

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: P333553-935

Luminaire Tested: **S125RDIP-S850D365U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333553-935  
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-S850D365U935-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 365 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4058.6 lumens  
Efficiency: N/A  
Efficacy: 116.0 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-Direct

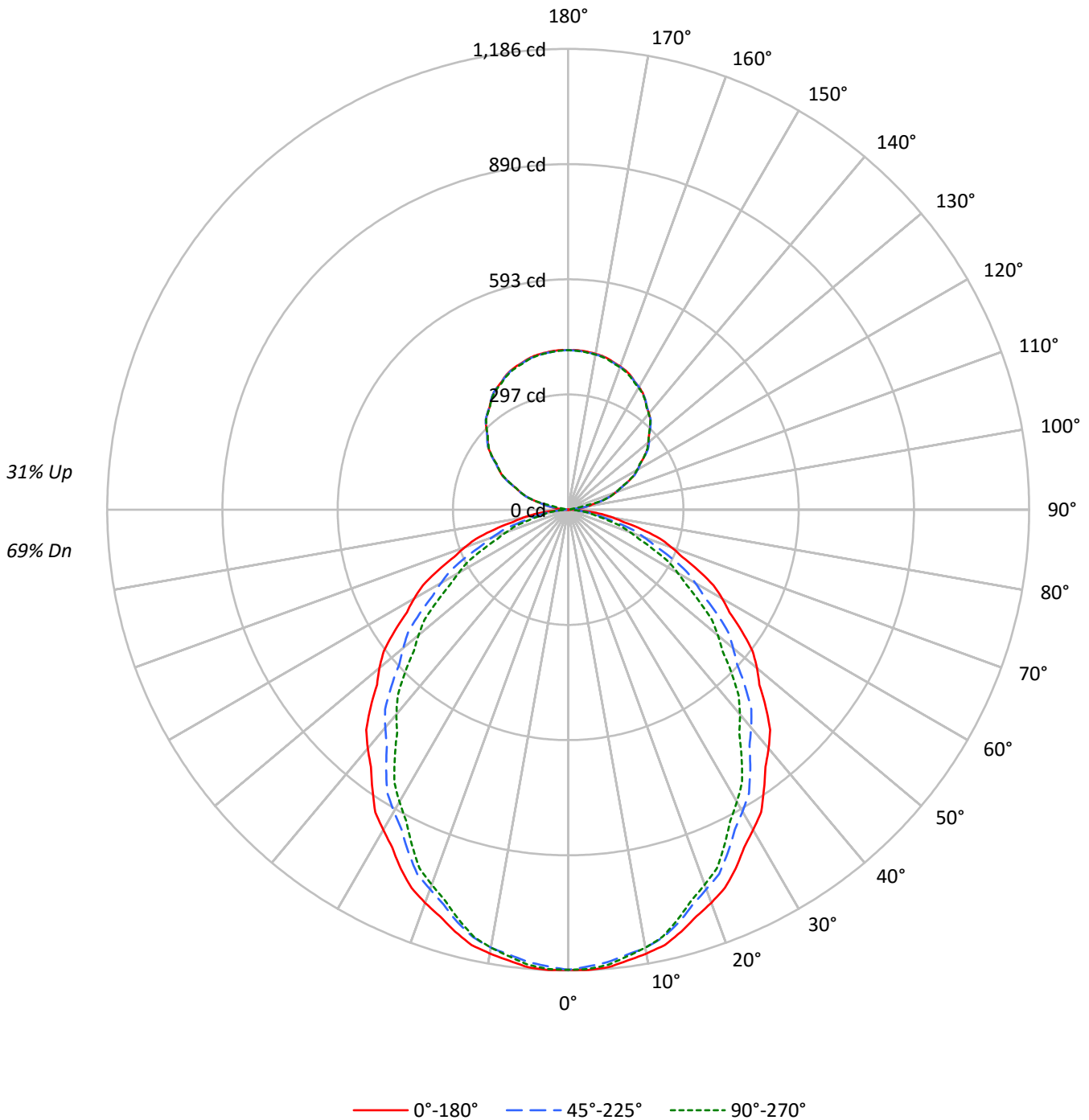
Input Watts (W): 35  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	112	112	112	112	105	105	105	105	94	94	94	83	83	83	74	74	74	69
1	102	98	94	91	97	93	89	86	83	80	78	74	72	70	66	64	63	59
2	93	86	80	75	88	81	76	71	73	69	65	65	62	59	58	56	53	50
3	85	76	68	62	80	72	65	60	65	59	55	58	54	50	52	48	46	42
4	78	67	59	53	74	64	57	51	58	52	47	52	47	43	46	43	40	37
5	72	60	52	46	68	57	50	44	52	46	41	47	42	38	42	38	35	32
6	67	54	46	40	63	52	44	39	47	41	36	42	37	33	38	34	31	28
7	62	49	41	35	58	47	40	34	43	36	32	39	33	30	35	31	27	25
8	57	45	37	32	54	43	36	31	39	33	29	35	30	27	32	28	25	22
9	54	41	33	28	51	39	32	27	36	30	26	33	28	24	30	25	22	20
10	50	38	30	26	47	36	29	25	33	27	23	30	25	22	28	23	20	18

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

	0°	45°	90°
0°	7647	7647	7647
5°	7664	7577	7623
10°	7606	7506	7506
15°	7515	7353	7294
20°	7399	7142	7056
25°	7264	6933	6780
30°	7095	6689	6475
35°	6923	6437	6133
40°	6762	6175	5798
45°	6566	5881	5431
50°	6370	5561	5050
55°	6141	5255	4641
60°	5913	4885	4204
65°	5644	4455	3703
70°	5336	3916	3191
75°	4908	3301	2655
80°	4322	2592	2228
85°	3646	2119	1993



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.3	2.7
10°-20°	311.1	7.7
20°-30°	451.2	11.1
30°-40°	514.2	12.7
40°-50°	501.2	12.3
50°-60°	421.9	10.4
60°-70°	295.7	7.3
70°-80°	152.0	3.7
80°-90°	39.2	1.0
90°-100°	14.9	0.4
100°-110°	92.0	2.3
110°-120°	166.8	4.1
120°-130°	214.0	5.3
130°-140°	230.2	5.7
140°-150°	216.1	5.3
150°-160°	174.8	4.3
160°-170°	113.0	2.8
170°-180°	39.0	1.0
0°-30°	873.6	21.5
0°-40°	1387.8	34.2
0°-60°	2310.8	56.9
0°-90°	2797.8	68.9
90°-120°	273.7	6.7
90°-150°	934.0	23.0
90°-180°	1261.0	31.1
0°-180°	4058.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1184	1184	1184	1184	1184	
5°	1182	1178	1169	1177	1176	112
15°	1124	1118	1100	1099	1091	317
25°	1019	1005	973	961	951	469
35°	878	856	816	791	778	550
45°	719	692	644	609	595	554
55°	545	516	467	428	412	488
65°	369	338	292	257	242	366
75°	197	169	132	113	106	208
85°	49	34	29	28	27	55
90°	0	3	5	6	7	3
95°	17	16	5	6	6	22
105°	90	91	91	91	90	95
115°	168	169	170	169	167	166
125°	239	241	241	240	239	213
135°	298	300	299	298	297	230
145°	345	346	346	346	344	216
155°	380	379	379	380	378	175
165°	401	400	400	402	399	113
175°	410	409	409	411	409	39
180°	410	410	410	410	410	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0
2.5°	1186.0	1185.6	1185.1	1184.6	1184.1	1183.1	1181.6	1179.9	1178.4	1176.7	1178.4
5°	1182.2	1181.4	1180.5	1179.7	1179.0	1177.5	1175.3	1173.1	1170.9	1168.7	1170.7
7.5°	1170.5	1169.8	1169.0	1168.2	1167.5	1165.8	1163.2	1160.5	1158.0	1155.3	1156.7
10°	1159.8	1159.2	1158.6	1158.0	1157.4	1155.7	1153.0	1150.1	1147.4	1144.6	1145.1
12.5°	1147.6	1146.9	1146.1	1145.4	1144.6	1142.4	1138.6	1134.9	1131.2	1127.4	1127.8
15°	1124.0	1122.8	1121.6	1120.4	1119.2	1116.5	1112.4	1108.2	1104.1	1099.8	1099.7
17.5°	1097.3	1095.5	1093.7	1091.9	1090.0	1086.5	1081.2	1076.0	1070.7	1065.5	1064.5
20°	1076.6	1074.6	1072.6	1070.7	1068.7	1064.5	1058.2	1051.8	1045.4	1039.1	1038.1
22.5°	1053.7	1051.7	1049.7	1047.8	1045.8	1041.5	1034.7	1028.1	1021.4	1014.8	1012.8
25°	1019.4	1016.4	1013.4	1010.5	1007.5	1002.3	995.0	987.6	980.2	972.9	970.3
27.5°	980.1	976.5	972.8	969.2	965.6	959.8	952.0	944.1	936.3	928.3	924.7
30°	951.4	947.6	943.9	940.1	936.3	930.2	922.0	913.6	905.3	896.9	892.3
32.5°	923.5	919.1	914.7	910.3	905.9	899.4	891.0	882.4	873.9	865.4	860.4
35°	878.1	873.3	868.6	863.8	859.0	852.1	843.3	834.3	825.4	816.4	810.6
37.5°	833.5	827.8	822.0	816.1	810.4	802.9	793.7	784.4	775.2	765.9	759.1
40°	802.1	796.2	790.1	784.2	778.3	770.5	761.0	751.4	741.9	732.4	724.8
42.5°	769.2	763.1	757.0	750.8	744.7	736.8	726.9	717.0	707.1	697.3	690.1
45°	718.9	713.2	707.4	701.6	695.9	687.5	676.6	665.7	654.8	643.9	635.8
47.5°	666.9	660.8	654.7	648.7	642.6	634.0	623.0	612.0	601.0	590.0	581.8
50°	634.0	627.4	620.9	614.3	607.8	598.8	587.5	576.2	564.8	553.5	545.2
52.5°	598.2	591.5	584.8	578.1	571.4	562.7	552.0	541.3	530.5	519.9	510.9
55°	545.4	539.1	532.8	526.4	520.0	511.3	500.2	489.0	477.9	466.7	457.8
57.5°	492.1	485.3	478.5	471.7	465.0	456.2	445.5	434.7	424.0	413.3	404.6
60°	457.8	450.9	443.9	437.0	430.0	421.2	410.4	399.7	389.0	378.2	369.5
62.5°	421.4	414.7	408.1	401.4	394.8	386.1	375.1	364.3	353.4	342.5	334.4
65°	369.3	362.6	355.8	349.0	342.2	333.6	323.1	312.5	302.0	291.5	283.5
67.5°	317.6	310.8	304.1	297.4	290.6	282.1	272.1	262.0	251.9	241.8	234.5
70°	282.6	275.8	269.1	262.3	255.5	247.2	237.3	227.3	217.4	207.4	201.3
72.5°	248.2	241.6	235.1	228.4	221.9	213.9	204.6	195.3	186.0	176.7	171.0
75°	196.7	190.8	184.8	178.8	172.9	165.7	157.4	149.0	140.7	132.3	127.9
77.5°	145.6	140.8	136.0	131.3	126.5	120.8	114.1	107.5	100.7	94.1	91.0
80°	116.2	111.5	106.7	101.9	97.2	92.0	86.4	80.8	75.3	69.7	67.9
82.5°	87.6	83.3	79.0	74.7	70.4	66.4	62.6	58.8	54.9	51.1	50.3
85°	49.2	45.6	42.0	38.5	34.9	32.5	31.6	30.6	29.6	28.6	28.4
87.5°	16.5	15.5	14.5	13.5	12.5	12.0	11.9	11.8	11.8	11.7	11.8
90°	0.3	0.9	1.4	1.9	2.5	3.0	3.4	4.0	4.4	4.9	5.2
92.5°	4.6	4.3	4.0	3.5	3.2	3.2	3.6	4.0	4.5	4.9	5.2
95°	17.3	17.1	17.0	16.7	16.5	15.2	12.6	10.0	7.4	4.9	5.2
97.5°	36.2	36.6	36.9	37.3	37.7	35.3	30.2	25.1	20.1	15.0	13.1
100°	50.8	51.1	51.2	51.4	51.7	51.8	52.2	52.4	52.7	53.0	42.9
102.5°	65.7	66.0	66.2	66.5	66.7	66.9	67.1	67.2	67.4	67.6	65.7
105°	89.5	89.7	90.1	90.3	90.6	90.7	90.7	90.7	90.7	90.7	90.7
107.5°	114.2	114.2	114.2	114.2	114.2	114.3	114.4	114.5	114.7	114.8	114.8
110°	130.3	130.3	130.3	130.3	130.3	130.4	130.4	130.6	130.7	130.9	130.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	145.3	145.5	145.7	145.9	146.0	146.1	146.2	146.3	146.4	146.5	146.2
115°	168.0	168.3	168.7	169.0	169.4	169.5	169.6	169.7	169.8	169.8	169.5
117.5°	191.4	191.4	191.4	191.4	191.4	191.5	191.7	192.0	192.3	192.5	192.2
120°	206.0	206.0	206.0	205.9	205.8	205.9	206.0	206.2	206.5	206.6	206.6
122.5°	219.0	219.2	219.5	219.7	220.0	220.2	220.2	220.3	220.4	220.5	220.4
125°	238.9	239.4	239.9	240.3	240.8	241.1	241.1	241.1	241.1	241.1	240.7
127.5°	258.0	258.3	258.6	259.0	259.3	259.5	259.4	259.4	259.3	259.3	259.2
130°	269.7	270.0	270.4	270.7	271.0	271.2	271.3	271.3	271.4	271.5	271.3
132.5°	281.4	281.7	282.1	282.5	282.9	283.0	282.9	282.8	282.6	282.4	282.4
135°	298.0	298.3	298.8	299.2	299.5	299.7	299.5	299.5	299.3	299.2	299.0
137.5°	313.2	313.6	313.9	314.3	314.6	314.8	314.6	314.5	314.4	314.3	314.3
140°	323.2	323.4	323.5	323.6	323.7	323.8	323.7	323.6	323.6	323.6	323.6
142.5°	332.3	332.3	332.4	332.4	332.5	332.6	332.8	332.9	332.9	333.0	333.0
145°	345.4	345.6	345.7	345.9	345.9	346.0	346.0	346.0	346.0	346.0	346.1
147.5°	357.0	357.0	357.0	356.9	356.9	356.9	357.0	357.1	357.1	357.2	357.3
150°	364.3	364.2	364.0	363.9	363.8	363.8	363.9	364.0	364.2	364.3	364.5
152.5°	371.3	371.1	370.7	370.5	370.1	370.1	370.2	370.4	370.5	370.7	370.7
155°	380.5	380.0	379.6	379.2	378.8	378.7	378.8	378.9	379.1	379.2	379.4
157.5°	387.4	387.2	386.9	386.7	386.5	386.3	386.3	386.4	386.4	386.4	386.6
160°	392.3	391.9	391.5	391.1	390.7	390.5	390.5	390.6	390.7	390.8	391.1
162.5°	396.2	395.8	395.4	394.9	394.6	394.4	394.5	394.5	394.6	394.7	395.0
165°	401.4	401.1	400.6	400.2	399.8	399.7	399.7	399.8	399.8	399.9	400.3
167.5°	405.4	404.9	404.5	404.1	403.6	403.5	403.6	403.6	403.7	403.7	404.2
170°	407.5	407.1	406.6	406.1	405.6	405.4	405.5	405.5	405.6	405.7	406.2
172.5°	409.0	408.5	408.0	407.6	407.1	406.9	407.0	407.2	407.3	407.4	407.9
175°	410.5	410.2	409.7	409.3	409.0	408.8	408.8	408.9	409.0	409.1	409.6
177.5°	411.3	411.0	410.6	410.4	410.0	409.8	409.9	410.0	410.0	410.1	410.4
180°	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0
2.5°	1179.9	1181.6	1183.1	1183.9	1183.7	1183.5	1183.4	1183.2
5°	1172.7	1174.7	1176.6	1177.5	1177.1	1176.6	1176.3	1175.9
7.5°	1158.1	1159.5	1160.9	1161.3	1160.9	1160.5	1160.0	1159.6
10°	1145.7	1146.3	1146.9	1146.9	1146.3	1145.7	1145.1	1144.6
12.5°	1128.3	1128.7	1129.1	1128.9	1128.0	1127.0	1126.2	1125.2
15°	1099.5	1099.2	1099.1	1098.1	1096.3	1094.5	1092.7	1090.9
17.5°	1063.5	1062.6	1061.5	1060.3	1058.9	1057.4	1055.9	1054.5
20°	1037.1	1036.0	1035.1	1033.7	1031.9	1030.1	1028.3	1026.6
22.5°	1010.8	1008.9	1006.9	1005.2	1003.8	1002.3	1000.8	999.4
25°	967.8	965.2	962.6	960.2	957.9	955.8	953.6	951.4
27.5°	921.1	917.5	913.9	911.0	909.0	906.8	904.7	902.6
30°	887.8	883.2	878.6	875.5	873.7	871.8	870.0	868.2
32.5°	855.3	850.2	845.2	841.5	839.3	837.1	834.7	832.5
35°	804.9	799.1	793.3	789.1	786.3	783.5	780.8	777.9
37.5°	752.2	745.2	738.3	733.5	730.8	728.1	725.4	722.7
40°	717.2	709.7	702.1	697.2	694.8	692.4	690.0	687.7
42.5°	682.9	675.6	668.4	663.0	659.5	656.0	652.5	649.0
45°	627.9	620.0	612.0	606.6	603.6	600.6	597.6	594.6
47.5°	573.6	565.4	557.2	551.5	548.2	544.9	541.6	538.3
50°	536.8	528.5	520.1	514.4	511.5	508.5	505.5	502.6
52.5°	502.0	492.9	484.0	477.9	475.0	472.0	469.1	466.1
55°	448.9	440.0	431.0	424.9	421.8	418.6	415.4	412.2
57.5°	395.8	387.1	378.3	372.6	369.7	366.9	364.1	361.3
60°	360.8	352.0	343.3	337.4	334.4	331.5	328.5	325.5
62.5°	326.2	318.1	310.0	304.5	301.5	298.5	295.6	292.6
65°	275.6	267.7	259.7	254.3	251.2	248.3	245.3	242.3
67.5°	227.2	220.0	212.7	207.8	205.5	203.1	200.7	198.4
70°	195.1	189.0	182.8	178.6	176.2	173.7	171.4	169.0
72.5°	165.3	159.6	153.9	150.3	148.7	147.1	145.6	144.0
75°	123.6	119.2	114.9	112.0	110.6	109.2	107.8	106.4
77.5°	87.9	84.9	81.8	79.8	78.8	77.7	76.7	75.7
80°	66.2	64.4	62.6	61.5	61.1	60.7	60.3	59.9
82.5°	49.5	48.6	47.8	47.3	47.0	46.8	46.6	46.3
85°	28.2	28.0	27.8	27.6	27.4	27.2	27.0	26.9
87.5°	11.9	11.9	12.0	12.0	11.8	11.7	11.6	11.5
90°	5.5	5.9	6.2	6.5	6.7	6.9	7.1	7.3
92.5°	5.5	5.9	6.2	6.5	6.5	6.6	6.7	6.8
95°	5.5	5.9	6.2	6.4	6.4	6.4	6.4	6.4
97.5°	11.2	9.2	7.3	6.4	6.4	6.4	6.4	6.4
100°	32.8	22.7	12.7	7.5	7.2	7.0	6.6	6.4
102.5°	63.7	61.8	59.9	56.7	52.1	47.5	42.9	38.3
105°	90.7	90.7	90.7	90.7	90.6	90.5	90.5	90.4
107.5°	114.9	114.9	114.9	114.8	114.6	114.3	114.2	113.9
110°	130.4	130.3	130.1	130.0	130.1	130.1	130.2	130.3





TEST NUMBER: P333553-935

CATALOG NUMBER: S125RDIP-S850D365U935-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	145.9	145.7	145.4	145.3	145.2	145.1	145.0	144.9
115°	169.3	169.0	168.8	168.4	168.0	167.6	167.2	166.8
117.5°	191.8	191.5	191.1	190.9	190.7	190.5	190.4	190.2
120°	206.4	206.2	206.1	205.9	205.5	205.2	204.8	204.5
122.5°	220.2	220.2	220.0	219.7	219.3	219.0	218.5	218.2
125°	240.5	240.2	240.0	239.7	239.5	239.4	239.1	238.9
127.5°	259.0	258.8	258.7	258.4	257.9	257.4	256.9	256.4
130°	271.0	270.9	270.7	270.4	270.1	269.8	269.4	269.1
132.5°	282.3	282.3	282.2	282.1	281.7	281.4	281.0	280.8
135°	298.9	298.8	298.6	298.3	298.0	297.6	297.1	296.7
137.5°	314.4	314.4	314.4	314.2	313.8	313.5	313.1	312.8
140°	323.8	323.9	324.1	323.9	323.6	323.1	322.7	322.3
142.5°	333.0	333.1	333.1	332.9	332.5	332.1	331.7	331.3
145°	346.2	346.2	346.3	346.1	345.8	345.3	344.9	344.5
147.5°	357.4	357.5	357.6	357.4	356.9	356.4	355.9	355.4
150°	364.5	364.7	364.8	364.6	364.1	363.6	363.0	362.5
152.5°	370.9	371.0	371.2	371.0	370.5	370.1	369.5	369.0
155°	379.6	379.8	380.0	379.9	379.4	378.8	378.2	377.7
157.5°	386.8	387.0	387.3	387.1	386.6	386.0	385.5	385.0
160°	391.3	391.6	391.8	391.8	391.2	390.6	390.1	389.6
162.5°	395.5	395.8	396.2	396.1	395.5	394.9	394.3	393.7
165°	400.7	401.1	401.6	401.5	401.0	400.4	399.8	399.3
167.5°	404.8	405.2	405.7	405.6	405.0	404.4	403.8	403.2
170°	406.7	407.3	407.9	407.9	407.3	406.7	406.0	405.4
172.5°	408.4	408.9	409.3	409.3	408.7	408.0	407.4	406.8
175°	410.1	410.7	411.2	411.2	410.5	409.9	409.3	408.7
177.5°	410.9	411.2	411.6	411.6	411.1	410.7	410.3	409.8
180°	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5

(END OF REPORT)