

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: P333554-930

Luminaire Tested: **S125RDIP-S850D365U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333554-930
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-S850D365U930-4F0-1E-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: 3682.6 lumens
Efficiency: N/A
Efficacy: 105.2 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-Direct

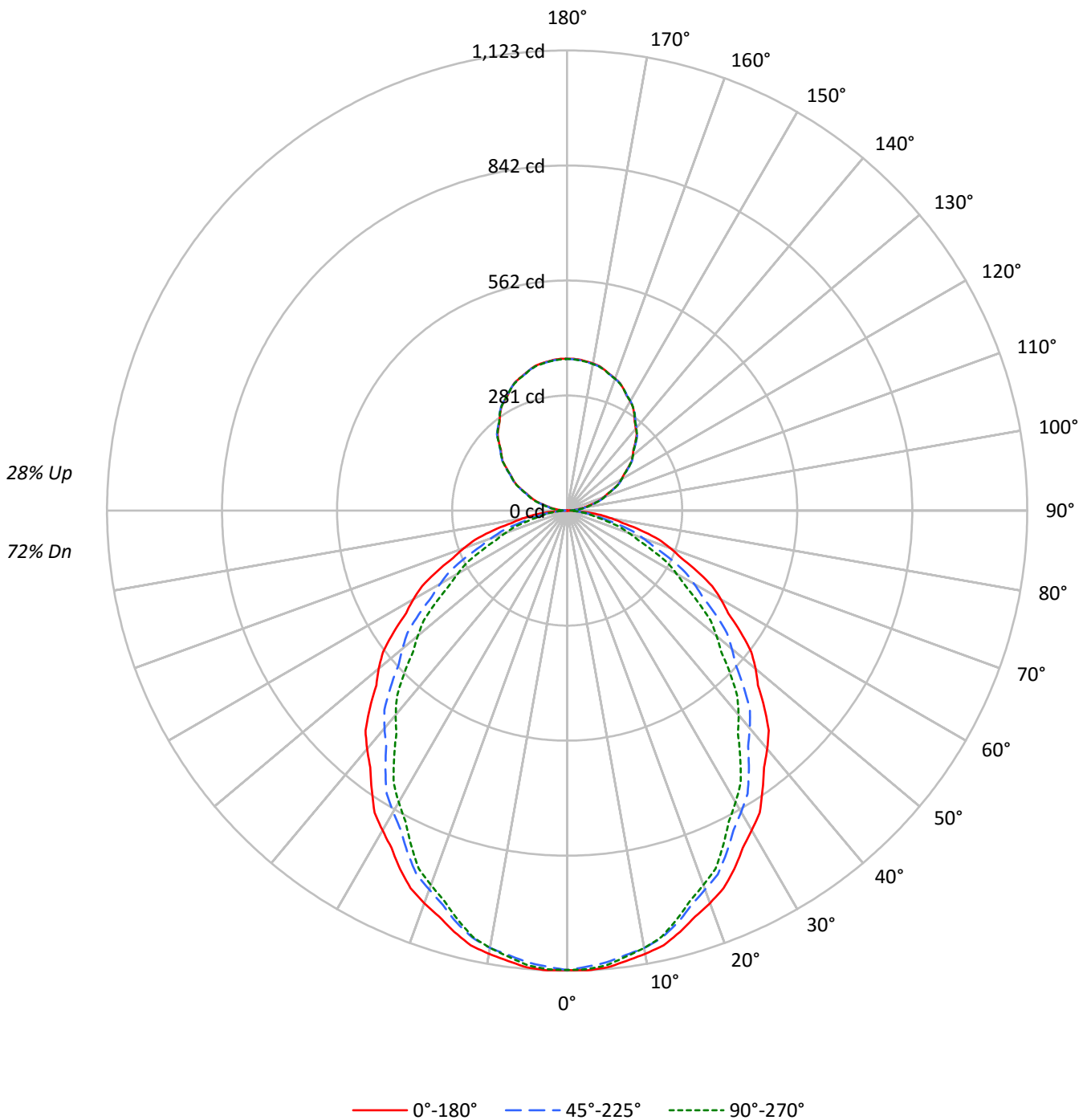
Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	7240	7240	7240
5°	7257	7175	7219
10°	7202	7108	7108
15°	7117	6964	6907
20°	7007	6762	6681
25°	6879	6565	6420
30°	6718	6334	6131
35°	6556	6095	5807
40°	6403	5847	5490
45°	6218	5569	5142
50°	6031	5267	4782
55°	5816	4977	4396
60°	5599	4627	3981
65°	5344	4219	3506
70°	5053	3709	3021
75°	4649	3127	2515
80°	4095	2455	2109
85°	3453	2008	1882



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.4	2.9
10°-20°	294.6	8.0
20°-30°	427.2	11.6
30°-40°	486.9	13.2
40°-50°	474.6	12.9
50°-60°	399.5	10.8
60°-70°	280.0	7.6
70°-80°	143.9	3.9
80°-90°	37.2	1.0
90°-100°	24.8	0.7
100°-110°	73.2	2.0
110°-120°	124.0	3.4
120°-130°	163.2	4.4
130°-140°	182.9	5.0
140°-150°	179.3	4.9
150°-160°	150.6	4.1
160°-170°	100.1	2.7
170°-180°	35.0	1.0
0°-30°	827.2	22.5
0°-40°	1314.1	35.7
0°-60°	2188.2	59.4
0°-90°	2649.3	71.9
90°-120°	222.1	6.0
90°-150°	747.5	20.3
90°-180°	1033.0	28.1
0°-180°	3682.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1121	1121	1121	1121	1121	
5°	1119	1116	1107	1115	1114	106
15°	1064	1059	1042	1040	1033	300
25°	965	952	921	910	901	444
35°	832	810	773	749	737	520
45°	681	655	610	577	563	525
55°	516	488	442	405	390	462
65°	350	320	276	243	229	346
75°	186	160	125	107	101	197
85°	47	32	27	26	25	52
90°	0	3	5	6	7	3
95°	19	19	22	24	25	20
105°	66	67	69	71	72	70
115°	124	125	126	126	125	123
125°	181	183	183	183	182	162
135°	236	237	238	238	237	182
145°	286	287	288	288	287	178
155°	327	327	327	328	327	150
165°	355	355	355	356	354	100
175°	369	368	368	370	368	35
180°	370	370	370	370	370	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1
2.5°	1123.1	1122.7	1122.2	1121.8	1121.3	1120.3	1118.8	1117.3	1115.8	1114.3	1115.8
5°	1119.4	1118.7	1117.9	1117.1	1116.4	1115.0	1112.9	1110.8	1108.7	1106.7	1108.6
7.5°	1108.4	1107.7	1106.9	1106.2	1105.5	1103.9	1101.5	1098.9	1096.5	1094.0	1095.3
10°	1098.2	1097.6	1097.1	1096.5	1095.9	1094.4	1091.8	1089.1	1086.5	1083.9	1084.3
12.5°	1086.7	1086.0	1085.2	1084.6	1083.9	1081.7	1078.2	1074.6	1071.1	1067.6	1068.0
15°	1064.4	1063.2	1062.1	1060.9	1059.8	1057.3	1053.4	1049.4	1045.5	1041.5	1041.3
17.5°	1039.1	1037.4	1035.7	1034.0	1032.2	1028.8	1023.9	1018.9	1013.9	1008.9	1008.0
20°	1019.5	1017.6	1015.7	1013.8	1011.9	1008.0	1002.0	996.0	989.9	983.9	983.0
22.5°	997.8	995.9	994.0	992.1	990.3	986.2	979.8	973.5	967.2	960.9	959.0
25°	965.3	962.5	959.6	956.8	954.0	949.1	942.2	935.1	928.2	921.3	918.8
27.5°	928.1	924.6	921.2	917.8	914.4	908.9	901.5	894.0	886.6	879.1	875.6
30°	900.9	897.3	893.8	890.2	886.6	880.8	873.0	865.1	857.2	849.3	845.0
32.5°	874.5	870.3	866.2	862.0	857.8	851.7	843.7	835.6	827.5	819.5	814.7
35°	831.5	827.0	822.5	817.9	813.4	806.9	798.5	790.0	781.5	773.1	767.6
37.5°	789.3	783.8	778.4	772.8	767.4	760.3	751.5	742.7	734.0	725.3	718.8
40°	759.5	753.9	748.2	742.6	736.9	729.6	720.6	711.5	702.5	693.5	686.3
42.5°	728.4	722.6	716.8	710.9	705.2	697.7	688.3	679.0	669.6	660.3	653.5
45°	680.8	675.3	669.8	664.4	658.9	651.0	640.7	630.4	620.0	609.7	602.1
47.5°	631.5	625.7	620.0	614.2	608.5	600.4	590.0	579.5	569.1	558.6	550.9
50°	600.3	594.1	587.9	581.7	575.5	567.0	556.3	545.6	534.8	524.2	516.2
52.5°	566.5	560.1	553.8	547.4	541.0	532.8	522.7	512.6	502.4	492.3	483.8
55°	516.5	510.5	504.5	498.5	492.4	484.1	473.6	463.1	452.6	442.0	433.5
57.5°	466.0	459.6	453.1	446.7	440.3	432.0	421.8	411.6	401.5	391.3	383.1
60°	433.5	427.0	420.4	413.8	407.2	398.8	388.7	378.5	368.4	358.2	349.9
62.5°	399.0	392.7	386.5	380.1	373.8	365.6	355.2	345.0	334.6	324.3	316.7
65°	349.7	343.3	336.9	330.5	324.1	315.9	306.0	296.0	286.0	276.1	268.5
67.5°	300.8	294.3	288.0	281.6	275.2	267.2	257.6	248.1	238.6	228.9	222.1
70°	267.6	261.1	254.8	248.3	242.0	234.1	224.7	215.2	205.9	196.4	190.6
72.5°	235.1	228.8	222.6	216.3	210.1	202.5	193.7	184.9	176.1	167.3	161.9
75°	186.3	180.7	175.0	169.3	163.7	156.9	149.0	141.1	133.2	125.3	121.2
77.5°	137.9	133.3	128.8	124.3	119.8	114.4	108.0	101.7	95.4	89.1	86.2
80°	110.1	105.6	101.0	96.5	92.0	87.2	81.9	76.6	71.3	66.0	64.3
82.5°	83.0	78.9	74.8	70.8	66.7	62.9	59.3	55.7	52.0	48.4	47.6
85°	46.6	43.2	39.8	36.4	33.0	30.8	29.9	28.9	28.0	27.1	26.9
87.5°	15.7	14.7	13.7	12.8	11.8	11.3	11.3	11.2	11.2	11.1	11.2
90°	0.3	0.8	1.3	1.8	2.4	2.9	3.3	3.8	4.2	4.6	4.9
92.5°	7.0	7.3	7.7	8.1	8.4	8.9	9.4	9.9	10.5	11.1	11.5
95°	18.8	18.8	19.0	19.1	19.2	19.6	20.3	20.9	21.5	22.2	22.7
97.5°	31.1	31.1	31.2	31.3	31.3	31.8	32.7	33.6	34.4	35.3	35.8
100°	40.4	40.4	40.4	40.4	40.4	40.8	41.6	42.4	43.3	44.1	44.7
102.5°	50.2	50.5	50.8	51.0	51.3	51.6	52.0	52.4	52.9	53.3	54.0
105°	65.7	66.0	66.4	66.7	67.0	67.3	67.8	68.1	68.5	68.9	69.2
107.5°	82.8	83.1	83.4	83.7	84.1	84.4	84.6	85.0	85.2	85.5	85.7
110°	94.5	94.8	95.1	95.5	95.8	96.0	96.2	96.4	96.6	96.9	97.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	106.5	106.6	106.8	107.0	107.1	107.4	107.6	107.9	108.1	108.4	108.4
115°	124.2	124.4	124.7	125.0	125.2	125.4	125.6	125.6	125.8	126.0	125.9
117.5°	141.9	142.0	142.2	142.3	142.4	142.5	142.7	142.8	142.8	143.0	143.0
120°	153.0	153.4	153.7	154.0	154.3	154.5	154.6	154.6	154.7	154.7	154.7
122.5°	165.0	165.1	165.3	165.3	165.4	165.6	165.8	165.9	166.1	166.2	166.2
125°	181.2	181.6	182.1	182.4	182.8	183.0	183.1	183.1	183.2	183.3	183.1
127.5°	198.5	198.8	199.0	199.2	199.4	199.6	199.7	199.7	199.8	199.8	199.8
130°	208.9	209.2	209.5	209.9	210.2	210.4	210.5	210.7	210.8	210.9	210.8
132.5°	219.3	219.8	220.4	220.9	221.4	221.7	221.6	221.6	221.6	221.5	221.4
135°	235.7	236.1	236.5	236.8	237.3	237.5	237.6	237.6	237.7	237.7	237.7
137.5°	251.2	251.5	251.9	252.3	252.7	252.9	253.1	253.2	253.3	253.5	253.6
140°	261.1	261.4	261.7	262.0	262.4	262.6	262.8	263.0	263.2	263.3	263.5
142.5°	271.0	271.3	271.5	271.8	272.1	272.3	272.6	272.8	273.0	273.3	273.4
145°	285.6	285.8	286.1	286.3	286.6	286.8	287.0	287.2	287.4	287.6	287.6
147.5°	299.1	299.2	299.3	299.5	299.6	299.8	299.9	300.1	300.2	300.4	300.5
150°	308.0	308.0	307.9	307.9	307.8	307.9	308.1	308.4	308.7	308.9	308.9
152.5°	315.4	315.5	315.6	315.7	315.8	315.8	316.0	316.1	316.2	316.3	316.4
155°	326.8	326.8	326.8	326.8	326.8	326.8	326.9	326.9	327.0	327.1	327.3
157.5°	336.9	336.8	336.6	336.5	336.4	336.3	336.4	336.5	336.5	336.6	336.8
160°	342.9	342.8	342.5	342.3	342.2	342.1	342.2	342.2	342.3	342.3	342.6
162.5°	348.2	348.1	348.0	347.8	347.6	347.6	347.6	347.6	347.6	347.6	348.0
165°	355.3	355.1	355.1	354.9	354.8	354.7	354.8	354.9	355.0	355.0	355.3
167.5°	361.3	361.0	360.8	360.5	360.3	360.1	360.1	360.1	360.1	360.1	360.5
170°	364.5	364.3	364.0	363.8	363.5	363.4	363.4	363.4	363.4	363.4	363.8
172.5°	366.8	366.6	366.3	366.1	365.8	365.7	365.7	365.7	365.7	365.7	366.1
175°	369.4	369.2	368.9	368.7	368.4	368.3	368.3	368.3	368.3	368.3	368.7
177.5°	370.7	370.6	370.3	370.1	369.9	369.8	369.7	369.7	369.7	369.6	369.9
180°	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1
2.5°	1117.3	1118.8	1120.3	1121.0	1120.9	1120.7	1120.5	1120.4
5°	1110.4	1112.3	1114.2	1115.0	1114.6	1114.2	1113.9	1113.5
7.5°	1096.7	1098.0	1099.3	1099.7	1099.3	1098.9	1098.5	1098.0
10°	1084.9	1085.5	1086.1	1086.1	1085.5	1084.9	1084.3	1083.9
12.5°	1068.4	1068.8	1069.2	1069.0	1068.1	1067.2	1066.4	1065.5
15°	1041.1	1040.9	1040.7	1039.8	1038.1	1036.4	1034.7	1033.0
17.5°	1007.1	1006.2	1005.2	1004.0	1002.7	1001.3	999.9	998.5
20°	982.0	981.0	980.2	978.8	977.1	975.4	973.7	972.1
22.5°	957.2	955.4	953.5	951.9	950.5	949.1	947.7	946.3
25°	916.4	914.0	911.5	909.2	907.1	905.1	903.0	900.9
27.5°	872.2	868.8	865.4	862.7	860.7	858.7	856.7	854.7
30°	840.7	836.3	831.9	829.0	827.3	825.6	823.9	822.1
32.5°	809.9	805.1	800.4	796.9	794.8	792.6	790.4	788.3
35°	762.1	756.7	751.2	747.2	744.5	741.9	739.3	736.6
37.5°	712.2	705.6	699.1	694.6	692.0	689.4	686.9	684.4
40°	679.1	672.1	664.9	660.1	657.9	655.7	653.4	651.2
42.5°	646.6	639.8	632.9	627.8	624.5	621.2	617.8	614.6
45°	594.6	587.1	579.5	574.4	571.5	568.8	565.9	563.0
47.5°	543.2	535.4	527.7	522.2	519.1	516.0	512.8	509.7
50°	508.3	500.4	492.5	487.1	484.4	481.5	478.7	475.9
52.5°	475.3	466.8	458.3	452.6	449.8	446.9	444.2	441.3
55°	425.1	416.6	408.1	402.4	399.4	396.4	393.4	390.4
57.5°	374.8	366.6	358.2	352.8	350.1	347.4	344.8	342.1
60°	341.6	333.3	325.1	319.5	316.7	313.9	311.0	308.2
62.5°	308.9	301.3	293.6	288.4	285.5	282.7	279.9	277.0
65°	261.0	253.5	245.9	240.8	237.9	235.1	232.3	229.4
67.5°	215.2	208.3	201.4	196.8	194.6	192.3	190.0	187.8
70°	184.7	179.0	173.1	169.1	166.8	164.5	162.3	160.0
72.5°	156.5	151.2	145.8	142.4	140.8	139.3	137.9	136.3
75°	117.1	112.9	108.8	106.1	104.7	103.4	102.1	100.8
77.5°	83.2	80.4	77.5	75.6	74.6	73.6	72.6	71.7
80°	62.7	61.0	59.3	58.2	57.9	57.5	57.1	56.7
82.5°	46.9	46.1	45.2	44.8	44.5	44.4	44.1	43.9
85°	26.7	26.5	26.3	26.2	25.9	25.8	25.6	25.4
87.5°	11.3	11.3	11.3	11.3	11.2	11.1	11.0	10.8
90°	5.2	5.5	5.9	6.1	6.4	6.5	6.7	6.9
92.5°	11.9	12.3	12.7	13.0	13.2	13.3	13.5	13.6
95°	23.1	23.6	24.0	24.3	24.4	24.5	24.6	24.8
97.5°	36.2	36.6	37.0	37.3	37.3	37.4	37.5	37.6
100°	45.2	45.8	46.4	46.7	46.9	47.0	47.1	47.3
102.5°	54.5	55.2	55.8	56.3	56.4	56.6	56.7	56.9
105°	69.6	70.0	70.4	70.7	70.8	71.1	71.3	71.5
107.5°	85.9	86.1	86.3	86.4	86.3	86.3	86.3	86.3
110°	97.2	97.4	97.6	97.7	97.6	97.5	97.4	97.4



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CATALOG NUMBER: S125RDIP-S850D365U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	108.5	108.6	108.7	108.7	108.6	108.4	108.4	108.3
115°	125.8	125.7	125.6	125.6	125.6	125.5	125.4	125.3
117.5°	143.1	143.2	143.2	143.1	142.8	142.6	142.4	142.0
120°	154.7	154.7	154.7	154.6	154.3	154.1	153.8	153.6
122.5°	166.2	166.1	166.1	165.9	165.8	165.5	165.3	165.1
125°	183.0	182.9	182.8	182.6	182.6	182.5	182.5	182.4
127.5°	199.7	199.7	199.6	199.5	199.4	199.3	199.1	199.0
130°	210.8	210.8	210.7	210.6	210.4	210.3	210.2	210.1
132.5°	221.4	221.4	221.3	221.2	220.9	220.8	220.6	220.5
135°	237.7	237.7	237.7	237.6	237.3	237.1	236.8	236.6
137.5°	253.6	253.7	253.8	253.6	253.3	253.0	252.7	252.3
140°	263.7	263.7	263.9	263.8	263.5	263.2	262.9	262.5
142.5°	273.5	273.5	273.6	273.5	273.1	272.8	272.6	272.2
145°	287.6	287.6	287.6	287.5	287.3	287.1	286.9	286.7
147.5°	300.7	300.8	301.0	300.8	300.4	299.9	299.5	299.1
150°	308.9	308.9	308.9	308.8	308.8	308.6	308.4	308.3
152.5°	316.6	316.7	316.9	316.8	316.7	316.4	316.2	315.9
155°	327.6	327.8	328.1	328.1	327.8	327.4	327.1	326.8
157.5°	337.0	337.4	337.6	337.5	337.1	336.6	336.2	335.8
160°	342.8	343.1	343.3	343.3	343.0	342.7	342.3	342.0
162.5°	348.2	348.5	348.9	348.9	348.5	348.1	347.7	347.3
165°	355.6	355.8	356.0	356.0	355.6	355.2	354.8	354.4
167.5°	360.9	361.3	361.7	361.7	361.3	360.9	360.4	360.1
170°	364.1	364.5	364.9	364.8	364.4	363.9	363.5	363.1
172.5°	366.5	366.8	367.2	367.2	366.8	366.4	366.0	365.6
175°	369.0	369.4	369.8	369.7	369.3	368.8	368.4	367.9
177.5°	370.2	370.6	370.8	370.8	370.5	370.1	369.7	369.3
180°	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3

(END OF REPORT)