

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: P333237-840

Luminaire Tested: **S125DIP-S850D1035U840-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333237-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S850D1035U840-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7066.0 lumens
Efficiency: N/A
Efficacy: 135.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

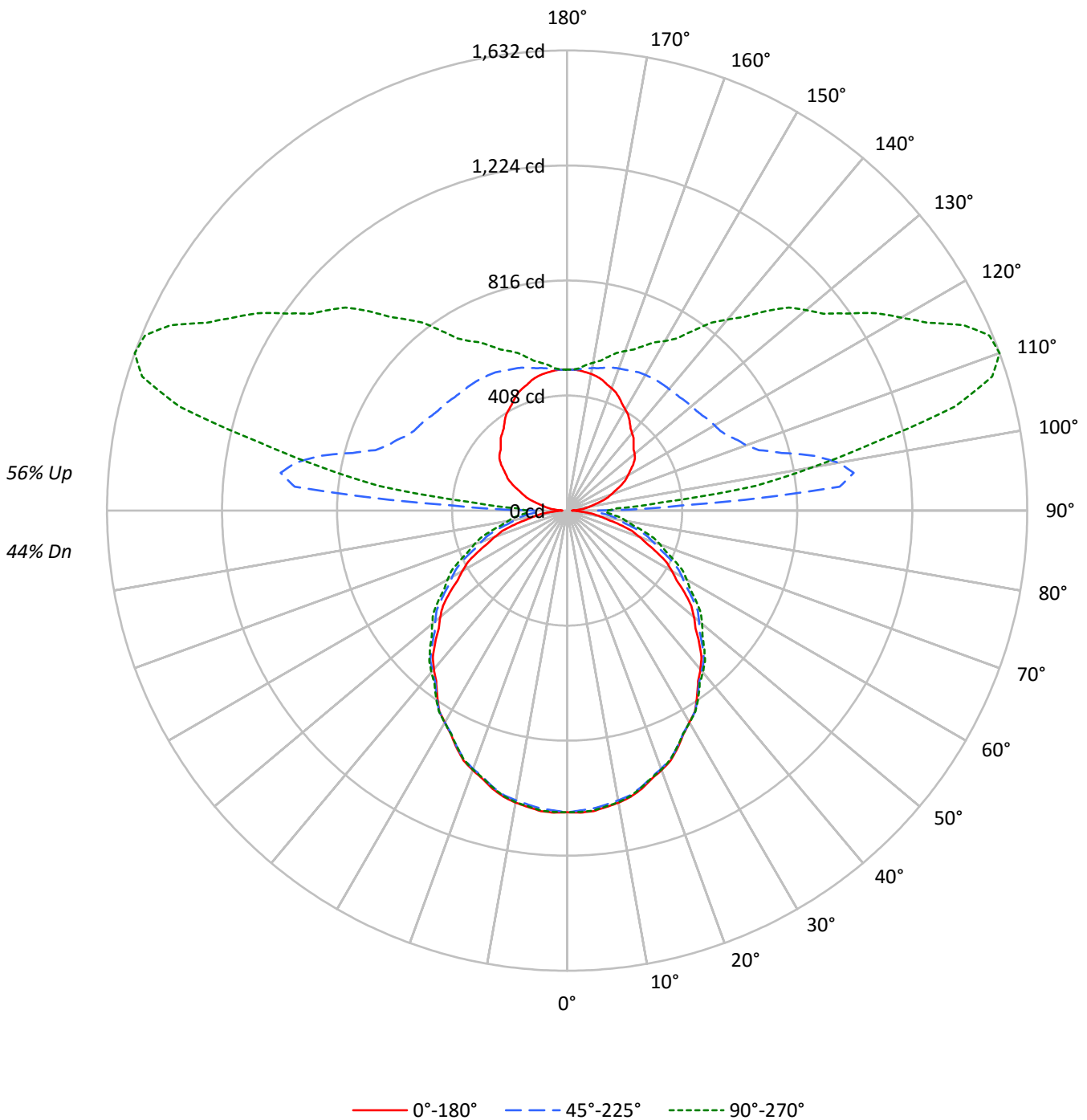
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	96	91	87	83	87	84	80	77	69	67	64	56	54	53	44	43	41	36
2	87	79	73	68	79	73	67	62	60	56	53	49	46	43	38	36	34	29
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	44	47	41	37	38	34	31	30	27	25	21
5	66	54	46	40	60	50	43	37	42	36	32	34	30	27	27	24	21	18
6	61	49	41	35	55	45	38	32	38	32	28	31	26	23	24	21	19	16
7	56	44	36	30	51	40	33	28	34	28	24	28	24	20	22	19	17	14
8	52	40	32	27	48	37	30	25	31	25	22	25	21	18	20	17	15	12
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	19	16	13	11
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6909	6909	6909
5°	6923	6782	6803
10°	6874	6661	6651
15°	6793	6515	6456
20°	6682	6336	6262
25°	6551	6144	6023
30°	6392	5934	5806
35°	6242	5740	5607
40°	6092	5535	5406
45°	5921	5360	5229
50°	5758	5171	5072
55°	5562	4992	4887
60°	5348	4788	4699
65°	5124	4575	4486
70°	4871	4283	4269
75°	4469	4001	4001
80°	3945	3661	3710
85°	3453	3433	3619



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.2	1.4
10°-20°	287.2	4.1
20°-30°	427.1	6.0
30°-40°	505.9	7.2
40°-50°	523.0	7.4
50°-60°	481.8	6.8
60°-70°	389.5	5.5
70°-80°	260.8	3.7
80°-90°	138.1	2.0
90°-100°	438.3	6.2
100°-110°	835.1	11.8
110°-120°	768.7	10.9
120°-130°	613.9	8.7
130°-140°	484.9	6.9
140°-150°	360.8	5.1
150°-160°	252.6	3.6
160°-170°	148.9	2.1
170°-180°	48.4	0.7
0°-30°	815.4	11.5
0°-40°	1321.2	18.7
0°-60°	2326.0	32.9
0°-90°	3114.4	44.1
90°-120°	2042.2	28.9
90°-150°	3501.7	49.6
90°-180°	3952.0	55.9
0°-180°	7066.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1070	1067	1060	1068	1068	101
15°	1022	1022	1015	1021	1017	288
25°	928	931	925	929	924	427
35°	803	810	808	811	811	503
45°	662	673	678	686	687	511
55°	509	526	542	553	558	455
65°	350	374	400	415	420	347
75°	193	221	254	274	280	205
85°	58	92	129	151	160	61
90°	18	60	102	130	141	13
95°	47	140	970	504	344	46
105°	123	186	789	1517	1422	130
115°	210	260	628	1324	1554	207
125°	286	335	587	1046	1219	254
135°	333	399	567	865	1001	258
145°	386	441	560	703	778	242
155°	440	473	546	618	644	202
165°	480	493	524	556	564	135
175°	499	499	503	509	507	47
180°	500	500	500	500	500	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8
2.5°	1072.3	1072.0	1071.6	1071.2	1070.8	1070.0	1068.6	1067.3	1066.0	1064.7	1066.0
5°	1069.8	1069.3	1068.8	1068.3	1067.9	1066.8	1065.2	1063.6	1062.0	1060.4	1062.2
7.5°	1060.4	1060.2	1060.0	1059.8	1059.6	1058.6	1057.0	1055.3	1053.6	1052.0	1053.6
10°	1052.0	1052.0	1052.0	1052.0	1052.0	1051.1	1049.1	1047.3	1045.4	1043.6	1045.2
12.5°	1040.2	1040.4	1040.6	1040.8	1041.0	1040.3	1038.8	1037.3	1035.8	1034.3	1035.6
15°	1021.6	1021.8	1022.0	1022.2	1022.5	1021.8	1020.2	1018.5	1016.8	1015.2	1016.6
17.5°	997.2	997.6	998.2	998.6	999.1	998.5	996.8	995.2	993.6	992.0	993.0
20°	979.6	980.1	980.5	981.0	981.5	980.9	979.3	977.7	975.9	974.3	975.0
22.5°	959.5	960.3	961.1	962.0	962.8	962.3	960.5	958.7	956.8	955.0	955.9
25°	928.2	928.9	929.6	930.3	931.0	930.6	929.3	927.9	926.5	925.0	925.9
27.5°	893.3	894.4	895.4	896.5	897.5	897.2	895.6	894.0	892.4	890.9	891.5
30°	867.4	868.8	870.2	871.5	872.9	872.9	871.5	870.2	868.8	867.4	867.9
32.5°	843.8	845.1	846.3	847.5	848.7	848.8	847.8	846.8	845.8	844.8	845.2
35°	803.3	805.1	806.7	808.3	809.9	810.4	809.7	809.0	808.3	807.6	808.3
37.5°	762.9	764.4	765.9	767.4	768.9	769.5	769.2	769.0	768.8	768.6	769.5
40°	735.2	737.1	738.9	740.8	742.7	743.5	743.3	743.1	742.8	742.6	743.5
42.5°	705.0	707.4	709.8	712.3	714.7	716.2	716.7	717.2	717.7	718.2	719.3
45°	661.8	664.4	666.9	669.4	672.1	673.9	675.1	676.2	677.4	678.5	680.2
47.5°	617.5	620.0	622.3	624.7	627.0	629.2	631.3	633.3	635.2	637.2	639.6
50°	587.3	589.9	592.5	595.0	597.5	600.2	602.7	605.3	607.8	610.4	613.0
52.5°	555.4	558.6	561.7	564.8	567.9	571.1	574.2	577.3	580.5	583.6	586.3
55°	508.7	512.4	516.1	519.9	523.6	527.4	531.1	534.8	538.5	542.2	544.8
57.5°	460.8	465.3	469.8	474.2	478.8	483.1	487.5	491.7	495.9	500.3	503.2
60°	429.0	433.6	438.3	442.9	447.6	452.3	457.0	461.6	466.3	470.9	474.4
62.5°	397.9	402.5	407.3	411.9	416.6	421.4	426.5	431.5	436.5	441.5	445.5
65°	350.3	355.7	361.0	366.4	371.7	377.2	382.8	388.4	394.0	399.6	403.1
67.5°	305.4	310.6	315.8	320.9	326.1	331.5	337.2	343.0	348.6	354.3	358.5
70°	272.7	278.0	283.4	288.8	294.2	299.8	305.9	311.9	318.0	324.1	328.5
72.5°	240.9	246.3	251.9	257.4	263.0	269.0	275.7	282.4	288.9	295.6	300.3
75°	193.0	199.0	205.1	211.2	217.2	224.0	231.5	238.9	246.3	253.8	258.4
77.5°	147.0	154.0	161.1	168.0	175.0	182.1	189.2	196.4	203.6	210.9	215.9
80°	118.6	125.5	132.5	139.5	146.5	153.9	161.9	169.8	177.7	185.6	190.8
82.5°	92.5	99.9	107.2	114.6	122.0	129.7	137.8	145.9	154.0	162.2	167.1
85°	57.7	65.3	73.1	80.8	88.5	96.3	104.5	112.7	120.9	129.0	134.1
87.5°	32.9	40.6	48.5	56.4	64.1	72.3	80.4	88.7	96.8	105.1	110.8
90°	17.8	26.3	35.7	45.2	54.6	64.4	73.3	83.2	92.2	102.1	108.5
92.5°	27.4	37.0	52.3	71.7	95.9	132.9	196.0	296.5	404.8	407.7	350.9
95°	46.9	53.9	68.1	85.2	113.5	165.8	281.7	511.3	797.5	969.8	955.7
97.5°	67.7	74.3	85.3	101.9	127.3	166.5	245.6	415.8	714.5	1025.2	1182.1
100°	82.1	89.0	98.0	113.9	137.9	174.4	240.3	378.8	640.4	977.4	1234.4
102.5°	98.2	103.9	111.7	128.1	150.2	185.5	244.8	362.1	583.9	897.5	1197.0
105°	123.4	127.0	135.8	149.7	169.6	203.1	254.5	351.1	526.5	788.6	1082.6
107.5°	147.9	153.1	161.1	172.6	192.5	222.8	272.5	356.0	500.0	712.8	966.9
110°	165.6	170.5	177.2	189.1	207.0	237.9	285.8	361.8	490.4	676.3	900.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	184.2	188.4	193.9	205.2	222.6	252.3	298.3	370.2	487.2	653.6	850.2
115°	210.0	213.6	218.2	228.9	245.7	274.8	318.1	382.6	485.4	627.6	794.2
117.5°	233.1	237.2	241.5	251.7	269.8	297.6	338.6	397.6	487.5	612.3	758.4
120°	249.2	253.0	257.6	267.4	285.3	313.5	354.2	407.9	490.9	604.1	738.1
122.5°	265.3	267.8	271.5	280.8	299.9	327.8	368.3	419.4	493.3	596.7	720.0
125°	286.5	288.2	293.1	301.9	320.8	349.2	387.2	435.2	498.4	586.6	695.2
127.5°	302.2	305.0	311.1	322.4	342.5	370.5	406.5	450.2	505.0	579.5	672.0
130°	312.7	315.4	323.3	336.2	357.1	384.8	419.3	460.9	509.5	575.3	657.2
132.5°	319.8	323.7	333.3	348.0	369.9	397.3	431.1	469.5	514.1	571.9	644.2
135°	332.8	336.6	348.4	364.4	385.3	413.1	446.1	481.0	519.9	566.9	627.4
137.5°	349.1	351.9	363.0	379.0	399.5	427.9	457.1	489.8	526.0	564.3	613.1
140°	357.9	360.9	373.0	389.2	408.3	435.7	465.1	495.6	528.1	562.6	605.5
142.5°	369.2	371.2	382.3	398.3	416.5	442.0	469.7	498.4	529.1	561.8	599.5
145°	386.2	387.9	397.8	411.6	429.6	452.6	478.9	504.0	531.3	560.5	591.9
147.5°	402.8	404.0	412.7	425.9	441.5	461.9	484.9	507.7	532.3	557.8	584.9
150°	413.3	415.4	422.4	435.6	449.6	466.8	489.0	510.1	532.3	555.4	579.7
152.5°	424.6	425.9	432.1	443.5	456.9	472.4	493.0	511.7	531.5	552.3	574.0
155°	439.5	439.5	445.6	455.7	465.7	479.9	497.0	513.1	529.3	546.4	564.5
157.5°	452.8	452.6	457.5	466.2	475.0	485.7	500.4	514.1	526.6	540.4	555.6
160°	461.7	460.7	464.7	471.8	479.9	489.0	502.0	514.1	524.2	536.3	548.5
162.5°	469.0	468.0	472.0	478.3	484.7	492.2	503.6	513.3	521.8	531.5	542.0
165°	479.9	477.9	480.9	485.9	490.0	496.0	504.0	512.1	518.2	524.2	532.3
167.5°	487.2	486.1	488.0	490.8	493.6	497.4	504.0	509.7	512.5	517.2	522.8
170°	492.0	491.0	492.0	494.0	496.0	499.0	504.0	508.1	510.1	513.1	517.2
172.5°	495.2	493.4	494.4	496.3	497.6	499.0	503.2	506.4	506.9	508.3	511.5
175°	499.0	497.0	498.0	499.0	499.0	499.0	502.0	504.0	503.0	503.0	504.0
177.5°	500.8	499.2	499.2	500.0	499.2	499.2	500.8	501.6	500.0	500.0	500.8
180°	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8
2.5°	1067.3	1068.6	1070.0	1070.6	1070.4	1070.2	1070.0	1069.8
5°	1064.1	1065.9	1067.8	1068.6	1068.3	1068.1	1067.9	1067.7
7.5°	1055.2	1056.8	1058.4	1059.1	1058.9	1058.7	1058.4	1058.2
10°	1046.8	1048.4	1050.1	1050.8	1050.6	1050.4	1050.1	1049.9
12.5°	1036.8	1038.1	1039.4	1039.7	1039.1	1038.4	1037.8	1037.2
15°	1018.0	1019.5	1020.9	1021.1	1020.2	1019.2	1018.2	1017.3
17.5°	994.1	995.2	996.2	996.5	995.9	995.4	994.8	994.3
20°	975.7	976.4	977.1	977.4	977.4	977.4	977.4	977.4
22.5°	956.8	957.7	958.6	958.8	958.2	957.7	957.0	956.5
25°	927.0	927.9	928.8	928.7	927.5	926.3	925.1	924.0
27.5°	892.1	892.8	893.4	893.6	893.1	892.7	892.3	891.9
30°	868.3	868.8	869.2	869.4	869.1	868.9	868.7	868.4
32.5°	845.7	846.1	846.6	846.7	846.5	846.3	846.0	845.8
35°	809.0	809.7	810.4	810.7	810.7	810.7	810.7	810.7
37.5°	770.4	771.3	772.2	772.7	772.6	772.5	772.4	772.3
40°	744.4	745.4	746.3	747.0	747.4	747.9	748.4	748.8
42.5°	720.4	721.5	722.7	723.3	723.4	723.5	723.6	723.7
45°	681.9	683.5	685.1	686.0	686.3	686.5	686.7	687.0
47.5°	642.0	644.4	646.7	648.2	648.7	649.2	649.7	650.3
50°	615.5	618.1	620.7	622.3	623.0	623.7	624.4	625.1
52.5°	589.1	591.8	594.5	596.2	596.7	597.2	597.7	598.2
55°	547.3	550.0	552.5	554.2	555.1	556.1	557.0	558.0
57.5°	506.1	509.1	512.0	513.8	514.5	515.2	515.9	516.6
60°	477.9	481.4	484.9	487.0	487.7	488.4	489.1	489.8
62.5°	449.3	453.1	457.1	459.4	460.3	461.2	462.0	462.9
65°	406.6	410.1	413.5	415.8	416.8	417.7	418.6	419.5
67.5°	362.7	367.0	371.2	374.0	375.2	376.4	377.6	378.8
70°	333.0	337.4	341.8	344.7	346.1	347.5	348.9	350.3
72.5°	305.2	309.9	314.8	317.7	318.7	319.7	320.7	321.7
75°	263.2	267.8	272.5	275.4	276.5	277.7	278.8	280.0
77.5°	221.1	226.2	231.4	234.4	235.3	236.2	237.1	238.1
80°	195.9	201.1	206.1	209.1	210.2	211.1	212.0	212.9
82.5°	172.0	176.9	181.9	185.2	186.9	188.5	190.3	192.0
85°	139.3	144.4	149.6	153.0	154.9	156.7	158.6	160.5
87.5°	116.3	121.9	127.4	131.3	133.0	134.6	136.4	138.0
90°	114.8	121.3	127.6	133.1	134.7	136.3	139.1	140.7
92.5°	271.7	227.8	201.0	189.5	178.1	177.3	177.5	177.6
95°	811.6	663.6	544.7	463.3	393.4	364.9	358.4	343.9
97.5°	1160.6	1058.0	942.2	827.7	766.9	712.1	684.4	673.1
100°	1316.9	1272.4	1173.5	1071.8	1003.6	932.4	896.5	881.8
102.5°	1367.3	1402.4	1357.3	1289.4	1216.4	1166.1	1127.0	1116.3
105°	1329.2	1472.0	1521.0	1513.0	1482.4	1450.8	1432.2	1421.8
107.5°	1210.3	1399.3	1517.7	1573.4	1591.1	1592.5	1587.2	1580.6
110°	1122.8	1318.7	1465.3	1554.0	1600.9	1621.7	1630.4	1632.1



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CATALOG NUMBER: S125DIP-S850D1035U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1052.9	1239.0	1386.9	1491.0	1558.9	1593.4	1612.6	1621.4
115°	964.6	1125.1	1267.4	1380.1	1460.2	1510.0	1539.5	1554.1
117.5°	905.5	1044.2	1167.1	1270.7	1350.9	1402.5	1432.1	1441.8
120°	873.1	998.0	1113.0	1204.4	1280.3	1330.1	1358.8	1368.2
122.5°	847.7	963.5	1066.1	1151.8	1219.7	1265.5	1294.0	1302.7
125°	810.8	917.5	1008.9	1083.9	1141.6	1184.0	1207.4	1218.6
127.5°	773.3	872.6	958.0	1028.2	1080.9	1118.7	1141.0	1146.8
130°	750.1	842.1	924.0	991.8	1043.4	1077.8	1099.1	1106.3
132.5°	726.6	812.9	887.6	952.8	1004.2	1038.4	1058.0	1065.8
135°	694.9	767.5	835.1	894.6	940.2	974.6	993.9	1001.1
137.5°	668.4	727.4	783.8	834.5	875.0	906.3	923.9	931.5
140°	653.4	703.4	752.3	796.4	834.7	861.8	877.9	883.8
142.5°	640.6	682.9	725.0	763.3	795.8	818.9	834.1	839.3
145°	624.3	656.7	689.1	717.4	742.6	760.6	772.6	777.6
147.5°	609.9	635.6	659.9	681.0	700.5	714.7	721.5	723.8
150°	601.9	624.0	643.2	661.5	676.8	689.1	693.4	694.7
152.5°	593.8	613.5	631.1	645.2	657.9	667.7	671.8	672.9
155°	581.7	597.8	612.0	623.0	633.1	640.2	643.2	644.2
157.5°	569.6	582.9	593.8	602.5	610.4	616.1	618.9	618.7
160°	561.5	571.6	581.7	588.8	595.8	600.9	602.9	601.9
162.5°	552.7	561.9	570.4	576.6	582.1	586.3	586.7	586.5
165°	540.4	547.4	553.5	558.5	562.5	564.5	564.5	564.5
167.5°	528.7	533.3	538.0	541.6	543.6	545.4	544.6	544.4
170°	522.2	525.2	528.3	530.3	532.3	533.3	533.3	532.3
172.5°	514.9	518.0	520.2	521.4	521.8	523.6	522.0	521.0
175°	507.1	507.1	509.1	509.1	509.1	510.1	508.1	507.1
177.5°	501.6	502.4	502.4	502.4	501.6	502.4	500.0	500.0
180°	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0

(END OF REPORT)