

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: P333235-927

Luminaire Tested: **S125DIP-S850D1035U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333235-927  
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: S125DIP-S850D1035U927-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1035 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5878.1 lumens  
Efficiency: N/A  
Efficacy: 113.0 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

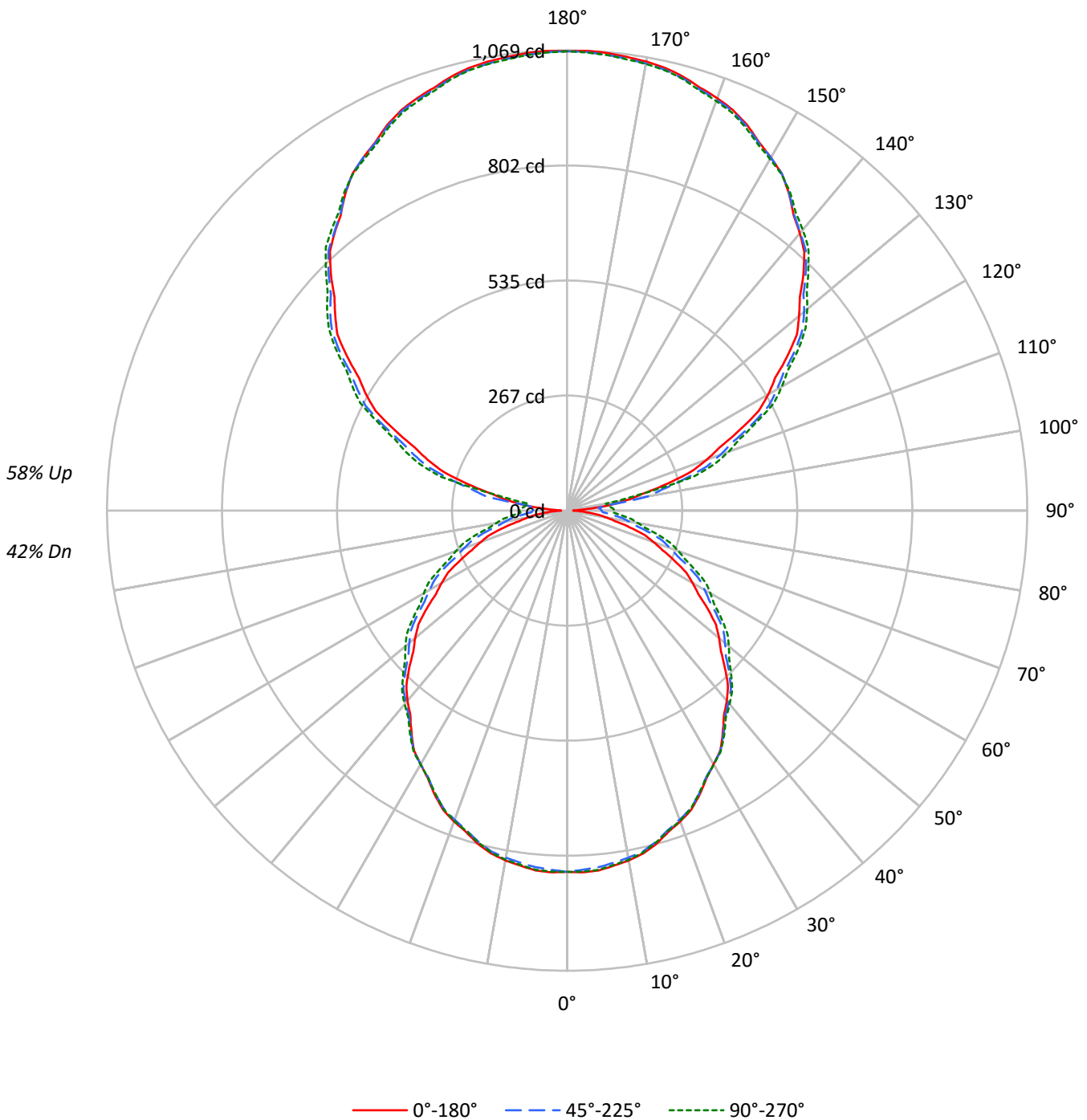
Input Watts (W): 52  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333235-927

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### Luminous Intensity Polar Plot





TEST NUMBER: P333235-927

CATALOG NUMBER: S125DIP-S850D1035U927-4F0-1E-UDD-D

**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	105	105	105	105	96	96	96	96	79	79	79		63	63	63		48	48	48	42
1	95	91	87	83	87	83	79	76	68	65	63		54	53	51		42	41	40	34
2	86	79	73	67	79	72	67	62	59	55	52		47	45	42		36	35	33	28
3	79	69	62	56	71	63	57	51	52	47	43		42	38	35		32	30	28	23
4	72	61	53	47	65	56	49	43	46	41	37		37	33	30		28	26	24	20
5	66	54	46	40	60	50	42	37	41	36	31		33	29	26		26	23	21	17
6	61	48	40	34	55	44	37	32	37	31	27		30	26	23		23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24		27	23	20		21	18	16	13
8	52	40	32	26	47	36	29	25	30	25	21		25	21	18		19	16	14	12
9	48	36	29	23	44	33	27	22	28	23	19		23	19	16		18	15	13	11
10	45	33	26	21	41	30	24	20	26	20	17		21	17	14		17	14	12	10

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

	0°	45°	90°
0°	5420	5420	5420
5°	5431	5320	5337
10°	5392	5225	5217
15°	5329	5111	5064
20°	5241	4970	4912
25°	5139	4820	4724
30°	5014	4654	4554
35°	4897	4502	4398
40°	4778	4342	4241
45°	4644	4205	4102
50°	4517	4056	3979
55°	4363	3916	3833
60°	4195	3756	3686
65°	4020	3589	3520
70°	3820	3359	3349
75°	3505	3139	3139
80°	3093	2872	2910
85°	2705	2693	2839



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.4	1.4
10°-20°	225.3	3.8
20°-30°	335.0	5.7
30°-40°	396.8	6.8
40°-50°	410.3	7.0
50°-60°	377.9	6.4
60°-70°	305.5	5.2
70°-80°	204.6	3.5
80°-90°	108.3	1.8
90°-100°	98.3	1.7
100°-110°	282.9	4.8
110°-120°	462.8	7.9
120°-130°	572.9	9.7
130°-140°	605.6	10.3
140°-150°	563.0	9.6
150°-160°	454.3	7.7
160°-170°	293.8	5.0
170°-180°	101.3	1.7
0°-30°	639.6	10.9
0°-40°	1036.4	17.6
0°-60°	1824.7	31.0
0°-90°	2443.1	41.6
90°-120°	844.0	14.4
90°-150°	2585.6	44.0
90°-180°	3435.0	58.4
0°-180°	5878.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	839	839	839	839	839	
5°	839	837	832	838	838	80
15°	801	802	796	801	798	226
25°	728	730	726	729	725	335
35°	630	636	634	636	636	394
45°	519	528	532	538	539	400
55°	399	412	425	434	438	357
65°	275	294	314	325	329	273
75°	151	173	199	215	220	161
85°	45	72	101	119	126	48
90°	14	47	80	102	111	11
95°	56	74	73	94	100	66
105°	240	257	281	297	302	254
115°	442	452	473	484	485	438
125°	624	630	645	655	657	557
135°	776	780	784	793	793	598
145°	899	899	899	904	903	562
155°	989	984	986	987	982	455
165°	1043	1039	1039	1043	1038	295
175°	1067	1063	1063	1069	1062	102
180°	1067	1067	1067	1067	1067	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	841.1	840.9	840.6	840.3	840.0	839.3	838.3	837.3	836.2	835.2	836.2
5°	839.2	838.8	838.4	838.0	837.7	836.9	835.6	834.3	833.1	831.8	833.2
7.5°	831.8	831.6	831.5	831.3	831.2	830.4	829.2	827.8	826.5	825.2	826.5
10°	825.2	825.2	825.2	825.2	825.2	824.5	823.0	821.6	820.1	818.6	819.9
12.5°	815.9	816.1	816.3	816.4	816.6	816.0	814.9	813.7	812.5	811.4	812.4
15°	801.4	801.5	801.7	801.8	802.1	801.5	800.3	799.0	797.6	796.4	797.5
17.5°	782.3	782.6	783.0	783.3	783.7	783.2	782.0	780.7	779.4	778.2	779.0
20°	768.4	768.8	769.1	769.5	769.9	769.4	768.2	766.9	765.6	764.3	764.9
22.5°	752.7	753.3	753.9	754.6	755.3	754.9	753.4	752.0	750.6	749.2	749.9
25°	728.1	728.6	729.2	729.8	730.3	730.0	729.0	727.9	726.7	725.6	726.4
27.5°	700.8	701.6	702.4	703.2	704.0	703.8	702.6	701.3	700.1	698.9	699.3
30°	680.4	681.5	682.6	683.7	684.8	684.8	683.7	682.6	681.5	680.4	680.8
32.5°	661.9	662.9	663.8	664.8	665.7	665.8	665.0	664.2	663.5	662.7	663.0
35°	630.2	631.5	632.8	634.1	635.3	635.7	635.2	634.6	634.1	633.5	634.1
37.5°	598.4	599.6	600.8	602.0	603.2	603.6	603.4	603.2	603.1	602.9	603.6
40°	576.7	578.2	579.6	581.1	582.6	583.2	583.0	582.9	582.7	582.5	583.2
42.5°	553.0	554.9	556.8	558.7	560.6	561.8	562.2	562.6	563.0	563.4	564.3
45°	519.1	521.2	523.2	525.1	527.2	528.6	529.6	530.4	531.4	532.3	533.6
47.5°	484.4	486.3	488.1	490.0	491.9	493.6	495.2	496.8	498.3	499.9	501.8
50°	460.7	462.7	464.8	466.8	468.7	470.8	472.8	474.8	476.8	478.8	480.9
52.5°	435.7	438.2	440.6	443.1	445.5	448.0	450.4	452.9	455.3	457.8	459.9
55°	399.0	402.0	404.9	407.8	410.7	413.7	416.6	419.5	422.4	425.3	427.4
57.5°	361.5	365.0	368.5	372.0	375.6	379.0	382.4	385.7	389.0	392.4	394.7
60°	336.5	340.2	343.8	347.5	351.1	354.8	358.5	362.1	365.8	369.4	372.2
62.5°	312.1	315.8	319.5	323.1	326.8	330.6	334.5	338.5	342.4	346.3	349.4
65°	274.8	279.0	283.2	287.4	291.6	295.9	300.3	304.7	309.1	313.5	316.2
67.5°	239.6	243.7	247.7	251.8	255.8	260.1	264.5	269.0	273.5	277.9	281.2
70°	213.9	218.1	222.3	226.6	230.8	235.2	240.0	244.7	249.5	254.2	257.7
72.5°	188.9	193.2	197.6	201.9	206.3	211.0	216.3	221.5	226.6	231.9	235.6
75°	151.4	156.1	160.9	165.6	170.4	175.7	181.6	187.4	193.2	199.1	202.7
77.5°	115.3	120.8	126.4	131.8	137.3	142.8	148.5	154.1	159.7	165.4	169.4
80°	93.0	98.5	103.9	109.4	114.9	120.7	127.0	133.2	139.4	145.6	149.6
82.5°	72.6	78.3	84.1	89.9	95.7	101.7	108.1	114.5	120.8	127.2	131.1
85°	45.2	51.3	57.4	63.4	69.4	75.6	82.0	88.4	94.8	101.2	105.2
87.5°	25.8	31.9	38.1	44.2	50.4	56.6	63.1	69.6	76.0	82.5	86.9
90°	13.9	21.2	28.4	35.7	43.0	50.3	57.8	65.2	72.6	80.1	85.2
92.5°	24.0	28.4	32.9	37.3	41.7	47.7	55.1	62.6	70.0	77.5	82.4
95°	55.8	60.0	64.2	68.4	72.7	74.5	74.1	73.7	73.2	72.7	77.6
97.5°	103.9	109.1	114.3	119.5	124.8	123.7	116.5	109.3	102.1	94.8	93.7
100°	141.2	145.5	149.9	154.2	158.6	164.1	170.6	177.2	183.7	190.3	167.9
102.5°	179.1	183.3	187.5	191.7	195.9	201.1	207.2	213.3	219.5	225.6	224.3
105°	240.0	243.6	247.2	250.8	254.4	259.0	264.5	270.0	275.4	281.0	284.6
107.5°	303.2	305.7	308.2	310.6	313.1	317.2	322.8	328.4	334.1	339.7	343.3
110°	344.3	346.5	348.7	350.9	353.1	356.9	362.3	367.8	373.3	378.8	381.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	383.5	385.7	387.9	390.1	392.2	395.9	401.1	406.3	411.5	416.7	419.3
115°	441.6	443.7	445.8	448.1	450.2	453.8	458.7	463.6	468.5	473.4	476.0
117.5°	501.6	502.4	503.3	504.1	504.9	507.9	513.0	518.2	523.3	528.5	530.7
120°	539.6	540.0	540.3	540.7	541.1	543.7	548.3	553.1	557.9	562.6	565.3
122.5°	572.5	573.4	574.3	575.3	576.2	578.8	583.1	587.4	591.7	596.0	598.7
125°	624.2	625.3	626.3	627.3	628.4	630.7	634.4	638.0	641.7	645.4	647.6
127.5°	672.9	673.6	674.3	675.0	675.7	677.5	680.3	683.3	686.2	689.0	691.3
130°	703.3	703.9	704.6	705.4	706.1	707.7	710.5	713.2	716.0	718.7	720.7
132.5°	733.0	734.0	734.9	735.9	736.9	738.2	739.8	741.4	743.0	744.6	747.0
135°	776.0	776.9	777.8	778.6	779.5	780.4	781.3	782.3	783.2	784.1	786.2
137.5°	815.6	816.3	817.1	817.8	818.6	819.1	819.4	819.8	820.1	820.4	822.6
140°	840.8	841.2	841.5	841.9	842.2	842.4	842.4	842.4	842.4	842.4	844.8
142.5°	864.3	864.3	864.4	864.4	864.5	864.7	865.0	865.2	865.5	865.8	867.6
145°	898.6	898.7	898.9	899.0	899.3	899.4	899.4	899.4	899.4	899.4	900.4
147.5°	927.8	927.7	927.6	927.6	927.5	927.6	927.8	928.0	928.2	928.4	928.9
150°	946.8	946.4	946.1	945.7	945.4	945.4	945.7	946.1	946.4	946.8	947.1
152.5°	965.1	964.4	963.6	962.8	962.0	961.9	962.2	962.5	962.9	963.2	963.6
155°	988.7	987.7	986.6	985.6	984.5	984.1	984.5	984.8	985.2	985.6	986.1
157.5°	1006.9	1006.2	1005.7	1005.0	1004.4	1004.1	1004.1	1004.2	1004.2	1004.2	1004.8
160°	1019.5	1018.5	1017.5	1016.4	1015.3	1014.9	1015.1	1015.3	1015.4	1015.6	1016.3
162.5°	1029.7	1028.6	1027.5	1026.5	1025.5	1025.0	1025.2	1025.4	1025.6	1025.7	1026.7
165°	1043.3	1042.2	1041.2	1040.1	1039.1	1038.6	1038.8	1038.9	1039.2	1039.3	1040.4
167.5°	1053.4	1052.3	1051.2	1050.1	1049.1	1048.6	1048.8	1048.9	1049.1	1049.3	1050.6
170°	1059.1	1057.9	1056.6	1055.4	1054.2	1053.7	1053.8	1054.0	1054.2	1054.4	1055.7
172.5°	1062.9	1061.7	1060.4	1059.2	1058.0	1057.6	1057.8	1058.1	1058.4	1058.8	1060.0
175°	1067.0	1066.0	1064.9	1063.8	1062.8	1062.4	1062.6	1062.7	1062.9	1063.0	1064.5
177.5°	1068.9	1068.1	1067.2	1066.4	1065.6	1065.2	1065.3	1065.5	1065.6	1065.7	1066.8
180°	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	837.3	838.3	839.3	839.8	839.6	839.5	839.3	839.2
5°	834.7	836.1	837.7	838.3	838.0	837.9	837.7	837.6
7.5°	827.8	829.0	830.3	830.8	830.7	830.5	830.3	830.1
10°	821.2	822.4	823.7	824.3	824.1	823.9	823.7	823.6
12.5°	813.3	814.4	815.3	815.6	815.1	814.6	814.1	813.7
15°	798.6	799.7	800.8	801.0	800.3	799.5	798.8	798.0
17.5°	779.8	780.7	781.5	781.7	781.3	780.9	780.4	780.0
20°	765.4	766.0	766.5	766.8	766.8	766.8	766.8	766.8
22.5°	750.6	751.2	751.9	752.1	751.6	751.2	750.8	750.4
25°	727.1	727.9	728.6	728.5	727.5	726.7	725.7	724.8
27.5°	699.8	700.4	700.8	701.0	700.6	700.3	700.0	699.7
30°	681.1	681.5	681.8	682.0	681.8	681.6	681.4	681.2
32.5°	663.4	663.7	664.1	664.2	664.0	663.8	663.6	663.5
35°	634.6	635.2	635.7	636.0	636.0	636.0	636.0	636.0
37.5°	604.4	605.1	605.8	606.2	606.1	606.0	605.9	605.9
40°	583.9	584.7	585.4	586.0	586.3	586.7	587.1	587.4
42.5°	565.1	566.0	566.9	567.4	567.4	567.5	567.6	567.7
45°	534.9	536.1	537.4	538.1	538.4	538.5	538.7	538.9
47.5°	503.6	505.5	507.3	508.5	508.9	509.3	509.7	510.1
50°	482.8	484.9	486.9	488.1	488.7	489.3	489.8	490.4
52.5°	462.1	464.2	466.4	467.7	468.1	468.5	468.9	469.3
55°	429.4	431.4	433.4	434.7	435.5	436.3	437.0	437.7
57.5°	397.0	399.3	401.6	403.1	403.6	404.2	404.7	405.3
60°	374.9	377.6	380.4	382.0	382.5	383.1	383.7	384.2
62.5°	352.4	355.5	358.5	360.4	361.1	361.8	362.4	363.1
65°	318.9	321.7	324.4	326.1	326.9	327.6	328.4	329.1
67.5°	284.6	287.9	291.2	293.3	294.3	295.2	296.2	297.1
70°	261.2	264.7	268.2	270.4	271.5	272.6	273.7	274.8
72.5°	239.4	243.1	246.9	249.2	250.0	250.8	251.6	252.4
75°	206.4	210.1	213.7	216.0	216.9	217.9	218.7	219.7
77.5°	173.4	177.4	181.5	183.9	184.6	185.3	186.0	186.8
80°	153.7	157.7	161.7	164.1	164.9	165.6	166.3	167.0
82.5°	134.9	138.8	142.7	145.3	146.6	147.9	149.2	150.6
85°	109.2	113.3	117.3	120.0	121.5	122.9	124.5	125.9
87.5°	91.3	95.6	100.1	102.9	104.3	105.7	107.0	108.4
90°	90.3	95.4	100.4	103.9	105.7	107.5	109.3	111.1
92.5°	87.4	92.3	97.2	100.4	102.0	103.5	105.0	106.5
95°	82.5	87.5	92.3	95.4	96.7	98.0	99.3	100.5
97.5°	92.6	91.5	90.4	90.5	91.7	92.9	94.2	95.5
100°	145.6	123.3	100.8	89.9	90.3	90.7	91.1	91.5
102.5°	223.1	221.8	220.5	214.5	203.7	192.8	182.0	171.1
105°	288.3	291.9	295.6	297.9	299.0	300.2	301.3	302.4
107.5°	347.0	350.6	354.3	356.4	357.0	357.6	358.2	358.9
110°	384.7	387.6	390.5	392.8	394.2	395.7	397.1	398.6





TEST NUMBER: P333235-927

CATALOG NUMBER: S125DIP-S850D1035U927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	422.0	424.6	427.3	429.1	430.2	431.2	432.2	433.2
115°	478.6	481.2	483.8	485.1	485.1	485.2	485.2	485.3
117.5°	532.9	535.1	537.3	538.8	539.6	540.3	541.1	541.9
120°	568.1	570.8	573.6	575.1	575.3	575.5	575.8	576.0
122.5°	601.3	603.8	606.4	607.8	607.8	607.9	608.0	608.1
125°	649.8	652.0	654.3	655.5	655.9	656.3	656.7	657.1
127.5°	693.7	696.0	698.3	699.3	699.1	698.9	698.6	698.4
130°	722.8	724.8	726.8	727.9	727.9	727.9	727.9	728.0
132.5°	749.5	751.9	754.4	755.5	755.4	755.3	755.2	755.1
135°	788.1	790.2	792.2	793.1	793.0	792.9	792.7	792.6
137.5°	824.8	827.0	829.3	830.3	830.1	830.0	829.7	829.6
140°	847.2	849.5	851.9	852.9	852.6	852.2	851.9	851.6
142.5°	869.4	871.2	873.0	873.7	873.4	873.1	872.7	872.4
145°	901.5	902.6	903.7	904.0	903.7	903.4	903.1	902.8
147.5°	929.5	929.9	930.4	930.3	929.3	928.4	927.4	926.5
150°	947.5	947.8	948.2	947.8	946.5	945.3	944.1	942.9
152.5°	963.9	964.3	964.6	964.2	963.0	961.8	960.5	959.3
155°	986.6	987.1	987.7	987.2	985.8	984.4	983.0	981.6
157.5°	1005.4	1005.9	1006.5	1006.1	1004.6	1003.2	1001.8	1000.4
160°	1017.0	1017.7	1018.4	1018.0	1016.7	1015.3	1013.8	1012.4
162.5°	1027.7	1028.6	1029.7	1029.4	1027.9	1026.3	1024.8	1023.2
165°	1041.4	1042.5	1043.5	1043.4	1042.0	1040.5	1039.2	1037.8
167.5°	1051.9	1053.1	1054.4	1054.2	1052.7	1051.1	1049.5	1047.9
170°	1057.2	1058.6	1060.0	1059.9	1058.3	1056.8	1055.2	1053.6
172.5°	1061.3	1062.6	1063.8	1063.7	1062.1	1060.5	1058.9	1057.4
175°	1065.9	1067.3	1068.7	1068.6	1067.0	1065.4	1063.8	1062.2
177.5°	1067.7	1068.7	1069.7	1069.6	1068.5	1067.4	1066.3	1065.1
180°	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0

(END OF REPORT)