

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: P333554-935

Luminaire Tested: **S125RDIP-S850D365U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333554-935
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-S850D365U935-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3889.0 lumens
Efficiency: N/A
Efficacy: 111.1 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-Direct

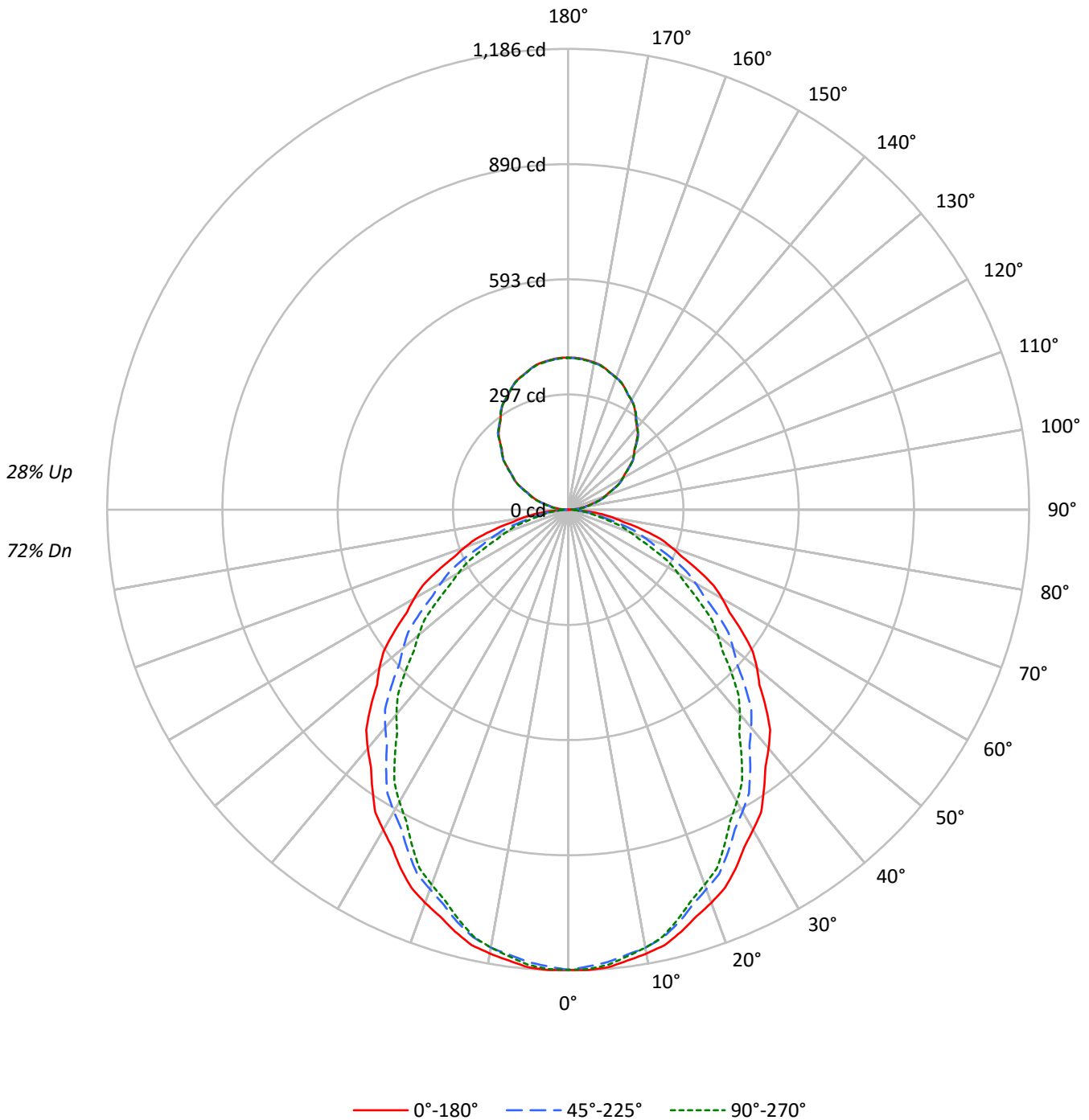
Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333554-935

CATALOG NUMBER: S125RDIP-S850D365U935-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333554-935

CATALOG NUMBER: S125RDIP-S850D365U935-4F0-1E-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	112	112	112	112	106	106	106	106	96	96	96	85	85	85	76	76	76	72
1	103	99	95	91	98	94	90	87	84	82	79	76	74	72	68	67	65	61
2	94	87	80	75	89	82	77	72	74	70	66	67	64	61	60	58	55	52
3	86	76	69	63	81	73	66	61	66	60	56	60	55	52	54	50	47	44
4	79	68	60	54	75	65	57	52	59	53	48	53	48	45	48	44	41	38
5	73	61	52	46	69	58	50	45	53	47	42	48	43	39	43	39	36	33
6	67	55	46	40	63	52	45	39	48	41	37	44	38	34	40	35	32	29
7	62	50	41	36	59	48	40	35	44	37	33	40	34	30	36	32	28	26
8	58	45	37	32	55	43	36	31	40	34	29	36	31	27	33	29	26	23
9	54	42	34	29	51	40	33	28	37	31	26	34	28	25	31	26	23	21
10	51	38	31	26	48	37	30	25	34	28	24	31	26	22	29	24	21	19

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



TEST NUMBER: P333554-935

CATALOG NUMBER: S125RDIP-S850D365U935-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.3	2.9
10°-20°	311.1	8.0
20°-30°	451.2	11.6
30°-40°	514.2	13.2
40°-50°	501.2	12.9
50°-60°	421.9	10.8
60°-70°	295.7	7.6
70°-80°	152.0	3.9
80°-90°	39.2	1.0
90°-100°	26.2	0.7
100°-110°	77.3	2.0
110°-120°	131.0	3.4
120°-130°	172.4	4.4
130°-140°	193.2	5.0
140°-150°	189.3	4.9
150°-160°	159.0	4.1
160°-170°	105.7	2.7
170°-180°	37.0	1.0
0°-30°	873.6	22.5
0°-40°	1387.8	35.7
0°-60°	2310.8	59.4
0°-90°	2797.8	71.9
90°-120°	234.5	6.0
90°-150°	789.5	20.3
90°-180°	1091.0	28.1
0°-180°	3889.0	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°	20	21	23	26	26	21
105°	69	71	73	74	76	74
115°	131	132	133	133	132	130
125°	191	193	194	193	193	171
135°	249	251	251	251	250	192
145°	302	303	304	304	303	188
155°	345	345	345	346	345	159
165°	375	375	375	376	374	106
175°	390	389	389	390	389	37
180°	391	391	391	391	391	



TEST NUMBER: P333554-935

CATALOG NUMBER: S125RDIP-S850D365U935-4F0-1E-UDD-F1

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°	7.4	7.7	8.1	8.5	8.9	9.4	9.9	10.5	11.1	11.7	12.1
95°	19.8	19.9	20.1	20.1	20.3	20.8	21.4	22.0	22.7	23.4	23.9
97.5°	32.9	32.9	33.0	33.1	33.1	33.6	34.5	35.5	36.3	37.3	37.8
100°	42.6	42.6	42.6	42.6	42.6	43.0	43.9	44.8	45.7	46.6	47.2
102.5°	53.0	53.4	53.6	53.9	54.2	54.5	54.9	55.4	55.9	56.3	57.0
105°	69.4	69.7	70.1	70.4	70.8	71.1	71.5	71.9	72.3	72.8	73.1
107.5°	87.4	87.7	88.1	88.4	88.8	89.1	89.4	89.7	90.0	90.3	90.5
110°	99.8	100.1	100.5	100.8	101.2	101.4	101.6	101.9	102.0	102.3	102.5



TEST NUMBER: P333554-935

CATALOG NUMBER: S125RDIP-S850D365U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	112.4	112.6	112.8	113.0	113.1	113.4	113.7	113.9	114.2	114.4	114.5
115°	131.1	131.4	131.7	132.0	132.2	132.4	132.6	132.7	132.9	133.0	132.9
117.5°	149.9	150.0	150.2	150.2	150.4	150.5	150.7	150.8	150.8	151.0	151.0
120°	161.6	162.0	162.3	162.6	162.9	163.2	163.2	163.2	163.3	163.4	163.4
122.5°	174.3	174.4	174.5	174.6	174.7	174.9	175.0	175.2	175.4	175.6	175.6
125°	191.4	191.8	192.3	192.6	193.0	193.3	193.4	193.4	193.5	193.6	193.4
127.5°	209.7	209.9	210.2	210.3	210.6	210.8	210.9	210.9	211.0	211.0	211.0
130°	220.6	220.9	221.3	221.6	222.0	222.2	222.3	222.5	222.7	222.7	222.7
132.5°	231.6	232.1	232.7	233.2	233.8	234.1	234.0	234.0	234.0	233.9	233.8
135°	248.9	249.3	249.8	250.1	250.6	250.8	250.9	250.9	251.0	251.1	251.1
137.5°	265.3	265.6	266.0	266.4	266.8	267.1	267.3	267.3	267.5	267.7	267.8
140°	275.7	276.0	276.4	276.7	277.1	277.3	277.5	277.8	277.9	278.1	278.3
142.5°	286.2	286.5	286.7	287.1	287.3	287.6	287.8	288.1	288.3	288.6	288.7
145°	301.6	301.9	302.1	302.4	302.6	302.9	303.1	303.3	303.5	303.7	303.7
147.5°	315.8	316.0	316.1	316.2	316.4	316.6	316.8	316.9	317.0	317.2	317.4
150°	325.3	325.3	325.2	325.1	325.0	325.1	325.4	325.7	326.0	326.2	326.2
152.5°	333.1	333.2	333.3	333.4	333.5	333.6	333.7	333.8	333.9	334.0	334.2
155°	345.1	345.1	345.1	345.1	345.1	345.1	345.2	345.3	345.3	345.4	345.7
157.5°	355.8	355.7	355.5	355.3	355.2	355.2	355.2	355.3	355.3	355.4	355.7
160°	362.1	362.0	361.7	361.5	361.4	361.3	361.4	361.4	361.4	361.5	361.8
162.5°	367.7	367.6	367.5	367.3	367.1	367.0	367.0	367.1	367.1	367.1	367.5
165°	375.2	375.1	375.0	374.8	374.7	374.6	374.7	374.8	374.9	374.9	375.2
167.5°	381.5	381.3	381.0	380.7	380.5	380.3	380.3	380.3	380.3	380.3	380.7
170°	385.0	384.7	384.4	384.2	383.8	383.7	383.7	383.7	383.7	383.7	384.2
172.5°	387.4	387.1	386.8	386.6	386.3	386.2	386.2	386.2	386.2	386.2	386.6
175°	390.1	389.9	389.6	389.3	389.1	388.9	388.9	388.9	388.9	388.9	389.3
177.5°	391.5	391.3	391.1	390.9	390.6	390.5	390.5	390.5	390.4	390.3	390.6
180°	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1



TEST NUMBER: P333554-935

CATALOG NUMBER: S125RDIP-S850D365U935-4F0-1E-UDD-F1

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°	12.6	13.0	13.4	13.8	13.9	14.0	14.2	14.4
95°	24.4	24.9	25.3	25.7	25.7	25.9	26.0	26.2
97.5°	38.2	38.7	39.1	39.3	39.4	39.5	39.6	39.7
100°	47.8	48.4	49.0	49.3	49.5	49.7	49.8	49.9
102.5°	57.6	58.3	59.0	59.4	59.6	59.8	59.9	60.1
105°	73.5	74.0	74.4	74.6	74.8	75.1	75.3	75.5
107.5°	90.7	90.9	91.1	91.3	91.2	91.2	91.2	91.2
110°	102.6	102.9	103.1	103.1	103.1	103.0	102.9	102.9



TEST NUMBER: P333554-935

CATALOG NUMBER: S125RDIP-S850D365U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	114.6	114.7	114.8	114.8	114.7	114.5	114.4	114.3
115°	132.9	132.8	132.7	132.7	132.6	132.5	132.4	132.3
117.5°	151.1	151.2	151.2	151.1	150.8	150.6	150.3	150.0
120°	163.4	163.4	163.4	163.2	163.0	162.7	162.5	162.2
122.5°	175.5	175.4	175.4	175.2	175.0	174.8	174.6	174.4
125°	193.3	193.1	193.0	192.9	192.9	192.8	192.7	192.6
127.5°	210.9	210.9	210.8	210.7	210.6	210.4	210.3	210.2
130°	222.7	222.6	222.5	222.4	222.2	222.1	222.0	221.9
132.5°	233.8	233.8	233.7	233.6	233.3	233.2	233.0	232.8
135°	251.1	251.1	251.1	250.9	250.6	250.4	250.1	249.9
137.5°	267.9	267.9	268.0	267.9	267.5	267.2	266.8	266.5
140°	278.4	278.5	278.7	278.6	278.3	277.9	277.6	277.2
142.5°	288.8	288.9	289.0	288.8	288.4	288.1	287.8	287.5
145°	303.7	303.7	303.7	303.6	303.4	303.2	303.0	302.8
147.5°	317.5	317.7	317.9	317.7	317.3	316.8	316.3	315.9
150°	326.2	326.2	326.2	326.1	326.1	325.9	325.7	325.6
152.5°	334.3	334.5	334.7	334.6	334.4	334.2	333.9	333.6
155°	345.9	346.2	346.5	346.5	346.1	345.8	345.4	345.1
157.5°	355.9	356.3	356.5	356.5	356.0	355.5	355.1	354.6
160°	362.1	362.3	362.6	362.6	362.2	361.9	361.5	361.2
162.5°	367.7	368.1	368.4	368.4	368.0	367.6	367.2	366.8
165°	375.5	375.7	376.0	375.9	375.5	375.1	374.7	374.3
167.5°	381.2	381.5	381.9	381.9	381.5	381.1	380.6	380.3
170°	384.5	385.0	385.4	385.3	384.9	384.4	383.9	383.4
172.5°	387.0	387.4	387.8	387.8	387.4	386.9	386.5	386.1
175°	389.7	390.1	390.5	390.5	390.0	389.5	389.1	388.6
177.5°	391.0	391.3	391.6	391.6	391.2	390.8	390.5	390.0
180°	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1

(END OF REPORT)