

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: P333620-830

Luminaire Tested: **S125RDIP-S1270D590U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333620-830
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-S1270D590U830-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6526.0 lumens
Efficiency: N/A
Efficacy: 118.4 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: Semi-Direct

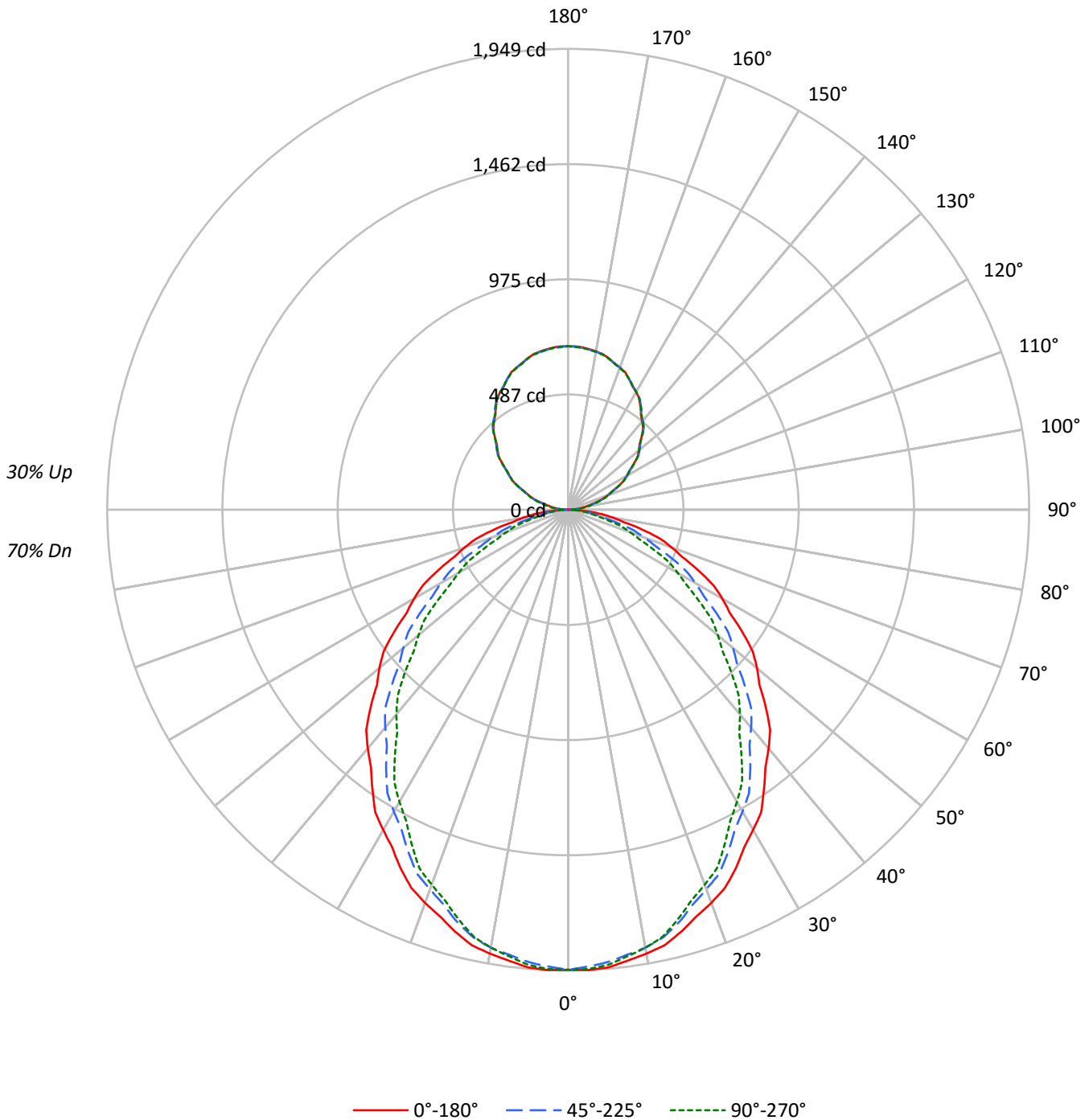
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75	70
1	103	98	94	91	97	93	90	87	84	81	79	75	73	71	67	65	64	60
2	94	86	80	75	88	82	76	72	74	69	66	66	63	60	59	57	54	51
3	86	76	69	63	81	72	66	60	65	60	56	59	55	51	53	49	47	43
4	79	68	60	53	74	64	57	51	58	52	48	53	48	44	47	43	40	37
5	72	61	52	46	68	58	50	45	52	46	41	47	42	38	43	39	35	33
6	67	55	46	40	63	52	44	39	47	41	36	43	38	34	39	35	31	29
7	62	49	41	36	59	47	40	34	43	37	32	39	34	30	36	31	28	26
8	58	45	37	32	55	43	36	31	39	33	29	36	31	27	33	28	25	23
9	54	41	34	28	51	40	32	28	36	30	26	33	28	24	30	26	23	21
10	50	38	31	26	48	36	30	25	34	28	24	31	26	22	28	24	21	19

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	2.8
10°-20°	511.3	7.8
20°-30°	741.4	11.4
30°-40°	845.0	12.9
40°-50°	823.6	12.6
50°-60°	693.3	10.6
60°-70°	486.0	7.4
70°-80°	249.8	3.8
80°-90°	64.6	1.0
90°-100°	46.3	0.7
100°-110°	136.7	2.1
110°-120°	231.5	3.5
120°-130°	304.6	4.7
130°-140°	341.3	5.2
140°-150°	334.5	5.1
150°-160°	281.0	4.3
160°-170°	186.8	2.9
170°-180°	65.4	1.0
0°-30°	1435.7	22.0
0°-40°	2280.6	34.9
0°-60°	3797.6	58.2
0°-90°	4598.0	70.5
90°-120°	414.4	6.3
90°-150°	1394.9	21.4
90°-180°	1928.0	29.5
0°-180°	6526.0	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	5	9	11	13	6
95°	35	36	41	45	46	37
105°	123	125	128	132	133	131
115°	232	234	235	234	234	229
125°	338	341	342	341	340	303
135°	440	443	444	444	442	339
145°	533	535	537	536	535	333
155°	610	610	610	612	610	281
165°	663	662	662	664	661	187
175°	689	687	687	690	687	65
180°	691	691	691	691	691	



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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°	27.1	25.5	23.8	22.2	20.6	19.7	19.6	19.5	19.4	19.3	19.5
90°	0.6	1.5	2.5	3.4	4.3	5.3	6.1	7.0	7.7	8.6	9.2
92.5°	13.0	13.7	14.3	15.0	15.6	16.5	17.5	18.6	19.6	20.6	21.4
95°	35.0	35.2	35.4	35.6	35.9	36.7	37.8	39.0	40.2	41.4	42.2
97.5°	58.1	58.2	58.2	58.3	58.4	59.3	61.0	62.6	64.3	65.9	66.7
100°	75.3	75.3	75.3	75.3	75.3	76.1	77.6	79.2	80.7	82.3	83.3
102.5°	93.8	94.3	94.7	95.2	95.7	96.3	97.1	97.9	98.7	99.4	100.7
105°	122.6	123.2	123.8	124.4	125.0	125.6	126.4	127.1	127.8	128.5	129.2
107.5°	154.4	155.0	155.6	156.2	156.8	157.4	158.0	158.4	159.0	159.6	159.9
110°	176.3	176.9	177.6	178.1	178.8	179.3	179.6	179.9	180.3	180.7	181.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	198.7	199.1	199.3	199.6	200.0	200.4	200.9	201.2	201.7	202.2	202.4
115°	231.8	232.2	232.7	233.2	233.7	234.0	234.2	234.5	234.7	235.0	234.9
117.5°	264.9	265.0	265.3	265.5	265.7	266.0	266.2	266.4	266.6	266.8	266.9
120°	285.5	286.2	286.7	287.3	287.9	288.2	288.4	288.5	288.6	288.7	288.7
122.5°	307.9	308.1	308.3	308.5	308.8	309.0	309.3	309.6	309.9	310.3	310.2
125°	338.2	338.9	339.6	340.4	341.1	341.5	341.6	341.8	341.9	342.0	341.8
127.5°	370.5	370.9	371.3	371.6	372.1	372.4	372.5	372.7	372.8	373.0	372.9
130°	389.8	390.4	391.1	391.6	392.2	392.7	392.9	393.1	393.3	393.6	393.5
132.5°	409.2	410.2	411.1	412.1	413.1	413.6	413.5	413.5	413.4	413.4	413.3
135°	439.8	440.5	441.3	442.0	442.7	443.1	443.3	443.4	443.5	443.6	443.6
137.5°	468.6	469.4	470.0	470.7	471.5	471.9	472.2	472.4	472.7	473.0	473.1
140°	487.1	487.8	488.3	488.9	489.6	490.0	490.4	490.8	491.1	491.4	491.7
142.5°	505.7	506.1	506.6	507.2	507.7	508.1	508.6	509.1	509.5	509.9	510.1
145°	532.8	533.3	533.9	534.3	534.8	535.2	535.6	535.9	536.3	536.6	536.6
147.5°	558.0	558.3	558.6	558.8	559.1	559.3	559.6	560.0	560.2	560.5	560.8
150°	574.8	574.7	574.6	574.5	574.3	574.5	575.0	575.4	575.9	576.4	576.4
152.5°	588.5	588.7	588.9	589.1	589.2	589.4	589.6	589.7	589.9	590.2	590.5
155°	609.7	609.7	609.7	609.7	609.7	609.8	609.9	610.0	610.2	610.3	610.8
157.5°	628.7	628.4	628.1	627.9	627.6	627.5	627.6	627.8	627.9	628.0	628.5
160°	639.9	639.5	639.1	638.8	638.4	638.3	638.4	638.6	638.7	638.8	639.2
162.5°	649.8	649.5	649.2	648.9	648.7	648.6	648.6	648.7	648.7	648.7	649.2
165°	663.0	662.7	662.5	662.2	662.0	661.9	662.0	662.2	662.3	662.4	662.9
167.5°	674.2	673.7	673.2	672.7	672.2	672.0	672.0	672.0	672.0	672.0	672.7
170°	680.1	679.7	679.2	678.7	678.3	678.1	678.1	678.1	678.1	678.1	678.7
172.5°	684.5	684.0	683.5	683.1	682.6	682.3	682.3	682.3	682.3	682.3	683.1
175°	689.3	688.8	688.3	687.9	687.4	687.2	687.2	687.2	687.2	687.2	687.9
177.5°	691.8	691.4	691.1	690.7	690.2	690.0	689.9	689.8	689.8	689.7	690.2
180°	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0



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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°	19.6	19.7	19.8	19.8	19.6	19.4	19.2	19.0
90°	9.8	10.4	11.0	11.5	11.9	12.2	12.5	12.9
92.5°	22.2	23.0	23.8	24.3	24.6	24.9	25.1	25.4
95°	43.1	43.9	44.8	45.2	45.5	45.8	46.0	46.3
97.5°	67.5	68.3	69.1	69.6	69.7	69.8	69.9	70.1
100°	84.5	85.5	86.5	87.2	87.5	87.8	87.9	88.2
102.5°	101.8	103.0	104.2	104.9	105.3	105.6	105.9	106.2
105°	130.0	130.6	131.4	132.0	132.2	132.6	133.0	133.4
107.5°	160.3	160.7	161.0	161.2	161.2	161.2	161.1	161.1
110°	181.3	181.7	182.1	182.2	182.1	182.0	181.8	181.7



TEST NUMBER: P333620-830

CATALOG NUMBER: S125RDIP-S1270D590U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	202.6	202.6	202.8	202.8	202.6	202.4	202.2	202.0
115°	234.7	234.6	234.5	234.4	234.2	234.1	234.0	233.9
117.5°	267.0	267.1	267.2	267.0	266.6	266.1	265.6	265.0
120°	288.7	288.7	288.7	288.5	288.0	287.6	287.1	286.6
122.5°	310.1	310.0	309.9	309.6	309.2	308.9	308.5	308.1
125°	341.5	341.3	341.0	340.8	340.7	340.6	340.4	340.4
127.5°	372.7	372.6	372.5	372.3	372.0	371.8	371.6	371.4
130°	393.3	393.2	393.1	392.9	392.7	392.5	392.2	392.0
132.5°	413.1	413.0	412.9	412.6	412.4	412.0	411.7	411.3
135°	443.6	443.6	443.6	443.4	442.9	442.4	442.0	441.5
137.5°	473.3	473.3	473.5	473.3	472.7	472.1	471.6	470.9
140°	491.9	492.2	492.4	492.2	491.6	491.1	490.4	489.8
142.5°	510.2	510.4	510.5	510.3	509.7	509.1	508.5	507.9
145°	536.6	536.6	536.6	536.4	536.1	535.7	535.4	535.0
147.5°	561.1	561.4	561.7	561.4	560.5	559.8	558.9	558.2
150°	576.4	576.4	576.4	576.3	576.1	575.8	575.6	575.3
152.5°	590.8	591.1	591.4	591.3	590.8	590.4	589.9	589.6
155°	611.2	611.7	612.2	612.2	611.5	611.0	610.3	609.7
157.5°	629.0	629.4	629.9	629.8	629.0	628.2	627.5	626.6
160°	639.7	640.2	640.6	640.6	640.1	639.4	638.9	638.3
162.5°	649.8	650.4	651.0	650.9	650.3	649.5	648.8	648.1
165°	663.4	663.8	664.4	664.2	663.5	662.8	662.0	661.4
167.5°	673.4	674.2	674.9	674.9	674.1	673.4	672.6	671.9
170°	679.5	680.1	680.9	680.8	680.0	679.2	678.3	677.5
172.5°	683.8	684.5	685.2	685.2	684.5	683.7	683.0	682.2
175°	688.6	689.3	690.0	689.9	689.2	688.3	687.5	686.6
177.5°	690.8	691.4	691.9	691.9	691.3	690.6	689.8	689.2
180°	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0

(END OF REPORT)