

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: P333613

Luminaire Tested: **S125RDIP-S1270D365U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333613
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: S125RDIP-S1270D365U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6342.0 lumens
Efficiency: N/A
Efficacy: 127.4 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

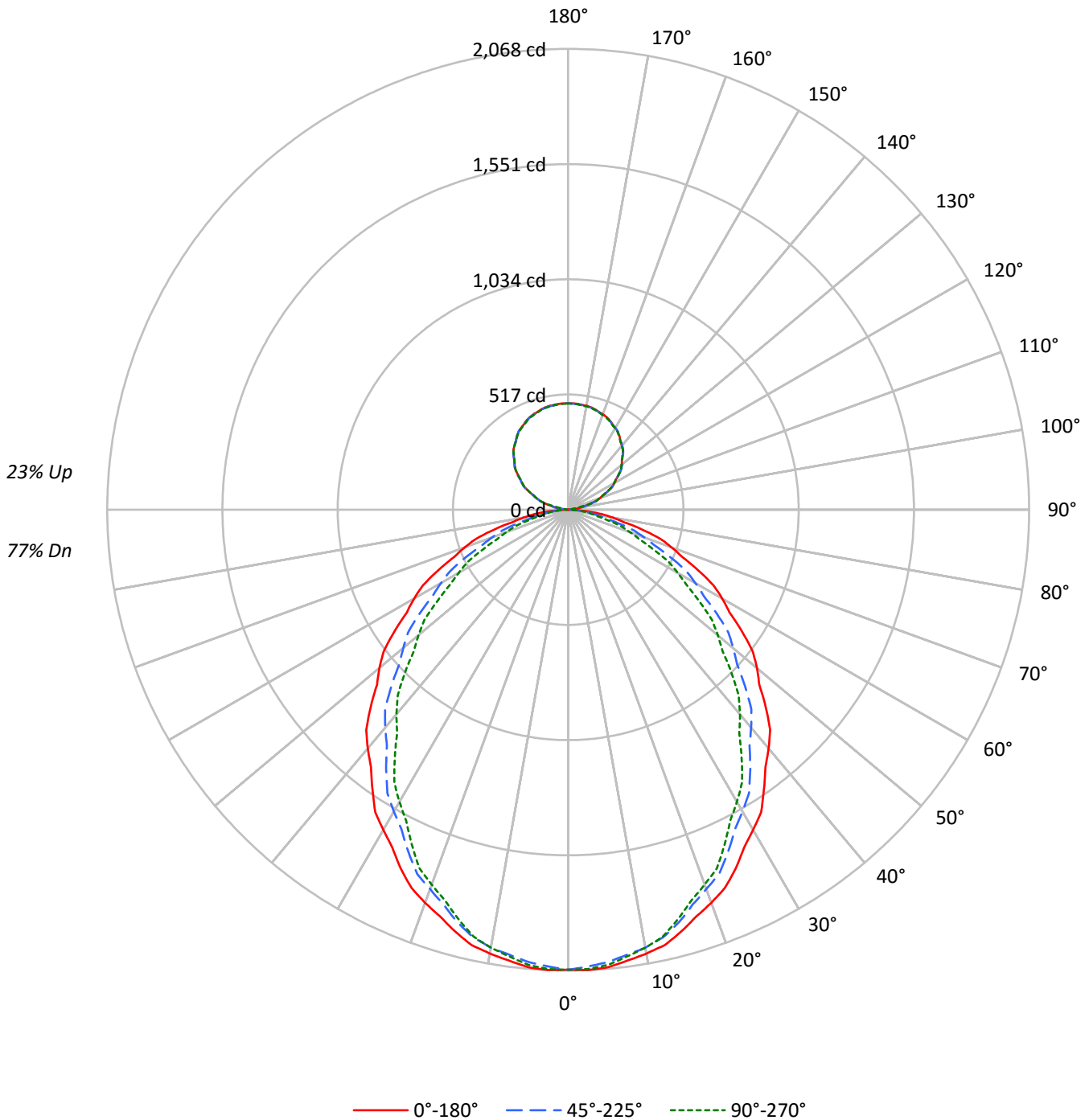
Input Watts (W): 49.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81	77
1	104	100	96	92	99	95	92	89	87	84	82	79	77	75	72	71	69	66
2	95	88	81	76	90	84	78	73	77	72	68	70	66	63	64	61	59	55
3	87	77	70	64	83	74	67	62	68	62	58	62	58	54	57	53	50	47
4	80	69	61	54	76	66	59	53	61	54	50	56	51	47	51	47	44	41
5	74	62	53	47	70	59	51	46	54	48	43	50	45	41	46	42	38	36
6	68	56	47	41	65	53	46	40	49	43	38	45	40	36	42	37	34	31
7	63	50	42	36	60	48	41	35	45	38	34	42	36	32	38	34	30	28
8	59	46	38	32	56	44	37	32	41	35	30	38	33	29	35	31	27	25
9	55	42	34	29	52	41	33	29	38	32	27	35	30	26	33	28	25	23
10	51	39	31	26	49	38	31	26	35	29	25	33	27	24	30	26	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13332	13332	13332
5°	13363	13211	13291
10°	13262	13088	13088
15°	13104	12822	12718
20°	12902	12451	12302
25°	12666	12088	11821
30°	12371	11662	11290
35°	12071	11223	10694
40°	11790	10765	10108
45°	11449	10253	9470
50°	11106	9697	8804
55°	10709	9164	8094
60°	10311	8519	7330
65°	9840	7768	6457
70°	9304	6830	5565
75°	8559	5757	4629
80°	7539	4523	3887
85°	6358	3698	3468



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.1	3.1
10°-20°	542.5	8.6
20°-30°	786.6	12.4
30°-40°	896.5	14.1
40°-50°	873.9	13.8
50°-60°	735.6	11.6
60°-70°	515.6	8.1
70°-80°	265.0	4.2
80°-90°	67.9	1.1
90°-100°	17.3	0.3
100°-110°	106.8	1.7
110°-120°	193.7	3.1
120°-130°	248.6	3.9
130°-140°	267.4	4.2
140°-150°	251.0	4.0
150°-160°	203.0	3.2
160°-170°	131.3	2.1
170°-180°	45.3	0.7
0°-30°	1523.2	24.0
0°-40°	2419.7	38.2
0°-60°	4029.1	63.5
0°-90°	4877.7	76.9
90°-120°	317.8	5.0
90°-150°	1084.7	17.1
90°-180°	1464.0	23.1
0°-180°	6342.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2064	2064	2064	2064	2064	
5°	2061	2054	2038	2052	2050	195
15°	1960	1949	1918	1915	1902	552
25°	1777	1752	1696	1676	1659	817
35°	1531	1492	1424	1380	1356	958
45°	1254	1206	1123	1062	1037	967
55°	951	899	814	746	719	850
65°	644	589	508	448	422	638
75°	343	295	231	198	186	363
85°	86	59	50	48	47	96
90°	0	3	6	7	8	5
95°	20	18	6	7	7	26
105°	104	105	105	105	105	110
115°	195	197	197	196	194	193
125°	278	280	280	279	278	248
135°	346	348	348	347	345	267
145°	401	402	402	402	400	251
155°	442	440	440	441	439	203
165°	466	464	464	466	464	132
175°	477	475	475	478	475	45
180°	477	477	477	477	477	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3
2.5°	2068.0	2067.2	2066.3	2065.5	2064.7	2062.9	2060.1	2057.3	2054.6	2051.8	2054.6
5°	2061.2	2059.8	2058.4	2057.0	2055.6	2053.0	2049.2	2045.4	2041.6	2037.8	2041.2
7.5°	2040.9	2039.6	2038.3	2036.9	2035.6	2032.7	2028.1	2023.5	2019.0	2014.4	2016.8
10°	2022.2	2021.1	2020.1	2019.1	2018.0	2015.1	2010.2	2005.4	2000.5	1995.7	1996.7
12.5°	2001.0	1999.7	1998.3	1997.0	1995.7	1991.8	1985.3	1978.8	1972.2	1965.7	1966.5
15°	1959.8	1957.7	1955.7	1953.6	1951.5	1946.8	1939.5	1932.3	1925.0	1917.7	1917.4
17.5°	1913.3	1910.2	1907.0	1903.8	1900.6	1894.4	1885.3	1876.1	1867.0	1857.8	1856.1
20°	1877.2	1873.7	1870.2	1866.8	1863.3	1856.0	1845.0	1833.9	1822.8	1811.7	1810.0
22.5°	1837.3	1833.8	1830.3	1826.9	1823.4	1815.9	1804.2	1792.6	1780.9	1769.3	1765.9
25°	1777.4	1772.2	1767.0	1761.8	1756.6	1747.6	1734.8	1722.0	1709.1	1696.3	1691.8
27.5°	1708.8	1702.5	1696.2	1689.9	1683.6	1673.6	1659.8	1646.1	1632.4	1618.7	1612.4
30°	1658.9	1652.3	1645.7	1639.2	1632.6	1622.0	1607.4	1592.9	1578.3	1563.8	1555.8
32.5°	1610.3	1602.6	1594.9	1587.2	1579.5	1568.2	1553.4	1538.6	1523.7	1508.9	1500.1
35°	1531.1	1522.7	1514.4	1506.1	1497.8	1485.8	1470.2	1454.7	1439.1	1423.5	1413.4
37.5°	1453.4	1443.3	1433.2	1423.1	1412.9	1399.8	1383.8	1367.7	1351.6	1335.5	1323.5
40°	1398.5	1388.1	1377.7	1367.3	1357.0	1343.4	1326.8	1310.2	1293.5	1276.9	1263.8
42.5°	1341.2	1330.5	1319.8	1309.1	1298.5	1284.5	1267.4	1250.2	1233.0	1215.8	1203.2
45°	1253.5	1243.5	1233.4	1223.4	1213.3	1198.8	1179.7	1160.7	1141.6	1122.6	1108.7
47.5°	1162.8	1152.2	1141.6	1131.0	1120.4	1105.5	1086.3	1067.1	1047.9	1028.7	1014.4
50°	1105.4	1094.0	1082.5	1071.1	1059.7	1044.1	1024.3	1004.6	984.8	965.1	950.5
52.5°	1043.0	1031.3	1019.6	1007.9	996.2	981.0	962.4	943.8	925.1	906.5	890.8
55°	951.1	940.0	928.9	917.8	906.7	891.5	872.1	852.7	833.3	813.9	798.3
57.5°	858.1	846.3	834.4	822.6	810.7	795.5	776.8	758.0	739.3	720.6	705.4
60°	798.3	786.1	774.0	761.9	749.8	734.3	715.6	696.9	678.2	659.5	644.3
62.5°	734.7	723.1	711.5	699.9	688.4	673.1	654.1	635.1	616.1	597.1	583.0
65°	643.9	632.1	620.4	608.6	596.8	581.7	563.4	545.0	526.6	508.3	494.4
67.5°	553.8	542.0	530.2	518.5	506.7	492.0	474.4	456.8	439.2	421.6	408.9
70°	492.7	480.9	469.1	457.3	445.6	431.0	413.7	396.4	379.0	361.7	351.0
72.5°	432.8	421.3	409.8	398.3	386.8	372.9	356.7	340.5	324.3	308.1	298.2
75°	343.0	332.6	322.2	311.8	301.4	289.0	274.4	259.9	245.3	230.7	223.1
77.5°	253.8	245.5	237.2	228.9	220.6	210.6	198.9	187.3	175.7	164.0	158.7
80°	202.7	194.4	186.1	177.7	169.4	160.4	150.7	141.0	131.3	121.6	118.5
82.5°	152.8	145.3	137.8	130.3	122.9	115.8	109.1	102.5	95.8	89.2	87.7
85°	85.8	79.5	73.3	67.0	60.8	56.8	55.1	53.4	51.6	49.9	49.5
87.5°	28.8	26.9	25.1	23.3	21.5	20.5	20.3	20.2	20.0	19.8	19.9
90°	0.4	1.0	1.6	2.2	2.9	3.5	4.0	4.6	5.1	5.7	6.0
92.5°	5.4	5.0	4.6	4.1	3.7	3.7	4.2	4.7	5.2	5.7	6.0
95°	20.1	19.9	19.7	19.4	19.2	17.6	14.6	11.6	8.6	5.7	6.0
97.5°	42.1	42.5	42.9	43.3	43.8	41.0	35.1	29.2	23.3	17.4	15.2
100°	59.0	59.3	59.5	59.7	60.0	60.2	60.6	60.9	61.2	61.5	49.8
102.5°	76.3	76.6	76.9	77.2	77.5	77.7	77.9	78.1	78.3	78.5	76.3
105°	103.9	104.2	104.6	104.9	105.2	105.3	105.3	105.3	105.3	105.3	105.3
107.5°	132.6	132.6	132.6	132.6	132.6	132.7	132.9	133.0	133.2	133.3	133.3
110°	151.3	151.3	151.3	151.3	151.3	151.4	151.5	151.7	151.8	152.0	151.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	168.8	169.0	169.2	169.4	169.6	169.7	169.8	169.9	170.0	170.1	169.8
115°	195.1	195.5	195.9	196.3	196.7	196.9	197.0	197.1	197.2	197.2	196.9
117.5°	222.3	222.3	222.3	222.3	222.3	222.4	222.7	223.0	223.3	223.6	223.2
120°	239.3	239.2	239.2	239.1	239.0	239.1	239.3	239.5	239.8	240.0	239.9
122.5°	254.3	254.6	254.9	255.2	255.5	255.7	255.8	255.9	256.0	256.1	256.0
125°	277.5	278.0	278.6	279.1	279.7	280.0	280.0	280.0	280.0	280.0	279.6
127.5°	299.6	300.0	300.4	300.8	301.2	301.4	301.3	301.3	301.2	301.2	301.0
130°	313.2	313.6	314.0	314.4	314.8	315.0	315.1	315.1	315.2	315.3	315.1
132.5°	326.8	327.2	327.7	328.1	328.6	328.7	328.6	328.4	328.2	328.0	328.0
135°	346.1	346.5	347.0	347.5	347.9	348.1	347.9	347.8	347.6	347.5	347.3
137.5°	363.8	364.2	364.6	365.0	365.4	365.6	365.4	365.3	365.1	365.0	365.0
140°	375.4	375.6	375.7	375.9	376.0	376.1	376.0	375.9	375.8	375.8	375.9
142.5°	385.9	386.0	386.1	386.1	386.2	386.3	386.5	386.6	386.7	386.8	386.8
145°	401.2	401.4	401.5	401.7	401.8	401.9	401.9	401.9	401.9	401.9	402.0
147.5°	414.6	414.6	414.6	414.5	414.5	414.5	414.6	414.7	414.8	414.9	415.0
150°	423.1	423.0	422.8	422.6	422.5	422.5	422.6	422.8	423.0	423.1	423.3
152.5°	431.3	431.0	430.6	430.3	429.9	429.8	430.0	430.2	430.3	430.5	430.6
155°	441.9	441.4	440.9	440.4	440.0	439.8	440.0	440.1	440.3	440.4	440.7
157.5°	450.0	449.7	449.4	449.1	448.9	448.7	448.7	448.8	448.8	448.8	449.0
160°	455.6	455.2	454.7	454.2	453.8	453.6	453.6	453.7	453.8	453.9	454.2
162.5°	460.2	459.7	459.2	458.7	458.3	458.1	458.2	458.2	458.3	458.4	458.8
165°	466.2	465.8	465.3	464.8	464.4	464.2	464.2	464.3	464.4	464.5	464.9
167.5°	470.8	470.3	469.8	469.3	468.8	468.6	468.7	468.8	468.9	468.9	469.5
170°	473.3	472.8	472.2	471.7	471.1	470.9	471.0	471.0	471.1	471.2	471.8
172.5°	475.0	474.5	473.9	473.4	472.8	472.6	472.7	472.9	473.0	473.2	473.7
175°	476.8	476.4	475.9	475.4	475.0	474.8	474.8	474.9	475.0	475.1	475.7
177.5°	477.7	477.3	476.9	476.6	476.2	476.0	476.1	476.2	476.2	476.3	476.7
180°	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3
2.5°	2057.3	2060.1	2062.9	2064.1	2063.9	2063.6	2063.3	2063.0
5°	2044.7	2048.2	2051.6	2053.0	2052.3	2051.6	2050.9	2050.2
7.5°	2019.2	2021.7	2024.1	2024.9	2024.1	2023.4	2022.6	2021.9
10°	1997.7	1998.8	1999.8	1999.8	1998.8	1997.7	1996.7	1995.7
12.5°	1967.3	1968.0	1968.8	1968.4	1966.8	1965.2	1963.6	1962.0
15°	1917.0	1916.7	1916.3	1914.6	1911.5	1908.4	1905.2	1902.1
17.5°	1854.4	1852.6	1850.9	1848.8	1846.2	1843.6	1841.1	1838.5
20°	1808.2	1806.5	1804.8	1802.3	1799.2	1796.1	1793.0	1789.9
22.5°	1762.5	1759.1	1755.7	1752.7	1750.2	1747.6	1745.0	1742.5
25°	1687.3	1682.8	1678.3	1674.1	1670.3	1666.5	1662.7	1658.9
27.5°	1606.1	1599.8	1593.5	1588.5	1584.8	1581.1	1577.4	1573.8
30°	1547.9	1539.9	1531.9	1526.4	1523.3	1520.1	1517.0	1513.9
32.5°	1491.3	1482.5	1473.7	1467.3	1463.4	1459.4	1455.5	1451.5
35°	1403.4	1393.3	1383.3	1375.8	1371.0	1366.1	1361.3	1356.4
37.5°	1311.4	1299.4	1287.3	1278.9	1274.2	1269.5	1264.8	1260.1
40°	1250.6	1237.4	1224.3	1215.6	1211.4	1207.3	1203.1	1199.0
42.5°	1190.6	1178.0	1165.4	1156.0	1149.9	1143.8	1137.7	1131.6
45°	1094.8	1081.0	1067.1	1057.6	1052.4	1047.2	1042.0	1036.8
47.5°	1000.2	985.9	971.6	961.6	955.8	950.1	944.3	938.6
50°	936.0	921.4	906.9	897.0	891.8	886.6	881.4	876.2
52.5°	875.1	859.5	843.8	833.4	828.2	823.0	817.8	812.6
55°	782.7	767.1	751.5	740.9	735.4	729.8	724.3	718.8
57.5°	690.1	674.9	659.6	649.6	644.6	639.7	634.8	629.9
60°	629.0	613.8	598.5	588.3	583.1	577.9	572.7	567.5
62.5°	568.9	554.7	540.6	530.9	525.7	520.5	515.3	510.1
65°	480.6	466.7	452.8	443.3	438.1	432.9	427.7	422.5
67.5°	396.2	383.5	370.9	362.4	358.3	354.1	350.0	345.8
70°	340.2	329.5	318.8	311.3	307.1	303.0	298.8	294.7
72.5°	288.3	278.4	268.4	262.1	259.3	256.6	253.8	251.0
75°	215.5	207.9	200.3	195.2	192.8	190.4	188.0	185.5
77.5°	153.3	148.0	142.7	139.1	137.3	135.5	133.7	131.9
80°	115.4	112.3	109.1	107.2	106.5	105.8	105.2	104.5
82.5°	86.3	84.8	83.4	82.4	82.0	81.6	81.2	80.8
85°	49.2	48.9	48.5	48.2	47.8	47.5	47.1	46.8
87.5°	20.0	20.1	20.2	20.1	19.8	19.6	19.4	19.2
90°	6.4	6.8	7.2	7.5	7.8	8.0	8.2	8.5
92.5°	6.4	6.8	7.2	7.5	7.6	7.7	7.8	7.9
95°	6.4	6.8	7.2	7.4	7.4	7.4	7.4	7.4
97.5°	13.0	10.7	8.5	7.4	7.4	7.4	7.4	7.4
100°	38.1	26.4	14.7	8.7	8.4	8.1	7.7	7.4
102.5°	74.0	71.8	69.6	65.8	60.5	55.2	49.8	44.5
105°	105.3	105.3	105.3	105.3	105.2	105.1	105.1	105.0
107.5°	133.4	133.4	133.4	133.3	133.1	132.8	132.6	132.3
110°	151.5	151.3	151.1	151.0	151.1	151.1	151.2	151.3



TEST NUMBER: P333613

CATALOG NUMBER: S125RDIP-S1270D365U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	169.5	169.2	168.9	168.7	168.6	168.5	168.4	168.3
115°	196.6	196.3	196.0	195.6	195.1	194.7	194.2	193.7
117.5°	222.8	222.4	222.0	221.7	221.5	221.3	221.1	220.9
120°	239.7	239.5	239.4	239.1	238.7	238.3	237.9	237.5
122.5°	255.8	255.7	255.5	255.2	254.7	254.3	253.8	253.4
125°	279.3	279.0	278.7	278.4	278.2	278.0	277.7	277.5
127.5°	300.8	300.6	300.5	300.1	299.5	298.9	298.4	297.8
130°	314.8	314.6	314.4	314.0	313.7	313.3	312.9	312.5
132.5°	327.9	327.9	327.8	327.6	327.2	326.8	326.4	326.1
135°	347.2	347.0	346.8	346.5	346.1	345.6	345.1	344.6
137.5°	365.1	365.1	365.1	364.9	364.5	364.1	363.7	363.3
140°	376.1	376.2	376.4	376.2	375.8	375.3	374.8	374.3
142.5°	386.8	386.9	386.9	386.7	386.2	385.7	385.3	384.8
145°	402.1	402.1	402.2	402.0	401.6	401.1	400.6	400.1
147.5°	415.1	415.2	415.3	415.1	414.5	413.9	413.4	412.8
150°	423.4	423.6	423.7	423.5	422.9	422.3	421.6	421.0
152.5°	430.8	430.9	431.1	430.9	430.3	429.8	429.2	428.6
155°	440.9	441.1	441.4	441.2	440.6	439.9	439.3	438.7
157.5°	449.3	449.5	449.8	449.6	449.0	448.3	447.7	447.1
160°	454.5	454.8	455.1	455.0	454.3	453.7	453.1	452.5
162.5°	459.3	459.7	460.2	460.0	459.3	458.6	458.0	457.3
165°	465.4	465.9	466.4	466.3	465.7	465.0	464.4	463.8
167.5°	470.1	470.6	471.2	471.1	470.4	469.7	469.0	468.3
170°	472.4	473.1	473.7	473.7	473.0	472.3	471.5	470.8
172.5°	474.3	474.9	475.4	475.4	474.7	473.9	473.2	472.5
175°	476.3	477.0	477.6	477.6	476.8	476.1	475.4	474.7
177.5°	477.2	477.6	478.0	478.0	477.5	477.0	476.5	476.0
180°	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8

(END OF REPORT)