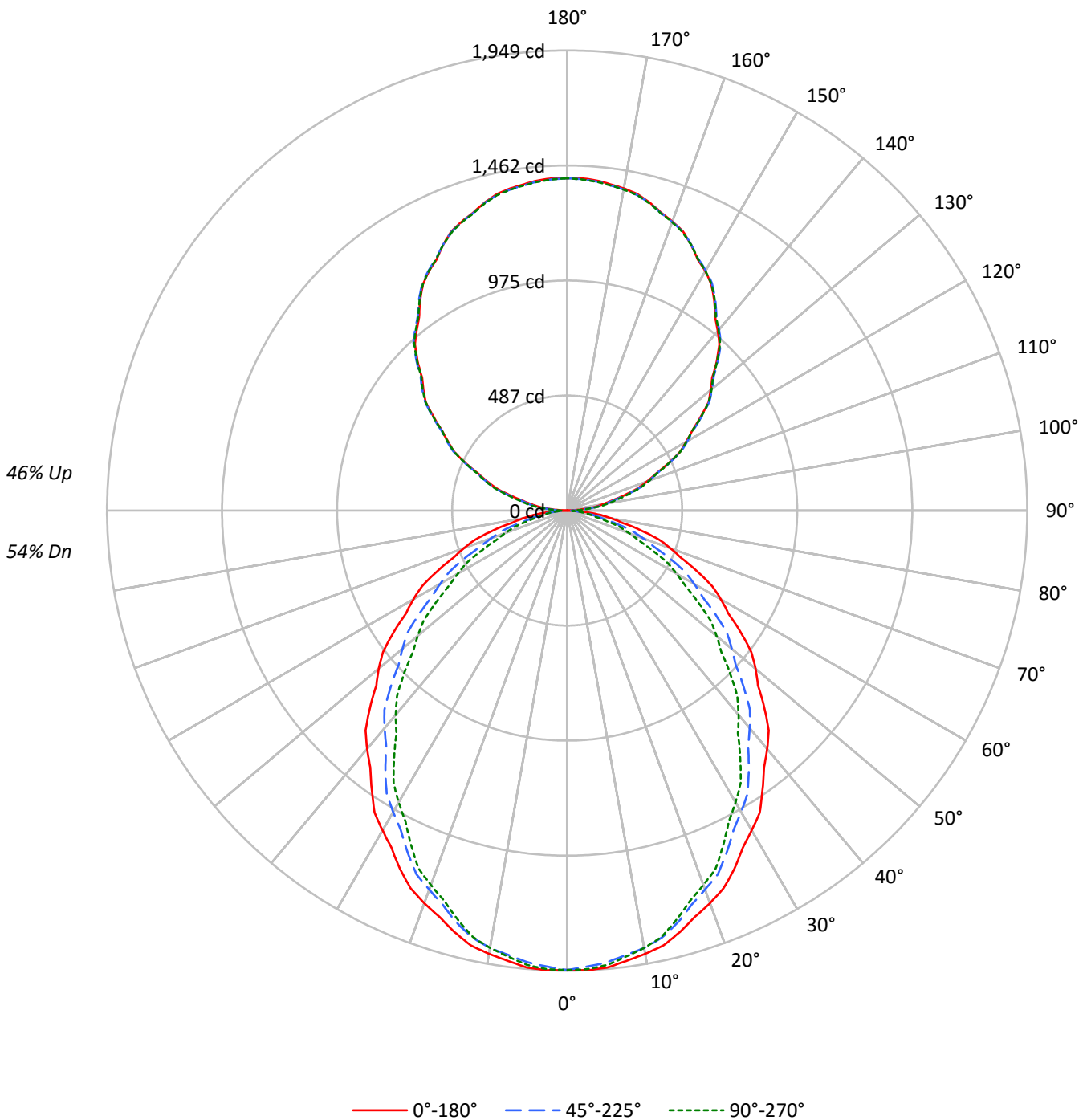
Input Watts (W): 71.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54
1	99	95	91	87	92	88	85	82	75	73	71	64	62	61	53	52	51	46
2	90	83	77	72	83	77	72	67	66	62	59	56	53	51	47	45	43	39
3	82	73	66	60	76	68	62	57	59	54	50	50	46	43	42	39	37	33
4	76	65	57	51	70	60	54	48	52	47	43	45	41	37	38	35	32	29
5	69	58	50	44	64	54	47	41	47	41	37	40	36	32	34	31	28	25
6	64	52	44	38	59	49	41	36	42	37	32	36	32	29	31	27	25	22
7	59	47	39	34	55	44	37	32	38	33	29	33	29	25	28	25	22	20
8	55	43	35	30	51	40	33	28	35	29	25	30	26	23	26	22	20	18
9	51	39	32	27	48	37	30	25	32	27	23	28	24	20	24	21	18	16
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	22	19	16	14

**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	2.1
10°-20°	511.3	6.0
20°-30°	741.4	8.7
30°-40°	845.0	9.9
40°-50°	823.6	9.7
50°-60°	693.3	8.1
60°-70°	486.0	5.7
70°-80°	249.8	2.9
80°-90°	66.2	0.8
90°-100°	94.3	1.1
100°-110°	278.4	3.3
110°-120°	471.5	5.5
120°-130°	620.5	7.3
130°-140°	695.3	8.2
140°-150°	681.4	8.0
150°-160°	572.4	6.7
160°-170°	380.5	4.5
170°-180°	133.1	1.6
0°-30°	1435.7	16.8
0°-40°	2280.6	26.7
0°-60°	3797.6	44.5
0°-90°	4599.6	53.9
90°-120°	844.1	9.9
90°-150°	2841.4	33.3
90°-180°	3927.0	46.1
0°-180°	8526.9	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	10	18	23	26	8
95°	71	74	84	92	94	76
105°	250	255	262	268	272	267
115°	472	476	479	478	476	467
125°	689	695	697	694	693	617
135°	896	902	904	903	899	690
145°	1085	1090	1093	1093	1090	678
155°	1242	1242	1243	1247	1242	572
165°	1350	1348	1349	1353	1347	381
175°	1404	1400	1400	1406	1399	133
180°	1407	1407	1407	1407	1407	



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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°	27.2	25.8	24.4	22.9	21.5	20.8	20.9	21.0	21.0	21.1	21.4
90°	1.1	3.0	5.0	7.0	8.9	10.7	12.4	14.1	15.8	17.5	18.8
92.5°	26.5	27.9	29.2	30.6	32.0	33.6	35.8	37.9	40.0	42.0	43.6
95°	71.2	71.6	72.2	72.7	73.1	74.6	77.0	79.5	81.9	84.4	86.1
97.5°	118.3	118.5	118.7	118.9	119.0	120.8	124.2	127.5	130.9	134.3	135.9
100°	153.4	153.4	153.4	153.4	153.4	155.0	158.1	161.3	164.4	167.6	169.8
102.5°	191.1	192.0	192.9	194.0	194.9	196.2	197.8	199.4	201.0	202.6	205.0
105°	249.7	250.9	252.1	253.4	254.6	255.9	257.4	258.8	260.3	261.7	263.3
107.5°	314.5	315.8	317.0	318.2	319.4	320.6	321.7	322.8	324.0	325.1	325.8
110°	359.3	360.4	361.7	362.9	364.1	365.0	365.8	366.6	367.3	368.0	368.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	404.8	405.5	406.0	406.7	407.4	408.1	409.1	410.0	410.9	411.8	412.2
115°	472.0	473.1	474.0	474.9	476.0	476.6	477.2	477.7	478.2	478.6	478.4
117.5°	539.5	540.0	540.5	540.8	541.3	541.7	542.2	542.6	543.0	543.5	543.7
120°	581.5	582.8	584.0	585.2	586.4	587.2	587.4	587.7	588.0	588.1	588.1
122.5°	627.2	627.6	628.0	628.5	628.9	629.4	630.1	630.7	631.3	632.0	631.8
125°	688.9	690.4	691.8	693.3	694.7	695.6	695.9	696.1	696.4	696.6	696.1
127.5°	754.7	755.4	756.3	757.1	758.0	758.6	758.8	759.1	759.4	759.7	759.4
130°	794.1	795.3	796.5	797.8	798.9	799.8	800.3	800.8	801.3	801.7	801.5
132.5°	833.5	835.5	837.5	839.5	841.5	842.4	842.4	842.3	842.2	842.1	841.8
135°	896.0	897.4	898.9	900.3	901.8	902.7	902.9	903.1	903.3	903.6	903.6
137.5°	954.6	956.0	957.4	958.8	960.3	961.3	961.8	962.3	962.9	963.4	963.7
140°	992.3	993.5	994.8	996.0	997.2	998.2	998.9	999.7	1000.3	1001.1	1001.5
142.5°	1030.0	1031.0	1032.1	1033.0	1034.1	1035.1	1035.9	1036.9	1037.8	1038.8	1039.1
145°	1085.4	1086.4	1087.4	1088.4	1089.3	1090.1	1090.9	1091.7	1092.3	1093.1	1093.1
147.5°	1136.7	1137.2	1137.7	1138.3	1138.8	1139.3	1140.0	1140.6	1141.1	1141.7	1142.3
150°	1170.8	1170.6	1170.4	1170.2	1169.9	1170.3	1171.2	1172.1	1173.2	1174.1	1174.1
152.5°	1198.9	1199.2	1199.6	1200.0	1200.2	1200.6	1201.0	1201.4	1201.8	1202.2	1202.8
155°	1242.1	1242.1	1242.1	1242.1	1242.1	1242.2	1242.5	1242.6	1242.9	1243.1	1244.2
157.5°	1280.6	1280.1	1279.5	1279.0	1278.5	1278.3	1278.6	1278.8	1279.0	1279.3	1280.3
160°	1303.3	1302.7	1301.9	1301.2	1300.4	1300.2	1300.4	1300.7	1301.0	1301.2	1302.1
162.5°	1323.5	1323.0	1322.5	1321.9	1321.4	1321.2	1321.2	1321.3	1321.3	1321.4	1322.5
165°	1350.5	1350.0	1349.5	1349.1	1348.5	1348.4	1348.7	1348.9	1349.2	1349.3	1350.4
167.5°	1373.3	1372.2	1371.3	1370.4	1369.3	1368.9	1368.9	1368.9	1368.9	1368.9	1370.4
170°	1385.5	1384.6	1383.6	1382.6	1381.7	1381.1	1381.1	1381.1	1381.1	1381.1	1382.6
172.5°	1394.3	1393.4	1392.3	1391.4	1390.4	1389.9	1389.9	1389.9	1389.9	1389.9	1391.4
175°	1404.1	1403.2	1402.2	1401.2	1400.2	1399.8	1399.8	1399.8	1399.8	1399.8	1401.2
177.5°	1409.2	1408.4	1407.6	1406.8	1406.1	1405.6	1405.4	1405.2	1405.0	1404.8	1406.0
180°	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4



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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°	21.6	21.9	22.1	22.1	22.1	22.0	21.9	21.7
90°	20.0	21.2	22.4	23.4	24.1	24.8	25.5	26.3
92.5°	45.2	46.8	48.4	49.6	50.0	50.6	51.2	51.7
95°	87.8	89.4	91.1	92.3	92.7	93.2	93.7	94.2
97.5°	137.5	139.1	140.7	141.7	141.9	142.2	142.5	142.8
100°	171.9	174.2	176.3	177.7	178.1	178.6	179.2	179.6
102.5°	207.4	209.8	212.2	213.7	214.4	215.1	215.7	216.4
105°	264.7	266.2	267.6	268.7	269.5	270.1	270.9	271.6
107.5°	326.5	327.3	328.0	328.4	328.3	328.3	328.2	328.1
110°	369.5	370.2	370.9	371.2	370.9	370.7	370.4	370.2





TEST NUMBER: P333638-830

CATALOG NUMBER: S125RDIP-S1270D1205U830-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	412.6	412.8	413.2	413.1	412.7	412.3	411.8	411.4
115°	478.2	477.9	477.7	477.4	477.2	476.9	476.6	476.5
117.5°	543.8	544.0	544.2	543.8	542.9	542.0	540.9	540.0
120°	588.1	588.1	588.1	587.7	586.7	585.7	584.8	583.8
122.5°	631.6	631.4	631.2	630.7	629.9	629.1	628.4	627.6
125°	695.6	695.1	694.7	694.3	694.1	693.8	693.5	693.3
127.5°	759.2	758.9	758.7	758.4	757.9	757.3	756.9	756.4
130°	801.3	801.0	800.8	800.4	799.9	799.5	798.9	798.4
132.5°	841.6	841.3	841.0	840.7	839.9	839.2	838.6	837.9
135°	903.6	903.6	903.6	903.1	902.1	901.2	900.2	899.2
137.5°	964.0	964.3	964.6	964.1	962.9	961.7	960.5	959.2
140°	1002.0	1002.6	1003.1	1002.7	1001.5	1000.2	999.0	997.8
142.5°	1039.3	1039.6	1039.9	1039.4	1038.2	1037.1	1035.9	1034.6
145°	1093.1	1093.1	1093.1	1092.7	1092.0	1091.3	1090.5	1089.8
147.5°	1142.9	1143.5	1144.1	1143.5	1141.9	1140.2	1138.6	1136.9
150°	1174.1	1174.1	1174.1	1173.9	1173.4	1172.9	1172.4	1172.0
152.5°	1203.3	1203.9	1204.5	1204.4	1203.5	1202.6	1201.7	1200.9
155°	1245.1	1246.0	1247.1	1246.9	1245.7	1244.4	1243.3	1242.1
157.5°	1281.2	1282.2	1283.2	1282.9	1281.3	1279.7	1278.1	1276.5
160°	1303.2	1304.1	1305.0	1305.0	1303.7	1302.5	1301.3	1300.1
162.5°	1323.7	1324.8	1326.1	1325.9	1324.5	1323.0	1321.6	1320.2
165°	1351.3	1352.3	1353.3	1353.0	1351.6	1350.1	1348.7	1347.2
167.5°	1371.8	1373.3	1374.7	1374.7	1373.2	1371.7	1370.2	1368.7
170°	1384.0	1385.5	1387.0	1386.9	1385.2	1383.5	1381.8	1380.1
172.5°	1392.8	1394.3	1395.7	1395.7	1394.2	1392.7	1391.2	1389.7
175°	1402.7	1404.1	1405.6	1405.5	1403.8	1402.1	1400.3	1398.6
177.5°	1407.1	1408.3	1409.5	1409.4	1408.1	1406.7	1405.3	1403.9
180°	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4

(END OF REPORT)