

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: P333654-940

Luminaire Tested: **S125RDIW-S375D1340U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333654-940  
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-S375D1340U940-4F0-1E-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: 6075.0 lumens  
Efficiency: N/A  
Efficacy: 130.4 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-Indirect

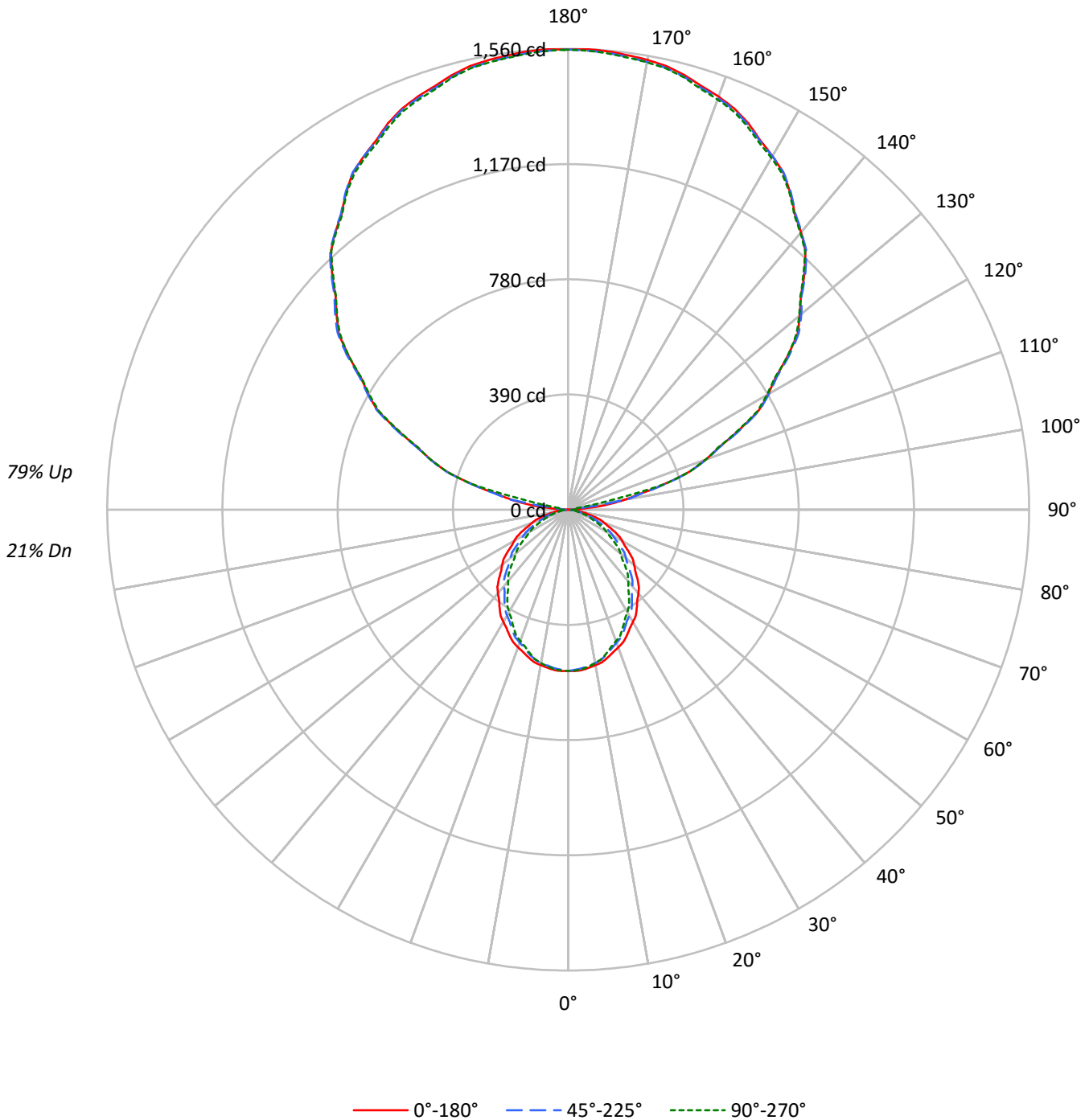
Input Watts (W): 46.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3524	3524	3524
5°	3532	3492	3513
10°	3505	3459	3459
15°	3463	3389	3361
20°	3410	3291	3252
25°	3348	3195	3125
30°	3270	3082	2984
35°	3191	2967	2827
40°	3117	2845	2672
45°	3027	2711	2503
50°	2936	2563	2327
55°	2831	2422	2139
60°	2725	2251	1938
65°	2601	2054	1705
70°	2459	1805	1469
75°	2263	1522	1223
80°	1993	1194	1027
85°	1675	978	919



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.3	0.8
10°-20°	143.4	2.4
20°-30°	207.9	3.4
30°-40°	237.0	3.9
40°-50°	231.0	3.8
50°-60°	194.4	3.2
60°-70°	136.3	2.2
70°-80°	70.1	1.2
80°-90°	20.9	0.3
90°-100°	56.6	0.9
100°-110°	348.8	5.7
110°-120°	632.6	10.4
120°-130°	811.9	13.4
130°-140°	873.3	14.4
140°-150°	819.7	13.5
150°-160°	663.1	10.9
160°-170°	428.8	7.1
170°-180°	147.9	2.4
0°-30°	402.6	6.6
0°-40°	639.6	10.5
0°-60°	1065.0	17.5
0°-90°	1292.3	21.3
90°-120°	1038.1	17.1
90°-150°	3542.9	58.3
90°-180°	4783.0	78.7
0°-180°	6075.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	546	546	546	546	546	
5°	545	543	539	542	542	52
15°	518	515	507	506	503	146
25°	470	463	448	443	438	216
35°	405	394	376	365	359	253
45°	331	319	297	281	274	256
55°	251	238	215	197	190	225
65°	170	156	134	118	112	169
75°	91	78	61	52	49	96
85°	23	16	13	13	12	25
90°	1	10	18	24	28	4
95°	66	60	18	24	24	84
105°	340	344	344	344	343	360
115°	637	643	644	640	633	632
125°	906	914	914	910	906	809
135°	1130	1137	1135	1132	1126	871
145°	1310	1313	1313	1313	1307	819
155°	1443	1437	1439	1441	1433	665
165°	1523	1516	1517	1523	1515	430
175°	1558	1551	1552	1560	1550	148
180°	1558	1558	1558	1558	1558	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6
2.5°	546.6	546.4	546.2	546.0	545.7	545.3	544.6	543.8	543.1	542.3	543.1
5°	544.8	544.5	544.1	543.7	543.3	542.7	541.6	540.6	539.7	538.6	539.6
7.5°	539.5	539.1	538.8	538.4	538.1	537.3	536.1	534.8	533.7	532.4	533.1
10°	534.5	534.2	534.0	533.7	533.4	532.6	531.4	530.0	528.8	527.5	527.8
12.5°	528.9	528.5	528.2	527.9	527.5	526.5	524.8	523.1	521.3	519.6	519.8
15°	518.0	517.5	516.9	516.4	515.9	514.6	512.6	510.8	508.8	506.9	506.8
17.5°	505.8	504.9	504.1	503.2	502.4	500.8	498.3	495.9	493.5	491.1	490.6
20°	496.1	495.3	494.4	493.5	492.5	490.6	487.7	484.7	481.8	478.8	478.4
22.5°	485.6	484.7	483.8	482.9	482.0	480.0	476.9	473.9	470.7	467.7	466.8
25°	469.8	468.4	467.1	465.7	464.3	461.9	458.5	455.1	451.7	448.4	447.2
27.5°	451.7	450.0	448.4	446.7	445.0	442.4	438.7	435.1	431.5	427.8	426.1
30°	438.5	436.8	435.0	433.3	431.5	428.7	424.9	421.1	417.2	413.3	411.3
32.5°	425.6	423.6	421.6	419.5	417.5	414.6	410.6	406.7	402.8	398.9	396.5
35°	404.7	402.5	400.3	398.1	395.9	392.7	388.6	384.5	380.4	376.3	373.6
37.5°	384.1	381.5	378.8	376.1	373.4	370.0	365.8	361.5	357.3	353.0	349.8
40°	369.7	366.9	364.2	361.4	358.6	355.1	350.7	346.3	341.9	337.5	334.0
42.5°	354.5	351.7	348.8	346.1	343.2	339.6	335.0	330.5	325.9	321.4	318.1
45°	331.4	328.7	326.0	323.3	320.7	316.8	311.8	306.8	301.8	296.8	293.0
47.5°	307.4	304.5	301.8	298.9	296.1	292.2	287.1	282.0	277.0	271.9	268.1
50°	292.2	289.2	286.1	283.1	280.1	276.0	270.7	265.6	260.3	255.1	251.3
52.5°	275.7	272.6	269.5	266.4	263.3	259.3	254.4	249.4	244.5	239.6	235.5
55°	251.4	248.4	245.5	242.6	239.7	235.7	230.5	225.3	220.3	215.1	211.0
57.5°	226.9	223.7	220.5	217.4	214.3	210.3	205.3	200.4	195.5	190.5	186.5
60°	211.0	207.8	204.6	201.3	198.1	194.1	189.1	184.2	179.2	174.3	170.3
62.5°	194.2	191.1	188.1	185.0	181.9	177.9	172.9	167.9	162.8	157.8	154.1
65°	170.2	167.1	164.0	160.9	157.7	153.7	148.9	144.1	139.2	134.4	130.7
67.5°	146.4	143.3	140.2	137.1	133.9	130.0	125.4	120.7	116.1	111.5	108.1
70°	130.2	127.2	124.0	120.9	117.8	114.0	109.3	104.8	100.2	95.6	92.7
72.5°	114.4	111.4	108.3	105.3	102.3	98.5	94.3	90.0	85.7	81.4	78.8
75°	90.7	87.9	85.2	82.4	79.7	76.4	72.5	68.7	64.8	61.0	58.9
77.5°	67.1	64.9	62.7	60.5	58.3	55.6	52.6	49.5	46.5	43.3	41.9
80°	53.6	51.4	49.2	47.0	44.8	42.4	39.9	37.3	34.7	32.1	31.3
82.5°	40.4	38.4	36.5	34.4	32.5	30.6	28.9	27.1	25.3	23.5	23.2
85°	22.6	21.0	19.4	17.7	16.1	15.0	14.5	14.1	13.6	13.2	13.1
87.5°	7.8	7.7	7.6	7.5	7.4	7.5	7.8	8.0	8.4	8.6	8.9
90°	1.2	3.2	5.3	7.3	9.4	11.3	13.1	14.9	16.7	18.5	19.8
92.5°	17.7	16.3	14.9	13.5	12.0	12.1	13.7	15.2	16.9	18.5	19.8
95°	65.8	65.0	64.3	63.5	62.7	57.4	47.7	38.0	28.2	18.5	19.8
97.5°	137.4	138.8	140.2	141.5	142.9	133.9	114.7	95.4	76.1	56.8	49.6
100°	192.8	193.6	194.3	195.1	195.9	196.8	197.8	198.9	199.8	200.9	162.6
102.5°	249.1	250.1	251.1	252.1	253.1	253.9	254.5	255.1	255.7	256.3	249.1
105°	339.5	340.5	341.5	342.5	343.6	344.0	344.0	344.0	344.0	344.0	344.0
107.5°	433.2	433.2	433.2	433.2	433.2	433.5	434.0	434.4	435.0	435.5	435.5
110°	494.2	494.2	494.2	494.2	494.2	494.4	494.9	495.4	496.0	496.4	495.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	551.4	552.1	552.7	553.2	553.8	554.4	554.6	554.9	555.3	555.5	554.6
115°	637.3	638.6	639.9	641.1	642.5	643.2	643.5	643.7	644.0	644.3	643.2
117.5°	726.2	726.1	726.1	726.0	726.0	726.5	727.5	728.4	729.4	730.4	729.1
120°	781.6	781.4	781.1	780.9	780.6	780.9	781.6	782.4	783.2	783.9	783.5
122.5°	830.5	831.5	832.5	833.5	834.5	835.2	835.5	835.9	836.2	836.6	836.1
125°	906.3	908.1	909.9	911.7	913.5	914.4	914.4	914.4	914.4	914.4	913.4
127.5°	978.6	979.9	981.1	982.4	983.7	984.3	984.1	984.0	983.8	983.6	983.1
130°	1022.9	1024.2	1025.5	1026.8	1028.1	1028.9	1029.1	1029.3	1029.6	1029.8	1029.1
132.5°	1067.3	1068.7	1070.2	1071.7	1073.2	1073.7	1073.1	1072.5	1072.0	1071.4	1071.3
135°	1130.3	1131.8	1133.4	1134.9	1136.5	1136.9	1136.5	1136.0	1135.4	1134.9	1134.4
137.5°	1188.3	1189.5	1190.9	1192.2	1193.6	1194.0	1193.6	1193.1	1192.7	1192.2	1192.3
140°	1226.1	1226.6	1227.2	1227.6	1228.2	1228.3	1228.1	1227.8	1227.5	1227.3	1227.8
142.5°	1260.3	1260.6	1260.9	1261.2	1261.5	1261.9	1262.2	1262.6	1262.9	1263.3	1263.4
145°	1310.4	1310.9	1311.4	1312.0	1312.4	1312.7	1312.7	1312.7	1312.7	1312.7	1313.0
147.5°	1354.2	1354.2	1354.1	1354.0	1353.9	1354.0	1354.2	1354.6	1354.9	1355.2	1355.5
150°	1382.0	1381.4	1381.0	1380.5	1379.9	1379.9	1380.5	1381.0	1381.4	1382.0	1382.5
152.5°	1408.7	1407.7	1406.5	1405.4	1404.3	1403.9	1404.4	1405.0	1405.5	1406.0	1406.5
155°	1443.1	1441.6	1440.1	1438.6	1437.0	1436.5	1437.0	1437.5	1438.1	1438.6	1439.3
157.5°	1469.7	1468.8	1467.8	1467.0	1466.1	1465.6	1465.6	1465.7	1465.8	1465.8	1466.6
160°	1488.2	1486.7	1485.1	1483.5	1482.0	1481.4	1481.7	1481.9	1482.2	1482.5	1483.5
162.5°	1503.0	1501.5	1499.9	1498.3	1496.8	1496.2	1496.5	1496.7	1496.9	1497.2	1498.6
165°	1522.9	1521.3	1519.7	1518.2	1516.7	1516.0	1516.3	1516.5	1516.8	1517.1	1518.6
167.5°	1537.6	1536.1	1534.5	1532.9	1531.2	1530.6	1530.8	1531.1	1531.3	1531.6	1533.5
170°	1546.0	1544.2	1542.3	1540.5	1538.7	1537.9	1538.2	1538.5	1538.7	1539.0	1541.1
172.5°	1551.5	1549.7	1547.9	1546.0	1544.3	1543.6	1544.1	1544.5	1545.0	1545.4	1547.3
175°	1557.5	1555.9	1554.4	1552.8	1551.3	1550.7	1551.0	1551.2	1551.5	1551.7	1553.7
177.5°	1560.2	1559.0	1557.8	1556.6	1555.3	1554.8	1555.1	1555.2	1555.4	1555.6	1557.1
180°	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6
2.5°	543.8	544.6	545.3	545.6	545.5	545.5	545.4	545.3
5°	540.5	541.4	542.2	542.7	542.5	542.2	542.1	541.9
7.5°	533.7	534.4	535.0	535.2	535.0	534.8	534.7	534.4
10°	528.1	528.3	528.6	528.6	528.3	528.1	527.8	527.5
12.5°	520.0	520.2	520.4	520.3	519.9	519.4	519.1	518.6
15°	506.7	506.6	506.5	506.0	505.2	504.4	503.6	502.7
17.5°	490.2	489.7	489.3	488.7	488.0	487.3	486.6	486.0
20°	478.0	477.5	477.1	476.4	475.5	474.7	473.9	473.1
22.5°	465.8	464.9	464.0	463.2	462.6	461.9	461.3	460.6
25°	446.0	444.8	443.6	442.6	441.5	440.5	439.5	438.5
27.5°	424.5	422.8	421.2	419.9	418.9	417.9	417.0	416.0
30°	409.1	407.1	404.9	403.5	402.6	401.8	401.0	400.2
32.5°	394.2	391.9	389.5	387.9	386.8	385.8	384.7	383.7
35°	371.0	368.3	365.6	363.6	362.4	361.1	359.8	358.6
37.5°	346.6	343.5	340.3	338.0	336.8	335.6	334.3	333.1
40°	330.6	327.1	323.6	321.3	320.2	319.1	318.0	316.9
42.5°	314.7	311.4	308.0	305.6	304.0	302.3	300.7	299.1
45°	289.4	285.7	282.0	279.6	278.2	276.8	275.4	274.0
47.5°	264.4	260.6	256.8	254.1	252.6	251.1	249.6	248.1
50°	247.4	243.5	239.7	237.1	235.8	234.3	233.0	231.6
52.5°	231.3	227.2	223.0	220.3	218.9	217.6	216.2	214.8
55°	206.9	202.8	198.7	195.8	194.4	192.9	191.5	190.0
57.5°	182.4	178.4	174.3	171.7	170.4	169.1	167.8	166.5
60°	166.3	162.2	158.2	155.5	154.1	152.8	151.4	150.0
62.5°	150.3	146.6	142.9	140.4	138.9	137.6	136.3	134.8
65°	127.0	123.3	119.7	117.2	115.8	114.4	113.1	111.6
67.5°	104.7	101.4	98.0	95.8	94.7	93.6	92.5	91.4
70°	90.0	87.1	84.3	82.3	81.1	80.1	79.0	77.8
72.5°	76.2	73.6	71.0	69.3	68.6	67.9	67.1	66.3
75°	57.0	54.9	53.0	51.6	51.0	50.3	49.7	49.0
77.5°	40.6	39.1	37.7	36.7	36.3	35.8	35.3	34.9
80°	30.5	29.7	28.9	28.4	28.2	28.0	27.8	27.6
82.5°	22.8	22.4	22.0	21.8	21.7	21.6	21.5	21.3
85°	13.0	12.9	12.8	12.8	12.7	12.6	12.5	12.4
87.5°	9.2	9.5	9.6	9.8	9.9	10.0	10.1	10.2
90°	21.0	22.3	23.6	24.6	25.4	26.1	26.9	27.7
92.5°	21.0	22.3	23.6	24.4	24.8	25.1	25.5	25.9
95°	21.0	22.3	23.6	24.3	24.3	24.3	24.3	24.3
97.5°	42.4	35.1	27.8	24.3	24.3	24.3	24.3	24.3
100°	124.4	86.2	48.0	28.4	27.3	26.3	25.2	24.3
102.5°	241.8	234.6	227.4	215.0	197.6	180.1	162.6	145.3
105°	344.0	344.0	344.0	343.9	343.7	343.4	343.1	342.9
107.5°	435.6	435.7	435.7	435.3	434.5	433.8	433.0	432.3
110°	494.9	494.2	493.4	493.1	493.4	493.7	493.9	494.2





TEST NUMBER: P333654-940

CATALOG NUMBER: S125RDIW-S375D1340U940-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	553.6	552.7	551.7	551.0	550.6	550.3	549.9	549.6
115°	642.2	641.1	640.2	638.8	637.3	635.8	634.2	632.7
117.5°	727.7	726.4	725.1	724.0	723.4	722.7	722.0	721.4
120°	782.9	782.4	781.9	781.0	779.7	778.4	777.1	775.9
122.5°	835.5	835.0	834.6	833.5	832.1	830.5	829.0	827.6
125°	912.3	911.3	910.3	909.4	908.7	907.9	907.0	906.3
127.5°	982.6	982.0	981.4	980.2	978.3	976.4	974.5	972.6
130°	1028.3	1027.5	1026.8	1025.7	1024.5	1023.1	1021.9	1020.7
132.5°	1071.1	1070.9	1070.8	1070.1	1068.8	1067.6	1066.2	1065.0
135°	1133.9	1133.4	1132.8	1131.8	1130.3	1128.7	1127.2	1125.7
137.5°	1192.4	1192.5	1192.6	1191.9	1190.6	1189.3	1187.9	1186.6
140°	1228.3	1228.8	1229.3	1228.8	1227.3	1225.7	1224.2	1222.6
142.5°	1263.5	1263.6	1263.7	1263.0	1261.4	1259.9	1258.4	1256.9
145°	1313.2	1313.5	1313.8	1313.1	1311.5	1310.0	1308.5	1307.0
147.5°	1355.8	1356.1	1356.5	1355.7	1353.8	1351.9	1350.1	1348.3
150°	1383.0	1383.5	1384.0	1383.2	1381.2	1379.1	1377.1	1375.0
152.5°	1407.0	1407.6	1408.0	1407.4	1405.5	1403.7	1401.9	1400.0
155°	1440.1	1440.8	1441.6	1441.0	1439.0	1436.9	1434.9	1432.8
157.5°	1467.5	1468.3	1469.1	1468.5	1466.4	1464.4	1462.3	1460.3
160°	1484.5	1485.5	1486.6	1486.0	1484.0	1481.9	1479.9	1477.8
162.5°	1500.0	1501.6	1503.0	1502.5	1500.3	1498.0	1495.8	1493.5
165°	1520.1	1521.7	1523.2	1523.0	1520.9	1518.9	1516.8	1514.7
167.5°	1535.3	1537.1	1539.0	1538.7	1536.4	1534.2	1531.9	1529.6
170°	1543.1	1545.2	1547.2	1547.1	1544.8	1542.5	1540.2	1537.8
172.5°	1549.2	1551.0	1552.8	1552.6	1550.3	1548.0	1545.7	1543.4
175°	1555.8	1557.8	1559.9	1559.8	1557.5	1555.1	1552.8	1550.5
177.5°	1558.5	1560.0	1561.4	1561.3	1559.6	1558.0	1556.3	1554.7
180°	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5

(END OF REPORT)