

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: P333245-927

Luminaire Tested: **S125DIP-S850D1205U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333245-927
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-S850D1205U927-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5902.6 lumens
Efficiency: N/A
Efficacy: 103.7 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

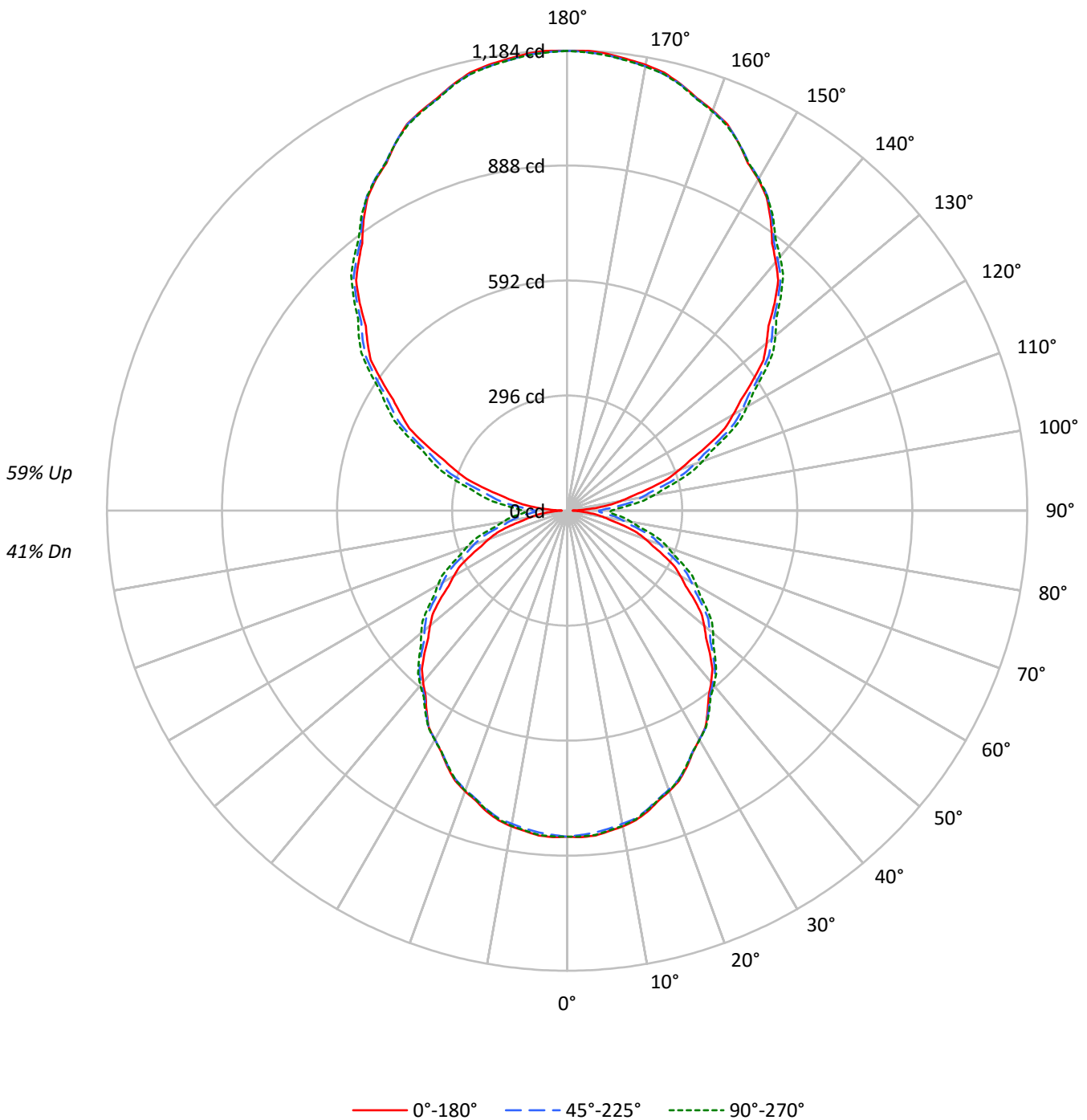
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41
1	95	91	87	83	87	83	79	76	68	65	63	54	53	51	42	40	39	34
2	86	79	73	67	78	72	67	62	59	55	52	47	44	42	36	34	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	20	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	26	22	28	22	19	23	19	16	18	15	13	11
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	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	1.3
10°-20°	225.3	3.8
20°-30°	335.0	5.7
30°-40°	396.8	6.7
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°	108.7	1.8
90°-100°	138.8	2.4
100°-110°	277.9	4.7
110°-120°	425.7	7.2
120°-130°	538.2	9.1
130°-140°	591.7	10.0
140°-150°	574.2	9.7
150°-160°	481.1	8.1
160°-170°	319.8	5.4
170°-180°	111.9	1.9
0°-30°	639.6	10.8
0°-40°	1036.4	17.6
0°-60°	1824.7	30.9
0°-90°	2443.5	41.4
90°-120°	842.3	14.3
90°-150°	2546.4	43.1
90°-180°	3459.0	58.6
0°-180°	5902.6	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	48	82	105	114	12
95°	70	95	131	154	163	72
105°	217	236	265	286	296	232
115°	402	412	434	448	452	397
125°	582	588	604	615	619	521
135°	755	759	766	776	777	581
145°	913	916	919	923	923	570
155°	1044	1044	1045	1048	1044	481
165°	1135	1133	1134	1137	1132	320
175°	1180	1177	1176	1181	1176	112
180°	1183	1183	1183	1183	1183	



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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	32.0	38.2	44.4	50.5	56.9	63.4	69.9	76.4	82.9	87.3
90°	14.1	21.5	29.1	36.5	44.0	51.6	59.3	66.9	74.5	82.2	87.5
92.5°	34.1	40.7	47.2	53.8	60.4	67.7	75.8	84.0	92.1	100.2	105.6
95°	70.5	75.7	80.9	86.0	91.2	97.9	106.2	114.4	122.7	130.9	136.4
97.5°	109.2	113.6	118.0	122.5	126.9	133.6	142.4	151.1	160.0	168.8	174.0
100°	137.9	141.8	145.6	149.5	153.3	159.5	167.9	176.5	185.0	193.5	199.2
102.5°	169.0	173.3	177.7	182.0	186.4	192.1	199.2	206.2	213.3	220.3	226.0
105°	217.3	221.3	225.2	229.1	233.1	238.4	245.1	251.8	258.6	265.3	270.1
107.5°	270.8	274.3	277.8	281.3	284.9	289.7	295.9	302.1	308.3	314.5	318.8
110°	307.7	310.9	314.1	317.3	320.6	325.0	330.7	336.5	342.2	348.0	352.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	346.0	348.2	350.5	352.8	355.1	359.2	364.9	370.7	376.4	382.1	385.8
115°	401.7	403.8	405.9	408.0	410.1	413.8	418.9	424.1	429.2	434.4	437.4
117.5°	457.6	458.8	460.0	461.2	462.4	465.5	470.3	475.2	480.1	484.9	488.2
120°	492.9	494.5	496.1	497.6	499.2	502.2	506.6	511.0	515.4	519.8	522.9
122.5°	530.6	531.2	531.8	532.4	533.1	535.7	540.3	544.9	549.5	554.1	556.8
125°	582.3	583.4	584.4	585.4	586.5	589.0	592.8	596.7	600.6	604.4	606.9
127.5°	636.8	637.2	637.8	638.3	638.8	640.6	643.9	647.1	650.4	653.6	656.2
130°	669.9	670.7	671.5	672.4	673.2	675.1	678.1	681.0	684.0	687.0	689.4
132.5°	702.3	704.0	705.6	707.3	708.9	710.7	712.6	714.5	716.4	718.3	720.6
135°	754.6	755.7	756.8	757.8	758.8	760.1	761.6	763.1	764.5	766.0	768.4
137.5°	803.8	804.9	805.9	806.9	808.0	809.1	810.1	811.2	812.3	813.3	815.7
140°	834.9	835.8	836.9	837.9	838.9	839.9	840.7	841.5	842.2	843.0	845.4
142.5°	866.5	867.2	867.9	868.6	869.3	870.1	870.9	871.7	872.6	873.4	875.4
145°	913.1	913.7	914.3	915.0	915.6	916.2	916.9	917.5	918.1	918.7	919.6
147.5°	955.4	955.8	956.2	956.7	957.1	957.6	958.1	958.6	959.1	959.6	960.4
150°	984.0	983.9	983.7	983.5	983.3	983.6	984.4	985.2	986.0	986.8	986.8
152.5°	1007.7	1007.9	1008.2	1008.5	1008.8	1009.1	1009.4	1009.7	1010.1	1010.4	1010.9
155°	1043.9	1043.9	1043.9	1043.9	1043.9	1044.0	1044.3	1044.4	1044.7	1044.8	1045.7
157.5°	1076.3	1075.9	1075.4	1075.0	1074.5	1074.4	1074.6	1074.8	1075.0	1075.2	1076.0
160°	1095.4	1094.9	1094.2	1093.6	1093.0	1092.8	1093.0	1093.2	1093.4	1093.6	1094.4
162.5°	1112.4	1112.0	1111.5	1111.0	1110.6	1110.4	1110.4	1110.5	1110.5	1110.6	1111.5
165°	1135.0	1134.6	1134.2	1133.9	1133.4	1133.3	1133.5	1133.7	1133.9	1134.1	1135.0
167.5°	1154.2	1153.3	1152.5	1151.8	1150.9	1150.5	1150.5	1150.5	1150.5	1150.5	1151.8
170°	1164.5	1163.7	1162.8	1162.1	1161.3	1160.8	1160.8	1160.8	1160.8	1160.8	1162.1
172.5°	1171.9	1171.1	1170.2	1169.4	1168.6	1168.2	1168.2	1168.2	1168.2	1168.2	1169.4
175°	1180.1	1179.3	1178.5	1177.7	1176.9	1176.5	1176.5	1176.5	1176.5	1176.5	1177.7
177.5°	1184.4	1183.8	1183.0	1182.4	1181.8	1181.4	1181.2	1181.1	1180.8	1180.7	1181.7
180°	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9



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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°	91.7	96.2	100.5	103.5	104.9	106.2	107.7	109.1
90°	92.7	97.9	103.1	106.6	108.5	110.4	112.3	114.2
92.5°	111.0	116.4	121.8	125.4	127.1	128.8	130.6	132.3
95°	141.9	147.3	152.7	156.3	158.0	159.7	161.4	163.1
97.5°	179.2	184.3	189.6	192.9	194.4	195.9	197.3	198.8
100°	204.9	210.6	216.2	219.8	221.3	222.8	224.3	225.9
102.5°	231.7	237.4	243.1	246.8	248.5	250.2	251.8	253.5
105°	275.0	279.9	284.8	288.2	290.1	292.0	293.9	295.7
107.5°	323.0	327.3	331.4	334.1	335.3	336.3	337.4	338.5
110°	356.2	360.2	364.3	366.9	368.0	369.1	370.1	371.2



TEST NUMBER: P333245-927

CATALOG NUMBER: S125DIP-S850D1205U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	389.4	393.0	396.6	398.9	399.8	400.7	401.6	402.5
115°	440.5	443.6	446.7	448.7	449.6	450.5	451.4	452.3
117.5°	491.5	494.7	498.0	499.9	500.3	500.7	501.1	501.5
120°	526.1	529.2	532.3	533.9	534.2	534.6	534.8	535.1
122.5°	559.6	562.4	565.2	566.8	567.3	567.8	568.2	568.6
125°	609.4	612.0	614.5	616.1	616.8	617.5	618.2	618.9
127.5°	658.6	661.2	663.6	665.2	665.8	666.5	667.2	667.8
130°	691.7	694.1	696.4	697.8	698.4	698.9	699.3	699.9
132.5°	722.9	725.3	727.7	729.0	729.1	729.4	729.5	729.8
135°	770.8	773.2	775.5	776.8	776.9	777.0	777.1	777.1
137.5°	818.2	820.5	822.9	824.0	823.7	823.4	823.2	822.8
140°	847.9	850.3	852.7	853.8	853.5	853.2	852.9	852.6
142.5°	877.3	879.2	881.2	882.1	881.8	881.5	881.2	880.9
145°	920.5	921.5	922.3	922.9	923.0	923.1	923.2	923.4
147.5°	961.2	961.9	962.7	962.6	961.6	960.4	959.4	958.3
150°	986.8	986.8	986.8	986.7	986.5	986.3	986.0	985.8
152.5°	1011.4	1011.9	1012.3	1012.3	1011.5	1010.8	1010.2	1009.5
155°	1046.5	1047.3	1048.1	1048.0	1046.9	1045.9	1045.0	1043.9
157.5°	1076.8	1077.7	1078.5	1078.2	1076.9	1075.5	1074.2	1072.9
160°	1095.3	1096.1	1096.9	1096.8	1095.7	1094.7	1093.7	1092.7
162.5°	1112.5	1113.5	1114.5	1114.4	1113.2	1112.0	1110.8	1109.6
165°	1135.8	1136.5	1137.4	1137.2	1136.0	1134.7	1133.5	1132.3
167.5°	1152.9	1154.2	1155.4	1155.4	1154.1	1152.9	1151.6	1150.3
170°	1163.2	1164.5	1165.7	1165.6	1164.2	1162.8	1161.3	1159.9
172.5°	1170.6	1171.9	1173.1	1173.1	1171.8	1170.5	1169.3	1168.0
175°	1178.9	1180.1	1181.4	1181.3	1179.9	1178.5	1176.9	1175.5
177.5°	1182.6	1183.7	1184.6	1184.6	1183.4	1182.3	1181.1	1180.0
180°	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9

(END OF REPORT)