

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: P333654

Luminaire Tested: **S125RDIW-S375D1340U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333654  
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: S125RDIW-S375D1340U835-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1340 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6812.8 lumens  
Efficiency: N/A  
Efficacy: 146.2 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-Indirect

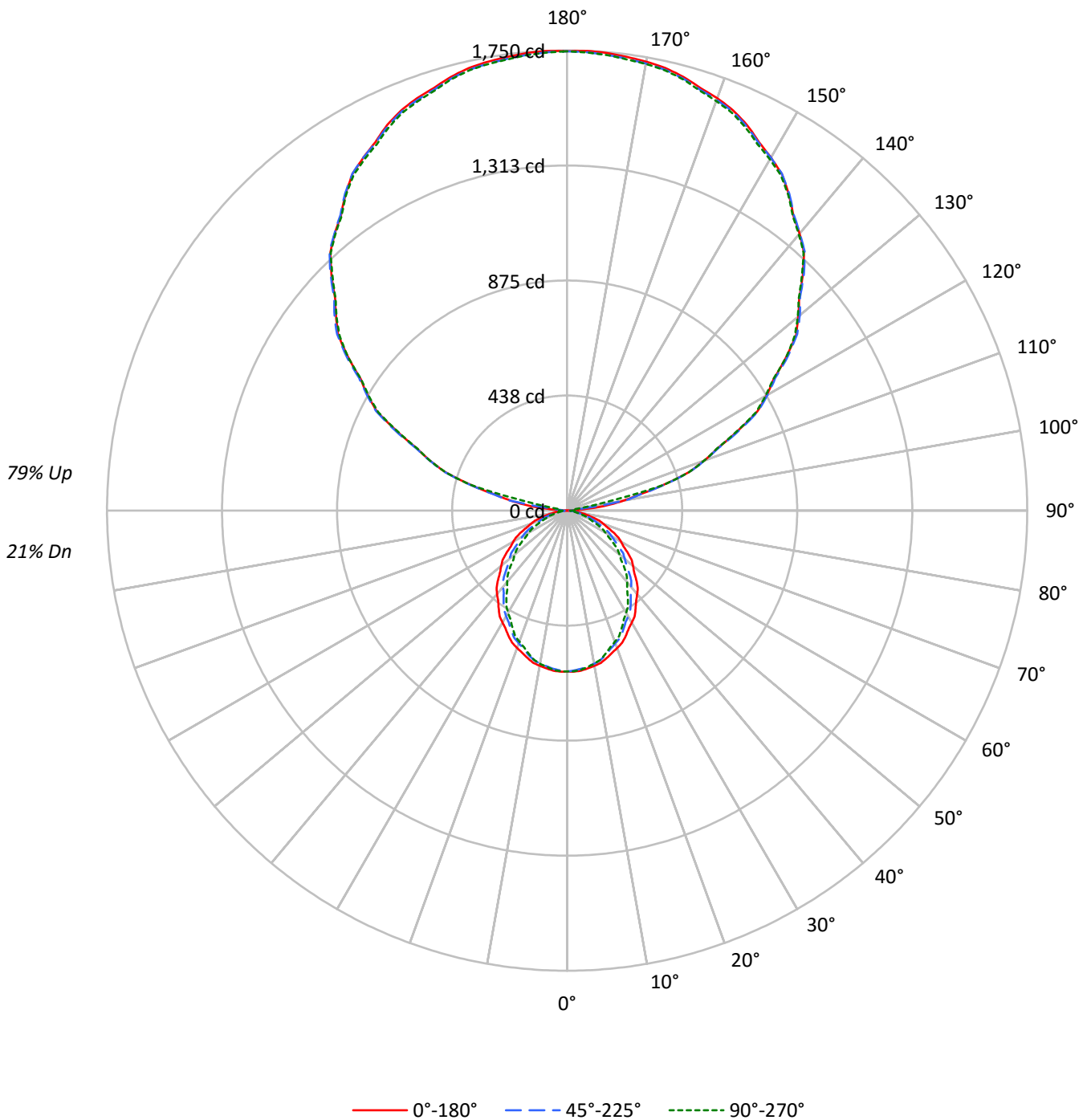
Input Watts (W): 46.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	21
1	91	87	84	80	81	77	74	72	59	57	55	42	41	40	26	26	25	18
2	83	76	71	66	74	68	63	59	52	49	46	37	35	33	23	22	21	15
3	76	67	60	55	67	60	54	49	46	42	38	33	30	28	21	19	18	13
4	69	59	52	46	61	53	46	42	40	36	33	29	26	24	19	17	16	11
5	64	53	45	39	56	47	40	36	36	32	28	26	23	21	17	15	14	10
6	58	47	39	34	52	42	35	31	32	28	24	23	20	18	15	13	12	9
7	54	42	35	29	48	38	31	27	29	25	21	21	18	16	14	12	11	8
8	50	38	31	26	44	34	28	23	27	22	19	19	16	14	13	11	10	7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9	6
10	43	32	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8	6

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3952	3952	3952
5°	3961	3916	3940
10°	3931	3880	3880
15°	3884	3801	3770
20°	3824	3691	3647
25°	3755	3583	3504
30°	3667	3457	3347
35°	3578	3327	3170
40°	3495	3191	2996
45°	3394	3040	2807
50°	3293	2875	2609
55°	3174	2716	2399
60°	3056	2525	2173
65°	2917	2303	1913
70°	2757	2024	1648
75°	2538	1707	1372
80°	2235	1339	1153
85°	1882	1097	1030



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.5	0.8
10°-20°	160.8	2.4
20°-30°	233.2	3.4
30°-40°	265.7	3.9
40°-50°	259.0	3.8
50°-60°	218.0	3.2
60°-70°	152.8	2.2
70°-80°	78.6	1.2
80°-90°	23.5	0.3
90°-100°	63.5	0.9
100°-110°	391.2	5.7
110°-120°	709.5	10.4
120°-130°	910.5	13.4
130°-140°	979.3	14.4
140°-150°	919.2	13.5
150°-160°	743.6	10.9
160°-170°	480.9	7.1
170°-180°	165.9	2.4
0°-30°	451.5	6.6
0°-40°	717.3	10.5
0°-60°	1194.3	17.5
0°-90°	1449.2	21.3
90°-120°	1164.1	17.1
90°-150°	3973.2	58.3
90°-180°	5364.0	78.7
0°-180°	6812.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	612	612	612	612	612	
5°	611	609	604	608	608	58
15°	581	578	568	568	564	164
25°	527	519	503	497	492	242
35°	454	442	422	409	402	284
45°	372	358	333	315	307	287
55°	282	267	241	221	213	252
65°	191	175	151	133	125	189
75°	102	88	68	59	55	108
85°	25	17	15	14	14	29
90°	1	12	21	27	31	4
95°	74	67	21	27	27	94
105°	381	386	386	386	384	404
115°	715	721	722	717	710	708
125°	1016	1025	1025	1020	1016	907
135°	1268	1275	1273	1270	1262	977
145°	1470	1472	1472	1473	1466	919
155°	1618	1611	1613	1616	1607	745
165°	1708	1700	1701	1708	1699	482
175°	1747	1739	1740	1749	1739	166
180°	1747	1747	1747	1747	1747	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9
2.5°	613.0	612.8	612.5	612.3	612.0	611.5	610.7	609.8	609.0	608.2	609.0
5°	611.0	610.6	610.2	609.7	609.3	608.6	607.4	606.3	605.2	604.0	605.1
7.5°	605.0	604.6	604.2	603.8	603.4	602.5	601.2	599.8	598.5	597.1	597.8
10°	599.4	599.1	598.8	598.5	598.2	597.3	595.9	594.4	593.0	591.6	591.9
12.5°	593.1	592.7	592.4	592.0	591.6	590.4	588.5	586.6	584.6	582.7	582.9
15°	580.9	580.3	579.7	579.1	578.5	577.1	574.9	572.8	570.6	568.5	568.4
17.5°	567.2	566.2	565.3	564.3	563.4	561.6	558.8	556.1	553.4	550.7	550.2
20°	556.4	555.4	554.4	553.4	552.3	550.2	546.9	543.6	540.3	537.0	536.5
22.5°	544.6	543.6	542.6	541.5	540.5	538.3	534.8	531.4	527.9	524.5	523.5
25°	526.9	525.3	523.8	522.2	520.7	518.0	514.2	510.4	506.6	502.8	501.5
27.5°	506.5	504.7	502.8	500.9	499.0	496.1	492.0	487.9	483.9	479.8	477.9
30°	491.7	489.8	487.8	485.9	483.9	480.8	476.5	472.2	467.9	463.5	461.2
32.5°	477.3	475.0	472.8	470.5	468.2	464.9	460.5	456.1	451.7	447.3	444.7
35°	453.8	451.4	448.9	446.4	444.0	440.4	435.8	431.2	426.6	422.0	419.0
37.5°	430.8	427.8	424.8	421.8	418.8	414.9	410.2	405.4	400.7	395.9	392.3
40°	414.6	411.5	408.4	405.3	402.2	398.2	393.3	388.4	383.4	378.5	374.6
42.5°	397.5	394.4	391.2	388.1	384.9	380.8	375.7	370.6	365.5	360.4	356.7
45°	371.6	368.6	365.6	362.6	359.7	355.3	349.7	344.1	338.4	332.8	328.6
47.5°	344.7	341.5	338.4	335.2	332.1	327.7	322.0	316.3	310.6	304.9	300.7
50°	327.7	324.3	320.9	317.5	314.1	309.5	303.6	297.8	291.9	286.1	281.8
52.5°	309.2	305.7	302.2	298.8	295.3	290.8	285.3	279.7	274.2	268.7	264.1
55°	281.9	278.6	275.3	272.1	268.8	264.3	258.5	252.7	247.0	241.2	236.6
57.5°	254.4	250.9	247.3	243.8	240.3	235.8	230.2	224.7	219.2	213.6	209.1
60°	236.6	233.0	229.4	225.8	222.2	217.7	212.1	206.6	201.0	195.5	191.0
62.5°	217.8	214.3	210.9	207.5	204.0	199.5	193.9	188.3	182.6	177.0	172.8
65°	190.9	187.4	183.9	180.4	176.9	172.4	167.0	161.6	156.1	150.7	146.6
67.5°	164.2	160.7	157.2	153.7	150.2	145.8	140.6	135.4	130.2	125.0	121.2
70°	146.0	142.6	139.1	135.6	132.1	127.8	122.6	117.5	112.4	107.2	104.0
72.5°	128.3	124.9	121.5	118.1	114.7	110.5	105.7	100.9	96.1	91.3	88.4
75°	101.7	98.6	95.5	92.4	89.4	85.7	81.3	77.0	72.7	68.4	66.1
77.5°	75.2	72.8	70.3	67.8	65.4	62.4	59.0	55.5	52.1	48.6	47.0
80°	60.1	57.6	55.2	52.7	50.2	47.6	44.7	41.8	38.9	36.0	35.1
82.5°	45.3	43.1	40.9	38.6	36.4	34.3	32.4	30.4	28.4	26.4	26.0
85°	25.4	23.6	21.7	19.9	18.0	16.8	16.3	15.8	15.3	14.8	14.7
87.5°	8.8	8.6	8.5	8.4	8.3	8.4	8.7	9.0	9.4	9.7	10.0
90°	1.3	3.6	5.9	8.2	10.5	12.7	14.7	16.7	18.7	20.7	22.2
92.5°	19.9	18.3	16.7	15.1	13.5	13.6	15.4	17.1	18.9	20.7	22.2
95°	73.8	72.9	72.1	71.2	70.3	64.4	53.5	42.6	31.6	20.7	22.2
97.5°	154.1	155.6	157.2	158.7	160.3	150.2	128.6	107.0	85.3	63.7	55.6
100°	216.2	217.1	217.9	218.8	219.7	220.7	221.8	223.0	224.1	225.3	182.4
102.5°	279.4	280.5	281.6	282.7	283.8	284.7	285.4	286.1	286.7	287.4	279.3
105°	380.7	381.8	383.0	384.1	385.3	385.8	385.8	385.8	385.8	385.8	385.8
107.5°	485.8	485.8	485.8	485.8	485.8	486.1	486.7	487.2	487.8	488.4	488.4
110°	554.2	554.2	554.2	554.2	554.2	554.4	555.0	555.6	556.2	556.7	555.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	618.4	619.1	619.8	620.4	621.1	621.7	622.0	622.3	622.7	623.0	621.9
115°	714.7	716.1	717.6	719.0	720.5	721.3	721.6	721.9	722.2	722.5	721.3
117.5°	814.4	814.3	814.3	814.2	814.2	814.7	815.8	816.9	818.0	819.1	817.6
120°	876.5	876.3	876.0	875.7	875.4	875.7	876.5	877.4	878.3	879.1	878.6
122.5°	931.4	932.5	933.6	934.7	935.8	936.6	937.0	937.4	937.8	938.2	937.6
125°	1016.4	1018.4	1020.4	1022.4	1024.4	1025.4	1025.4	1025.4	1025.4	1025.4	1024.3
127.5°	1097.4	1098.9	1100.3	1101.7	1103.2	1103.8	1103.6	1103.5	1103.3	1103.1	1102.5
130°	1147.1	1148.6	1150.0	1151.5	1152.9	1153.8	1154.1	1154.3	1154.6	1154.9	1154.1
132.5°	1196.9	1198.5	1200.2	1201.9	1203.5	1204.1	1203.4	1202.8	1202.2	1201.5	1201.4
135°	1267.6	1269.3	1271.0	1272.7	1274.5	1275.0	1274.5	1273.9	1273.3	1272.7	1272.2
137.5°	1332.6	1334.0	1335.5	1337.0	1338.5	1339.0	1338.5	1338.0	1337.5	1337.0	1337.1
140°	1375.0	1375.6	1376.2	1376.7	1377.3	1377.5	1377.2	1376.9	1376.6	1376.3	1376.9
142.5°	1413.3	1413.7	1414.0	1414.4	1414.7	1415.1	1415.5	1415.9	1416.3	1416.7	1416.8
145°	1469.5	1470.1	1470.7	1471.3	1471.8	1472.1	1472.1	1472.1	1472.1	1472.1	1472.4
147.5°	1518.7	1518.6	1518.5	1518.4	1518.3	1518.4	1518.7	1519.1	1519.4	1519.8	1520.1
150°	1549.8	1549.2	1548.7	1548.1	1547.5	1547.5	1548.1	1548.7	1549.2	1549.8	1550.4
152.5°	1579.8	1578.6	1577.3	1576.1	1574.8	1574.4	1575.0	1575.6	1576.2	1576.7	1577.3
155°	1618.4	1616.7	1615.0	1613.3	1611.5	1611.0	1611.5	1612.1	1612.7	1613.3	1614.1
157.5°	1648.2	1647.2	1646.1	1645.1	1644.1	1643.6	1643.6	1643.7	1643.8	1643.8	1644.7
160°	1668.9	1667.2	1665.5	1663.7	1662.0	1661.3	1661.6	1661.9	1662.2	1662.5	1663.6
162.5°	1685.5	1683.8	1682.0	1680.3	1678.6	1677.9	1678.2	1678.5	1678.7	1679.0	1680.6
165°	1707.8	1706.0	1704.3	1702.6	1700.9	1700.1	1700.4	1700.7	1701.0	1701.3	1703.0
167.5°	1724.3	1722.6	1720.8	1719.0	1717.2	1716.5	1716.7	1717.0	1717.3	1717.6	1719.7
170°	1733.7	1731.7	1729.6	1727.6	1725.6	1724.7	1725.0	1725.3	1725.6	1725.9	1728.2
172.5°	1739.9	1737.9	1735.9	1733.8	1731.8	1731.1	1731.6	1732.1	1732.6	1733.1	1735.2
175°	1746.6	1744.9	1743.2	1741.4	1739.7	1739.0	1739.3	1739.6	1739.9	1740.1	1742.4
177.5°	1749.7	1748.3	1747.0	1745.6	1744.2	1743.6	1743.9	1744.1	1744.3	1744.5	1746.2
180°	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9
2.5°	609.8	610.7	611.5	611.9	611.8	611.7	611.6	611.5
5°	606.1	607.1	608.1	608.6	608.4	608.1	607.9	607.7
7.5°	598.5	599.3	600.0	600.2	600.0	599.8	599.6	599.3
10°	592.2	592.5	592.8	592.8	592.5	592.2	591.9	591.6
12.5°	583.1	583.4	583.6	583.5	583.0	582.5	582.1	581.6
15°	568.2	568.1	568.0	567.5	566.6	565.7	564.8	563.8
17.5°	549.7	549.2	548.7	548.0	547.3	546.5	545.7	545.0
20°	536.0	535.5	535.0	534.3	533.3	532.4	531.5	530.6
22.5°	522.4	521.4	520.4	519.5	518.8	518.0	517.3	516.5
25°	500.2	498.8	497.5	496.3	495.1	494.0	492.9	491.7
27.5°	476.1	474.2	472.3	470.9	469.8	468.7	467.6	466.5
30°	458.8	456.5	454.1	452.5	451.5	450.6	449.7	448.8
32.5°	442.1	439.5	436.8	435.0	433.8	432.6	431.4	430.3
35°	416.0	413.0	410.0	407.8	406.4	405.0	403.5	402.1
37.5°	388.7	385.2	381.6	379.1	377.7	376.3	374.9	373.5
40°	370.7	366.8	362.9	360.3	359.1	357.9	356.6	355.4
42.5°	352.9	349.2	345.4	342.7	340.9	339.0	337.2	335.4
45°	324.5	320.4	316.3	313.5	312.0	310.4	308.9	307.3
47.5°	296.5	292.2	288.0	285.0	283.3	281.6	279.9	278.2
50°	277.4	273.1	268.8	265.9	264.4	262.8	261.3	259.7
52.5°	259.4	254.8	250.1	247.0	245.5	244.0	242.4	240.9
55°	232.0	227.4	222.8	219.6	218.0	216.3	214.7	213.1
57.5°	204.6	200.1	195.5	192.5	191.1	189.6	188.2	186.7
60°	186.5	181.9	177.4	174.4	172.8	171.3	169.8	168.2
62.5°	168.6	164.4	160.2	157.4	155.8	154.3	152.8	151.2
65°	142.4	138.3	134.2	131.4	129.9	128.3	126.8	125.2
67.5°	117.4	113.7	109.9	107.4	106.2	105.0	103.7	102.5
70°	100.9	97.7	94.5	92.3	91.0	89.8	88.6	87.3
72.5°	85.4	82.5	79.6	77.7	76.9	76.1	75.2	74.4
75°	63.9	61.6	59.4	57.9	57.2	56.4	55.7	55.0
77.5°	45.5	43.9	42.3	41.2	40.7	40.2	39.6	39.1
80°	34.2	33.3	32.4	31.8	31.6	31.4	31.2	31.0
82.5°	25.6	25.1	24.7	24.4	24.3	24.2	24.1	23.9
85°	14.6	14.5	14.4	14.3	14.2	14.1	14.0	13.9
87.5°	10.3	10.6	10.8	11.0	11.1	11.2	11.3	11.4
90°	23.6	25.0	26.5	27.6	28.5	29.3	30.2	31.1
92.5°	23.6	25.0	26.5	27.4	27.8	28.2	28.6	29.0
95°	23.6	25.0	26.5	27.2	27.2	27.2	27.2	27.2
97.5°	47.5	39.4	31.2	27.2	27.2	27.2	27.2	27.2
100°	139.5	96.7	53.8	31.8	30.6	29.5	28.3	27.2
102.5°	271.2	263.1	255.0	241.1	221.6	202.0	182.4	162.9
105°	385.8	385.8	385.8	385.7	385.4	385.1	384.8	384.5
107.5°	488.5	488.6	488.6	488.2	487.3	486.5	485.6	484.8
110°	555.0	554.2	553.3	553.0	553.3	553.6	553.9	554.2





TEST NUMBER: P333654

CATALOG NUMBER: S125RDIW-S375D1340U835-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	620.8	619.8	618.7	617.9	617.5	617.1	616.7	616.3
115°	720.2	719.0	717.9	716.4	714.7	713.0	711.2	709.5
117.5°	816.1	814.6	813.1	811.9	811.2	810.5	809.7	809.0
120°	878.0	877.4	876.8	875.8	874.4	872.9	871.5	870.1
122.5°	937.0	936.4	935.9	934.7	933.1	931.4	929.7	928.1
125°	1023.1	1022.0	1020.8	1019.8	1019.0	1018.1	1017.2	1016.4
127.5°	1101.9	1101.2	1100.6	1099.2	1097.1	1095.0	1092.8	1090.7
130°	1153.2	1152.3	1151.5	1150.3	1148.9	1147.4	1146.0	1144.6
132.5°	1201.2	1201.0	1200.8	1200.0	1198.6	1197.2	1195.7	1194.3
135°	1271.6	1271.0	1270.4	1269.3	1267.6	1265.8	1264.1	1262.4
137.5°	1337.2	1337.3	1337.4	1336.7	1335.2	1333.7	1332.2	1330.7
140°	1377.5	1378.0	1378.6	1378.0	1376.3	1374.6	1372.9	1371.1
142.5°	1416.9	1417.1	1417.2	1416.4	1414.6	1412.9	1411.2	1409.5
145°	1472.7	1473.0	1473.3	1472.6	1470.8	1469.1	1467.4	1465.7
147.5°	1520.5	1520.8	1521.2	1520.3	1518.2	1516.1	1514.1	1512.0
150°	1551.0	1551.5	1552.1	1551.2	1548.9	1546.6	1544.3	1542.0
152.5°	1577.9	1578.5	1579.0	1578.3	1576.2	1574.2	1572.1	1570.0
155°	1615.0	1615.8	1616.7	1616.0	1613.7	1611.4	1609.1	1606.8
157.5°	1645.7	1646.6	1647.5	1646.8	1644.5	1642.2	1639.9	1637.6
160°	1664.8	1665.9	1667.1	1666.5	1664.2	1661.9	1659.6	1657.3
162.5°	1682.2	1683.9	1685.5	1685.0	1682.5	1679.9	1677.4	1674.9
165°	1704.7	1706.5	1708.2	1707.9	1705.6	1703.3	1701.0	1698.7
167.5°	1721.8	1723.8	1725.9	1725.6	1723.0	1720.5	1717.9	1715.3
170°	1730.5	1732.8	1735.1	1735.0	1732.4	1729.8	1727.2	1724.6
172.5°	1737.3	1739.4	1741.4	1741.2	1738.6	1736.0	1733.4	1730.8
175°	1744.7	1747.0	1749.3	1749.2	1746.6	1744.0	1741.4	1738.8
177.5°	1747.8	1749.4	1751.0	1750.9	1749.0	1747.2	1745.3	1743.5
180°	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6

(END OF REPORT)