

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: P333366-840

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333366-840
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: S125DIW-S375D1560U840-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7776.3 lumens
Efficiency: N/A
Efficacy: 145.6 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

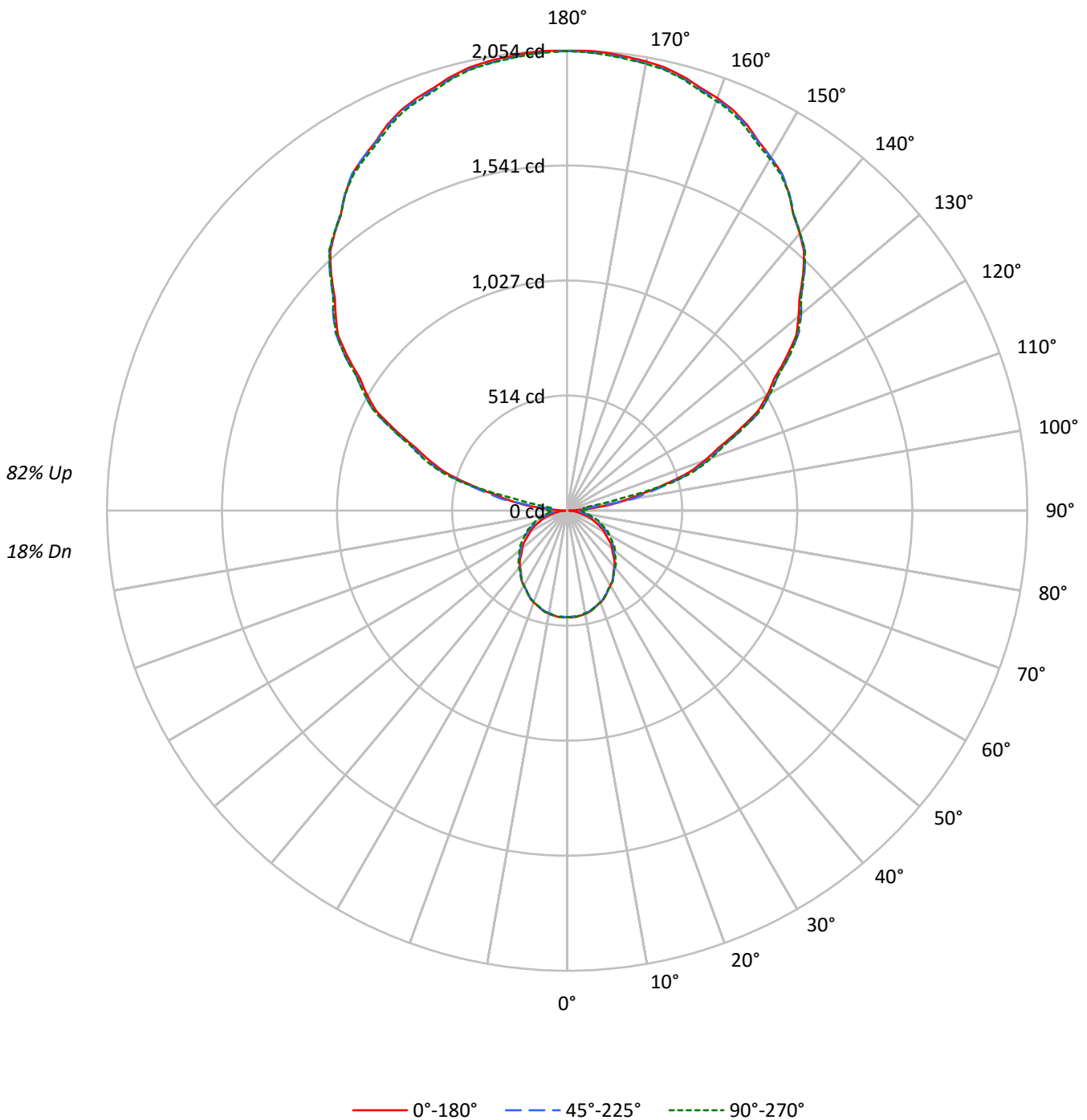
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	99	99	99	99	88	88	88	88	65	65	65	45	45	45	27	27	27	18																			
1	90	86	82	79	79	76	73	70	57	55	53	39	38	37	23	22	22	14																			
2	82	75	69	64	72	66	61	57	50	46	43	34	32	31	20	19	18	12																			
3	75	66	59	53	65	58	52	47	44	40	36	30	28	26	18	16	15	10																			
4	68	58	50	45	60	51	45	40	38	34	31	27	24	22	16	14	13	8																			
5	62	51	44	38	55	45	39	34	34	30	26	24	21	19	14	13	11	7																			
6	57	46	38	33	50	41	34	29	31	26	23	21	18	16	13	11	10	6																			
7	53	41	34	28	46	36	30	25	28	23	20	19	16	14	12	10	9	6																			
8	49	37	30	25	43	33	27	22	25	21	17	18	15	12	11	9	8	5																			
9	45	34	27	22	40	30	24	20	23	18	15	16	13	11	10	8	7	5																			
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	9	7	6	4																			

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	0.6
10°-20°	127.8	1.6
20°-30°	190.0	2.4
30°-40°	225.1	2.9
40°-50°	232.7	3.0
50°-60°	214.4	2.8
60°-70°	173.3	2.2
70°-80°	116.1	1.5
80°-90°	64.5	0.8
90°-100°	108.3	1.4
100°-110°	484.2	6.2
110°-120°	849.7	10.9
120°-130°	1078.5	13.9
130°-140°	1154.0	14.8
140°-150°	1080.1	13.9
150°-160°	873.1	11.2
160°-170°	564.7	7.3
170°-180°	194.8	2.5
0°-30°	362.8	4.7
0°-40°	587.9	7.6
0°-60°	1035.1	13.3
0°-90°	1388.9	17.9
90°-120°	1442.2	18.5
90°-150°	4754.9	61.1
90°-180°	6387.0	82.1
0°-180°	7776.3	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	9
95°	93	98	58	75	80	115
105°	451	465	479	488	490	478
115°	842	853	866	868	862	834
125°	1195	1205	1215	1216	1214	1067
135°	1489	1497	1498	1501	1494	1148
145°	1726	1728	1728	1732	1725	1079
155°	1900	1892	1894	1898	1886	875
165°	2005	1997	1998	2006	1994	566
175°	2051	2042	2043	2054	2042	195
180°	2051	2051	2051	2051	2051	



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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	39.0	44.9	50.8	56.7	62.6	66.7
92.5°	30.1	31.3	32.5	33.6	34.8	38.3	44.0	49.7	55.4	61.1	65.1
95°	92.7	94.4	96.0	97.8	99.5	95.6	86.3	77.1	67.7	58.4	62.4
97.5°	186.4	190.7	194.9	199.1	203.4	194.5	172.6	150.6	128.6	106.5	99.2
100°	259.0	262.2	265.4	268.6	271.8	275.7	280.3	285.1	289.7	294.4	246.2
102.5°	332.9	336.1	339.4	342.7	346.0	349.7	353.8	357.8	361.8	365.9	358.4
105°	451.1	454.1	457.2	460.2	463.2	466.3	469.4	472.5	475.5	478.7	480.8
107.5°	574.0	575.4	576.8	578.2	579.7	582.2	585.8	589.6	593.2	596.8	599.0
110°	653.9	655.2	656.4	657.6	658.9	661.3	664.9	668.4	672.1	675.6	676.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	729.3	731.1	733.0	734.8	736.5	739.0	742.3	745.5	748.7	751.9	752.6
115°	841.9	844.3	846.8	849.2	851.6	854.3	857.4	860.4	863.4	866.5	867.0
117.5°	958.6	959.0	959.4	959.8	960.2	962.3	966.1	970.0	973.8	977.7	977.7
120°	1031.5	1031.5	1031.5	1031.5	1031.4	1033.1	1036.5	1039.9	1043.3	1046.7	1047.7
122.5°	1095.6	1097.0	1098.4	1099.8	1101.4	1103.4	1106.2	1108.9	1111.8	1114.5	1115.5
125°	1195.3	1197.5	1199.7	1202.0	1204.3	1206.5	1208.5	1210.6	1212.6	1214.8	1215.1
127.5°	1289.9	1291.5	1293.1	1294.6	1296.3	1297.8	1299.3	1300.8	1302.3	1303.8	1304.5
130°	1348.3	1349.9	1351.5	1353.0	1354.6	1356.3	1358.2	1359.9	1361.7	1363.5	1363.9
132.5°	1406.3	1408.3	1410.2	1412.1	1414.0	1415.2	1415.6	1415.9	1416.3	1416.7	1418.0
135°	1489.2	1491.2	1493.1	1495.0	1496.9	1497.9	1497.9	1498.0	1498.0	1498.1	1498.7
137.5°	1565.4	1567.1	1568.8	1570.4	1572.2	1572.9	1572.6	1572.4	1572.1	1571.9	1573.2
140°	1614.9	1615.6	1616.3	1617.0	1617.6	1617.8	1617.6	1617.4	1617.1	1616.9	1618.7
142.5°	1659.9	1660.2	1660.5	1660.9	1661.2	1661.6	1662.1	1662.6	1663.1	1663.6	1664.7
145°	1725.9	1726.5	1727.1	1727.6	1728.2	1728.5	1728.5	1728.5	1728.5	1728.5	1729.3
147.5°	1783.2	1783.0	1782.9	1782.8	1782.6	1782.8	1783.2	1783.6	1784.0	1784.4	1784.9
150°	1819.7	1819.0	1818.4	1817.7	1816.9	1816.9	1817.7	1818.4	1819.0	1819.7	1820.4
152.5°	1854.9	1853.5	1852.0	1850.5	1849.0	1848.6	1849.3	1850.0	1850.7	1851.3	1852.0
155°	1900.3	1898.2	1896.2	1894.2	1892.2	1891.5	1892.2	1892.8	1893.5	1894.2	1895.2
157.5°	1935.2	1934.0	1932.8	1931.6	1930.4	1929.8	1929.9	1930.0	1930.0	1930.1	1931.2
160°	1959.5	1957.5	1955.5	1953.5	1951.5	1950.6	1951.0	1951.3	1951.6	1952.0	1953.3
162.5°	1979.0	1977.0	1975.0	1972.9	1970.9	1970.0	1970.3	1970.8	1971.1	1971.4	1973.3
165°	2005.2	2003.2	2001.0	1999.0	1997.0	1996.2	1996.5	1996.9	1997.2	1997.5	1999.5
167.5°	2024.6	2022.6	2020.4	2018.3	2016.2	2015.4	2015.7	2016.0	2016.4	2016.7	2019.1
170°	2035.6	2033.2	2030.8	2028.4	2026.1	2025.1	2025.4	2025.8	2026.1	2026.4	2029.1
172.5°	2042.9	2040.5	2038.1	2035.8	2033.4	2032.6	2033.2	2033.8	2034.4	2035.0	2037.4
175°	2050.7	2048.7	2046.7	2044.7	2042.7	2041.8	2042.1	2042.5	2042.9	2043.2	2045.9
177.5°	2054.4	2052.8	2051.1	2049.5	2047.9	2047.2	2047.5	2047.8	2048.0	2048.3	2050.2
180°	2050.7	2050.7	2050.7	2050.7	2050.7	2050.7	2050.7	2050.7	2050.7	2050.7	2050.7



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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	78.9	81.8	83.5	85.2	87.1	88.8
92.5°	69.1	73.1	77.1	79.7	80.9	82.1	83.2	84.4
95°	66.3	70.3	74.3	76.6	77.4	78.1	78.8	79.6
97.5°	91.8	84.5	77.2	73.8	74.5	75.2	75.9	76.6
100°	198.0	149.9	101.8	77.4	76.5	75.8	75.1	74.4
102.5°	351.0	343.6	336.2	321.2	298.9	276.5	254.2	231.9
105°	482.8	484.9	487.0	488.2	488.6	489.0	489.4	489.8
107.5°	601.1	603.2	605.3	606.2	605.8	605.5	605.1	604.7
110°	677.5	678.5	679.4	680.4	681.6	682.6	683.7	684.7



TEST NUMBER: P333366-840

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	753.2	753.8	754.4	754.8	755.1	755.3	755.6	755.8
115°	867.5	868.0	868.6	868.1	866.7	865.3	863.8	862.4
117.5°	977.7	977.7	977.7	977.5	977.4	977.2	977.0	976.8
120°	1048.8	1050.0	1051.1	1051.1	1050.0	1048.9	1047.8	1046.8
122.5°	1116.5	1117.5	1118.5	1118.3	1117.0	1115.7	1114.4	1113.0
125°	1215.4	1215.7	1216.0	1215.9	1215.4	1214.9	1214.4	1213.9
127.5°	1305.4	1306.2	1307.0	1306.5	1304.5	1302.6	1300.7	1298.8
130°	1364.3	1364.8	1365.2	1364.8	1363.7	1362.5	1361.4	1360.2
132.5°	1419.3	1420.5	1421.7	1421.7	1420.5	1419.2	1418.0	1416.7
135°	1499.4	1500.2	1500.8	1500.4	1498.8	1497.3	1495.8	1494.3
137.5°	1574.6	1575.9	1577.2	1577.3	1575.9	1574.6	1573.3	1571.9
140°	1620.5	1622.3	1624.2	1624.3	1622.7	1621.0	1619.4	1617.8
142.5°	1665.8	1666.9	1668.0	1667.8	1666.2	1664.6	1662.9	1661.3
145°	1730.2	1731.0	1731.9	1731.5	1729.9	1728.3	1726.7	1725.1
147.5°	1785.5	1786.1	1786.7	1785.8	1783.6	1781.4	1779.1	1776.9
150°	1821.0	1821.7	1822.4	1821.4	1818.9	1816.2	1813.6	1811.0
152.5°	1852.7	1853.3	1854.0	1853.1	1850.7	1848.4	1845.9	1843.5
155°	1896.2	1897.2	1898.2	1897.3	1894.7	1892.0	1889.3	1886.5
157.5°	1932.2	1933.3	1934.4	1933.6	1930.9	1928.1	1925.4	1922.8
160°	1954.6	1956.0	1957.3	1956.7	1954.0	1951.3	1948.5	1945.9
162.5°	1975.2	1977.1	1978.9	1978.4	1975.5	1972.5	1969.5	1966.5
165°	2001.6	2003.7	2005.7	2005.3	2002.7	1999.9	1997.2	1994.5
167.5°	2021.5	2024.0	2026.4	2026.1	2023.1	2020.0	2017.0	2014.0
170°	2031.8	2034.6	2037.2	2037.1	2034.1	2031.0	2027.9	2024.9
172.5°	2039.8	2042.3	2044.7	2044.4	2041.3	2038.3	2035.3	2032.3
175°	2048.5	2051.2	2054.0	2053.8	2050.7	2047.7	2044.7	2041.6
177.5°	2052.1	2054.0	2055.9	2055.8	2053.6	2051.4	2049.2	2047.1
180°	2050.7	2050.7	2050.7	2050.7	2050.7	2050.7	2050.7	2050.7

(END OF REPORT)