

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: P333212

Luminaire Tested: **S125DIP-S850D365U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333212
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: S125DIP-S850D365U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4684.3 lumens
Efficiency: N/A
Efficacy: 133.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

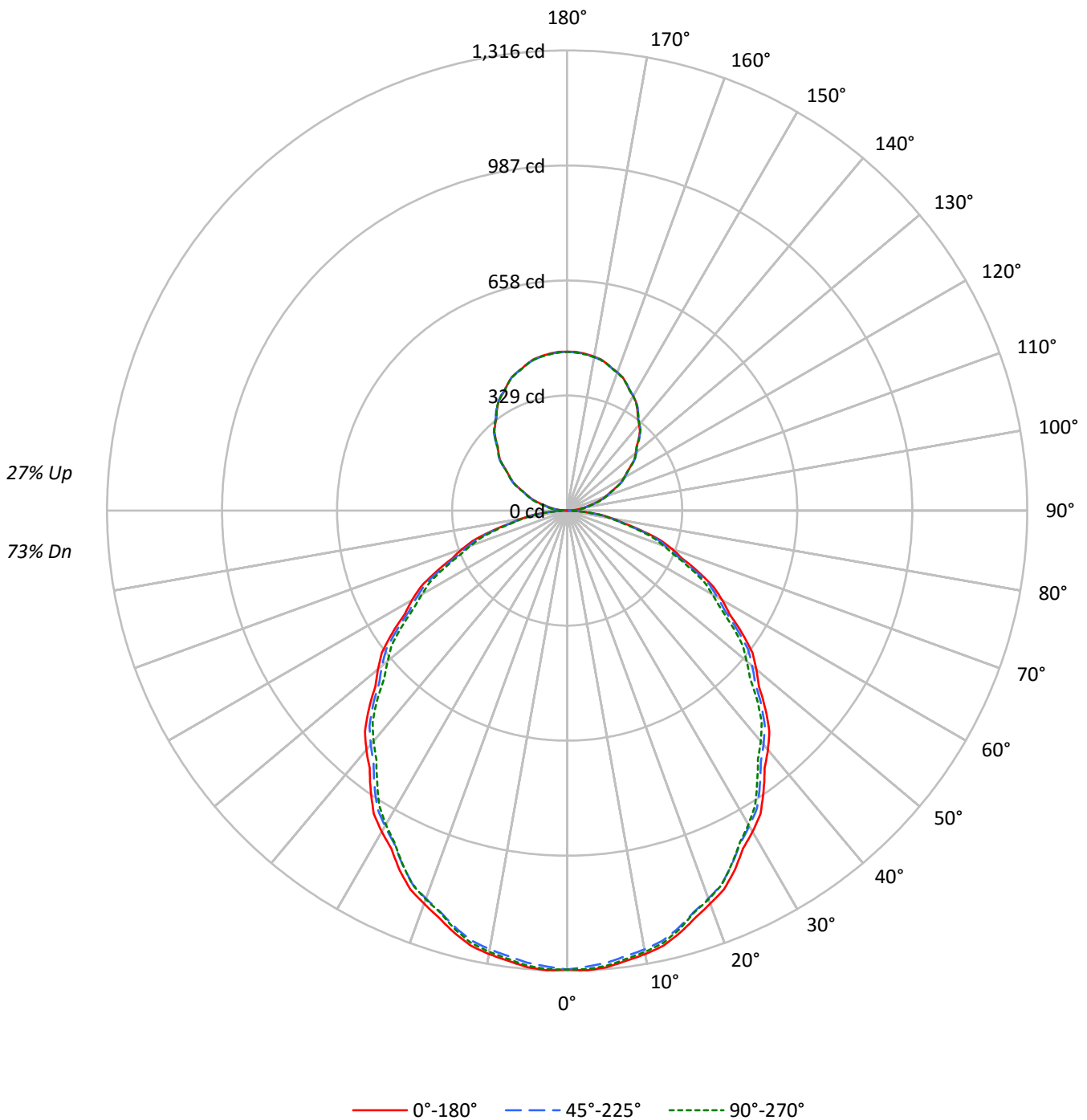
Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	73
1	103	98	94	91	97	93	90	87	84	82	79	76	74	72	68	67	65	61
2	94	86	79	74	89	82	76	71	74	69	65	67	63	60	60	57	55	51
3	85	75	68	62	81	72	65	59	65	60	55	59	54	51	53	50	47	43
4	78	67	59	52	74	64	56	50	58	52	47	52	48	43	47	43	40	37
5	72	60	51	45	68	57	49	43	52	46	41	47	42	38	43	38	35	32
6	66	54	45	39	63	51	44	38	47	40	36	43	37	33	39	34	31	28
7	61	49	40	35	58	47	39	33	43	36	31	39	33	29	35	31	27	25
8	57	44	36	31	54	42	35	30	39	33	28	36	30	26	33	28	25	22
9	53	41	33	28	51	39	32	27	36	30	25	33	28	24	30	26	22	20
10	50	37	30	25	47	36	29	24	33	27	23	30	25	22	28	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8478	8478	8478
5°	8497	8416	8470
10°	8445	8357	8405
15°	8354	8256	8291
20°	8223	8115	8130
25°	8082	7948	7941
30°	7908	7768	7730
35°	7722	7574	7468
40°	7530	7363	7259
45°	7323	7172	7029
50°	7095	6939	6731
55°	6876	6677	6490
60°	6613	6412	6185
65°	6301	6094	5888
70°	6001	5727	5531
75°	5467	5288	5105
80°	4868	4790	4675
85°	4231	4313	4076



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.8	2.6
10°-20°	349.6	7.5
20°-30°	516.2	11.0
30°-40°	602.4	12.9
40°-50°	605.0	12.9
50°-60°	531.1	11.3
60°-70°	395.7	8.4
70°-80°	226.3	4.8
80°-90°	66.8	1.4
90°-100°	30.4	0.6
100°-110°	89.8	1.9
110°-120°	152.1	3.2
120°-130°	200.2	4.3
130°-140°	224.4	4.8
140°-150°	219.9	4.7
150°-160°	184.7	3.9
160°-170°	122.8	2.6
170°-180°	43.0	0.9
0°-30°	989.7	21.1
0°-40°	1592.1	34.0
0°-60°	2728.2	58.2
0°-90°	3417.0	72.9
90°-120°	272.4	5.8
90°-150°	916.9	19.6
90°-180°	1267.0	27.0
0°-180°	4684.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1313	1313	1313	1313	1313	
5°	1311	1308	1298	1307	1306	124
15°	1249	1246	1235	1240	1240	352
25°	1134	1128	1115	1117	1114	522
35°	979	975	961	955	947	612
45°	802	797	785	773	770	618
55°	611	607	593	584	576	545
65°	412	410	399	390	385	409
75°	219	217	212	209	205	234
85°	57	58	58	57	55	64
90°	0	3	6	7	8	4
95°	23	24	27	30	30	25
105°	81	82	84	87	88	86
115°	152	154	154	154	154	151
125°	222	224	225	224	224	199
135°	289	291	292	292	290	223
145°	350	352	353	353	352	219
155°	401	401	401	402	401	185
165°	436	435	435	437	435	123
175°	453	452	452	454	451	43
180°	454	454	454	454	454	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7
2.5°	1316.1	1315.5	1315.0	1314.4	1313.8	1312.6	1310.8	1309.0	1307.1	1305.3	1307.1
5°	1310.7	1310.2	1309.7	1309.3	1308.8	1307.4	1305.1	1302.8	1300.5	1298.2	1300.3
7.5°	1298.6	1298.2	1297.7	1297.2	1296.8	1295.3	1292.7	1290.2	1287.7	1285.1	1287.1
10°	1287.8	1287.4	1286.9	1286.4	1286.0	1284.5	1281.9	1279.4	1276.9	1274.3	1276.2
12.5°	1274.5	1273.7	1272.9	1272.0	1271.2	1269.6	1267.3	1264.9	1262.5	1260.2	1261.7
15°	1249.4	1248.7	1248.0	1247.3	1246.6	1245.0	1242.5	1239.9	1237.4	1234.8	1236.0
17.5°	1220.5	1219.5	1218.5	1217.5	1216.5	1214.6	1212.0	1209.4	1206.7	1204.1	1205.5
20°	1196.4	1196.0	1195.5	1195.0	1194.6	1192.8	1189.8	1186.8	1183.8	1180.8	1182.5
22.5°	1172.3	1171.5	1170.7	1169.8	1169.0	1167.2	1164.4	1161.5	1158.7	1155.9	1157.0
25°	1134.1	1133.0	1131.8	1130.6	1129.5	1127.4	1124.4	1121.4	1118.4	1115.4	1115.9
27.5°	1089.4	1088.8	1088.1	1087.4	1086.7	1084.8	1081.7	1078.6	1075.5	1072.4	1072.5
30°	1060.4	1059.7	1059.0	1058.3	1057.6	1055.5	1052.1	1048.6	1045.1	1041.7	1041.2
32.5°	1028.8	1027.7	1026.7	1025.6	1024.6	1022.5	1019.4	1016.3	1013.2	1010.1	1009.3
35°	979.4	978.4	977.5	976.6	975.7	973.6	970.4	967.1	963.9	960.7	959.5
37.5°	928.1	926.9	925.7	924.6	923.4	921.3	918.3	915.2	912.2	909.2	907.4
40°	893.2	892.0	890.9	889.7	888.5	886.4	883.1	879.9	876.7	873.4	871.4
42.5°	855.8	854.8	853.8	852.9	851.9	849.8	846.6	843.3	840.1	836.9	835.0
45°	801.8	800.8	799.9	799.0	798.1	796.2	793.5	790.7	787.9	785.2	782.4
47.5°	743.6	743.7	743.7	743.7	743.8	742.2	738.8	735.5	732.2	728.9	726.0
50°	706.2	705.5	704.8	704.1	703.5	701.7	699.0	696.2	693.4	690.6	687.6
52.5°	668.0	667.5	667.0	666.5	666.0	664.2	661.3	658.3	655.4	652.4	649.8
55°	610.7	610.0	609.3	608.6	607.9	605.9	602.7	599.5	596.2	593.0	590.9
57.5°	550.2	549.9	549.5	549.1	548.8	547.2	544.5	541.8	539.0	536.3	533.6
60°	512.0	511.1	510.2	509.2	508.3	506.6	504.0	501.5	499.0	496.4	494.1
62.5°	472.1	471.4	470.7	469.9	469.2	467.7	465.6	463.4	461.2	459.0	456.6
65°	412.3	411.8	411.4	410.9	410.5	409.0	406.4	403.9	401.3	398.8	396.7
67.5°	354.4	353.4	352.4	351.4	350.5	349.0	347.2	345.3	343.4	341.5	339.7
70°	317.8	316.6	315.5	314.3	313.2	311.6	309.5	307.4	305.3	303.3	301.9
72.5°	277.9	277.1	276.3	275.6	274.8	273.7	272.4	271.0	269.7	268.4	266.8
75°	219.1	218.7	218.2	217.8	217.3	216.5	215.3	214.2	213.0	211.9	211.2
77.5°	164.9	164.7	164.6	164.4	164.2	163.8	163.1	162.5	161.8	161.2	160.8
80°	130.9	130.9	130.9	130.9	130.9	130.6	130.2	129.7	129.2	128.8	128.6
82.5°	100.9	100.6	100.2	99.8	99.5	99.2	99.1	99.1	99.0	98.9	98.5
85°	57.1	57.4	57.6	57.8	58.0	58.2	58.2	58.2	58.2	58.2	57.9
87.5°	22.5	22.6	22.8	22.9	23.0	23.0	23.0	22.9	22.8	22.7	22.8
90°	0.4	1.0	1.6	2.2	2.9	3.5	4.0	4.6	5.1	5.7	6.0
92.5°	8.6	9.0	9.4	9.9	10.3	10.9	11.5	12.2	12.9	13.6	14.1
95°	23.0	23.1	23.3	23.4	23.6	24.1	24.9	25.6	26.4	27.2	27.8
97.5°	38.2	38.2	38.3	38.4	38.4	39.0	40.1	41.2	42.2	43.3	43.9
100°	49.5	49.5	49.5	49.5	49.5	50.0	51.0	52.0	53.1	54.1	54.8
102.5°	61.6	62.0	62.3	62.6	62.9	63.3	63.8	64.3	64.9	65.4	66.2
105°	80.6	81.0	81.4	81.8	82.2	82.6	83.1	83.5	84.0	84.5	84.9
107.5°	101.5	101.9	102.3	102.7	103.1	103.5	103.8	104.2	104.5	104.9	105.1
110°	115.9	116.3	116.7	117.1	117.5	117.8	118.0	118.3	118.5	118.8	119.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	130.6	130.8	131.0	131.2	131.4	131.7	132.0	132.3	132.6	132.9	133.0
115°	152.3	152.6	153.0	153.3	153.6	153.8	154.0	154.1	154.3	154.5	154.4
117.5°	174.1	174.2	174.4	174.5	174.7	174.8	175.0	175.1	175.2	175.4	175.4
120°	187.7	188.1	188.5	188.9	189.2	189.5	189.6	189.6	189.7	189.8	189.8
122.5°	202.4	202.5	202.7	202.8	202.9	203.1	203.3	203.5	203.7	203.9	203.9
125°	222.3	222.8	223.3	223.7	224.2	224.5	224.6	224.6	224.7	224.8	224.6
127.5°	243.5	243.8	244.1	244.3	244.6	244.8	244.9	245.0	245.1	245.1	245.1
130°	256.2	256.6	257.0	257.4	257.8	258.1	258.2	258.4	258.6	258.7	258.6
132.5°	269.0	269.6	270.3	270.9	271.5	271.9	271.8	271.8	271.8	271.7	271.6
135°	289.1	289.6	290.1	290.5	291.0	291.3	291.4	291.4	291.5	291.6	291.6
137.5°	308.1	308.5	309.0	309.4	309.9	310.2	310.4	310.5	310.7	310.9	311.0
140°	320.2	320.6	321.0	321.4	321.8	322.1	322.3	322.6	322.8	323.0	323.2
142.5°	332.4	332.7	333.0	333.4	333.7	334.0	334.3	334.6	334.9	335.2	335.3
145°	350.3	350.6	350.9	351.2	351.5	351.8	352.0	352.3	352.5	352.7	352.7
147.5°	366.8	367.0	367.1	367.3	367.5	367.7	367.9	368.1	368.2	368.4	368.6
150°	377.8	377.8	377.7	377.6	377.5	377.6	377.9	378.3	378.6	378.9	378.9
152.5°	386.9	387.0	387.1	387.2	387.3	387.4	387.6	387.7	387.8	387.9	388.1
155°	400.8	400.8	400.8	400.8	400.8	400.8	400.9	401.0	401.1	401.2	401.5
157.5°	413.2	413.1	412.9	412.7	412.6	412.5	412.6	412.7	412.7	412.8	413.1
160°	420.6	420.4	420.1	419.9	419.7	419.6	419.7	419.7	419.8	419.9	420.2
162.5°	427.1	426.9	426.8	426.6	426.4	426.3	426.3	426.4	426.4	426.4	426.8
165°	435.8	435.6	435.5	435.3	435.2	435.1	435.2	435.3	435.4	435.4	435.8
167.5°	443.1	442.8	442.5	442.2	441.9	441.7	441.7	441.7	441.7	441.7	442.2
170°	447.1	446.8	446.5	446.2	445.8	445.7	445.7	445.7	445.7	445.7	446.2
172.5°	449.9	449.6	449.3	449.0	448.7	448.5	448.5	448.5	448.5	448.5	449.0
175°	453.1	452.8	452.5	452.2	451.9	451.7	451.7	451.7	451.7	451.7	452.2
177.5°	454.7	454.5	454.2	454.0	453.7	453.6	453.5	453.5	453.4	453.3	453.7
180°	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7
2.5°	1309.0	1310.8	1312.6	1313.5	1313.3	1313.1	1312.9	1312.7
5°	1302.4	1304.4	1306.5	1307.4	1307.2	1307.0	1306.7	1306.5
7.5°	1289.2	1291.2	1293.2	1294.1	1293.9	1293.7	1293.4	1293.2
10°	1278.0	1279.9	1281.7	1282.5	1282.3	1282.0	1281.8	1281.6
12.5°	1263.1	1264.6	1266.1	1266.8	1266.8	1266.7	1266.7	1266.6
15°	1237.2	1238.3	1239.5	1240.0	1240.0	1240.0	1240.0	1240.0
17.5°	1207.0	1208.4	1209.8	1210.0	1208.8	1207.7	1206.5	1205.4
20°	1184.1	1185.7	1187.3	1187.5	1186.4	1185.2	1184.1	1182.9
22.5°	1158.0	1159.1	1160.2	1160.3	1159.5	1158.7	1157.9	1157.2
25°	1116.3	1116.8	1117.3	1117.1	1116.5	1115.8	1115.1	1114.4
27.5°	1072.6	1072.7	1072.8	1072.5	1071.8	1071.1	1070.4	1069.7
30°	1040.8	1040.3	1039.8	1039.3	1038.6	1037.9	1037.2	1036.5
32.5°	1008.4	1007.6	1006.8	1005.7	1004.5	1003.2	1002.0	1000.8
35°	958.4	957.2	956.1	954.6	952.7	950.9	949.0	947.2
37.5°	905.7	904.0	902.3	900.9	899.9	898.8	897.8	896.7
40°	869.3	867.2	865.1	863.7	863.0	862.4	861.7	861.0
42.5°	833.1	831.2	829.3	827.8	826.8	825.7	824.6	823.6
45°	779.6	776.8	774.1	772.3	771.7	771.0	770.3	769.6
47.5°	723.2	720.4	717.6	715.4	713.8	712.2	710.5	708.9
50°	684.6	681.6	678.6	676.3	674.7	673.1	671.5	669.9
52.5°	647.2	644.5	641.9	639.7	637.9	636.1	634.3	632.5
55°	588.9	586.8	584.7	582.9	581.2	579.6	578.0	576.4
57.5°	531.0	528.3	525.6	523.8	522.9	522.1	521.2	520.3
60°	491.8	489.5	487.2	485.2	483.6	482.0	480.4	478.8
62.5°	454.1	451.6	449.1	447.2	446.0	444.7	443.5	442.2
65°	394.7	392.6	390.5	389.0	388.1	387.2	386.2	385.3
67.5°	338.0	336.2	334.5	333.3	332.8	332.2	331.6	331.1
70°	300.5	299.1	297.7	296.6	295.6	294.7	293.8	292.9
72.5°	265.2	263.7	262.1	260.8	259.9	259.0	258.1	257.1
75°	210.5	209.8	209.1	208.3	207.4	206.4	205.5	204.6
77.5°	160.4	159.9	159.5	159.0	158.3	157.7	157.1	156.4
80°	128.3	128.1	127.9	127.5	127.1	126.6	126.1	125.7
82.5°	98.0	97.6	97.2	97.0	96.9	96.8	96.7	96.6
85°	57.7	57.5	57.2	56.9	56.4	56.0	55.5	55.0
87.5°	22.9	23.0	23.0	22.9	22.6	22.3	22.0	21.6
90°	6.4	6.8	7.2	7.5	7.8	8.0	8.2	8.5
92.5°	14.6	15.1	15.6	16.0	16.2	16.3	16.5	16.7
95°	28.3	28.9	29.4	29.8	29.9	30.1	30.2	30.4
97.5°	44.4	44.9	45.4	45.7	45.8	45.9	46.0	46.1
100°	55.5	56.2	56.9	57.3	57.5	57.7	57.8	58.0
102.5°	66.9	67.7	68.5	69.0	69.2	69.4	69.6	69.8
105°	85.4	85.9	86.4	86.7	86.9	87.2	87.4	87.7
107.5°	105.4	105.6	105.8	106.0	105.9	105.9	105.9	105.9
110°	119.2	119.5	119.7	119.8	119.7	119.6	119.5	119.5



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CATALOG NUMBER: S125DIP-S850D365U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	133.1	133.2	133.3	133.3	133.2	133.0	132.9	132.8
115°	154.3	154.2	154.1	154.1	154.0	153.9	153.8	153.7
117.5°	175.5	175.6	175.6	175.5	175.2	174.9	174.6	174.2
120°	189.8	189.8	189.8	189.6	189.3	189.0	188.7	188.4
122.5°	203.8	203.7	203.7	203.5	203.3	203.0	202.8	202.5
125°	224.5	224.3	224.2	224.0	224.0	223.9	223.8	223.7
127.5°	245.0	244.9	244.8	244.7	244.6	244.4	244.2	244.1
130°	258.6	258.5	258.4	258.3	258.1	258.0	257.8	257.7
132.5°	271.6	271.5	271.4	271.3	271.0	270.8	270.6	270.4
135°	291.6	291.6	291.6	291.4	291.1	290.8	290.5	290.2
137.5°	311.1	311.2	311.3	311.1	310.7	310.3	309.9	309.5
140°	323.4	323.5	323.7	323.6	323.2	322.8	322.4	322.0
142.5°	335.4	335.5	335.6	335.4	335.0	334.6	334.3	333.9
145°	352.7	352.7	352.7	352.6	352.4	352.1	351.9	351.7
147.5°	368.8	369.0	369.2	369.0	368.5	367.9	367.4	366.9
150°	378.9	378.9	378.9	378.8	378.7	378.5	378.3	378.2
152.5°	388.3	388.5	388.7	388.6	388.4	388.1	387.8	387.5
155°	401.8	402.1	402.4	402.4	402.0	401.6	401.2	400.8
157.5°	413.4	413.8	414.1	414.0	413.5	412.9	412.4	411.9
160°	420.5	420.8	421.1	421.1	420.7	420.3	419.9	419.5
162.5°	427.1	427.5	427.9	427.9	427.4	426.9	426.5	426.0
165°	436.1	436.4	436.7	436.6	436.1	435.7	435.2	434.7
167.5°	442.7	443.1	443.6	443.6	443.1	442.6	442.1	441.7
170°	446.6	447.1	447.6	447.5	447.0	446.4	445.9	445.3
172.5°	449.5	449.9	450.4	450.4	449.9	449.4	448.9	448.4
175°	452.6	453.1	453.6	453.5	453.0	452.4	451.9	451.3
177.5°	454.1	454.5	454.8	454.8	454.4	453.9	453.5	453.0
180°	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2

(END OF REPORT)