

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: P333541-935

Luminaire Tested: **S125RDIP-S610D1035U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333541-935  
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-S610D1035U935-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1035 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5609.9 lumens  
Efficiency: N/A  
Efficacy: 126.1 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

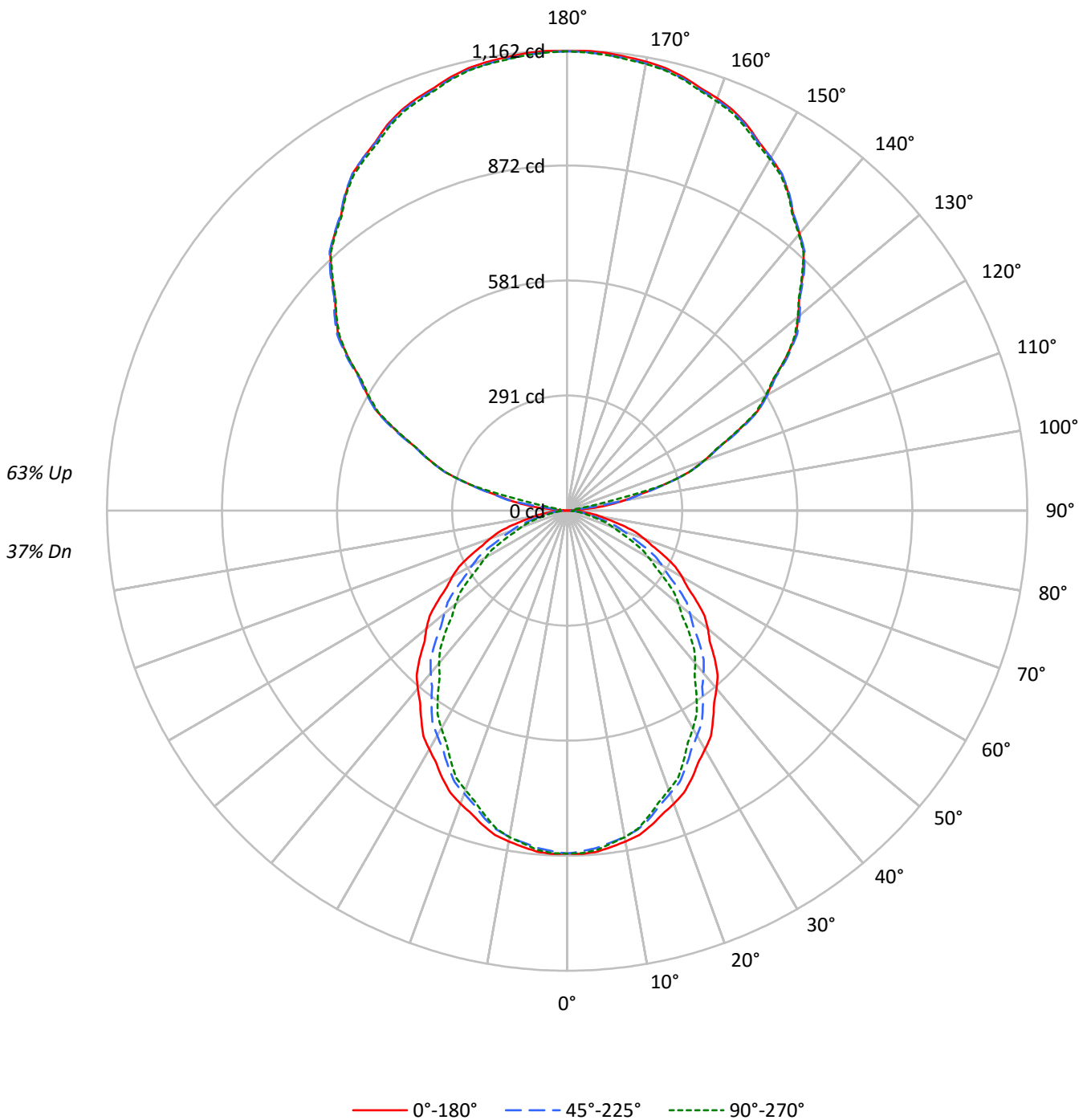
Input Watts (W): 44.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	76	76	76		59	59	59		44	44	44	37
1	95	91	87	84	86	82	79	76	67	64	62		52	51	49		39	38	37	31
2	87	79	73	69	78	72	67	63	59	55	52		46	44	42		34	33	32	26
3	79	70	63	57	71	64	58	53	52	47	44		41	38	35		31	29	27	22
4	72	62	54	48	65	56	50	45	46	41	37		36	33	30		27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32		33	29	26		25	22	20	17
6	61	49	41	36	55	45	38	33	37	32	28		30	26	23		22	20	18	15
7	56	44	37	31	51	41	34	29	34	28	25		27	23	20		21	18	16	13
8	52	40	33	28	47	37	30	26	31	25	22		25	21	18		19	16	14	12
9	49	37	29	25	44	34	27	23	28	23	20		23	19	16		17	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18		21	17	15		16	14	12	10

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

	0°	45°	90°
0°	5594	5594	5594
5°	5607	5543	5577
10°	5564	5491	5491
15°	5498	5380	5336
20°	5413	5225	5161
25°	5315	5072	4960
30°	5190	4894	4737
35°	5065	4709	4487
40°	4947	4517	4242
45°	4804	4302	3974
50°	4660	4068	3693
55°	4494	3845	3396
60°	4326	3574	3077
65°	4129	3260	2709
70°	3903	2866	2334
75°	3593	2415	1941
80°	3165	1901	1629
85°	2668	1549	1452



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.4	1.5
10°-20°	227.6	4.1
20°-30°	330.1	5.9
30°-40°	376.2	6.7
40°-50°	366.7	6.5
50°-60°	308.6	5.5
60°-70°	216.4	3.9
70°-80°	111.2	2.0
80°-90°	30.5	0.5
90°-100°	42.2	0.8
100°-110°	259.7	4.6
110°-120°	471.1	8.4
120°-130°	604.6	10.8
130°-140°	650.2	11.6
140°-150°	610.3	10.9
150°-160°	493.7	8.8
160°-170°	319.3	5.7
170°-180°	110.1	2.0
0°-30°	639.1	11.4
0°-40°	1015.3	18.1
0°-60°	1690.5	30.1
0°-90°	2048.6	36.5
90°-120°	772.9	13.8
90°-150°	2638.1	47.0
90°-180°	3561.0	63.5
0°-180°	5609.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	865	862	855	861	860	82
15°	822	818	805	804	798	232
25°	746	735	712	703	696	343
35°	642	626	597	579	569	402
45°	526	506	471	446	435	406
55°	399	377	342	313	302	357
65°	270	247	213	188	177	268
75°	144	124	97	83	78	152
85°	36	25	21	20	20	40
90°	1	8	14	18	21	4
95°	49	45	14	18	18	62
105°	253	256	256	256	255	268
115°	475	479	480	476	471	470
125°	675	681	681	678	675	603
135°	842	846	845	843	838	649
145°	976	977	978	978	973	610
155°	1075	1070	1071	1073	1067	495
165°	1134	1129	1130	1134	1128	320
175°	1160	1155	1155	1161	1154	110
180°	1160	1160	1160	1160	1160	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	867.7	867.4	867.0	866.7	866.3	865.6	864.4	863.2	862.0	860.9	862.0
5°	864.8	864.3	863.7	863.1	862.5	861.4	859.8	858.2	856.6	855.0	856.4
7.5°	856.4	855.7	855.2	854.6	854.1	852.9	850.9	849.0	847.1	845.2	846.2
10°	848.4	848.0	847.6	847.1	846.7	845.5	843.4	841.5	839.4	837.3	837.8
12.5°	839.6	839.0	838.4	837.9	837.3	835.7	833.0	830.3	827.5	824.8	825.1
15°	822.3	821.4	820.5	819.7	818.8	816.8	813.8	810.7	807.7	804.6	804.5
17.5°	802.8	801.5	800.1	798.8	797.5	794.9	791.0	787.2	783.3	779.5	778.8
20°	787.6	786.2	784.7	783.3	781.8	778.8	774.1	769.5	764.8	760.2	759.4
22.5°	770.9	769.4	768.0	766.5	765.1	761.9	757.0	752.2	747.3	742.4	741.0
25°	745.8	743.6	741.4	739.3	737.0	733.2	727.9	722.5	717.1	711.7	709.9
27.5°	717.0	714.4	711.7	709.0	706.4	702.2	696.5	690.7	684.9	679.2	676.5
30°	696.0	693.3	690.5	687.8	685.0	680.5	674.4	668.4	662.3	656.2	652.8
32.5°	675.6	672.4	669.2	666.0	662.7	658.0	651.8	645.6	639.3	633.1	629.4
35°	642.4	638.9	635.4	632.0	628.4	623.5	616.9	610.4	603.8	597.3	593.1
37.5°	609.8	605.5	601.3	597.1	592.9	587.4	580.6	573.9	567.1	560.3	555.3
40°	586.8	582.5	578.1	573.7	569.4	563.7	556.7	549.7	542.8	535.8	530.3
42.5°	562.7	558.3	553.8	549.3	544.8	539.0	531.8	524.5	517.4	510.1	504.8
45°	526.0	521.8	517.5	513.3	509.1	503.0	495.0	487.0	479.0	471.0	465.2
47.5°	487.9	483.5	479.0	474.6	470.1	463.8	455.8	447.7	439.7	431.6	425.7
50°	463.8	459.0	454.2	449.4	444.6	438.1	429.8	421.5	413.2	404.9	398.8
52.5°	437.6	432.7	427.8	422.9	418.0	411.6	403.8	396.0	388.1	380.3	373.8
55°	399.1	394.4	389.8	385.1	380.5	374.0	365.9	357.7	349.7	341.5	334.9
57.5°	360.1	355.1	350.1	345.2	340.2	333.7	325.9	318.1	310.2	302.4	295.9
60°	334.9	329.8	324.8	319.7	314.6	308.2	300.2	292.4	284.6	276.7	270.4
62.5°	308.2	303.4	298.5	293.7	288.9	282.4	274.5	266.5	258.6	250.6	244.6
65°	270.2	265.3	260.3	255.4	250.4	244.1	236.3	228.7	220.9	213.3	207.4
67.5°	232.4	227.4	222.5	217.6	212.6	206.5	199.1	191.7	184.3	176.8	171.6
70°	206.7	201.8	196.8	191.9	186.9	180.8	173.6	166.3	159.0	151.8	147.2
72.5°	181.6	176.8	171.9	167.1	162.3	156.4	149.6	142.8	136.0	129.2	125.1
75°	144.0	139.6	135.2	130.9	126.5	121.2	115.1	109.0	102.9	96.8	93.6
77.5°	106.5	103.0	99.5	96.0	92.6	88.3	83.4	78.6	73.7	68.8	66.6
80°	85.1	81.5	78.1	74.6	71.1	67.3	63.2	59.2	55.1	51.1	49.7
82.5°	64.1	61.0	57.9	54.7	51.6	48.6	45.8	43.0	40.2	37.5	36.9
85°	36.0	33.3	30.7	28.2	25.5	23.8	23.1	22.4	21.7	20.9	20.8
87.5°	12.2	11.7	11.2	10.7	10.2	10.0	10.2	10.3	10.4	10.6	10.8
90°	0.9	2.4	3.9	5.4	7.0	8.4	9.7	11.1	12.4	13.8	14.7
92.5°	13.3	12.1	11.1	10.0	9.0	9.0	10.2	11.4	12.6	13.8	14.7
95°	49.0	48.4	47.9	47.3	46.8	42.8	35.6	28.2	21.0	13.8	14.7
97.5°	102.3	103.3	104.4	105.4	106.4	99.8	85.4	71.0	56.7	42.3	36.9
100°	143.5	144.1	144.7	145.3	145.9	146.5	147.3	148.1	148.8	149.6	121.1
102.5°	185.5	186.2	187.0	187.7	188.4	189.0	189.5	189.9	190.4	190.9	185.5
105°	252.7	253.5	254.3	255.0	255.8	256.1	256.1	256.1	256.1	256.1	256.1
107.5°	322.5	322.5	322.5	322.5	322.5	322.7	323.1	323.5	323.9	324.3	324.3
110°	367.9	367.9	367.9	367.9	367.9	368.2	368.5	368.9	369.3	369.6	369.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	410.6	411.0	411.5	412.0	412.4	412.8	413.0	413.2	413.5	413.7	412.9
115°	474.6	475.5	476.5	477.4	478.4	479.0	479.1	479.3	479.5	479.7	479.0
117.5°	540.7	540.7	540.6	540.6	540.6	541.0	541.7	542.3	543.1	543.8	542.9
120°	582.0	581.8	581.6	581.4	581.3	581.4	582.0	582.6	583.2	583.8	583.3
122.5°	618.5	619.1	619.9	620.6	621.4	621.8	622.2	622.4	622.7	622.9	622.5
125°	674.9	676.1	677.5	678.9	680.2	680.9	680.9	680.9	680.9	680.9	680.1
127.5°	728.7	729.6	730.6	731.5	732.5	732.9	732.8	732.7	732.5	732.5	732.0
130°	761.6	762.7	763.6	764.6	765.5	766.0	766.3	766.5	766.6	766.8	766.3
132.5°	794.7	795.8	796.9	798.0	799.1	799.4	799.0	798.7	798.2	797.8	797.6
135°	841.6	842.7	844.0	845.1	846.2	846.6	846.2	845.8	845.4	845.1	844.6
137.5°	884.8	885.8	886.7	887.8	888.7	889.1	888.7	888.4	888.0	887.7	887.8
140°	913.0	913.3	913.8	914.1	914.5	914.6	914.4	914.2	914.0	913.9	914.2
142.5°	938.4	938.7	938.9	939.1	939.4	939.6	939.9	940.1	940.4	940.6	940.7
145°	975.8	976.1	976.5	976.9	977.2	977.5	977.5	977.5	977.5	977.5	977.7
147.5°	1008.4	1008.3	1008.2	1008.1	1008.1	1008.1	1008.4	1008.7	1008.8	1009.1	1009.4
150°	1029.1	1028.6	1028.3	1027.9	1027.5	1027.5	1027.9	1028.3	1028.6	1029.1	1029.4
152.5°	1049.0	1048.2	1047.3	1046.5	1045.6	1045.4	1045.8	1046.1	1046.5	1046.9	1047.3
155°	1074.6	1073.5	1072.3	1071.2	1070.1	1069.6	1070.1	1070.4	1070.7	1071.2	1071.8
157.5°	1094.3	1093.6	1093.0	1092.4	1091.7	1091.3	1091.3	1091.4	1091.4	1091.5	1092.1
160°	1108.1	1107.0	1105.9	1104.7	1103.5	1103.0	1103.3	1103.5	1103.6	1103.8	1104.6
162.5°	1119.1	1118.0	1116.8	1115.7	1114.6	1114.0	1114.2	1114.5	1114.7	1114.8	1115.9
165°	1133.9	1132.7	1131.6	1130.5	1129.4	1128.9	1129.0	1129.2	1129.5	1129.6	1130.8
167.5°	1145.0	1143.8	1142.5	1141.3	1140.2	1139.7	1139.9	1140.1	1140.2	1140.5	1141.9
170°	1151.1	1149.8	1148.4	1147.1	1145.7	1145.2	1145.4	1145.6	1145.7	1146.0	1147.5
172.5°	1155.2	1153.9	1152.5	1151.2	1149.9	1149.4	1149.7	1150.0	1150.4	1150.7	1152.1
175°	1159.7	1158.6	1157.4	1156.2	1155.1	1154.7	1154.9	1155.0	1155.2	1155.4	1156.9
177.5°	1161.7	1160.9	1159.9	1159.0	1158.1	1157.7	1157.9	1158.0	1158.2	1158.3	1159.4
180°	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	863.2	864.4	865.6	866.1	866.0	865.8	865.7	865.6
5°	857.9	859.4	860.8	861.4	861.1	860.8	860.6	860.2
7.5°	847.2	848.3	849.3	849.6	849.3	848.9	848.7	848.3
10°	838.2	838.6	839.1	839.1	838.6	838.2	837.8	837.3
12.5°	825.4	825.8	826.0	825.9	825.2	824.6	823.9	823.2
15°	804.3	804.2	804.1	803.3	802.0	800.7	799.4	798.1
17.5°	778.1	777.3	776.6	775.7	774.6	773.5	772.5	771.4
20°	758.7	757.9	757.2	756.2	754.9	753.6	752.3	751.0
22.5°	739.5	738.0	736.7	735.4	734.3	733.2	732.2	731.1
25°	708.0	706.1	704.2	702.4	700.9	699.2	697.7	696.0
27.5°	673.9	671.2	668.6	666.5	665.0	663.4	661.9	660.3
30°	649.5	646.1	642.7	640.4	639.1	637.8	636.5	635.2
32.5°	625.7	622.1	618.4	615.7	614.0	612.3	610.7	609.1
35°	588.8	584.6	580.4	577.3	575.2	573.2	571.2	569.1
37.5°	550.3	545.2	540.1	536.6	534.6	532.7	530.7	528.7
40°	524.7	519.2	513.7	510.1	508.3	506.5	504.8	503.1
42.5°	499.6	494.2	489.0	485.0	482.5	479.9	477.3	474.8
45°	459.3	453.6	447.7	443.8	441.6	439.4	437.2	435.1
47.5°	419.7	413.6	407.7	403.5	401.1	398.6	396.2	393.8
50°	392.7	386.6	380.5	376.3	374.2	372.0	369.8	367.6
52.5°	367.2	360.6	354.0	349.7	347.5	345.3	343.1	341.0
55°	328.4	321.8	315.3	310.9	308.6	306.3	303.9	301.6
57.5°	289.6	283.2	276.8	272.5	270.4	268.4	266.4	264.3
60°	263.9	257.5	251.2	246.8	244.7	242.5	240.3	238.2
62.5°	238.7	232.7	226.8	222.7	220.6	218.4	216.2	214.0
65°	201.6	195.8	190.0	186.0	183.8	181.7	179.4	177.3
67.5°	166.3	160.9	155.6	152.1	150.3	148.6	146.8	145.1
70°	142.8	138.3	133.7	130.6	128.9	127.2	125.4	123.6
72.5°	121.0	116.8	112.6	109.9	108.8	107.6	106.5	105.3
75°	90.4	87.2	84.0	81.9	80.9	79.9	78.9	77.8
77.5°	64.3	62.1	59.8	58.4	57.6	56.8	56.1	55.4
80°	48.4	47.1	45.8	45.0	44.7	44.4	44.1	43.8
82.5°	36.2	35.6	35.0	34.6	34.4	34.3	34.1	33.9
85°	20.7	20.5	20.3	20.2	20.1	19.9	19.8	19.6
87.5°	11.0	11.2	11.4	11.5	11.5	11.5	11.5	11.5
90°	15.7	16.6	17.6	18.3	18.9	19.5	20.1	20.7
92.5°	15.7	16.6	17.6	18.2	18.4	18.7	19.0	19.3
95°	15.7	16.6	17.6	18.1	18.1	18.1	18.1	18.1
97.5°	31.5	26.2	20.8	18.1	18.1	18.1	18.1	18.1
100°	92.6	64.2	35.7	21.1	20.3	19.5	18.9	18.1
102.5°	180.0	174.7	169.3	160.1	147.1	134.1	121.1	108.1
105°	256.1	256.1	256.1	256.1	255.9	255.7	255.5	255.3
107.5°	324.3	324.4	324.4	324.2	323.6	323.0	322.4	321.8
110°	368.5	367.9	367.4	367.2	367.4	367.6	367.7	367.9





TEST NUMBER: P333541-935

CATALOG NUMBER: S125RDIP-S610D1035U935-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	412.2	411.5	410.8	410.3	410.0	409.7	409.5	409.2
115°	478.2	477.4	476.6	475.7	474.6	473.4	472.3	471.1
117.5°	541.8	540.9	539.8	539.1	538.6	538.1	537.6	537.1
120°	583.0	582.6	582.2	581.5	580.6	579.6	578.7	577.7
122.5°	622.2	621.8	621.4	620.6	619.6	618.5	617.3	616.2
125°	679.3	678.6	677.8	677.2	676.6	676.0	675.5	674.9
127.5°	731.6	731.2	730.7	729.9	728.4	727.0	725.7	724.2
130°	765.7	765.1	764.6	763.8	762.8	761.9	761.0	759.9
132.5°	797.5	797.5	797.3	796.8	795.8	794.9	793.9	793.0
135°	844.3	844.0	843.5	842.7	841.6	840.5	839.3	838.2
137.5°	887.9	887.9	888.0	887.5	886.6	885.5	884.6	883.6
140°	914.6	915.0	915.3	915.0	913.9	912.7	911.5	910.4
142.5°	940.8	940.9	941.0	940.5	939.3	938.1	937.0	935.8
145°	977.8	978.0	978.2	977.8	976.6	975.4	974.3	973.2
147.5°	1009.5	1009.8	1010.0	1009.4	1008.1	1006.7	1005.3	1003.9
150°	1029.8	1030.2	1030.5	1030.0	1028.5	1026.9	1025.4	1023.9
152.5°	1047.7	1048.1	1048.4	1047.9	1046.5	1045.2	1043.8	1042.4
155°	1072.3	1072.9	1073.5	1073.0	1071.4	1069.9	1068.4	1066.9
157.5°	1092.7	1093.3	1093.9	1093.5	1091.9	1090.4	1088.8	1087.4
160°	1105.4	1106.1	1106.9	1106.5	1105.0	1103.5	1101.9	1100.4
162.5°	1117.0	1118.0	1119.1	1118.8	1117.1	1115.4	1113.8	1112.1
165°	1131.9	1133.1	1134.2	1134.0	1132.5	1130.9	1129.5	1127.9
167.5°	1143.2	1144.6	1146.0	1145.8	1144.1	1142.4	1140.7	1138.9
170°	1149.0	1150.6	1152.1	1151.9	1150.2	1148.6	1146.9	1145.1
172.5°	1153.5	1154.9	1156.2	1156.1	1154.3	1152.6	1150.9	1149.3
175°	1158.5	1160.0	1161.5	1161.4	1159.7	1158.0	1156.2	1154.5
177.5°	1160.5	1161.6	1162.6	1162.5	1161.3	1160.1	1158.9	1157.6
180°	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7

(END OF REPORT)