

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: P333366-830

Luminaire Tested: **S125DIW-S375D1560U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333366-830  
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-S375D1560U830-4F0-1E-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: 7257.9 lumens  
Efficiency: N/A  
Efficacy: 135.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: Semi-Indirect

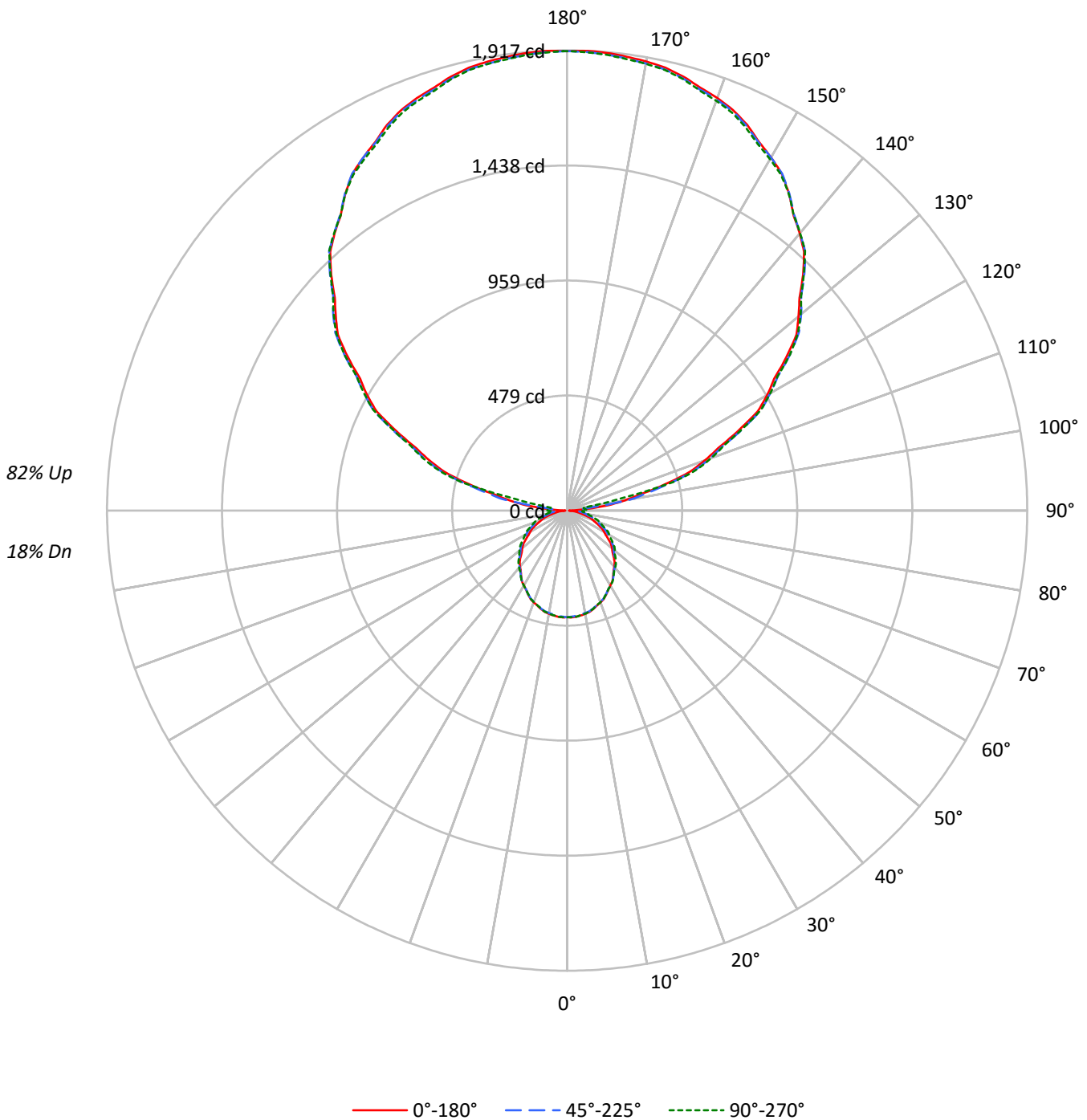
Input Watts (W): 53.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





TEST NUMBER: P333366-830

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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	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°	2869	2869	2869
5°	2875	2817	2826
10°	2855	2766	2762
15°	2821	2706	2681
20°	2776	2631	2601
25°	2721	2552	2502
30°	2654	2464	2411
35°	2593	2384	2329
40°	2531	2299	2245
45°	2459	2226	2171
50°	2391	2147	2106
55°	2309	2073	2030
60°	2220	1989	1951
65°	2128	1900	1864
70°	2024	1779	1773
75°	1855	1662	1662
80°	1636	1521	1540
85°	1430	1424	1502



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.0	0.6
10°-20°	119.3	1.6
20°-30°	177.4	2.4
30°-40°	210.1	2.9
40°-50°	217.2	3.0
50°-60°	200.1	2.8
60°-70°	161.8	2.2
70°-80°	108.3	1.5
80°-90°	60.2	0.8
90°-100°	101.1	1.4
100°-110°	451.9	6.2
110°-120°	793.0	10.9
120°-130°	1006.6	13.9
130°-140°	1077.1	14.8
140°-150°	1008.1	13.9
150°-160°	814.9	11.2
160°-170°	527.0	7.3
170°-180°	181.8	2.5
0°-30°	338.7	4.7
0°-40°	548.8	7.6
0°-60°	966.1	13.3
0°-90°	1296.3	17.9
90°-120°	1346.0	18.5
90°-150°	4437.9	61.1
90°-180°	5962.0	82.1
0°-180°	7257.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	444	443	440	444	444	42
15°	424	424	422	424	422	119
25°	386	387	384	386	384	177
35°	334	336	336	337	337	209
45°	275	280	282	285	285	212
55°	211	218	225	230	232	189
65°	146	156	166	172	174	144
75°	80	92	105	114	116	85
85°	24	38	54	63	67	26
90°	8	34	58	75	83	8
95°	86	91	54	70	74	107
105°	421	434	447	455	457	446
115°	786	796	809	810	805	779
125°	1116	1125	1134	1135	1133	996
135°	1390	1398	1398	1400	1395	1071
145°	1611	1613	1613	1616	1610	1007
155°	1774	1766	1768	1771	1761	817
165°	1872	1864	1864	1872	1862	528
175°	1914	1906	1907	1917	1906	182
180°	1914	1914	1914	1914	1914	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	445.4	445.2	445.1	444.9	444.8	444.4	443.8	443.3	442.8	442.2	442.8
5°	444.3	444.1	443.9	443.7	443.6	443.1	442.4	441.8	441.1	440.4	441.2
7.5°	440.4	440.4	440.3	440.2	440.1	439.7	439.0	438.3	437.6	436.9	437.6
10°	436.9	436.9	436.9	436.9	436.9	436.5	435.7	435.0	434.2	433.4	434.1
12.5°	432.1	432.2	432.2	432.3	432.3	432.1	431.5	430.8	430.2	429.6	430.1
15°	424.2	424.3	424.4	424.6	424.7	424.3	423.7	423.0	422.4	421.7	422.3
17.5°	414.2	414.3	414.5	414.7	414.9	414.7	414.1	413.3	412.6	412.0	412.5
20°	406.9	407.1	407.3	407.5	407.6	407.4	406.7	406.0	405.4	404.6	405.0
22.5°	398.5	398.9	399.2	399.5	399.9	399.6	398.9	398.1	397.4	396.6	397.0
25°	385.5	385.8	386.1	386.3	386.6	386.5	386.0	385.4	384.7	384.2	384.6
27.5°	371.1	371.5	371.9	372.3	372.8	372.7	372.0	371.4	370.7	370.0	370.2
30°	360.2	360.8	361.4	362.0	362.6	362.6	362.0	361.4	360.8	360.2	360.4
32.5°	350.5	351.0	351.5	352.0	352.5	352.5	352.1	351.7	351.3	350.8	351.0
35°	333.7	334.3	335.1	335.7	336.4	336.6	336.3	336.0	335.7	335.5	335.7
37.5°	316.9	317.4	318.1	318.7	319.3	319.6	319.5	319.4	319.3	319.2	319.6
40°	305.4	306.1	306.9	307.6	308.5	308.8	308.7	308.6	308.5	308.4	308.8
42.5°	292.8	293.8	294.8	295.9	296.8	297.5	297.7	297.8	298.1	298.3	298.8
45°	274.8	276.0	277.0	278.1	279.1	279.9	280.4	280.9	281.3	281.8	282.5
47.5°	256.5	257.5	258.4	259.5	260.4	261.4	262.2	263.0	263.8	264.7	265.7
50°	243.9	245.0	246.1	247.1	248.2	249.3	250.3	251.4	252.4	253.5	254.6
52.5°	230.7	232.0	233.3	234.6	235.9	237.1	238.5	239.8	241.1	242.3	243.6
55°	211.2	212.8	214.3	215.9	217.4	219.0	220.6	222.1	223.7	225.2	226.3
57.5°	191.4	193.2	195.1	197.0	198.9	200.7	202.5	204.2	206.0	207.7	209.0
60°	178.1	180.1	182.0	184.0	185.9	187.8	189.7	191.7	193.7	195.6	197.0
62.5°	165.2	167.2	169.2	171.1	173.1	175.0	177.1	179.2	181.3	183.4	185.0
65°	145.5	147.7	150.0	152.1	154.4	156.7	159.0	161.4	163.6	166.0	167.4
67.5°	126.9	129.0	131.1	133.3	135.4	137.7	140.1	142.4	144.8	147.1	148.9
70°	113.3	115.5	117.7	119.9	122.2	124.5	127.1	129.6	132.1	134.6	136.5
72.5°	100.0	102.4	104.6	106.9	109.2	111.8	114.5	117.3	120.0	122.7	124.8
75°	80.1	82.7	85.2	87.7	90.2	93.0	96.1	99.2	102.4	105.4	107.4
77.5°	61.1	64.0	66.9	69.7	72.7	75.6	78.6	81.6	84.5	87.6	89.7
80°	49.2	52.1	55.0	58.0	60.8	63.9	67.2	70.5	73.8	77.1	79.3
82.5°	38.5	41.5	44.6	47.6	50.6	53.9	57.2	60.6	64.0	67.3	69.4
85°	23.9	27.1	30.3	33.6	36.8	40.1	43.5	46.8	50.2	53.5	55.7
87.5°	13.9	17.4	21.1	24.7	28.3	32.0	35.7	39.4	43.2	46.8	49.4
90°	8.4	14.0	19.6	25.3	30.9	36.4	41.9	47.4	52.9	58.4	62.2
92.5°	28.1	29.2	30.3	31.4	32.5	35.7	41.1	46.4	51.7	57.0	60.8
95°	86.5	88.1	89.6	91.2	92.8	89.3	80.6	71.9	63.2	54.5	58.2
97.5°	174.0	178.0	181.9	185.9	189.8	181.5	161.1	140.5	120.0	99.4	92.6
100°	241.8	244.7	247.7	250.7	253.6	257.3	261.6	266.1	270.4	274.8	229.8
102.5°	310.7	313.7	316.8	319.9	322.9	326.4	330.2	333.9	337.7	341.5	334.5
105°	421.0	423.9	426.7	429.5	432.3	435.2	438.1	441.0	443.8	446.8	448.7
107.5°	535.7	537.1	538.4	539.7	541.0	543.4	546.8	550.3	553.6	557.0	559.0
110°	610.3	611.5	612.7	613.8	615.0	617.2	620.6	623.9	627.3	630.6	631.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	680.7	682.4	684.1	685.8	687.4	689.8	692.8	695.8	698.8	701.8	702.4
115°	785.8	788.1	790.3	792.6	794.8	797.4	800.2	803.0	805.9	808.7	809.2
117.5°	894.7	895.0	895.4	895.8	896.2	898.1	901.7	905.3	908.9	912.5	912.5
120°	962.7	962.7	962.7	962.7	962.6	964.2	967.4	970.5	973.7	976.9	977.9
122.5°	1022.6	1023.9	1025.2	1026.5	1027.9	1029.8	1032.5	1035.0	1037.6	1040.2	1041.1
125°	1115.6	1117.7	1119.7	1121.9	1124.0	1126.1	1127.9	1129.9	1131.8	1133.8	1134.1
127.5°	1203.9	1205.4	1206.9	1208.3	1209.8	1211.3	1212.7	1214.1	1215.5	1216.9	1217.6
130°	1258.4	1259.9	1261.4	1262.8	1264.3	1265.9	1267.6	1269.2	1270.9	1272.6	1273.0
132.5°	1312.6	1314.4	1316.2	1318.0	1319.7	1320.9	1321.3	1321.5	1321.9	1322.3	1323.4
135°	1390.0	1391.8	1393.5	1395.3	1397.1	1398.1	1398.1	1398.2	1398.2	1398.3	1398.8
137.5°	1461.0	1462.6	1464.2	1465.7	1467.4	1468.0	1467.7	1467.5	1467.3	1467.1	1468.3
140°	1507.2	1507.9	1508.5	1509.2	1509.8	1510.0	1509.8	1509.6	1509.3	1509.1	1510.8
142.5°	1549.3	1549.5	1549.8	1550.2	1550.5	1550.9	1551.3	1551.8	1552.3	1552.7	1553.7
145°	1610.8	1611.4	1611.9	1612.4	1613.0	1613.3	1613.3	1613.3	1613.3	1613.3	1614.0
147.5°	1664.3	1664.2	1664.1	1664.0	1663.8	1664.0	1664.3	1664.7	1665.1	1665.5	1665.9
150°	1698.4	1697.7	1697.1	1696.5	1695.8	1695.8	1696.5	1697.1	1697.7	1698.4	1699.0
152.5°	1731.3	1729.9	1728.5	1727.1	1725.7	1725.3	1726.0	1726.6	1727.3	1727.9	1728.5
155°	1773.6	1771.7	1769.8	1767.9	1766.0	1765.4	1766.0	1766.6	1767.3	1767.9	1768.9
157.5°	1806.2	1805.1	1803.9	1802.8	1801.7	1801.1	1801.2	1801.3	1801.3	1801.4	1802.4
160°	1828.9	1827.0	1825.1	1823.3	1821.4	1820.5	1820.9	1821.2	1821.5	1821.8	1823.1
162.5°	1847.1	1845.2	1843.3	1841.4	1839.5	1838.7	1839.0	1839.4	1839.7	1839.9	1841.7
165°	1871.5	1869.6	1867.6	1865.8	1863.9	1863.1	1863.4	1863.8	1864.1	1864.3	1866.2
167.5°	1889.6	1887.7	1885.7	1883.8	1881.8	1881.0	1881.3	1881.6	1882.0	1882.3	1884.5
170°	1899.9	1897.6	1895.5	1893.2	1891.0	1890.1	1890.4	1890.7	1891.0	1891.3	1893.9
172.5°	1906.7	1904.5	1902.2	1900.1	1897.8	1897.1	1897.6	1898.2	1898.8	1899.3	1901.6
175°	1914.0	1912.1	1910.3	1908.4	1906.5	1905.7	1906.0	1906.3	1906.7	1907.0	1909.5
177.5°	1917.4	1915.9	1914.4	1912.9	1911.4	1910.7	1911.0	1911.3	1911.5	1911.8	1913.5
180°	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	443.3	443.8	444.4	444.6	444.5	444.5	444.4	444.3
5°	442.0	442.7	443.5	443.8	443.7	443.7	443.6	443.5
7.5°	438.3	438.9	439.6	439.9	439.8	439.7	439.6	439.5
10°	434.8	435.5	436.1	436.4	436.3	436.2	436.1	436.0
12.5°	430.6	431.1	431.7	431.8	431.6	431.3	431.0	430.8
15°	422.8	423.4	424.0	424.0	423.7	423.3	422.9	422.5
17.5°	412.9	413.3	413.8	413.9	413.7	413.4	413.2	412.9
20°	405.3	405.6	405.9	406.0	406.0	406.0	406.0	406.0
22.5°	397.4	397.8	398.1	398.2	397.9	397.8	397.5	397.3
25°	384.9	385.4	385.8	385.7	385.2	384.7	384.3	383.8
27.5°	370.5	370.8	371.1	371.2	371.0	370.8	370.6	370.4
30°	360.6	360.8	361.0	361.1	361.0	360.9	360.8	360.7
32.5°	351.2	351.4	351.6	351.7	351.6	351.5	351.4	351.3
35°	336.0	336.3	336.6	336.7	336.7	336.7	336.7	336.7
37.5°	320.0	320.4	320.7	320.9	320.9	320.8	320.8	320.7
40°	309.2	309.5	310.0	310.3	310.5	310.7	310.9	311.0
42.5°	299.3	299.7	300.2	300.4	300.5	300.5	300.5	300.6
45°	283.2	283.9	284.6	284.9	285.0	285.1	285.2	285.3
47.5°	266.6	267.7	268.6	269.2	269.5	269.7	269.8	270.0
50°	255.6	256.7	257.8	258.4	258.7	259.0	259.3	259.6
52.5°	244.7	245.8	246.9	247.6	247.8	248.1	248.3	248.5
55°	227.3	228.4	229.5	230.2	230.5	230.9	231.4	231.8
57.5°	210.2	211.4	212.6	213.4	213.7	214.0	214.3	214.6
60°	198.5	199.9	201.4	202.3	202.6	202.8	203.1	203.4
62.5°	186.6	188.2	189.8	190.8	191.1	191.5	191.9	192.3
65°	168.9	170.3	171.7	172.7	173.1	173.4	173.9	174.3
67.5°	150.7	152.4	154.2	155.3	155.8	156.4	156.8	157.3
70°	138.3	140.2	141.9	143.2	143.7	144.3	144.9	145.5
72.5°	126.8	128.8	130.7	132.0	132.3	132.8	133.2	133.7
75°	109.3	111.2	113.2	114.3	114.9	115.4	115.8	116.3
77.5°	91.8	94.0	96.0	97.4	97.7	98.1	98.5	98.9
80°	81.3	83.5	85.6	86.9	87.3	87.7	88.0	88.4
82.5°	71.4	73.5	75.6	76.9	77.7	78.3	79.0	79.7
85°	57.9	59.9	62.1	63.5	64.3	65.1	65.9	66.6
87.5°	51.9	54.5	57.0	58.7	59.7	60.5	61.4	62.2
90°	66.1	69.8	73.6	76.3	77.9	79.6	81.2	82.8
92.5°	64.5	68.2	71.9	74.4	75.5	76.6	77.7	78.8
95°	61.9	65.6	69.4	71.5	72.2	72.9	73.5	74.3
97.5°	85.7	78.9	72.0	68.9	69.6	70.2	70.9	71.5
100°	184.8	139.9	95.0	72.2	71.4	70.8	70.1	69.5
102.5°	327.6	320.7	313.8	299.8	279.0	258.1	237.2	216.4
105°	450.6	452.6	454.5	455.6	456.0	456.4	456.8	457.1
107.5°	561.0	563.0	565.0	565.8	565.4	565.1	564.8	564.4
110°	632.4	633.3	634.1	635.1	636.1	637.1	638.1	639.0





TEST NUMBER: P333366-830

CATALOG NUMBER: S125DIW-S375D1560U830-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	702.9	703.5	704.1	704.5	704.7	704.9	705.2	705.4
115°	809.6	810.1	810.7	810.2	808.9	807.6	806.3	804.9
117.5°	912.5	912.5	912.5	912.4	912.3	912.1	911.9	911.7
120°	978.9	980.0	981.0	981.0	980.0	979.0	978.0	977.0
122.5°	1042.1	1043.0	1044.0	1043.8	1042.5	1041.3	1040.1	1038.8
125°	1134.3	1134.6	1134.9	1134.8	1134.3	1133.9	1133.4	1132.9
127.5°	1218.3	1219.1	1219.8	1219.4	1217.6	1215.8	1214.0	1212.2
130°	1273.4	1273.8	1274.2	1273.8	1272.8	1271.7	1270.6	1269.5
132.5°	1324.6	1325.8	1326.9	1326.9	1325.8	1324.6	1323.4	1322.3
135°	1399.5	1400.1	1400.7	1400.3	1398.9	1397.5	1396.1	1394.7
137.5°	1469.6	1470.8	1472.1	1472.2	1470.8	1469.6	1468.4	1467.1
140°	1512.5	1514.2	1515.9	1516.0	1514.5	1513.0	1511.5	1510.0
142.5°	1554.7	1555.8	1556.8	1556.6	1555.1	1553.6	1552.1	1550.6
145°	1614.9	1615.6	1616.5	1616.1	1614.6	1613.1	1611.6	1610.1
147.5°	1666.5	1667.1	1667.5	1666.8	1664.7	1662.6	1660.5	1658.4
150°	1699.6	1700.3	1700.9	1700.0	1697.6	1695.2	1692.7	1690.3
152.5°	1729.2	1729.8	1730.4	1729.6	1727.3	1725.1	1722.9	1720.6
155°	1769.8	1770.8	1771.7	1770.8	1768.4	1765.9	1763.3	1760.8
157.5°	1803.4	1804.4	1805.4	1804.7	1802.1	1799.6	1797.1	1794.6
160°	1824.3	1825.6	1826.8	1826.3	1823.7	1821.2	1818.6	1816.2
162.5°	1843.5	1845.3	1847.0	1846.5	1843.8	1841.0	1838.2	1835.4
165°	1868.1	1870.1	1872.0	1871.6	1869.2	1866.6	1864.1	1861.5
167.5°	1886.8	1889.0	1891.3	1891.0	1888.2	1885.4	1882.5	1879.7
170°	1896.4	1898.9	1901.4	1901.3	1898.5	1895.6	1892.7	1889.9
172.5°	1903.8	1906.1	1908.4	1908.1	1905.3	1902.4	1899.6	1896.8
175°	1911.9	1914.5	1917.0	1916.8	1914.0	1911.2	1908.4	1905.5
177.5°	1915.3	1917.0	1918.8	1918.7	1916.7	1914.7	1912.6	1910.6
180°	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0

(END OF REPORT)