

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: P333542-840

Luminaire Tested: **S125RDIP-S610D1035U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333542-840  
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: S125RDIP-S610D1035U840-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6017.9 lumens  
Efficiency: N/A  
Efficacy: 135.2 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

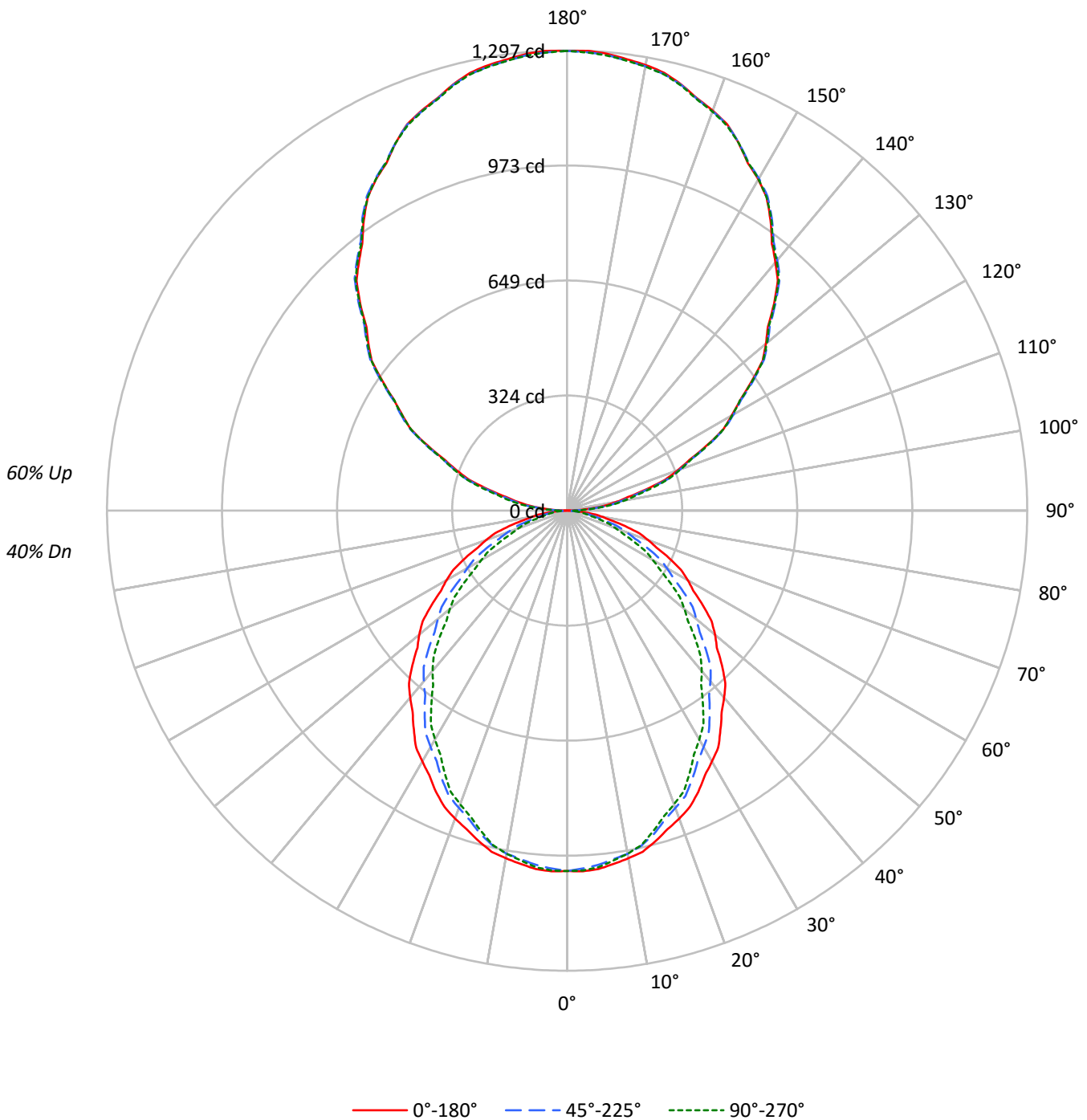
Input Watts (W): 44.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333542-840

CATALOG NUMBER: S125RDIP-S610D1035U840-4F0-1E-UDD-F1

### Luminous Intensity Polar Plot





TEST NUMBER: P333542-840

CATALOG NUMBER: S125RDIP-S610D1035U840-4F0-1E-UDD-F1

**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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	92	88	84	87	83	80	77	68	66	64	54	53	52	42	41	40	34
2	87	80	74	69	79	73	68	64	60	56	53	48	46	43	37	35	34	29
3	80	70	63	58	72	64	58	53	53	49	45	43	39	37	33	31	29	25
4	73	62	55	49	66	57	50	45	47	42	38	38	34	32	29	27	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	27	24	22	18
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16
7	57	45	37	32	52	41	35	30	35	29	25	28	24	21	22	19	17	14
8	53	41	33	28	48	38	31	26	31	26	23	26	22	19	20	18	15	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	17	15	13	11

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

	0°	45°	90°
0°	6561	6561	6561
5°	6576	6501	6541
10°	6526	6441	6441
15°	6449	6310	6258
20°	6349	6128	6054
25°	6233	5949	5818
30°	6088	5739	5557
35°	5941	5523	5263
40°	5802	5298	4975
45°	5634	5045	4661
50°	5466	4772	4332
55°	5271	4510	3984
60°	5074	4193	3608
65°	4843	3822	3177
70°	4579	3361	2738
75°	4212	2832	2278
80°	3712	2228	1912
85°	3127	1815	1704



TEST NUMBER: P333542-840

CATALOG NUMBER: S125RDIP-S610D1035U840-4F0-1E-UDD-F1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.5	1.6
10°-20°	267.0	4.4
20°-30°	387.1	6.4
30°-40°	441.2	7.3
40°-50°	430.0	7.1
50°-60°	362.0	6.0
60°-70°	253.8	4.2
70°-80°	130.4	2.2
80°-90°	35.8	0.6
90°-100°	86.8	1.4
100°-110°	256.2	4.3
110°-120°	434.0	7.2
120°-130°	571.2	9.5
130°-140°	640.0	10.6
140°-150°	627.3	10.4
150°-160°	526.9	8.8
160°-170°	350.2	5.8
170°-180°	122.6	2.0
0°-30°	749.6	12.5
0°-40°	1190.8	19.8
0°-60°	1982.8	32.9
0°-90°	2402.8	39.9
90°-120°	777.0	12.9
90°-150°	2615.5	43.5
90°-180°	3615.0	60.1
0°-180°	6017.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1016	1016	1016	1016	1016	
5°	1014	1011	1003	1010	1009	96
15°	964	959	944	943	936	272
25°	875	862	835	825	816	402
35°	754	734	700	679	668	472
45°	617	594	552	523	510	476
55°	468	442	400	367	354	418
65°	317	290	250	220	208	314
75°	169	145	114	97	91	179
85°	42	29	24	24	23	47
90°	1	9	16	21	24	6
95°	66	68	78	84	87	70
105°	230	235	241	247	250	245
115°	434	438	441	440	439	430
125°	634	640	641	639	638	568
135°	825	830	832	832	828	635
145°	999	1003	1006	1006	1003	624
155°	1143	1143	1144	1148	1143	526
165°	1243	1241	1242	1246	1240	351
175°	1292	1289	1288	1294	1288	123
180°	1296	1296	1296	1296	1296	



TEST NUMBER: P333542-840

CATALOG NUMBER: S125RDIP-S610D1035U840-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9
2.5°	1017.7	1017.3	1016.9	1016.5	1016.1	1015.2	1013.8	1012.5	1011.1	1009.8	1011.1
5°	1014.3	1013.7	1013.0	1012.3	1011.6	1010.4	1008.5	1006.6	1004.7	1002.8	1004.5
7.5°	1004.4	1003.7	1003.1	1002.4	1001.8	1000.4	998.0	995.8	993.6	991.3	992.5
10°	995.1	994.6	994.1	993.6	993.1	991.7	989.3	986.9	984.5	982.1	982.6
12.5°	984.7	984.1	983.4	982.8	982.1	980.2	977.0	973.8	970.6	967.3	967.8
15°	964.5	963.4	962.4	961.4	960.4	958.1	954.5	950.9	947.4	943.7	943.6
17.5°	941.6	940.1	938.5	937.0	935.3	932.3	927.8	923.3	918.8	914.3	913.4
20°	923.8	922.1	920.4	918.7	917.0	913.4	908.0	902.5	897.1	891.6	890.7
22.5°	904.1	902.4	900.8	899.1	897.4	893.6	887.9	882.2	876.5	870.7	869.1
25°	874.7	872.1	869.6	867.1	864.4	860.0	853.7	847.4	841.1	834.8	832.6
27.5°	840.9	837.9	834.8	831.6	828.5	823.6	816.9	810.1	803.3	796.6	793.5
30°	816.4	813.1	809.9	806.7	803.4	798.2	791.0	784.0	776.8	769.6	765.7
32.5°	792.4	788.7	784.9	781.1	777.3	771.7	764.5	757.2	749.8	742.6	738.2
35°	753.5	749.4	745.3	741.2	737.1	731.2	723.6	715.9	708.2	700.5	695.6
37.5°	715.3	710.2	705.3	700.3	695.4	688.9	681.0	673.1	665.2	657.2	651.4
40°	688.2	683.2	678.0	672.9	667.8	661.2	653.0	644.8	636.6	628.4	622.0
42.5°	660.0	654.8	649.5	644.3	639.0	632.2	623.7	615.2	606.8	598.3	592.1
45°	616.9	612.0	607.0	602.1	597.1	590.0	580.6	571.2	561.8	552.4	545.6
47.5°	572.3	567.0	561.8	556.6	551.4	544.0	534.6	525.1	515.7	506.2	499.3
50°	544.0	538.4	532.7	527.1	521.5	513.8	504.1	494.4	484.6	474.9	467.8
52.5°	513.3	507.6	501.8	496.0	490.3	482.8	473.6	464.4	455.2	446.1	438.4
55°	468.1	462.6	457.2	451.7	446.3	438.7	429.2	419.6	410.1	400.5	392.8
57.5°	422.3	416.5	410.6	404.9	399.0	391.4	382.2	373.0	363.9	354.7	347.1
60°	392.8	386.9	380.9	375.0	369.0	361.4	352.1	343.0	333.8	324.6	317.1
62.5°	361.5	355.9	350.1	344.5	338.8	331.2	321.9	312.6	303.3	293.9	286.9
65°	316.9	311.1	305.3	299.5	293.7	286.3	277.2	268.2	259.1	250.1	243.3
67.5°	272.6	266.7	260.9	255.2	249.3	242.2	233.5	224.8	216.1	207.4	201.3
70°	242.5	236.7	230.9	225.1	219.2	212.1	203.6	195.1	186.5	178.0	172.7
72.5°	213.0	207.3	201.7	196.0	190.4	183.5	175.5	167.5	159.6	151.6	146.7
75°	168.8	163.7	158.5	153.5	148.3	142.2	135.0	127.8	120.7	113.5	109.8
77.5°	124.9	120.8	116.7	112.6	108.6	103.6	97.9	92.2	86.4	80.7	78.1
80°	99.8	95.6	91.6	87.5	83.4	79.0	74.1	69.4	64.6	59.9	58.3
82.5°	75.2	71.5	67.9	64.1	60.5	57.0	53.7	50.4	47.2	43.9	43.2
85°	42.2	39.1	36.1	33.0	29.9	28.0	27.1	26.3	25.4	24.5	24.3
87.5°	14.3	13.7	13.1	12.5	11.9	11.7	11.9	12.1	12.2	12.4	12.6
90°	1.0	2.8	4.5	6.4	8.2	9.9	11.4	13.0	14.5	16.2	17.3
92.5°	24.4	25.7	26.9	28.2	29.4	31.0	32.9	34.8	36.8	38.7	40.2
95°	65.5	65.9	66.4	66.9	67.4	68.7	70.9	73.1	75.4	77.7	79.2
97.5°	108.9	109.1	109.3	109.5	109.6	111.3	114.3	117.4	120.5	123.6	125.1
100°	141.2	141.2	141.2	141.2	141.2	142.6	145.5	148.5	151.4	154.2	156.2
102.5°	175.8	176.7	177.6	178.5	179.5	180.6	182.1	183.6	185.0	186.5	188.7
105°	229.8	231.0	232.1	233.3	234.4	235.6	236.9	238.2	239.6	241.0	242.3
107.5°	289.5	290.6	291.8	293.0	294.1	295.1	296.1	297.2	298.2	299.2	299.9
110°	330.7	331.8	333.0	334.1	335.2	336.1	336.7	337.4	338.1	338.7	339.4



TEST NUMBER: P333542-840

CATALOG NUMBER: S125RDIP-S610D1035U840-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	372.6	373.2	373.8	374.4	375.0	375.7	376.6	377.4	378.2	379.1	379.4
115°	434.5	435.5	436.4	437.3	438.1	438.8	439.2	439.7	440.1	440.6	440.4
117.5°	496.7	497.1	497.5	497.9	498.3	498.7	499.1	499.5	499.9	500.3	500.5
120°	535.3	536.4	537.6	538.8	539.9	540.5	540.7	541.0	541.2	541.4	541.4
122.5°	577.3	577.7	578.1	578.6	579.0	579.4	580.0	580.6	581.2	581.7	581.6
125°	634.2	635.5	636.8	638.2	639.5	640.4	640.6	640.8	641.0	641.3	640.8
127.5°	694.7	695.4	696.2	696.9	697.7	698.2	698.5	698.7	699.0	699.3	699.0
130°	730.9	732.1	733.2	734.3	735.4	736.2	736.7	737.1	737.5	738.0	737.8
132.5°	767.2	769.1	770.9	772.7	774.6	775.5	775.4	775.3	775.2	775.1	774.9
135°	824.8	826.1	827.4	828.7	830.1	830.9	831.1	831.3	831.5	831.7	831.7
137.5°	878.8	880.0	881.3	882.6	883.9	884.8	885.3	885.9	886.4	886.8	887.1
140°	913.4	914.5	915.6	916.8	917.9	918.8	919.5	920.2	920.8	921.5	921.9
142.5°	948.1	949.1	950.0	950.9	951.9	952.8	953.6	954.5	955.3	956.1	956.4
145°	999.2	1000.1	1000.9	1001.8	1002.7	1003.5	1004.2	1004.8	1005.5	1006.2	1006.2
147.5°	1046.3	1046.8	1047.3	1047.8	1048.2	1048.8	1049.4	1049.9	1050.4	1051.0	1051.5
150°	1077.7	1077.5	1077.3	1077.1	1076.9	1077.2	1078.1	1079.0	1079.8	1080.8	1080.8
152.5°	1103.6	1103.9	1104.2	1104.5	1104.8	1105.2	1105.5	1105.9	1106.2	1106.6	1107.1
155°	1143.3	1143.3	1143.3	1143.3	1143.3	1143.4	1143.7	1143.9	1144.1	1144.3	1145.2
157.5°	1178.8	1178.3	1177.8	1177.3	1176.8	1176.7	1176.9	1177.1	1177.4	1177.6	1178.5
160°	1199.7	1199.1	1198.4	1197.7	1197.1	1196.9	1197.1	1197.3	1197.5	1197.7	1198.6
162.5°	1218.3	1217.8	1217.3	1216.8	1216.4	1216.1	1216.2	1216.2	1216.3	1216.3	1217.4
165°	1243.1	1242.6	1242.2	1241.7	1241.3	1241.2	1241.4	1241.6	1241.8	1242.1	1243.0
167.5°	1264.0	1263.1	1262.3	1261.4	1260.5	1260.0	1260.0	1260.0	1260.0	1260.0	1261.4
170°	1275.4	1274.4	1273.5	1272.7	1271.8	1271.3	1271.3	1271.3	1271.3	1271.3	1272.7
172.5°	1283.4	1282.5	1281.6	1280.7	1279.9	1279.4	1279.4	1279.4	1279.4	1279.4	1280.7
175°	1292.5	1291.6	1290.7	1289.8	1288.9	1288.5	1288.5	1288.5	1288.5	1288.5	1289.8
177.5°	1297.2	1296.5	1295.8	1294.9	1294.2	1293.8	1293.6	1293.4	1293.3	1293.1	1294.2
180°	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6



TEST NUMBER: P333542-840

CATALOG NUMBER: S125RDIP-S610D1035U840-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9
2.5°	1012.5	1013.8	1015.2	1015.8	1015.7	1015.5	1015.4	1015.3
5°	1006.2	1007.9	1009.7	1010.4	1010.0	1009.7	1009.4	1009.0
7.5°	993.7	994.9	996.1	996.5	996.1	995.7	995.4	995.0
10°	983.1	983.6	984.2	984.2	983.6	983.1	982.6	982.1
12.5°	968.2	968.6	968.9	968.7	967.9	967.1	966.3	965.5
15°	943.4	943.2	943.1	942.2	940.7	939.2	937.7	936.0
17.5°	912.6	911.7	910.9	909.8	908.6	907.3	906.1	904.7
20°	889.9	889.0	888.2	887.0	885.4	883.9	882.4	880.8
22.5°	867.4	865.7	864.0	862.5	861.3	860.0	858.8	857.5
25°	830.4	828.2	826.0	823.8	822.0	820.1	818.3	816.4
27.5°	790.4	787.3	784.2	781.7	779.9	778.1	776.3	774.5
30°	761.7	757.8	753.9	751.1	749.6	748.1	746.6	745.1
32.5°	733.9	729.6	725.3	722.2	720.1	718.2	716.3	714.4
35°	690.6	685.7	680.8	677.1	674.7	672.3	669.9	667.5
37.5°	645.4	639.4	633.5	629.3	627.0	624.8	622.5	620.2
40°	615.4	608.9	602.5	598.2	596.2	594.1	592.1	590.1
42.5°	585.9	579.7	573.5	568.9	565.9	562.9	559.9	556.9
45°	538.8	532.0	525.1	520.5	518.0	515.3	512.8	510.3
47.5°	492.2	485.1	478.2	473.2	470.4	467.6	464.7	461.9
50°	460.6	453.4	446.3	441.4	438.9	436.4	433.7	431.2
52.5°	430.7	422.9	415.3	410.1	407.6	405.1	402.4	399.9
55°	385.2	377.5	369.8	364.7	361.9	359.2	356.5	353.8
57.5°	339.6	332.1	324.7	319.6	317.2	314.8	312.5	310.0
60°	309.5	302.1	294.6	289.5	287.0	284.4	281.9	279.3
62.5°	279.9	273.0	266.0	261.3	258.7	256.2	253.6	251.1
65°	236.5	229.6	222.9	218.1	215.6	213.1	210.5	207.9
67.5°	195.0	188.7	182.5	178.3	176.3	174.3	172.2	170.2
70°	167.4	162.2	156.8	153.2	151.2	149.2	147.0	145.0
72.5°	141.9	136.9	132.1	129.0	127.6	126.2	124.9	123.5
75°	106.0	102.3	98.6	96.0	94.9	93.7	92.5	91.3
77.5°	75.4	72.8	70.2	68.5	67.6	66.7	65.8	64.9
80°	56.8	55.2	53.7	52.8	52.4	52.1	51.7	51.4
82.5°	42.4	41.7	41.0	40.6	40.4	40.2	40.0	39.8
85°	24.2	24.0	23.8	23.7	23.5	23.3	23.2	23.0
87.5°	12.9	13.1	13.3	13.4	13.4	13.4	13.4	13.4
90°	18.4	19.5	20.6	21.5	22.2	22.8	23.5	24.2
92.5°	41.7	43.1	44.6	45.6	46.2	46.6	47.1	47.6
95°	80.8	82.3	83.9	84.9	85.3	85.8	86.2	86.7
97.5°	126.5	128.1	129.6	130.4	130.7	131.0	131.2	131.5
100°	158.2	160.3	162.3	163.6	164.0	164.4	164.9	165.3
102.5°	190.9	193.1	195.3	196.7	197.3	197.9	198.6	199.2
105°	243.7	245.0	246.3	247.3	248.0	248.7	249.3	250.0
107.5°	300.5	301.2	301.9	302.3	302.2	302.2	302.2	302.1
110°	340.1	340.7	341.4	341.6	341.4	341.2	341.0	340.7





TEST NUMBER: P333542-840

CATALOG NUMBER: S125RDIP-S610D1035U840-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	379.7	380.0	380.3	380.3	379.9	379.5	379.1	378.7
115°	440.1	439.9	439.7	439.5	439.2	439.0	438.8	438.6
117.5°	500.6	500.8	501.0	500.6	499.7	498.9	498.0	497.1
120°	541.4	541.4	541.4	541.0	540.1	539.2	538.3	537.3
122.5°	581.4	581.2	581.0	580.6	579.9	579.2	578.5	577.7
125°	640.4	639.9	639.4	639.0	638.8	638.6	638.4	638.2
127.5°	698.8	698.6	698.4	698.0	697.6	697.1	696.7	696.3
130°	737.5	737.3	737.1	736.8	736.3	735.9	735.4	735.0
132.5°	774.7	774.5	774.2	773.8	773.2	772.5	771.9	771.2
135°	831.7	831.7	831.7	831.3	830.4	829.5	828.6	827.7
137.5°	887.4	887.6	887.9	887.5	886.4	885.2	884.1	883.0
140°	922.4	922.8	923.3	922.9	921.8	920.7	919.6	918.5
142.5°	956.7	956.9	957.3	956.8	955.7	954.6	953.5	952.3
145°	1006.2	1006.2	1006.2	1005.8	1005.2	1004.5	1003.8	1003.2
147.5°	1052.0	1052.6	1053.1	1052.6	1051.1	1049.6	1048.0	1046.5
150°	1080.8	1080.8	1080.8	1080.6	1080.2	1079.6	1079.2	1078.7
152.5°	1107.7	1108.2	1108.7	1108.6	1107.8	1107.0	1106.2	1105.4
155°	1146.1	1147.0	1147.9	1147.8	1146.7	1145.5	1144.4	1143.3
157.5°	1179.3	1180.2	1181.1	1180.8	1179.4	1177.9	1176.4	1175.0
160°	1199.5	1200.4	1201.3	1201.2	1200.1	1199.0	1197.9	1196.7
162.5°	1218.4	1219.5	1220.6	1220.5	1219.2	1217.9	1216.6	1215.3
165°	1243.9	1244.8	1245.7	1245.5	1244.2	1242.7	1241.4	1240.1
167.5°	1262.7	1264.0	1265.5	1265.4	1264.0	1262.6	1261.2	1259.8
170°	1274.0	1275.4	1276.7	1276.6	1275.1	1273.4	1271.9	1270.3
172.5°	1282.1	1283.4	1284.8	1284.8	1283.3	1282.0	1280.6	1279.2
175°	1291.2	1292.5	1293.8	1293.7	1292.2	1290.6	1289.0	1287.5
177.5°	1295.3	1296.4	1297.4	1297.4	1296.1	1294.8	1293.5	1292.3
180°	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6

(END OF REPORT)