

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: P333505-840

Luminaire Tested: **S125RDIP-S375D810U840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333505-840  
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: S125RDIP-S375D810U840-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 810 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4733.7 lumens  
Efficiency: N/A  
Efficacy: 151.7 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

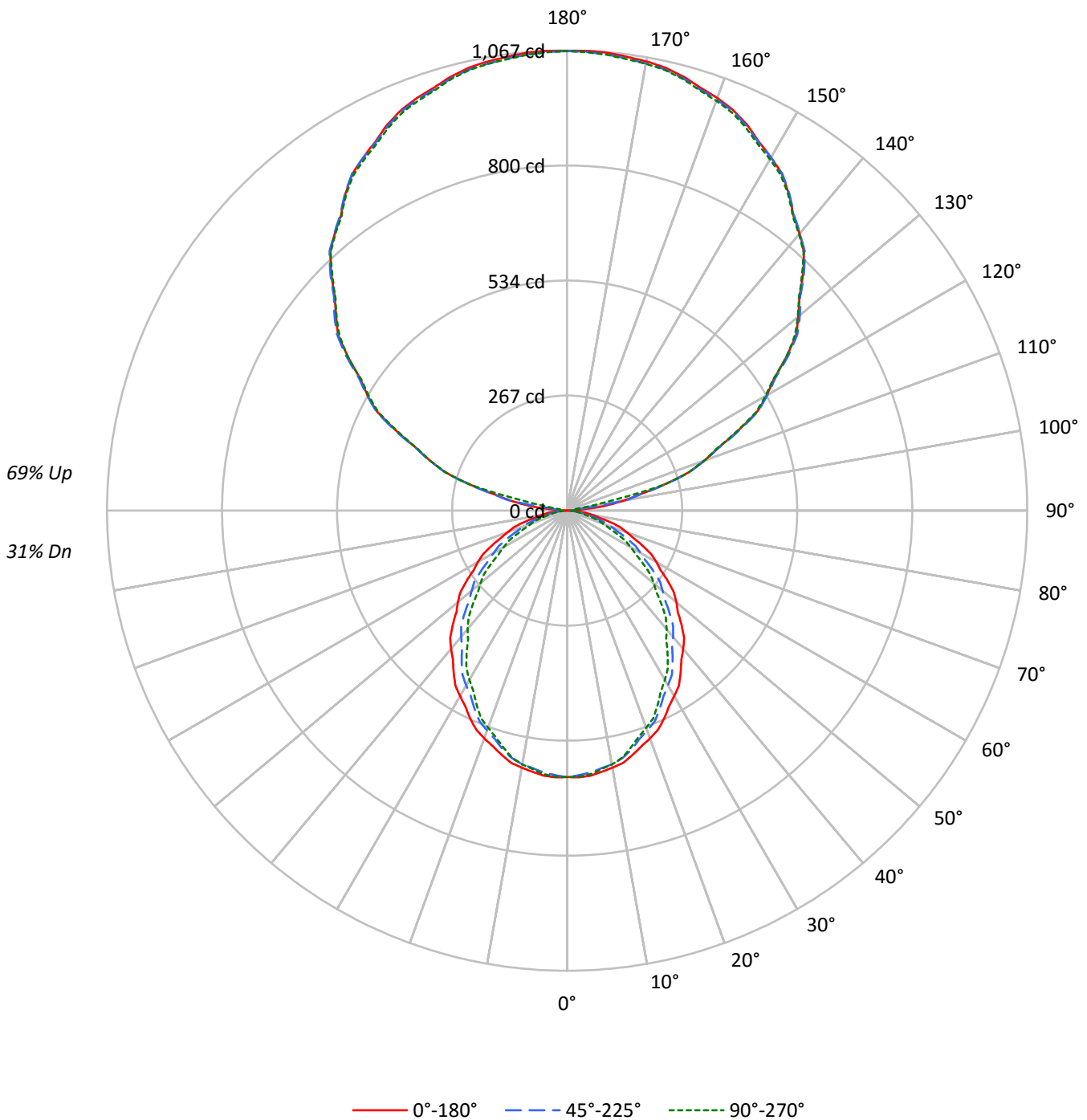
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333505-840

CATALOG NUMBER: S125RDIP-S375D810U840-4F0-1E-UDD-F

### Luminous Intensity Polar Plot





TEST NUMBER: P333505-840

CATALOG NUMBER: S125RDIP-S375D810U840-4F0-1E-UDD-F

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	0														
RCR																																						
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	39	39	39	39	39	39	31														
1	94	89	86	82	84	81	77	75	64	62	60	48	47	46	34	33	33	33	33	33	33	33	33	26														
2	85	78	72	67	76	71	66	61	56	53	50	43	40	38	30	29	28	28	28	28	28	28	28	22														
3	78	69	62	56	70	62	56	51	49	45	42	38	35	33	27	25	24	24	24	24	24	24	24	19														
4	71	61	53	48	64	55	49	44	44	39	36	34	31	28	24	22	21	21	21	21	21	21	21	16														
5	65	54	46	41	58	49	42	37	39	34	31	30	27	24	22	20	18	18	18	18	18	18	18	14														
6	60	48	41	35	54	44	37	32	35	30	27	27	24	21	20	18	16	16	16	16	16	16	16	13														
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	14	14	14	14	14	14	11														
8	51	40	32	27	46	36	29	25	29	24	21	23	19	17	17	14	13	13	13	13	13	13	13	10														
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	15	13	11	11	11	11	11	11	11	9														
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	10	10	10	10	10	10	8														

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

	0°	45°	90°
0°	3991	3991	3991
5°	4000	3955	3979
10°	3970	3918	3918
15°	3922	3839	3807
20°	3862	3727	3682
25°	3792	3619	3539
30°	3703	3491	3380
35°	3613	3360	3202
40°	3530	3222	3026
45°	3428	3070	2834
50°	3325	2903	2635
55°	3206	2743	2423
60°	3086	2550	2195
65°	2946	2326	1932
70°	2783	2045	1665
75°	2563	1724	1385
80°	2258	1354	1164
85°	1904	1104	1037



TEST NUMBER: P333505-840

CATALOG NUMBER: S125RDIP-S375D810U840-4F0-1E-UDD-F

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.1	1.2
10°-20°	162.4	3.4
20°-30°	235.5	5.0
30°-40°	268.4	5.7
40°-50°	261.6	5.5
50°-60°	220.2	4.7
60°-70°	154.3	3.3
70°-80°	79.3	1.7
80°-90°	22.3	0.5
90°-100°	38.7	0.8
100°-110°	238.6	5.0
110°-120°	432.8	9.1
120°-130°	555.4	11.7
130°-140°	597.4	12.6
140°-150°	560.7	11.8
150°-160°	453.6	9.6
160°-170°	293.3	6.2
170°-180°	101.2	2.1
0°-30°	456.0	9.6
0°-40°	724.3	15.3
0°-60°	1206.1	25.5
0°-90°	1462.1	30.9
90°-120°	710.1	15.0
90°-150°	2423.5	51.2
90°-180°	3272.0	69.1
0°-180°	4733.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	617	615	610	614	614	58
15°	587	584	574	573	569	165
25°	532	524	508	502	497	245
35°	458	447	426	413	406	287
45°	375	361	336	318	310	289
55°	285	269	244	223	215	255
65°	193	176	152	134	126	191
75°	103	88	69	59	56	109
85°	26	18	15	14	14	29
90°	1	7	13	17	19	3
95°	45	41	13	16	17	57
105°	232	235	235	235	235	246
115°	436	440	441	437	433	432
125°	620	625	626	622	620	554
135°	773	778	776	775	770	596
145°	896	898	898	898	894	560
155°	987	983	984	986	980	455
165°	1042	1037	1038	1042	1036	294
175°	1065	1061	1062	1067	1061	101
180°	1065	1065	1065	1065	1065	



TEST NUMBER: P333505-840

CATALOG NUMBER: S125RDIP-S375D810U840-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	619.0	618.8	618.5	618.3	618.0	617.5	616.7	615.8	615.0	614.2	615.0
5°	617.0	616.6	616.2	615.7	615.3	614.6	613.4	612.3	611.2	610.0	611.1
7.5°	611.0	610.6	610.2	609.8	609.4	608.4	607.1	605.7	604.4	603.0	603.7
10°	605.3	605.0	604.7	604.4	604.1	603.2	601.8	600.3	598.8	597.4	597.7
12.5°	599.0	598.5	598.2	597.8	597.4	596.2	594.3	592.4	590.4	588.4	588.7
15°	586.6	586.0	585.4	584.8	584.2	582.8	580.6	578.5	576.2	574.1	574.0
17.5°	572.8	571.8	570.9	569.9	569.0	567.1	564.3	561.6	558.9	556.1	555.6
20°	561.9	560.9	559.9	558.9	557.7	555.6	552.3	549.0	545.6	542.3	541.8
22.5°	550.0	549.0	548.0	546.8	545.8	543.6	540.1	536.6	533.1	529.7	528.7
25°	532.1	530.5	529.0	527.4	525.8	523.1	519.3	515.4	511.6	507.8	506.4
27.5°	511.5	509.7	507.8	505.8	503.9	501.0	496.9	492.7	488.7	484.5	482.6
30°	496.6	494.6	492.6	490.7	488.7	485.5	481.2	476.9	472.5	468.1	465.7
32.5°	482.0	479.7	477.5	475.1	472.8	469.5	465.0	460.6	456.2	451.7	449.1
35°	458.3	455.9	453.3	450.8	448.4	444.7	440.1	435.5	430.8	426.2	423.1
37.5°	435.0	432.0	429.0	426.0	422.9	419.0	414.2	409.4	404.7	399.8	396.2
40°	418.7	415.6	412.4	409.3	406.2	402.1	397.2	392.2	387.2	382.2	378.3
42.5°	401.4	398.3	395.1	391.9	388.7	384.6	379.4	374.3	369.1	364.0	360.2
45°	375.3	372.2	369.2	366.2	363.2	358.8	353.1	347.5	341.7	336.1	331.8
47.5°	348.1	344.9	341.7	338.5	335.4	330.9	325.2	319.4	313.7	307.9	303.7
50°	330.9	327.5	324.1	320.6	317.2	312.6	306.6	300.7	294.8	288.9	284.6
52.5°	312.3	308.7	305.2	301.7	298.2	293.7	288.1	282.5	276.9	271.4	266.7
55°	284.7	281.3	278.0	274.8	271.5	266.9	261.1	255.2	249.4	243.6	238.9
57.5°	256.9	253.4	249.7	246.2	242.7	238.1	232.5	226.9	221.4	215.7	211.2
60°	238.9	235.3	231.7	228.0	224.4	219.8	214.2	208.6	203.0	197.4	192.9
62.5°	219.9	216.4	213.0	209.5	206.0	201.5	195.8	190.2	184.4	178.7	174.5
65°	192.8	189.2	185.7	182.2	178.6	174.1	168.6	163.2	157.6	152.2	148.0
67.5°	165.8	162.3	158.8	155.2	151.7	147.2	142.0	136.7	131.5	126.2	122.4
70°	147.4	144.0	140.5	136.9	133.4	129.1	123.8	118.7	113.5	108.3	105.0
72.5°	129.6	126.1	122.7	119.3	115.8	111.6	106.7	101.9	97.0	92.2	89.3
75°	102.7	99.6	96.4	93.3	90.3	86.5	82.1	77.8	73.4	69.1	66.8
77.5°	75.9	73.5	71.0	68.5	66.0	63.0	59.6	56.0	52.6	49.1	47.5
80°	60.7	58.2	55.7	53.2	50.7	48.1	45.1	42.2	39.3	36.4	35.4
82.5°	45.7	43.5	41.3	39.0	36.8	34.6	32.7	30.7	28.7	26.7	26.3
85°	25.7	23.8	21.9	20.1	18.2	17.0	16.5	16.0	15.5	14.9	14.8
87.5°	8.8	8.5	8.2	7.9	7.6	7.5	7.7	7.8	8.0	8.1	8.3
90°	0.8	2.2	3.6	5.0	6.4	7.7	9.0	10.2	11.4	12.6	13.5
92.5°	12.1	11.2	10.2	9.2	8.3	8.3	9.4	10.5	11.5	12.6	13.5
95°	45.0	44.5	43.9	43.4	42.9	39.3	32.6	26.0	19.3	12.6	13.5
97.5°	94.0	94.9	95.8	96.8	97.8	91.7	78.5	65.2	52.0	38.9	33.9
100°	131.9	132.4	132.9	133.5	134.0	134.6	135.3	136.0	136.7	137.4	111.3
102.5°	170.5	171.1	171.8	172.4	173.1	173.6	174.1	174.5	174.9	175.3	170.4
105°	232.2	232.9	233.6	234.3	235.0	235.3	235.3	235.3	235.3	235.3	235.3
107.5°	296.3	296.3	296.3	296.3	296.3	296.5	296.8	297.2	297.5	297.9	297.9
110°	338.0	338.0	338.0	338.0	338.0	338.2	338.5	338.9	339.2	339.6	339.1



TEST NUMBER: P333505-840

CATALOG NUMBER: S125RDIP-S375D810U840-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	377.2	377.6	378.0	378.5	378.9	379.2	379.4	379.6	379.8	380.0	379.4
115°	436.0	436.9	437.7	438.6	439.5	440.0	440.2	440.3	440.5	440.7	440.0
117.5°	496.8	496.8	496.7	496.7	496.7	497.0	497.6	498.3	499.0	499.6	498.7
120°	534.6	534.5	534.3	534.1	533.9	534.1	534.6	535.2	535.7	536.2	535.9
122.5°	568.2	568.9	569.5	570.2	570.8	571.3	571.5	571.8	572.0	572.3	571.9
125°	620.0	621.2	622.4	623.7	624.9	625.5	625.5	625.5	625.5	625.5	624.8
127.5°	669.4	670.2	671.2	672.1	672.9	673.3	673.2	673.1	673.0	672.9	672.5
130°	699.7	700.6	701.5	702.4	703.3	703.8	704.0	704.1	704.3	704.5	704.0
132.5°	730.0	731.0	732.1	733.1	734.2	734.5	734.1	733.7	733.3	732.9	732.8
135°	773.2	774.3	775.3	776.4	777.4	777.7	777.4	777.0	776.7	776.4	776.0
137.5°	812.8	813.7	814.7	815.6	816.5	816.8	816.5	816.2	815.9	815.5	815.6
140°	838.7	839.1	839.4	839.8	840.1	840.2	840.0	839.9	839.7	839.5	839.9
142.5°	862.1	862.3	862.5	862.7	862.9	863.1	863.4	863.6	863.9	864.1	864.2
145°	896.4	896.8	897.1	897.5	897.8	898.0	898.0	898.0	898.0	898.0	898.2
147.5°	926.3	926.3	926.2	926.1	926.1	926.1	926.3	926.6	926.9	927.1	927.3
150°	945.3	945.0	944.6	944.3	943.9	943.9	944.3	944.6	945.0	945.3	945.7
152.5°	963.7	962.9	962.1	961.4	960.6	960.4	960.7	961.1	961.4	961.8	962.1
155°	987.2	986.1	985.1	984.0	983.0	982.6	983.0	983.3	983.7	984.0	984.5
157.5°	1005.3	1004.7	1004.1	1003.5	1002.8	1002.5	1002.6	1002.6	1002.6	1002.7	1003.2
160°	1018.0	1016.9	1015.9	1014.8	1013.8	1013.4	1013.5	1013.7	1013.9	1014.0	1014.7
162.5°	1028.1	1027.0	1026.0	1024.9	1023.9	1023.5	1023.6	1023.8	1024.0	1024.2	1025.1
165°	1041.7	1040.7	1039.6	1038.5	1037.4	1037.0	1037.2	1037.4	1037.5	1037.7	1038.8
167.5°	1051.8	1050.8	1049.7	1048.5	1047.4	1047.0	1047.1	1047.3	1047.5	1047.7	1048.9
170°	1057.5	1056.2	1055.0	1053.8	1052.6	1052.1	1052.2	1052.4	1052.6	1052.8	1054.2
172.5°	1061.3	1060.1	1058.8	1057.6	1056.3	1055.9	1056.2	1056.5	1056.8	1057.1	1058.4
175°	1065.4	1064.3	1063.3	1062.3	1061.2	1060.8	1060.9	1061.1	1061.3	1061.5	1062.9
177.5°	1067.3	1066.4	1065.6	1064.8	1063.9	1063.6	1063.7	1063.8	1064.0	1064.1	1065.1
180°	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4



TEST NUMBER: P333505-840

CATALOG NUMBER: S125RDIP-S375D810U840-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	615.8	616.7	617.5	617.9	617.8	617.7	617.6	617.5
5°	612.1	613.1	614.1	614.6	614.4	614.1	613.9	613.7
7.5°	604.4	605.2	605.9	606.1	605.9	605.7	605.5	605.2
10°	598.0	598.3	598.6	598.6	598.3	598.0	597.7	597.4
12.5°	588.9	589.2	589.4	589.3	588.8	588.2	587.8	587.3
15°	573.8	573.7	573.6	573.1	572.2	571.3	570.4	569.4
17.5°	555.1	554.6	554.1	553.4	552.7	551.9	551.1	550.4
20°	541.3	540.8	540.3	539.6	538.6	537.7	536.7	535.8
22.5°	527.6	526.5	525.5	524.6	523.9	523.1	522.4	521.6
25°	505.1	503.7	502.4	501.2	500.0	498.9	497.8	496.6
27.5°	480.8	478.9	477.0	475.5	474.4	473.3	472.2	471.1
30°	463.3	461.0	458.6	457.0	456.0	455.0	454.1	453.2
32.5°	446.5	443.8	441.1	439.3	438.1	436.9	435.7	434.5
35°	420.1	417.1	414.0	411.8	410.4	409.0	407.5	406.1
37.5°	392.5	389.0	385.4	382.8	381.4	380.0	378.6	377.2
40°	374.4	370.4	366.5	363.9	362.6	361.4	360.1	358.9
42.5°	356.4	352.6	348.8	346.1	344.3	342.3	340.5	338.7
45°	327.7	323.6	319.4	316.6	315.1	313.5	311.9	310.3
47.5°	299.4	295.1	290.8	287.8	286.1	284.4	282.7	280.9
50°	280.1	275.8	271.5	268.5	267.0	265.4	263.9	262.3
52.5°	262.0	257.3	252.6	249.4	247.9	246.4	244.8	243.3
55°	234.3	229.6	225.0	221.8	220.2	218.4	216.8	215.2
57.5°	206.6	202.1	197.4	194.4	193.0	191.5	190.1	188.5
60°	188.3	183.7	179.2	176.1	174.5	173.0	171.5	169.9
62.5°	170.3	166.0	161.8	159.0	157.3	155.8	154.3	152.7
65°	143.8	139.7	135.5	132.7	131.2	129.6	128.1	126.4
67.5°	118.6	114.8	111.0	108.5	107.2	106.0	104.7	103.5
70°	101.9	98.7	95.4	93.2	91.9	90.7	89.5	88.2
72.5°	86.2	83.3	80.4	78.5	77.7	76.9	75.9	75.1
75°	64.5	62.2	60.0	58.5	57.8	57.0	56.2	55.5
77.5°	45.9	44.3	42.7	41.6	41.1	40.6	40.0	39.5
80°	34.5	33.6	32.7	32.1	31.9	31.7	31.5	31.3
82.5°	25.9	25.3	24.9	24.6	24.5	24.4	24.3	24.1
85°	14.7	14.6	14.5	14.4	14.3	14.2	14.1	14.0
87.5°	8.5	8.7	8.8	8.9	9.0	9.0	9.0	9.0
90°	14.4	15.2	16.2	16.9	17.4	17.9	18.4	19.0
92.5°	14.4	15.2	16.2	16.7	17.0	17.2	17.5	17.7
95°	14.4	15.2	16.2	16.6	16.6	16.6	16.6	16.6
97.5°	29.0	24.0	19.1	16.6	16.6	16.6	16.6	16.6
100°	85.1	59.0	32.8	19.4	18.7	18.0	17.3	16.6
102.5°	165.4	160.5	155.5	147.1	135.1	123.2	111.3	99.4
105°	235.3	235.3	235.3	235.3	235.1	234.9	234.7	234.6
107.5°	298.0	298.0	298.0	297.8	297.3	296.7	296.2	295.7
110°	338.5	338.0	337.5	337.3	337.5	337.7	337.8	338.0





TEST NUMBER: P333505-840

CATALOG NUMBER: S125RDIP-S375D810U840-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	378.7	378.0	377.4	376.9	376.7	376.4	376.2	376.0
115°	439.3	438.6	437.9	437.0	436.0	434.8	433.8	432.8
117.5°	497.8	496.9	495.9	495.2	494.8	494.3	493.9	493.4
120°	535.5	535.2	534.8	534.2	533.3	532.5	531.6	530.7
122.5°	571.6	571.2	570.9	570.2	569.2	568.2	567.1	566.1
125°	624.1	623.4	622.7	622.1	621.6	621.0	620.5	620.0
127.5°	672.1	671.8	671.4	670.4	669.2	667.9	666.6	665.3
130°	703.4	702.9	702.4	701.7	700.7	699.9	699.0	698.1
132.5°	732.7	732.6	732.5	732.0	731.1	730.2	729.3	728.5
135°	775.7	775.3	775.0	774.3	773.2	772.1	771.0	770.0
137.5°	815.7	815.7	815.8	815.4	814.5	813.5	812.6	811.7
140°	840.2	840.6	840.9	840.6	839.5	838.5	837.4	836.4
142.5°	864.3	864.3	864.4	863.9	862.9	861.8	860.8	859.7
145°	898.3	898.5	898.7	898.2	897.2	896.2	895.0	894.0
147.5°	927.5	927.7	927.9	927.4	926.0	924.8	923.5	922.3
150°	946.0	946.4	946.7	946.2	944.8	943.4	942.0	940.6
152.5°	962.5	962.8	963.2	962.7	961.5	960.2	959.0	957.7
155°	985.1	985.6	986.1	985.7	984.3	982.9	981.5	980.1
157.5°	1003.8	1004.4	1004.9	1004.5	1003.1	1001.7	1000.3	998.9
160°	1015.4	1016.1	1016.8	1016.5	1015.1	1013.7	1012.3	1010.9
162.5°	1026.1	1027.1	1028.0	1027.8	1026.2	1024.7	1023.2	1021.7
165°	1039.9	1040.9	1042.0	1041.8	1040.4	1038.9	1037.5	1036.1
167.5°	1050.3	1051.5	1052.8	1052.6	1051.0	1049.5	1047.8	1046.3
170°	1055.5	1056.9	1058.3	1058.2	1056.7	1055.1	1053.5	1052.0
172.5°	1059.7	1061.0	1062.3	1062.1	1060.5	1058.9	1057.3	1055.7
175°	1064.2	1065.6	1067.0	1066.9	1065.4	1063.8	1062.3	1060.7
177.5°	1066.1	1067.0	1068.0	1068.0	1066.8	1065.7	1064.6	1063.5
180°	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4

(END OF REPORT)