

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: P333542-940

Luminaire Tested: **S125RDIP-S610D1035U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333542-940  
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-S610D1035U940-4F0-1E-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: 5313.8 lumens  
Efficiency: N/A  
Efficacy: 119.4 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

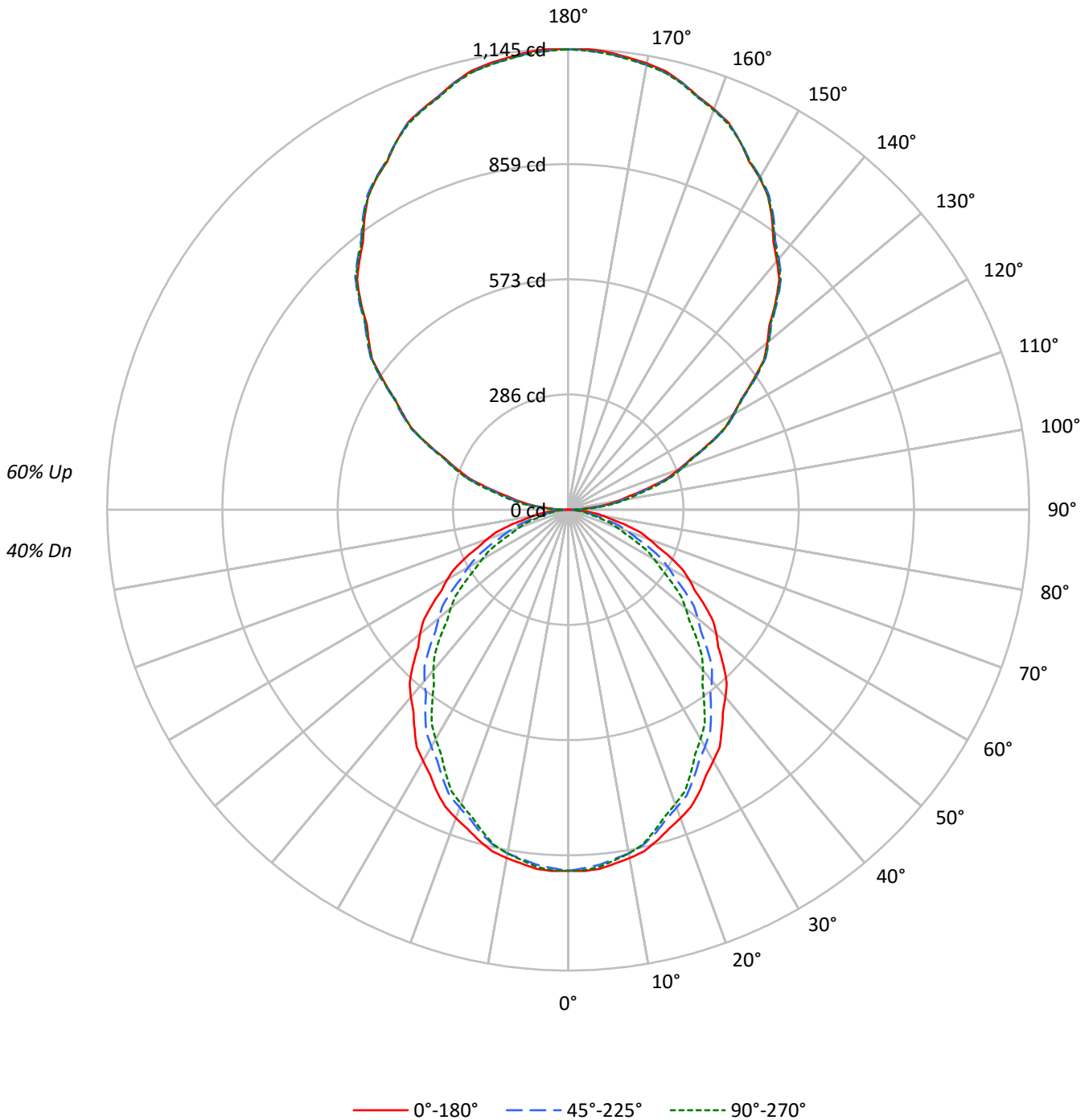
Input Watts (W): 44.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	5794	5794	5794
5°	5806	5741	5776
10°	5762	5687	5687
15°	5695	5572	5526
20°	5606	5411	5346
25°	5504	5253	5137
30°	5376	5068	4906
35°	5245	4877	4647
40°	5123	4678	4392
45°	4975	4455	4116
50°	4827	4214	3826
55°	4654	3983	3518
60°	4481	3702	3185
65°	4276	3376	2806
70°	4043	2968	2417
75°	3721	2500	2011
80°	3277	1967	1689
85°	2764	1608	1504



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.3	1.6
10°-20°	235.7	4.4
20°-30°	341.8	6.4
30°-40°	389.6	7.3
40°-50°	379.7	7.1
50°-60°	319.6	6.0
60°-70°	224.1	4.2
70°-80°	115.2	2.2
80°-90°	31.6	0.6
90°-100°	76.6	1.4
100°-110°	226.3	4.3
110°-120°	383.2	7.2
120°-130°	504.3	9.5
130°-140°	565.1	10.6
140°-150°	553.9	10.4
150°-160°	465.2	8.8
160°-170°	309.2	5.8
170°-180°	108.2	2.0
0°-30°	661.9	12.5
0°-40°	1051.5	19.8
0°-60°	1750.9	32.9
0°-90°	2121.7	39.9
90°-120°	686.1	12.9
90°-150°	2309.5	43.5
90°-180°	3192.0	60.1
0°-180°	5313.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	896	893	886	892	891	85
15°	852	847	833	832	826	240
25°	772	761	737	728	721	355
35°	665	648	619	600	589	416
45°	545	524	488	462	451	420
55°	413	391	354	324	312	370
65°	280	256	221	195	184	277
75°	149	128	100	86	81	158
85°	37	26	22	21	20	42
90°	1	8	14	19	21	5
95°	58	60	69	75	77	62
105°	203	208	213	218	221	217
115°	384	387	389	388	387	379
125°	560	565	566	564	564	501
135°	728	733	734	734	731	561
145°	882	886	888	888	886	551
155°	1010	1010	1010	1014	1010	465
165°	1098	1096	1097	1100	1095	310
175°	1141	1138	1138	1142	1137	108
180°	1144	1144	1144	1144	1144	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1
2.5°	898.7	898.3	898.0	897.6	897.2	896.4	895.2	894.0	892.8	891.6	892.8
5°	895.6	895.1	894.5	893.9	893.2	892.2	890.5	888.9	887.2	885.5	887.0
7.5°	886.9	886.3	885.7	885.1	884.6	883.3	881.3	879.3	877.4	875.3	876.4
10°	878.7	878.2	877.8	877.4	876.9	875.7	873.5	871.5	869.3	867.2	867.6
12.5°	869.5	869.0	868.3	867.8	867.2	865.5	862.7	859.9	857.0	854.2	854.5
15°	851.7	850.7	849.8	848.9	848.0	846.0	842.8	839.6	836.5	833.3	833.2
17.5°	831.4	830.1	828.7	827.3	825.9	823.2	819.2	815.3	811.3	807.4	806.6
20°	815.7	814.2	812.7	811.2	809.7	806.6	801.7	796.9	792.1	787.3	786.5
22.5°	798.3	796.8	795.4	793.9	792.4	789.1	784.0	779.0	773.9	768.8	767.4
25°	772.4	770.1	767.9	765.6	763.3	759.4	753.9	748.2	742.7	737.1	735.2
27.5°	742.5	739.9	737.1	734.3	731.6	727.3	721.3	715.3	709.4	703.4	700.6
30°	720.9	718.0	715.2	712.3	709.4	704.8	698.5	692.2	685.9	679.6	676.1
32.5°	699.7	696.4	693.0	689.7	686.3	681.4	675.0	668.6	662.1	655.7	651.8
35°	665.3	661.7	658.1	654.5	650.9	645.7	638.9	632.1	625.4	618.6	614.2
37.5°	631.6	627.1	622.8	618.4	614.0	608.3	601.3	594.3	587.4	580.3	575.2
40°	607.7	603.2	598.7	594.1	589.7	583.8	576.6	569.4	562.1	554.9	549.2
42.5°	582.8	578.2	573.5	568.9	564.3	558.2	550.7	543.2	535.8	528.3	522.8
45°	544.7	540.4	536.0	531.6	527.3	520.9	512.6	504.4	496.1	487.8	481.8
47.5°	505.3	500.7	496.1	491.5	486.9	480.4	472.1	463.7	455.4	447.0	440.9
50°	480.4	475.4	470.4	465.5	460.5	453.7	445.1	436.6	427.9	419.4	413.0
52.5°	453.3	448.2	443.1	438.0	432.9	426.3	418.2	410.1	402.0	393.9	387.1
55°	413.3	408.5	403.7	398.9	394.0	387.4	379.0	370.5	362.1	353.7	346.9
57.5°	372.9	367.7	362.6	357.5	352.3	345.6	337.5	329.4	321.3	313.2	306.5
60°	346.9	341.6	336.4	331.1	325.8	319.1	310.9	302.8	294.7	286.6	280.0
62.5°	319.2	314.2	309.2	304.2	299.2	292.5	284.3	276.0	267.8	259.5	253.3
65°	279.8	274.7	269.6	264.5	259.3	252.8	244.8	236.8	228.8	220.9	214.8
67.5°	240.7	235.5	230.4	225.3	220.2	213.8	206.2	198.5	190.8	183.2	177.7
70°	214.1	209.0	203.8	198.8	193.6	187.3	179.8	172.3	164.7	157.2	152.5
72.5°	188.1	183.1	178.1	173.1	168.1	162.0	155.0	147.9	140.9	133.8	129.6
75°	149.1	144.5	140.0	135.5	131.0	125.6	119.2	112.9	106.6	100.2	96.9
77.5°	110.3	106.6	103.1	99.4	95.9	91.5	86.4	81.4	76.3	71.2	68.9
80°	88.1	84.4	80.9	77.2	73.7	69.7	65.5	61.3	57.1	52.9	51.5
82.5°	66.4	63.1	59.9	56.6	53.4	50.3	47.4	44.5	41.6	38.8	38.2
85°	37.3	34.5	31.8	29.2	26.4	24.7	23.9	23.2	22.5	21.7	21.5
87.5°	12.7	12.1	11.6	11.1	10.5	10.3	10.5	10.7	10.8	11.0	11.1
90°	0.9	2.5	4.0	5.6	7.2	8.7	10.1	11.5	12.8	14.3	15.2
92.5°	21.6	22.6	23.7	24.9	25.9	27.4	29.1	30.8	32.5	34.2	35.5
95°	57.9	58.2	58.7	59.0	59.5	60.6	62.6	64.6	66.6	68.6	69.9
97.5°	96.1	96.3	96.5	96.7	96.8	98.3	100.9	103.7	106.4	109.1	110.5
100°	124.7	124.7	124.7	124.7	124.7	125.9	128.5	131.1	133.7	136.2	137.9
102.5°	155.2	156.0	156.9	157.7	158.5	159.4	160.8	162.1	163.4	164.7	166.7
105°	203.0	203.9	204.9	206.0	207.0	208.0	209.2	210.4	211.6	212.8	213.9
107.5°	255.7	256.6	257.6	258.7	259.7	260.6	261.4	262.4	263.3	264.2	264.8
110°	292.0	293.0	294.0	295.0	296.0	296.8	297.3	297.9	298.5	299.1	299.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	329.0	329.6	330.0	330.6	331.1	331.7	332.5	333.2	333.9	334.7	335.0
115°	383.7	384.5	385.3	386.1	386.8	387.4	387.8	388.3	388.6	389.1	388.9
117.5°	438.5	438.9	439.3	439.6	440.0	440.3	440.7	441.0	441.4	441.8	441.9
120°	472.7	473.7	474.7	475.7	476.7	477.2	477.4	477.7	477.9	478.0	478.0
122.5°	509.8	510.1	510.5	510.9	511.2	511.6	512.1	512.6	513.2	513.6	513.5
125°	560.0	561.2	562.3	563.6	564.7	565.4	565.6	565.8	566.0	566.2	565.8
127.5°	613.4	614.0	614.7	615.4	616.1	616.5	616.8	617.0	617.2	617.5	617.2
130°	645.4	646.4	647.4	648.4	649.3	650.1	650.5	650.9	651.2	651.7	651.5
132.5°	677.4	679.1	680.7	682.3	683.9	684.7	684.7	684.6	684.5	684.4	684.2
135°	728.3	729.4	730.6	731.7	733.0	733.7	733.9	734.1	734.2	734.4	734.4
137.5°	776.0	777.0	778.2	779.4	780.5	781.3	781.8	782.2	782.7	783.0	783.3
140°	806.6	807.5	808.5	809.5	810.5	811.3	811.9	812.5	813.1	813.7	814.0
142.5°	837.1	838.0	838.8	839.6	840.5	841.3	842.0	842.8	843.6	844.3	844.5
145°	882.3	883.1	883.8	884.6	885.4	886.1	886.7	887.3	887.9	888.5	888.5
147.5°	923.9	924.3	924.8	925.2	925.6	926.1	926.6	927.0	927.5	928.0	928.4
150°	951.6	951.5	951.3	951.1	950.9	951.2	952.0	952.8	953.5	954.3	954.3
152.5°	974.5	974.7	975.0	975.3	975.5	975.9	976.2	976.5	976.8	977.1	977.6
155°	1009.5	1009.5	1009.5	1009.5	1009.5	1009.6	1009.9	1010.0	1010.2	1010.4	1011.2
157.5°	1040.9	1040.4	1040.0	1039.6	1039.1	1039.0	1039.2	1039.4	1039.6	1039.8	1040.6
160°	1059.4	1058.8	1058.2	1057.6	1057.0	1056.9	1057.0	1057.2	1057.4	1057.6	1058.4
162.5°	1075.8	1075.3	1074.9	1074.4	1074.1	1073.8	1073.9	1073.9	1074.0	1074.0	1075.0
165°	1097.7	1097.3	1096.9	1096.4	1096.1	1096.0	1096.2	1096.4	1096.5	1096.8	1097.6
167.5°	1116.2	1115.4	1114.6	1113.8	1113.0	1112.6	1112.6	1112.6	1112.6	1112.6	1113.8
170°	1126.1	1125.3	1124.5	1123.8	1123.0	1122.6	1122.6	1122.6	1122.6	1122.6	1123.8
172.5°	1133.3	1132.5	1131.7	1130.9	1130.2	1129.7	1129.7	1129.7	1129.7	1129.7	1130.9
175°	1141.3	1140.5	1139.7	1138.9	1138.1	1137.7	1137.7	1137.7	1137.7	1137.7	1138.9
177.5°	1145.4	1144.8	1144.2	1143.4	1142.8	1142.5	1142.3	1142.1	1142.0	1141.8	1142.8
180°	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1
2.5°	894.0	895.2	896.4	897.0	896.9	896.7	896.6	896.5
5°	888.5	890.0	891.5	892.2	891.8	891.5	891.3	890.9
7.5°	877.4	878.5	879.6	879.9	879.6	879.2	879.0	878.6
10°	868.1	868.5	869.1	869.1	868.5	868.1	867.6	867.2
12.5°	854.9	855.2	855.5	855.3	854.6	854.0	853.3	852.6
15°	833.0	832.9	832.8	832.0	830.6	829.3	828.0	826.5
17.5°	805.8	805.0	804.3	803.3	802.3	801.1	800.0	798.9
20°	785.8	785.0	784.3	783.2	781.9	780.5	779.2	777.8
22.5°	765.9	764.4	762.9	761.6	760.5	759.4	758.3	757.2
25°	733.3	731.3	729.3	727.5	725.9	724.2	722.6	720.9
27.5°	697.9	695.2	692.4	690.3	688.7	687.1	685.5	683.9
30°	672.6	669.1	665.7	663.3	661.9	660.6	659.2	657.9
32.5°	648.0	644.3	640.4	637.7	635.9	634.2	632.5	630.8
35°	609.8	605.5	601.1	597.9	595.8	593.6	591.6	589.4
37.5°	569.9	564.6	559.4	555.7	553.7	551.7	549.7	547.6
40°	543.4	537.7	532.0	528.2	526.5	524.6	522.8	521.0
42.5°	517.4	511.8	506.4	502.3	499.7	497.0	494.4	491.8
45°	475.7	469.8	463.7	459.6	457.4	455.0	452.8	450.6
47.5°	434.6	428.4	422.2	417.9	415.4	412.9	410.4	407.9
50°	406.7	400.4	394.0	389.8	387.5	385.3	383.0	380.8
52.5°	380.3	373.4	366.7	362.1	359.9	357.7	355.3	353.1
55°	340.1	333.3	326.5	322.0	319.6	317.2	314.8	312.4
57.5°	299.9	293.3	286.7	282.2	280.1	277.9	275.9	273.8
60°	273.3	266.7	260.1	255.7	253.4	251.1	248.9	246.6
62.5°	247.2	241.0	234.9	230.7	228.5	226.2	223.9	221.7
65°	208.8	202.8	196.8	192.6	190.4	188.2	185.8	183.6
67.5°	172.2	166.7	161.1	157.5	155.7	153.9	152.0	150.3
70°	147.8	143.2	138.5	135.3	133.5	131.7	129.8	128.0
72.5°	125.3	120.9	116.6	113.9	112.7	111.5	110.3	109.1
75°	93.6	90.3	87.0	84.8	83.8	82.8	81.7	80.6
77.5°	66.6	64.3	62.0	60.5	59.7	58.9	58.1	57.3
80°	50.1	48.8	47.4	46.6	46.3	46.0	45.7	45.4
82.5°	37.5	36.8	36.2	35.8	35.7	35.5	35.3	35.1
85°	21.4	21.2	21.0	21.0	20.8	20.6	20.5	20.3
87.5°	11.4	11.6	11.8	11.9	11.9	11.9	11.9	11.9
90°	16.2	17.2	18.2	19.0	19.6	20.2	20.8	21.4
92.5°	36.8	38.1	39.4	40.3	40.8	41.1	41.6	42.0
95°	71.3	72.7	74.1	75.0	75.3	75.8	76.2	76.6
97.5°	111.7	113.1	114.4	115.1	115.4	115.7	115.8	116.1
100°	139.7	141.5	143.3	144.5	144.8	145.2	145.6	146.0
102.5°	168.5	170.5	172.5	173.7	174.2	174.8	175.4	175.9
105°	215.2	216.3	217.5	218.4	219.0	219.6	220.2	220.8
107.5°	265.4	266.0	266.6	266.9	266.8	266.8	266.8	266.7
110°	300.3	300.9	301.5	301.7	301.5	301.3	301.1	300.9





TEST NUMBER: P333542-940

CATALOG NUMBER: S125RDIP-S610D1035U940-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	335.3	335.6	335.8	335.8	335.5	335.1	334.7	334.4
115°	388.6	388.4	388.3	388.1	387.8	387.6	387.4	387.3
117.5°	442.0	442.2	442.4	442.0	441.2	440.5	439.7	438.9
120°	478.0	478.0	478.0	477.7	476.9	476.1	475.3	474.5
122.5°	513.4	513.2	513.0	512.6	512.0	511.4	510.8	510.1
125°	565.4	565.0	564.6	564.3	564.1	563.9	563.7	563.6
127.5°	617.1	616.9	616.7	616.4	616.0	615.5	615.2	614.8
130°	651.2	651.0	650.9	650.6	650.1	649.8	649.3	649.0
132.5°	684.0	683.9	683.6	683.2	682.7	682.2	681.6	681.0
135°	734.4	734.4	734.4	734.1	733.3	732.5	731.6	730.8
137.5°	783.5	783.7	784.0	783.6	782.7	781.7	780.7	779.7
140°	814.5	814.8	815.3	814.9	814.0	813.0	812.0	811.0
142.5°	844.8	845.0	845.3	844.9	843.9	842.9	842.0	840.9
145°	888.5	888.5	888.5	888.1	887.6	887.0	886.4	885.8
147.5°	928.9	929.4	929.9	929.4	928.1	926.8	925.4	924.1
150°	954.3	954.3	954.3	954.1	953.8	953.3	953.0	952.5
152.5°	978.1	978.6	979.0	978.9	978.2	977.5	976.8	976.1
155°	1012.0	1012.8	1013.6	1013.5	1012.5	1011.5	1010.5	1009.5
157.5°	1041.3	1042.1	1042.9	1042.7	1041.4	1040.1	1038.8	1037.5
160°	1059.2	1060.0	1060.8	1060.7	1059.7	1058.7	1057.7	1056.7
162.5°	1075.8	1076.8	1077.8	1077.7	1076.6	1075.4	1074.2	1073.1
165°	1098.3	1099.1	1099.9	1099.7	1098.6	1097.3	1096.2	1095.0
167.5°	1115.0	1116.2	1117.4	1117.3	1116.2	1114.9	1113.7	1112.4
170°	1125.0	1126.1	1127.3	1127.2	1125.9	1124.4	1123.1	1121.7
172.5°	1132.1	1133.3	1134.4	1134.4	1133.2	1132.0	1130.8	1129.5
175°	1140.1	1141.3	1142.5	1142.4	1141.0	1139.6	1138.2	1136.8
177.5°	1143.7	1144.7	1145.6	1145.6	1144.4	1143.4	1142.2	1141.1
180°	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0

(END OF REPORT)