

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: P333655-927

Luminaire Tested: **S125RDIW-S375D1340U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333655-927  
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: S125RDIW-S375D1340U927-4F0-1E-UDD-F1  
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, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4832.7 lumens  
Efficiency: N/A  
Efficacy: 103.7 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

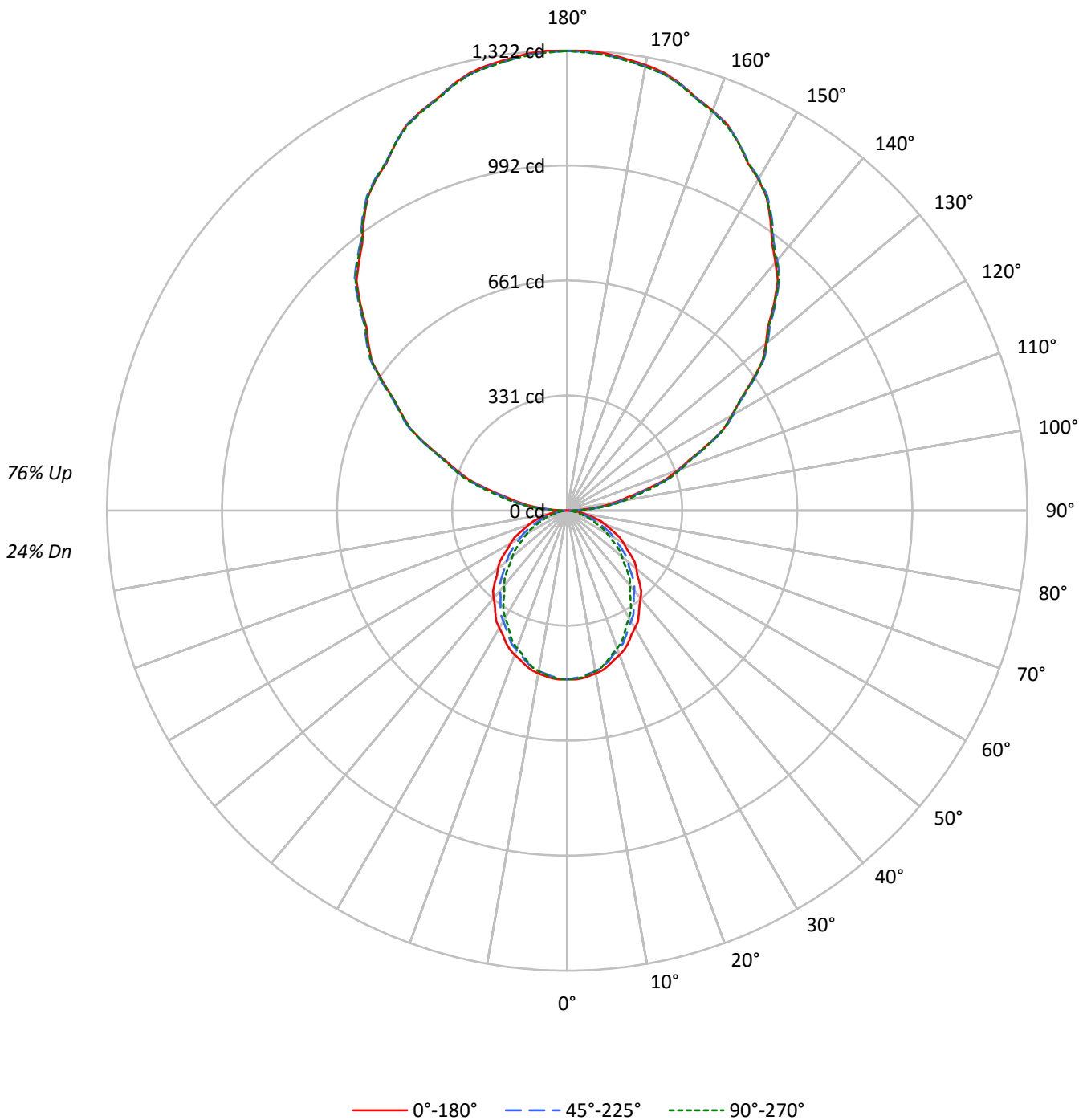
Input Watts (W): 46.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333655-927

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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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	56	44	42	41	28	28	27	20
2	84	77	71	66	74	68	64	60	53	50	47	38	36	35	25	24	23	17
3	76	67	61	55	68	60	54	50	47	43	39	34	31	29	22	21	20	15
4	70	60	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	40	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	40	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	12	9
8	50	39	31	26	45	35	28	24	27	23	19	20	17	15	14	12	10	8
9	47	35	28	23	41	32	25	21	25	20	17	19	15	13	13	11	9	7
10	43	32	25	21	39	29	23	19	23	18	15	17	14	12	12	10	8	6

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

	0°	45°	90°
0°	3130	3130	3130
5°	3138	3102	3121
10°	3114	3074	3074
15°	3077	3011	2986
20°	3030	2924	2889
25°	2974	2838	2776
30°	2905	2738	2651
35°	2834	2636	2511
40°	2769	2528	2373
45°	2689	2408	2223
50°	2608	2277	2067
55°	2514	2152	1901
60°	2421	2001	1721
65°	2311	1825	1516
70°	2185	1603	1307
75°	2011	1352	1088
80°	1770	1060	915
85°	1489	867	815



TEST NUMBER: P333655-927

CATALOG NUMBER: S125RDIW-S375D1340U927-4F0-1E-UDD-F1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.6	0.9
10°-20°	127.4	2.6
20°-30°	184.7	3.8
30°-40°	210.5	4.4
40°-50°	205.2	4.2
50°-60°	172.7	3.6
60°-70°	121.1	2.5
70°-80°	62.2	1.3
80°-90°	18.6	0.4
90°-100°	88.4	1.8
100°-110°	261.2	5.4
110°-120°	442.4	9.2
120°-130°	582.2	12.0
130°-140°	652.3	13.5
140°-150°	639.3	13.2
150°-160°	537.0	11.1
160°-170°	357.0	7.4
170°-180°	124.9	2.6
0°-30°	357.7	7.4
0°-40°	568.2	11.8
0°-60°	946.1	19.6
0°-90°	1148.0	23.8
90°-120°	792.0	16.4
90°-150°	2665.8	55.2
90°-180°	3685.0	76.3
0°-180°	4832.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	485	485	485	485	485	
5°	484	482	478	482	481	46
15°	460	458	450	450	447	130
25°	417	411	398	394	390	192
35°	360	350	334	324	318	225
45°	294	283	264	249	243	227
55°	223	211	191	175	169	200
65°	151	138	119	105	99	150
75°	81	69	54	46	44	85
85°	20	14	12	11	11	23
90°	1	9	16	21	25	5
95°	67	69	79	86	88	71
105°	234	239	246	252	255	250
115°	443	447	449	448	447	438
125°	646	652	654	652	650	579
135°	841	846	848	848	844	648
145°	1018	1022	1026	1025	1022	636
155°	1165	1165	1166	1170	1165	536
165°	1267	1265	1266	1270	1264	357
175°	1317	1314	1313	1319	1312	125
180°	1320	1320	1320	1320	1320	



TEST NUMBER: P333655-927

CATALOG NUMBER: S125RDIW-S375D1340U927-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7
2.5°	485.6	485.4	485.2	485.1	484.8	484.4	483.8	483.1	482.4	481.8	482.4
5°	484.0	483.7	483.4	483.0	482.7	482.1	481.2	480.3	479.4	478.5	479.3
7.5°	479.3	479.0	478.6	478.3	478.0	477.3	476.3	475.2	474.1	473.0	473.6
10°	474.8	474.6	474.4	474.1	473.9	473.2	472.1	470.9	469.8	468.7	468.9
12.5°	469.8	469.5	469.3	469.0	468.7	467.7	466.2	464.7	463.1	461.6	461.8
15°	460.2	459.7	459.2	458.8	458.3	457.2	455.4	453.8	452.0	450.4	450.3
17.5°	449.3	448.5	447.8	447.0	446.3	444.9	442.7	440.5	438.4	436.3	435.9
20°	440.8	440.0	439.2	438.4	437.5	435.9	433.2	430.6	428.0	425.4	425.0
22.5°	431.4	430.6	429.8	429.0	428.2	426.4	423.7	421.0	418.2	415.5	414.7
25°	417.4	416.1	414.9	413.7	412.5	410.4	407.3	404.3	401.3	398.3	397.3
27.5°	401.2	399.8	398.3	396.8	395.3	393.0	389.8	386.5	383.3	380.1	378.6
30°	389.5	388.0	386.4	384.9	383.3	380.9	377.5	374.1	370.7	367.2	365.4
32.5°	378.1	376.3	374.5	372.7	370.9	368.3	364.8	361.3	357.8	354.3	352.3
35°	359.5	357.6	355.6	353.6	351.7	348.9	345.2	341.6	337.9	334.3	331.9
37.5°	341.3	338.9	336.5	334.1	331.8	328.7	325.0	321.2	317.4	313.6	310.8
40°	328.4	326.0	323.5	321.1	318.6	315.4	311.6	307.7	303.7	299.8	296.8
42.5°	314.9	312.4	309.9	307.4	304.9	301.7	297.6	293.6	289.5	285.5	282.6
45°	294.4	292.0	289.6	287.2	284.9	281.5	277.0	272.6	268.1	263.6	260.3
47.5°	273.1	270.5	268.1	265.5	263.1	259.6	255.1	250.6	246.1	241.5	238.2
50°	259.6	256.9	254.2	251.5	248.8	245.2	240.5	235.9	231.2	226.6	223.2
52.5°	244.9	242.2	239.4	236.7	233.9	230.4	226.0	221.6	217.2	212.9	209.2
55°	223.3	220.7	218.1	215.6	212.9	209.4	204.8	200.2	195.7	191.1	187.4
57.5°	201.5	198.8	195.9	193.1	190.4	186.8	182.4	178.0	173.6	169.2	165.6
60°	187.4	184.6	181.7	178.9	176.0	172.5	168.0	163.7	159.2	154.9	151.3
62.5°	172.5	169.8	167.1	164.4	161.6	158.0	153.6	149.2	144.7	140.2	136.9
65°	151.2	148.5	145.7	142.9	140.1	136.6	132.3	128.0	123.7	119.4	116.1
67.5°	130.1	127.3	124.5	121.8	119.0	115.5	111.4	107.3	103.1	99.0	96.0
70°	115.7	113.0	110.2	107.4	104.6	101.2	97.1	93.1	89.0	84.9	82.4
72.5°	101.6	98.9	96.3	93.6	90.9	87.5	83.7	79.9	76.1	72.3	70.0
75°	80.6	78.1	75.7	73.2	70.8	67.9	64.4	61.0	57.6	54.2	52.4
77.5°	59.6	57.7	55.7	53.7	51.8	49.4	46.7	44.0	41.3	38.5	37.2
80°	47.6	45.6	43.7	41.7	39.8	37.7	35.4	33.1	30.8	28.5	27.8
82.5°	35.9	34.1	32.4	30.6	28.8	27.2	25.7	24.1	22.5	20.9	20.6
85°	20.1	18.7	17.2	15.8	14.3	13.3	12.9	12.5	12.1	11.7	11.6
87.5°	7.0	6.8	6.7	6.7	6.6	6.7	6.9	7.2	7.4	7.7	7.9
90°	1.0	2.9	4.7	6.5	8.3	10.1	11.6	13.2	14.8	16.5	17.6
92.5°	24.9	26.1	27.4	28.7	29.9	31.6	33.6	35.6	37.5	39.5	41.0
95°	66.8	67.3	67.7	68.1	68.6	70.0	72.2	74.5	76.8	79.1	80.7
97.5°	111.0	111.1	111.4	111.5	111.7	113.4	116.5	119.7	122.9	126.0	127.5
100°	143.9	143.9	143.9	143.9	143.9	145.4	148.3	151.3	154.2	157.2	159.3
102.5°	179.2	180.1	181.0	182.0	182.8	184.1	185.6	187.1	188.6	190.1	192.3
105°	234.3	235.4	236.5	237.7	238.8	240.1	241.5	242.9	244.2	245.6	247.0
107.5°	295.1	296.3	297.4	298.6	299.7	300.8	301.8	302.9	304.0	305.0	305.7
110°	337.1	338.2	339.4	340.5	341.6	342.5	343.3	343.9	344.6	345.2	345.9



TEST NUMBER: P333655-927

CATALOG NUMBER: S125RDIW-S375D1340U927-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	379.8	380.4	381.0	381.6	382.1	382.9	383.7	384.6	385.5	386.3	386.7
115°	442.9	443.8	444.7	445.6	446.6	447.3	447.7	448.1	448.6	449.1	448.9
117.5°	506.2	506.6	507.0	507.4	507.9	508.3	508.7	509.1	509.5	509.9	510.1
120°	545.7	546.8	548.0	549.1	550.2	550.9	551.1	551.4	551.6	551.8	551.8
122.5°	588.4	588.8	589.2	589.6	590.0	590.6	591.1	591.8	592.3	592.9	592.7
125°	646.3	647.7	649.1	650.5	651.8	652.6	652.8	653.1	653.3	653.6	653.1
127.5°	708.0	708.8	709.6	710.3	711.1	711.6	711.9	712.2	712.5	712.7	712.5
130°	745.0	746.2	747.3	748.5	749.6	750.4	750.8	751.3	751.7	752.2	751.9
132.5°	782.0	783.9	785.8	787.6	789.5	790.4	790.3	790.2	790.1	790.0	789.8
135°	840.6	841.9	843.3	844.7	846.1	846.8	847.1	847.3	847.6	847.8	847.8
137.5°	895.6	897.0	898.3	899.6	900.9	901.8	902.4	902.9	903.4	903.9	904.1
140°	931.0	932.2	933.3	934.5	935.6	936.4	937.2	937.9	938.5	939.2	939.7
142.5°	966.4	967.3	968.3	969.2	970.2	971.1	971.9	972.8	973.7	974.5	974.9
145°	1018.4	1019.2	1020.2	1021.0	1022.0	1022.8	1023.5	1024.1	1024.8	1025.6	1025.6
147.5°	1066.4	1066.9	1067.5	1067.9	1068.4	1069.0	1069.5	1070.1	1070.6	1071.2	1071.7
150°	1098.5	1098.3	1098.0	1097.8	1097.6	1097.9	1098.8	1099.8	1100.7	1101.6	1101.6
152.5°	1124.8	1125.1	1125.5	1125.8	1126.1	1126.4	1126.8	1127.1	1127.5	1127.9	1128.5
155°	1165.3	1165.3	1165.3	1165.3	1165.3	1165.4	1165.6	1165.9	1166.1	1166.3	1167.2
157.5°	1201.4	1200.9	1200.5	1199.9	1199.4	1199.3	1199.5	1199.8	1200.0	1200.2	1201.1
160°	1222.8	1222.2	1221.5	1220.8	1220.1	1219.9	1220.1	1220.4	1220.5	1220.8	1221.7
162.5°	1241.7	1241.3	1240.7	1240.2	1239.8	1239.5	1239.5	1239.6	1239.6	1239.7	1240.8
165°	1267.0	1266.5	1266.1	1265.7	1265.2	1265.1	1265.3	1265.5	1265.7	1266.0	1266.9
167.5°	1288.4	1287.5	1286.6	1285.6	1284.8	1284.3	1284.3	1284.3	1284.3	1284.3	1285.6
170°	1299.9	1299.0	1298.1	1297.2	1296.2	1295.8	1295.8	1295.8	1295.8	1295.8	1297.2
172.5°	1308.1	1307.2	1306.3	1305.4	1304.5	1304.0	1304.0	1304.0	1304.0	1304.0	1305.4
175°	1317.4	1316.4	1315.6	1314.6	1313.8	1313.3	1313.3	1313.3	1313.3	1313.3	1314.6
177.5°	1322.1	1321.4	1320.6	1319.9	1319.1	1318.7	1318.5	1318.3	1318.2	1318.0	1319.1
180°	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5



TEST NUMBER: P333655-927

CATALOG NUMBER: S125RDIW-S375D1340U927-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7
2.5°	483.1	483.8	484.4	484.7	484.7	484.6	484.5	484.4
5°	480.1	480.9	481.7	482.1	482.0	481.7	481.6	481.4
7.5°	474.1	474.8	475.3	475.5	475.3	475.2	475.0	474.8
10°	469.1	469.4	469.6	469.6	469.4	469.1	468.9	468.7
12.5°	461.9	462.2	462.3	462.2	461.8	461.4	461.1	460.7
15°	450.1	450.0	450.0	449.6	448.9	448.1	447.4	446.6
17.5°	435.5	435.1	434.7	434.1	433.6	432.9	432.3	431.7
20°	424.6	424.2	423.8	423.3	422.5	421.8	421.0	420.3
22.5°	413.8	413.0	412.3	411.5	411.0	410.4	409.8	409.2
25°	396.2	395.1	394.1	393.2	392.2	391.3	390.5	389.5
27.5°	377.2	375.7	374.1	373.0	372.2	371.3	370.4	369.6
30°	363.5	361.6	359.7	358.5	357.7	357.0	356.2	355.5
32.5°	350.2	348.2	346.0	344.6	343.6	342.7	341.7	340.9
35°	329.5	327.2	324.8	323.1	321.9	320.8	319.6	318.5
37.5°	307.9	305.1	302.3	300.3	299.2	298.1	297.0	295.9
40°	293.7	290.6	287.5	285.4	284.5	283.5	282.5	281.5
42.5°	279.6	276.6	273.6	271.5	270.1	268.5	267.1	265.7
45°	257.1	253.8	250.6	248.3	247.2	245.9	244.7	243.4
47.5°	234.9	231.5	228.1	225.8	224.4	223.1	221.7	220.4
50°	219.8	216.3	212.9	210.6	209.5	208.2	207.0	205.7
52.5°	205.5	201.8	198.1	195.7	194.5	193.3	192.0	190.8
55°	183.8	180.1	176.5	174.0	172.7	171.3	170.1	168.8
57.5°	162.1	158.5	154.9	152.5	151.4	150.2	149.1	147.9
60°	147.7	144.1	140.5	138.2	136.9	135.7	134.5	133.2
62.5°	133.6	130.2	126.9	124.7	123.4	122.2	121.0	119.8
65°	112.8	109.6	106.3	104.1	102.9	101.6	100.4	99.2
67.5°	93.0	90.1	87.1	85.1	84.1	83.2	82.1	81.2
70°	79.9	77.4	74.9	73.1	72.1	71.1	70.2	69.2
72.5°	67.7	65.4	63.1	61.6	60.9	60.3	59.6	58.9
75°	50.6	48.8	47.1	45.9	45.3	44.7	44.1	43.6
77.5°	36.0	34.8	33.5	32.6	32.2	31.8	31.4	31.0
80°	27.1	26.4	25.7	25.2	25.0	24.9	24.7	24.6
82.5°	20.3	19.9	19.6	19.3	19.3	19.2	19.1	18.9
85°	11.6	11.5	11.4	11.3	11.2	11.2	11.1	11.0
87.5°	8.2	8.4	8.6	8.7	8.8	8.9	9.0	9.0
90°	18.7	19.9	21.0	21.9	22.6	23.3	24.0	24.6
92.5°	42.5	44.0	45.5	46.5	47.0	47.5	48.0	48.5
95°	82.3	83.9	85.6	86.5	87.0	87.5	87.9	88.4
97.5°	129.0	130.5	132.0	132.9	133.2	133.5	133.7	134.0
100°	161.4	163.3	165.4	166.7	167.2	167.6	168.1	168.5
102.5°	194.6	196.8	199.1	200.5	201.1	201.8	202.4	203.0
105°	248.3	249.7	251.0	252.1	252.8	253.5	254.1	254.8
107.5°	306.3	307.0	307.8	308.1	308.0	307.9	307.9	307.8
110°	346.7	347.3	348.0	348.2	348.0	347.8	347.5	347.3





TEST NUMBER: P333655-927

CATALOG NUMBER: S125RDIW-S375D1340U927-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	387.0	387.3	387.6	387.6	387.2	386.8	386.3	386.0
115°	448.6	448.4	448.1	447.9	447.7	447.4	447.3	447.0
117.5°	510.2	510.4	510.6	510.2	509.4	508.4	507.6	506.6
120°	551.8	551.8	551.8	551.4	550.4	549.5	548.6	547.7
122.5°	592.6	592.4	592.2	591.8	591.0	590.3	589.5	588.8
125°	652.6	652.2	651.7	651.4	651.2	650.9	650.7	650.5
127.5°	712.3	712.0	711.9	711.5	711.1	710.6	710.1	709.6
130°	751.7	751.5	751.3	750.9	750.5	750.0	749.6	749.1
132.5°	789.6	789.3	789.1	788.7	788.1	787.3	786.7	786.1
135°	847.8	847.8	847.8	847.3	846.4	845.5	844.5	843.7
137.5°	904.4	904.7	905.0	904.5	903.4	902.2	901.1	900.0
140°	940.2	940.6	941.0	940.7	939.5	938.4	937.3	936.1
142.5°	975.1	975.4	975.7	975.3	974.1	973.0	971.8	970.7
145°	1025.6	1025.6	1025.6	1025.2	1024.5	1023.8	1023.1	1022.5
147.5°	1072.2	1072.8	1073.3	1072.9	1071.3	1069.8	1068.2	1066.7
150°	1101.6	1101.6	1101.6	1101.4	1100.9	1100.4	1099.9	1099.5
152.5°	1128.9	1129.5	1130.0	1130.0	1129.1	1128.3	1127.4	1126.6
155°	1168.2	1169.0	1170.0	1169.8	1168.7	1167.6	1166.4	1165.3
157.5°	1202.1	1202.9	1203.9	1203.6	1202.1	1200.6	1199.0	1197.5
160°	1222.6	1223.5	1224.4	1224.3	1223.2	1222.0	1220.9	1219.7
162.5°	1241.9	1242.9	1244.0	1244.0	1242.6	1241.3	1240.0	1238.7
165°	1267.8	1268.8	1269.6	1269.4	1268.0	1266.7	1265.3	1263.9
167.5°	1287.1	1288.4	1289.8	1289.8	1288.3	1286.9	1285.5	1284.0
170°	1298.5	1299.9	1301.2	1301.2	1299.6	1298.0	1296.3	1294.7
172.5°	1306.8	1308.1	1309.5	1309.5	1308.1	1306.6	1305.2	1303.8
175°	1316.0	1317.4	1318.7	1318.6	1317.0	1315.4	1313.8	1312.2
177.5°	1320.2	1321.3	1322.4	1322.3	1321.0	1319.7	1318.4	1317.2
180°	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5

(END OF REPORT)