

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: P333367-840

Luminaire Tested: **S125DIW-S375D1560U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333367-840
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: S125DIW-S375D1560U840-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6939.9 lumens
Efficiency: N/A
Efficacy: 130.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

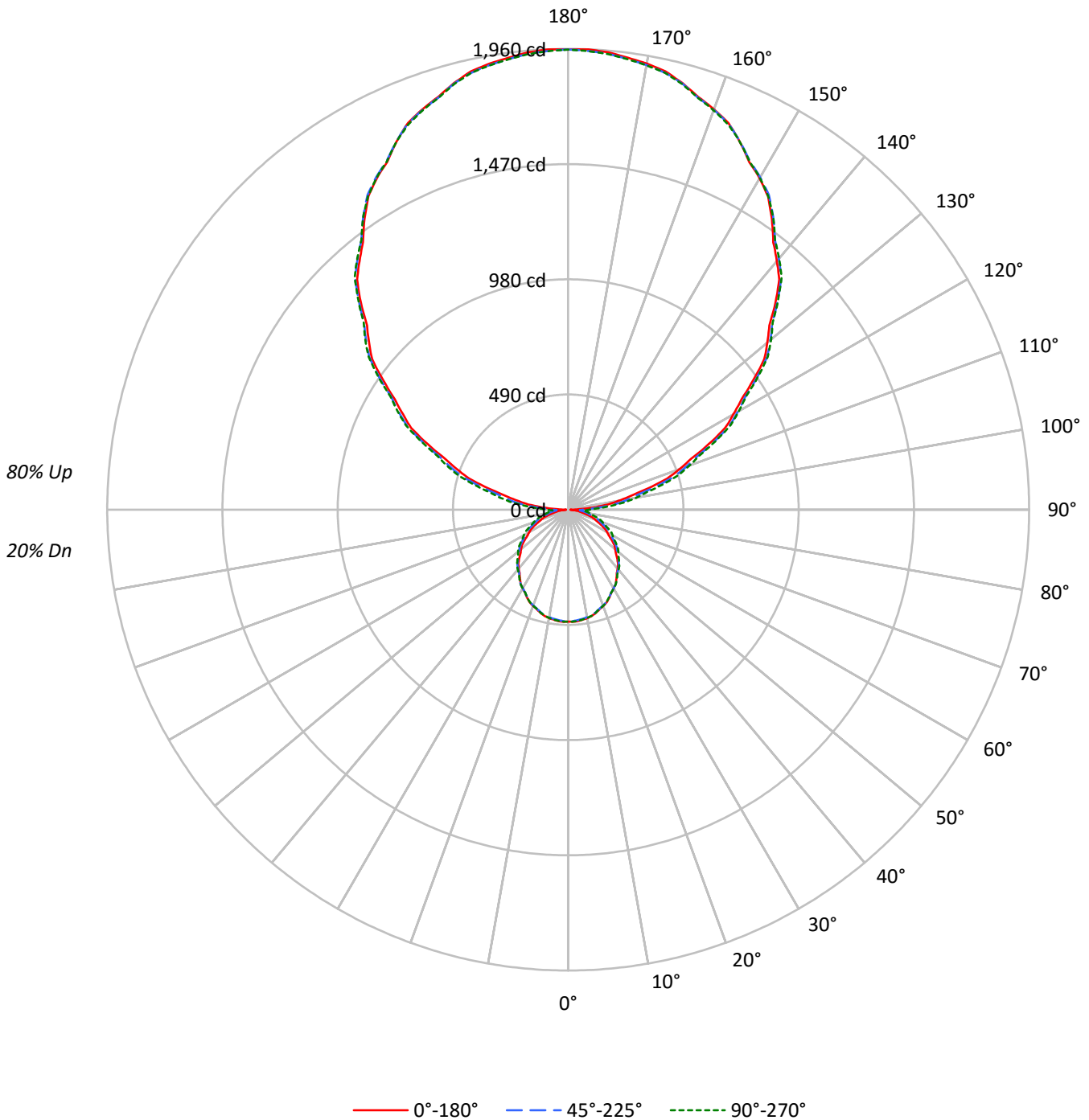
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333367-840

CATALOG NUMBER: S125DIW-S375D1560U840-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P333367-840

CATALOG NUMBER: S125DIW-S375D1560U840-4F0-1E-UDD-D1

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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	91	86	83	79	80	76	73	70	58	56	54	41	39	38	25	24	23	16
2	82	75	69	64	73	67	62	57	50	47	44	35	33	32	22	20	19	13
3	75	66	59	53	66	58	53	48	44	40	37	31	29	27	19	18	16	11
4	69	58	51	45	60	52	45	40	39	35	31	28	25	23	17	15	14	9
5	63	52	44	38	55	46	39	34	35	30	27	25	22	19	15	13	12	8
6	58	46	38	33	51	41	34	29	31	27	23	22	19	17	14	12	11	7
7	53	41	34	28	47	37	30	26	28	23	20	20	17	15	12	11	9	6
8	49	37	30	25	43	33	27	22	25	21	18	18	15	13	11	10	8	6
9	46	34	27	22	40	30	24	20	23	19	16	17	14	12	10	9	7	5
10	42	31	24	19	37	28	22	18	21	17	14	15	12	10	10	8	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3075	3075	3075
5°	3081	3017	3027
10°	3059	2963	2960
15°	3022	2899	2873
20°	2974	2819	2786
25°	2915	2734	2680
30°	2844	2641	2584
35°	2778	2554	2494
40°	2711	2463	2406
45°	2635	2385	2327
50°	2563	2302	2256
55°	2474	2222	2175
60°	2380	2130	2090
65°	2281	2035	1997
70°	2168	1905	1900
75°	1987	1780	1780
80°	1753	1629	1650
85°	1538	1527	1610



TEST NUMBER: P333367-840

CATALOG NUMBER: S125DIW-S375D1560U840-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	0.6
10°-20°	127.8	1.8
20°-30°	190.0	2.7
30°-40°	225.1	3.2
40°-50°	232.7	3.4
50°-60°	214.4	3.1
60°-70°	173.3	2.5
70°-80°	116.1	1.7
80°-90°	64.5	0.9
90°-100°	164.9	2.4
100°-110°	412.0	5.9
110°-120°	672.3	9.7
120°-130°	872.3	12.6
130°-140°	971.0	14.0
140°-150°	948.4	13.7
150°-160°	795.9	11.5
160°-170°	529.1	7.6
170°-180°	185.2	2.7
0°-30°	362.8	5.2
0°-40°	587.9	8.5
0°-60°	1035.1	14.9
0°-90°	1388.9	20.0
90°-120°	1249.2	18.0
90°-150°	4040.9	58.2
90°-180°	5551.0	80.0
0°-180°	6939.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	472	475	475	45
15°	454	455	452	454	453	128
25°	413	414	412	413	411	190
35°	358	360	359	361	361	224
45°	294	299	302	305	306	227
55°	226	234	241	246	248	202
65°	156	167	178	184	187	155
75°	86	98	113	122	125	91
85°	26	41	57	67	71	27
90°	9	36	63	80	89	10
95°	105	121	151	172	178	110
105°	351	367	390	408	416	375
115°	659	669	684	690	692	652
125°	960	969	979	984	985	859
135°	1247	1255	1260	1266	1262	961
145°	1510	1515	1520	1522	1520	943
155°	1727	1727	1729	1734	1727	795
165°	1878	1875	1876	1882	1873	530
175°	1953	1947	1946	1954	1945	185
180°	1957	1957	1957	1957	1957	



TEST NUMBER: P333367-840

CATALOG NUMBER: S125DIW-S375D1560U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	477.2	477.0	476.9	476.7	476.6	476.2	475.5	474.9	474.4	473.8	474.4
5°	476.1	475.8	475.6	475.4	475.2	474.7	474.0	473.3	472.6	471.8	472.7
7.5°	471.8	471.8	471.7	471.6	471.5	471.1	470.4	469.6	468.9	468.1	468.9
10°	468.1	468.1	468.1	468.1	468.1	467.7	466.9	466.1	465.2	464.3	465.1
12.5°	462.9	463.0	463.0	463.1	463.2	462.9	462.3	461.6	460.9	460.3	460.8
15°	454.5	454.6	454.7	454.9	455.0	454.6	453.9	453.2	452.5	451.8	452.4
17.5°	443.7	443.9	444.1	444.3	444.5	444.3	443.6	442.8	442.1	441.4	441.9
20°	436.0	436.2	436.4	436.6	436.8	436.5	435.8	435.0	434.3	433.5	433.9
22.5°	427.0	427.4	427.7	428.1	428.5	428.2	427.4	426.6	425.8	425.0	425.4
25°	413.0	413.3	413.6	413.9	414.2	414.1	413.5	412.9	412.2	411.6	412.0
27.5°	397.6	398.0	398.5	398.9	399.4	399.3	398.6	397.9	397.2	396.5	396.7
30°	386.0	386.6	387.2	387.9	388.5	388.5	387.9	387.2	386.6	386.0	386.2
32.5°	375.6	376.1	376.6	377.2	377.7	377.7	377.3	376.8	376.4	375.9	376.1
35°	357.5	358.2	359.0	359.7	360.4	360.6	360.3	360.0	359.7	359.4	359.7
37.5°	339.5	340.1	340.8	341.4	342.1	342.4	342.3	342.2	342.1	342.0	342.4
40°	327.2	328.0	328.8	329.6	330.5	330.8	330.7	330.6	330.5	330.4	330.8
42.5°	313.8	314.8	315.9	317.0	318.0	318.7	318.9	319.1	319.4	319.6	320.1
45°	294.5	295.7	296.8	297.9	299.0	299.9	300.4	300.9	301.4	301.9	302.7
47.5°	274.8	275.9	276.9	278.0	279.0	280.0	280.9	281.8	282.7	283.6	284.7
50°	261.4	262.5	263.7	264.8	265.9	267.1	268.2	269.3	270.4	271.7	272.8
52.5°	247.2	248.5	249.9	251.4	252.8	254.1	255.5	256.9	258.3	259.6	260.9
55°	226.3	228.0	229.6	231.4	233.0	234.7	236.3	237.9	239.6	241.3	242.5
57.5°	205.1	207.0	209.0	211.1	213.1	215.0	216.9	218.8	220.8	222.6	223.9
60°	190.9	193.0	195.0	197.1	199.1	201.3	203.3	205.4	207.5	209.5	211.1
62.5°	177.0	179.2	181.3	183.3	185.4	187.5	189.8	192.0	194.3	196.5	198.2
65°	155.9	158.2	160.7	163.0	165.4	167.8	170.4	172.9	175.3	177.8	179.4
67.5°	135.9	138.3	140.5	142.8	145.1	147.5	150.1	152.6	155.1	157.6	159.6
70°	121.4	123.7	126.1	128.5	130.9	133.4	136.1	138.9	141.5	144.2	146.2
72.5°	107.1	109.7	112.1	114.5	117.0	119.8	122.7	125.6	128.6	131.5	133.7
75°	85.8	88.6	91.3	93.9	96.6	99.7	103.0	106.3	109.7	112.9	115.0
77.5°	65.4	68.6	71.7	74.7	77.9	81.0	84.2	87.5	90.6	93.8	96.1
80°	52.7	55.8	59.0	62.1	65.1	68.5	72.0	75.5	79.1	82.6	84.9
82.5°	41.2	44.4	47.8	51.0	54.2	57.8	61.3	64.9	68.6	72.1	74.3
85°	25.7	29.1	32.5	36.0	39.4	42.9	46.6	50.2	53.8	57.4	59.7
87.5°	14.8	18.7	22.6	26.5	30.3	34.2	38.3	42.2	46.3	50.2	52.9
90°	9.0	15.0	21.0	27.1	33.1	39.1	44.9	50.9	56.8	62.6	66.8
92.5°	43.6	48.6	53.5	58.5	63.4	69.2	75.7	82.2	88.8	95.2	99.8
95°	105.0	108.5	111.8	115.2	118.6	123.7	130.6	137.5	144.4	151.4	156.0
97.5°	170.0	172.7	175.4	178.0	180.8	186.2	194.2	202.3	210.4	218.4	222.9
100°	218.3	220.6	222.7	224.9	227.1	232.1	239.7	247.4	255.2	262.9	268.1
102.5°	270.3	273.8	277.1	280.4	283.9	288.2	293.8	299.2	304.7	310.1	315.6
105°	351.4	354.8	358.2	361.5	364.9	369.1	374.3	379.4	384.6	389.7	393.7
107.5°	441.0	444.1	447.3	450.4	453.4	457.3	461.8	466.4	470.9	475.4	478.6
110°	502.8	505.7	508.7	511.6	514.5	518.0	521.9	525.8	529.8	533.7	536.6



TEST NUMBER: P333367-840

CATALOG NUMBER: S125DIW-S375D1560U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	566.2	568.0	570.0	571.8	573.7	576.6	580.8	584.9	589.0	593.1	595.5
115°	659.2	661.4	663.4	665.5	667.5	670.2	673.7	677.0	680.4	683.8	685.3
117.5°	752.6	753.7	754.8	755.9	756.9	759.0	762.2	765.4	768.5	771.7	773.8
120°	811.0	813.0	815.1	817.1	819.1	821.4	824.2	826.9	829.6	832.3	834.1
122.5°	874.0	874.8	875.6	876.4	877.1	879.1	882.2	885.4	888.6	891.8	893.2
125°	959.9	961.8	963.7	965.6	967.6	969.8	972.2	974.5	976.9	979.4	980.4
127.5°	1050.8	1051.8	1052.9	1053.9	1055.0	1056.5	1058.6	1060.8	1062.9	1065.0	1066.2
130°	1105.6	1107.2	1108.8	1110.3	1112.0	1113.8	1115.9	1118.1	1120.2	1122.4	1123.5
132.5°	1160.0	1162.9	1165.6	1168.3	1171.0	1173.0	1174.0	1174.9	1175.9	1176.9	1178.0
135°	1246.8	1248.7	1250.6	1252.5	1254.5	1256.0	1257.1	1258.1	1259.2	1260.2	1261.6
137.5°	1328.3	1330.2	1332.1	1333.9	1335.8	1337.4	1338.5	1339.5	1340.6	1341.7	1343.3
140°	1380.4	1382.0	1383.7	1385.4	1387.2	1388.6	1389.7	1390.8	1391.9	1393.0	1394.8
142.5°	1432.7	1434.1	1435.4	1436.7	1438.0	1439.5	1440.7	1442.0	1443.3	1444.6	1446.0
145°	1509.8	1511.1	1512.3	1513.6	1514.8	1515.9	1516.9	1517.9	1518.9	1519.9	1520.6
147.5°	1580.6	1581.3	1582.1	1582.9	1583.6	1584.4	1585.2	1586.0	1586.8	1587.6	1588.6
150°	1628.1	1627.8	1627.5	1627.1	1626.8	1627.3	1628.6	1630.0	1631.3	1632.7	1632.7
152.5°	1667.1	1667.6	1668.1	1668.5	1669.0	1669.5	1670.1	1670.6	1671.1	1671.7	1672.5
155°	1727.2	1727.2	1727.2	1727.2	1727.2	1727.3	1727.7	1728.0	1728.3	1728.7	1730.0
157.5°	1780.7	1780.0	1779.3	1778.5	1777.8	1777.6	1777.9	1778.3	1778.6	1778.9	1780.3
160°	1812.4	1811.4	1810.4	1809.4	1808.4	1808.1	1808.4	1808.7	1809.1	1809.4	1810.7
162.5°	1840.5	1839.7	1839.0	1838.3	1837.4	1837.1	1837.1	1837.2	1837.3	1837.3	1839.1
165°	1877.9	1877.2	1876.5	1875.9	1875.2	1875.0	1875.4	1875.7	1876.0	1876.4	1877.7
167.5°	1909.6	1908.2	1906.9	1905.5	1904.2	1903.5	1903.5	1903.5	1903.5	1903.5	1905.5
170°	1926.6	1925.3	1923.9	1922.6	1921.3	1920.6	1920.6	1920.6	1920.6	1920.6	1922.6
172.5°	1938.8	1937.5	1936.1	1934.8	1933.4	1932.8	1932.8	1932.8	1932.8	1932.8	1934.8
175°	1952.6	1951.2	1949.8	1948.4	1947.1	1946.4	1946.4	1946.4	1946.4	1946.4	1948.4
177.5°	1959.5	1958.4	1957.4	1956.3	1955.2	1954.5	1954.3	1954.0	1953.7	1953.5	1955.1
180°	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1



TEST NUMBER: P333367-840

CATALOG NUMBER: S125DIW-S375D1560U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	474.9	475.5	476.2	476.4	476.3	476.3	476.2	476.1
5°	473.5	474.3	475.1	475.5	475.4	475.3	475.2	475.1
7.5°	469.6	470.3	471.0	471.3	471.2	471.1	471.0	470.9
10°	465.9	466.6	467.3	467.6	467.5	467.4	467.3	467.2
12.5°	461.4	461.9	462.5	462.6	462.4	462.1	461.8	461.6
15°	453.0	453.6	454.2	454.3	453.9	453.5	453.1	452.7
17.5°	442.4	442.8	443.3	443.4	443.2	442.9	442.7	442.4
20°	434.2	434.5	434.8	434.9	434.9	434.9	434.9	434.9
22.5°	425.8	426.2	426.6	426.7	426.4	426.2	425.9	425.7
25°	412.4	412.9	413.3	413.2	412.7	412.2	411.7	411.2
27.5°	397.0	397.3	397.6	397.7	397.5	397.3	397.1	396.9
30°	386.4	386.6	386.8	386.9	386.8	386.7	386.6	386.5
32.5°	376.3	376.5	376.7	376.8	376.7	376.6	376.5	376.4
35°	360.0	360.3	360.6	360.7	360.7	360.7	360.7	360.7
37.5°	342.8	343.3	343.7	343.9	343.9	343.8	343.8	343.7
40°	331.2	331.6	332.1	332.4	332.6	332.9	333.1	333.3
42.5°	320.6	321.1	321.6	321.8	321.9	321.9	321.9	322.0
45°	303.5	304.2	304.9	305.3	305.4	305.5	305.6	305.7
47.5°	285.7	286.8	287.8	288.4	288.7	288.9	289.1	289.3
50°	273.9	275.1	276.2	276.9	277.2	277.5	277.8	278.1
52.5°	262.2	263.4	264.6	265.3	265.5	265.8	266.0	266.2
55°	243.6	244.7	245.9	246.6	247.0	247.4	247.9	248.3
57.5°	225.2	226.5	227.8	228.6	228.9	229.2	229.6	229.9
60°	212.7	214.2	215.8	216.7	217.0	217.3	217.6	217.9
62.5°	200.0	201.7	203.4	204.4	204.8	205.2	205.6	206.0
65°	181.0	182.5	184.0	185.0	185.4	185.8	186.3	186.7
67.5°	161.5	163.3	165.2	166.4	166.9	167.5	168.0	168.5
70°	148.1	150.2	152.1	153.4	154.0	154.6	155.2	155.9
72.5°	135.8	137.9	140.1	141.4	141.8	142.3	142.7	143.2
75°	117.1	119.2	121.3	122.5	123.1	123.6	124.1	124.6
77.5°	98.4	100.7	102.9	104.3	104.7	105.1	105.5	105.9
80°	87.2	89.5	91.7	93.1	93.5	93.9	94.3	94.7
82.5°	76.5	78.8	81.0	82.4	83.2	83.9	84.6	85.4
85°	62.0	64.2	66.6	68.1	68.9	69.8	70.6	71.4
87.5°	55.6	58.4	61.1	62.9	63.9	64.8	65.7	66.7
90°	70.8	74.8	79.0	81.9	83.6	85.3	87.1	88.9
92.5°	104.3	108.9	113.4	116.4	117.9	119.4	120.8	122.3
95°	160.7	165.3	170.0	173.0	174.4	175.8	177.2	178.5
97.5°	227.3	231.7	236.1	238.8	239.9	241.1	242.2	243.3
100°	273.4	278.5	283.8	287.0	288.3	289.6	290.9	292.3
102.5°	320.9	326.4	331.7	335.3	336.9	338.4	340.0	341.5
105°	397.9	402.0	406.1	409.0	410.7	412.5	414.2	416.0
107.5°	481.6	484.6	487.8	489.6	490.2	490.7	491.3	491.9
110°	539.7	542.6	545.6	547.3	547.6	548.1	548.5	548.9



TEST NUMBER: P333367-840

CATALOG NUMBER: S125DIW-S375D1560U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	597.8	600.2	602.6	603.8	603.9	604.0	604.1	604.3
115°	686.8	688.3	689.8	690.7	691.1	691.4	691.7	692.0
117.5°	775.8	777.8	779.8	780.5	779.9	779.2	778.6	777.9
120°	835.9	837.6	839.4	839.9	839.2	838.5	837.7	837.0
122.5°	894.5	896.0	897.4	897.9	897.5	897.0	896.5	896.1
125°	981.4	982.3	983.3	983.9	984.1	984.2	984.4	984.6
127.5°	1067.3	1068.5	1069.8	1070.4	1070.3	1070.2	1070.1	1070.1
130°	1124.6	1125.7	1126.8	1127.3	1127.1	1126.9	1126.8	1126.6
132.5°	1179.1	1180.2	1181.3	1181.6	1181.1	1180.6	1180.1	1179.6
135°	1262.9	1264.3	1265.7	1265.9	1265.1	1264.3	1263.3	1262.5
137.5°	1344.9	1346.7	1348.3	1348.4	1347.2	1345.8	1344.5	1343.3
140°	1396.6	1398.5	1400.3	1400.6	1399.3	1398.0	1396.7	1395.4
142.5°	1447.4	1448.8	1450.2	1450.2	1449.0	1447.6	1446.4	1445.1
145°	1521.1	1521.6	1522.1	1522.1	1521.5	1520.9	1520.3	1519.6
147.5°	1589.5	1590.5	1591.5	1590.9	1588.8	1586.7	1584.6	1582.5
150°	1632.7	1632.7	1632.7	1632.4	1631.8	1631.2	1630.7	1630.1
152.5°	1673.3	1674.2	1675.0	1674.8	1673.5	1672.3	1671.1	1669.9
155°	1731.3	1732.7	1734.0	1733.9	1732.2	1730.5	1728.8	1727.2
157.5°	1781.6	1783.0	1784.3	1783.9	1781.6	1779.4	1777.2	1774.9
160°	1812.1	1813.4	1814.8	1814.6	1812.9	1811.2	1809.6	1807.9
162.5°	1840.7	1842.3	1843.9	1843.7	1841.8	1839.8	1837.9	1835.8
165°	1879.1	1880.5	1881.8	1881.5	1879.5	1877.4	1875.4	1873.3
167.5°	1907.5	1909.6	1911.6	1911.6	1909.5	1907.4	1905.3	1903.2
170°	1924.6	1926.6	1928.6	1928.5	1926.1	1923.8	1921.4	1919.0
172.5°	1936.8	1938.8	1940.9	1940.9	1938.7	1936.6	1934.5	1932.5
175°	1950.6	1952.6	1954.6	1954.4	1952.1	1949.6	1947.3	1944.9
177.5°	1956.7	1958.3	1959.9	1959.8	1957.9	1956.0	1954.1	1952.3
180°	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1

(END OF REPORT)