

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: P333236

Luminaire Tested: **S125DIP-S850D1035U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333236
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-S850D1035U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6863.7 lumens
Efficiency: N/A
Efficacy: 132.0 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

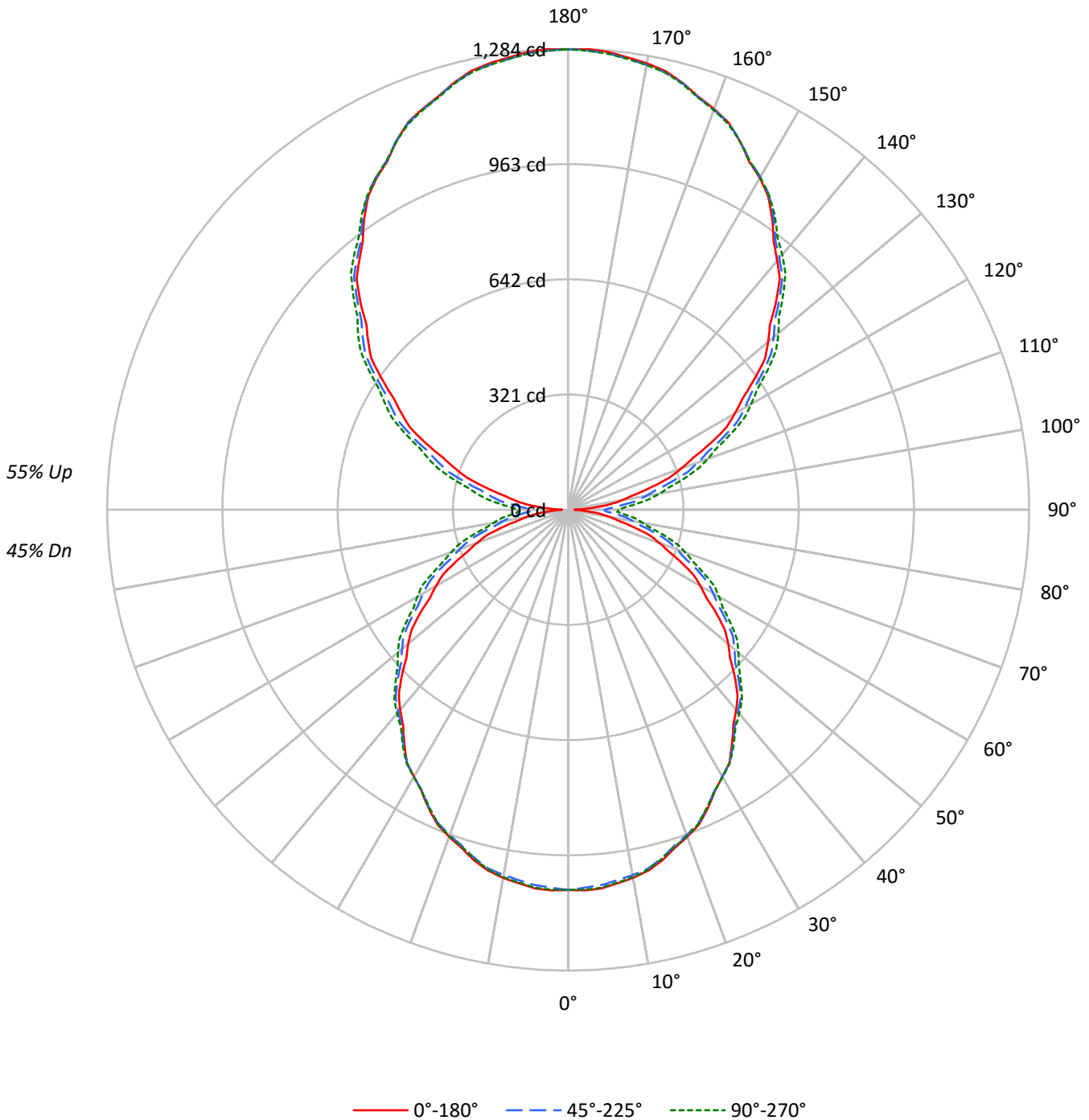
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	51	51	51	45
1	96	91	87	84	88	84	80	77	70	67	65	56	55	53	44	43	42	36
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30
3	79	70	62	56	72	64	57	52	53	48	44	43	40	37	34	32	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	28	25	21
5	66	55	46	40	60	50	43	38	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	25	22	19	16
7	56	44	36	30	51	41	33	28	34	29	25	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	21	17	15	13
9	49	36	29	24	44	34	27	22	28	23	19	24	19	16	19	16	14	11
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6841	6841	6841
5°	6855	6715	6737
10°	6806	6595	6585
15°	6726	6452	6393
20°	6616	6274	6201
25°	6486	6084	5964
30°	6329	5876	5749
35°	6182	5684	5552
40°	6032	5481	5353
45°	5863	5308	5178
50°	5702	5120	5022
55°	5508	4943	4839
60°	5296	4741	4653
65°	5075	4530	4443
70°	4822	4240	4228
75°	4425	3962	3962
80°	3905	3625	3673
85°	3417	3398	3583



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.2	1.5
10°-20°	284.4	4.1
20°-30°	422.9	6.2
30°-40°	500.9	7.3
40°-50°	517.9	7.5
50°-60°	477.1	7.0
60°-70°	385.7	5.6
70°-80°	258.3	3.8
80°-90°	136.7	2.0
90°-100°	161.1	2.3
100°-110°	309.1	4.5
110°-120°	466.9	6.8
120°-130°	586.7	8.5
130°-140°	643.0	9.4
140°-150°	623.0	9.1
150°-160°	521.7	7.6
160°-170°	346.8	5.1
170°-180°	121.4	1.8
0°-30°	807.4	11.8
0°-40°	1308.3	19.1
0°-60°	2303.3	33.6
0°-90°	3084.0	44.9
90°-120°	937.1	13.7
90°-150°	2789.8	40.6
90°-180°	3780.0	55.1
0°-180°	6863.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1059	1057	1050	1058	1057	100
15°	1012	1012	1005	1011	1007	285
25°	919	922	916	920	915	423
35°	796	802	800	803	803	498
45°	655	666	672	679	680	506
55°	504	520	537	548	552	450
65°	347	371	396	411	415	344
75°	191	218	251	271	277	203
85°	57	92	128	150	159	61
90°	18	59	101	129	140	15
95°	78	108	153	181	192	80
105°	237	259	296	322	333	253
115°	436	449	477	494	500	432
125°	632	638	659	673	678	566
135°	819	824	832	845	847	631
145°	990	993	996	1001	1003	619
155°	1132	1132	1133	1137	1132	521
165°	1231	1229	1230	1233	1228	347
175°	1280	1276	1276	1281	1275	122
180°	1283	1283	1283	1283	1283	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3
2.5°	1061.8	1061.5	1061.1	1060.7	1060.3	1059.5	1058.2	1056.9	1055.6	1054.3	1055.6
5°	1059.3	1058.9	1058.4	1057.9	1057.5	1056.4	1054.8	1053.2	1051.6	1050.0	1051.8
7.5°	1050.0	1049.8	1049.6	1049.4	1049.2	1048.3	1046.7	1045.0	1043.3	1041.7	1043.3
10°	1041.7	1041.7	1041.7	1041.7	1041.7	1040.8	1038.9	1037.1	1035.2	1033.4	1035.0
12.5°	1030.0	1030.2	1030.4	1030.6	1030.8	1030.1	1028.7	1027.2	1025.7	1024.2	1025.5
15°	1011.6	1011.8	1012.0	1012.2	1012.5	1011.8	1010.2	1008.6	1006.9	1005.3	1006.7
17.5°	987.5	987.9	988.4	988.8	989.3	988.7	987.1	985.5	983.9	982.3	983.3
20°	970.0	970.5	970.9	971.4	971.9	971.3	969.7	968.1	966.4	964.8	965.5
22.5°	950.1	950.9	951.7	952.6	953.4	952.9	951.1	949.3	947.5	945.7	946.6
25°	919.1	919.8	920.5	921.2	921.9	921.5	920.2	918.8	917.4	916.0	916.9
27.5°	884.6	885.7	886.7	887.7	888.7	888.4	886.9	885.3	883.7	882.2	882.8
30°	858.9	860.3	861.7	863.0	864.4	864.4	863.0	861.7	860.3	858.9	859.4
32.5°	835.6	836.8	838.0	839.2	840.4	840.5	839.5	838.5	837.5	836.5	836.9
35°	795.5	797.2	798.8	800.4	802.0	802.5	801.8	801.1	800.4	799.7	800.4
37.5°	755.4	756.9	758.4	759.9	761.4	762.0	761.7	761.5	761.3	761.1	762.0
40°	728.0	729.9	731.7	733.6	735.4	736.2	736.0	735.8	735.5	735.3	736.2
42.5°	698.1	700.5	702.9	705.3	707.7	709.2	709.7	710.2	710.7	711.2	712.3
45°	655.3	657.9	660.4	662.9	665.5	667.3	668.5	669.6	670.8	671.9	673.6
47.5°	611.5	613.9	616.2	618.6	620.9	623.1	625.1	627.1	629.0	631.0	633.4
50°	581.6	584.1	586.7	589.2	591.7	594.3	596.8	599.4	601.9	604.4	607.0
52.5°	550.0	553.1	556.2	559.3	562.4	565.5	568.6	571.7	574.8	577.9	580.6
55°	503.7	507.4	511.1	514.8	518.5	522.2	525.9	529.6	533.2	536.9	539.5
57.5°	456.3	460.8	465.2	469.6	474.1	478.4	482.7	486.9	491.1	495.4	498.3
60°	424.8	429.4	434.0	438.6	443.2	447.9	452.5	457.1	461.7	466.3	469.8
62.5°	394.0	398.6	403.3	407.9	412.5	417.3	422.3	427.3	432.2	437.2	441.1
65°	346.9	352.2	357.5	362.8	368.1	373.5	379.1	384.6	390.2	395.7	399.2
67.5°	302.4	307.6	312.7	317.8	322.9	328.3	333.9	339.6	345.2	350.8	355.0
70°	270.0	275.3	280.6	286.0	291.3	296.9	302.9	308.9	314.9	320.9	325.3
72.5°	238.5	243.9	249.4	254.9	260.4	266.4	273.0	279.6	286.1	292.7	297.4
75°	191.1	197.1	203.1	209.1	215.1	221.8	229.2	236.6	243.9	251.3	255.9
77.5°	145.6	152.5	159.5	166.4	173.3	180.3	187.4	194.5	201.6	208.8	213.8
80°	117.4	124.3	131.2	138.1	145.1	152.4	160.3	168.1	176.0	183.8	188.9
82.5°	91.6	98.9	106.2	113.5	120.8	128.4	136.5	144.5	152.5	160.6	165.5
85°	57.1	64.7	72.4	80.0	87.6	95.4	103.5	111.6	119.7	127.7	132.8
87.5°	32.6	40.3	48.1	55.8	63.6	71.5	79.7	87.8	96.0	104.1	109.7
90°	17.6	26.8	35.9	45.1	54.3	63.5	72.9	82.3	91.7	101.1	107.6
92.5°	39.1	47.2	55.3	63.3	71.4	80.4	90.4	100.3	110.2	120.2	126.8
95°	78.4	84.8	91.3	97.7	104.2	112.4	122.5	132.6	142.6	152.7	159.3
97.5°	120.1	125.7	131.2	136.8	142.4	150.5	161.1	171.8	182.4	193.0	199.3
100°	151.2	156.0	160.9	165.7	170.6	178.1	188.4	198.7	208.9	219.2	226.1
102.5°	184.7	190.1	195.4	200.8	206.2	213.2	221.8	230.5	239.2	247.8	254.7
105°	237.0	241.8	246.6	251.4	256.2	262.7	271.0	279.2	287.5	295.7	301.7
107.5°	294.8	299.1	303.3	307.6	311.8	317.8	325.4	333.1	340.8	348.4	353.7
110°	334.7	338.6	342.5	346.4	350.2	355.7	362.9	370.0	377.1	384.3	389.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	376.3	379.1	381.8	384.6	387.4	392.4	399.5	406.6	413.7	420.9	425.4
115°	436.5	439.0	441.5	444.0	446.5	451.0	457.5	463.9	470.3	476.8	480.7
117.5°	497.0	498.4	499.9	501.4	502.8	506.6	512.7	518.7	524.8	530.9	535.0
120°	535.3	537.1	538.9	540.7	542.5	546.2	551.7	557.3	562.8	568.3	572.2
122.5°	576.0	576.7	577.5	578.2	578.9	582.1	587.8	593.5	599.2	604.9	608.5
125°	632.1	633.2	634.3	635.4	636.5	639.5	644.3	649.2	654.0	658.8	662.1
127.5°	691.0	691.5	692.0	692.6	693.1	695.4	699.4	703.5	707.5	711.6	714.8
130°	726.9	727.8	728.7	729.6	730.4	732.7	736.4	740.1	743.7	747.4	750.4
132.5°	762.0	763.8	765.6	767.3	769.1	771.2	773.6	776.0	778.4	780.8	783.8
135°	818.7	819.8	820.9	822.0	823.1	824.6	826.4	828.3	830.1	831.9	834.9
137.5°	872.0	873.1	874.2	875.3	876.4	877.6	878.9	880.2	881.4	882.7	885.7
140°	905.5	906.7	907.8	908.9	910.0	911.0	911.9	912.8	913.7	914.6	917.6
142.5°	939.9	940.6	941.4	942.1	942.9	943.7	944.6	945.5	946.4	947.3	949.7
145°	990.4	991.1	991.7	992.4	993.0	993.7	994.4	995.0	995.7	996.4	997.5
147.5°	1036.1	1036.6	1037.1	1037.6	1038.0	1038.6	1039.1	1039.6	1040.1	1040.7	1041.6
150°	1067.2	1067.0	1066.8	1066.6	1066.4	1066.7	1067.6	1068.5	1069.3	1070.2	1070.2
152.5°	1092.8	1093.1	1093.4	1093.7	1094.0	1094.4	1094.7	1095.1	1095.4	1095.8	1096.3
155°	1132.1	1132.1	1132.1	1132.1	1132.1	1132.2	1132.5	1132.7	1132.9	1133.1	1134.0
157.5°	1167.3	1166.8	1166.3	1165.8	1165.3	1165.2	1165.4	1165.6	1165.9	1166.1	1167.0
160°	1188.0	1187.4	1186.7	1186.0	1185.4	1185.2	1185.4	1185.6	1185.8	1186.0	1186.9
162.5°	1206.4	1205.9	1205.4	1204.9	1204.5	1204.2	1204.3	1204.3	1204.4	1204.4	1205.5
165°	1231.0	1230.5	1230.1	1229.6	1229.2	1229.1	1229.3	1229.5	1229.7	1230.0	1230.9
167.5°	1251.7	1250.8	1250.0	1249.1	1248.2	1247.7	1247.7	1247.7	1247.7	1247.7	1249.1
170°	1262.9	1262.0	1261.1	1260.3	1259.4	1258.9	1258.9	1258.9	1258.9	1258.9	1260.3
172.5°	1270.9	1270.0	1269.1	1268.2	1267.4	1266.9	1266.9	1266.9	1266.9	1266.9	1268.2
175°	1279.9	1279.0	1278.1	1277.2	1276.3	1275.9	1275.9	1275.9	1275.9	1275.9	1277.2
177.5°	1284.5	1283.8	1283.1	1282.3	1281.6	1281.2	1281.0	1280.8	1280.7	1280.5	1281.6
180°	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3
2.5°	1056.9	1058.2	1059.5	1060.1	1059.9	1059.7	1059.5	1059.3
5°	1053.7	1055.5	1057.4	1058.2	1057.9	1057.7	1057.5	1057.3
7.5°	1044.9	1046.5	1048.1	1048.8	1048.6	1048.4	1048.1	1047.9
10°	1036.6	1038.2	1039.8	1040.5	1040.3	1040.1	1039.8	1039.6
12.5°	1026.7	1028.0	1029.2	1029.5	1028.9	1028.3	1027.7	1027.1
15°	1008.1	1009.5	1010.9	1011.1	1010.2	1009.2	1008.3	1007.4
17.5°	984.4	985.5	986.5	986.8	986.2	985.7	985.1	984.6
20°	966.2	966.9	967.6	967.9	967.9	967.9	967.9	967.9
22.5°	947.5	948.3	949.2	949.4	948.8	948.3	947.7	947.2
25°	917.9	918.8	919.7	919.6	918.4	917.3	916.1	915.0
27.5°	883.4	884.1	884.7	884.9	884.4	884.0	883.6	883.2
30°	859.8	860.3	860.7	860.9	860.6	860.4	860.2	859.9
32.5°	837.4	837.8	838.3	838.4	838.2	838.0	837.7	837.5
35°	801.1	801.8	802.5	802.8	802.8	802.8	802.8	802.8
37.5°	762.9	763.8	764.7	765.2	765.1	765.0	764.9	764.8
40°	737.1	738.1	739.0	739.7	740.1	740.6	741.1	741.5
42.5°	713.4	714.5	715.6	716.2	716.3	716.4	716.5	716.6
45°	675.2	676.8	678.4	679.3	679.6	679.8	680.0	680.3
47.5°	635.7	638.1	640.4	641.9	642.4	642.9	643.4	643.9
50°	609.5	612.1	614.6	616.2	616.9	617.6	618.3	619.0
52.5°	583.3	586.0	588.7	590.4	590.9	591.4	591.9	592.4
55°	542.0	544.6	547.1	548.8	549.7	550.7	551.6	552.5
57.5°	501.2	504.1	507.0	508.8	509.5	510.2	510.9	511.6
60°	473.2	476.7	480.2	482.2	482.9	483.6	484.3	485.0
62.5°	444.9	448.7	452.6	454.9	455.8	456.7	457.5	458.4
65°	402.6	406.1	409.5	411.7	412.7	413.6	414.5	415.4
67.5°	359.2	363.4	367.6	370.3	371.5	372.7	373.9	375.1
70°	329.7	334.1	338.5	341.3	342.7	344.1	345.5	346.9
72.5°	302.2	306.9	311.7	314.6	315.6	316.6	317.6	318.6
75°	260.6	265.2	269.8	272.7	273.8	275.0	276.1	277.3
77.5°	218.9	224.0	229.1	232.1	233.0	233.9	234.8	235.8
80°	194.0	199.1	204.1	207.1	208.1	209.0	209.9	210.8
82.5°	170.3	175.2	180.1	183.4	185.1	186.7	188.4	190.1
85°	137.9	143.0	148.1	151.5	153.4	155.2	157.1	158.9
87.5°	115.2	120.7	126.3	129.9	131.7	133.4	135.1	136.9
90°	114.0	120.4	126.8	131.2	133.4	135.7	138.0	140.3
92.5°	133.4	139.9	146.5	150.9	153.0	155.1	157.2	159.3
95°	165.9	172.6	179.2	183.6	185.6	187.7	189.7	191.8
97.5°	205.6	212.0	218.3	222.3	224.2	226.0	227.8	229.7
100°	232.9	239.7	246.6	250.9	252.8	254.6	256.4	258.2
102.5°	261.5	268.3	275.2	279.6	281.6	283.6	285.6	287.6
105°	307.6	313.6	319.5	323.6	325.9	328.2	330.5	332.8
107.5°	358.9	364.2	369.4	372.7	374.1	375.5	376.9	378.2
110°	394.4	399.4	404.5	407.7	409.1	410.5	411.9	413.3



TEST NUMBER: P333236

CATALOG NUMBER: S125DIP-S850D1035U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	429.9	434.4	438.9	441.8	443.0	444.2	445.4	446.6
115°	484.6	488.6	492.5	495.1	496.2	497.4	498.5	499.7
117.5°	539.1	543.2	547.3	549.7	550.4	551.1	551.7	552.4
120°	576.2	580.1	584.0	586.2	586.7	587.2	587.7	588.2
122.5°	612.0	615.6	619.2	621.3	622.0	622.6	623.3	624.0
125°	665.3	668.6	671.8	673.9	674.9	675.8	676.7	677.7
127.5°	718.0	721.1	724.3	726.4	727.3	728.2	729.1	730.0
130°	753.4	756.4	759.4	761.3	762.0	762.7	763.4	764.1
132.5°	786.8	789.9	792.9	794.5	794.9	795.2	795.6	795.9
135°	837.9	840.9	843.9	845.6	845.8	846.1	846.4	846.6
137.5°	888.7	891.7	894.7	896.1	895.9	895.7	895.5	895.3
140°	920.5	923.5	926.5	927.9	927.7	927.5	927.3	927.2
142.5°	952.1	954.6	957.0	958.1	957.9	957.7	957.6	957.4
145°	998.7	999.8	1001.0	1001.7	1001.9	1002.2	1002.4	1002.7
147.5°	1042.5	1043.4	1044.3	1044.2	1043.1	1042.0	1040.9	1039.8
150°	1070.2	1070.2	1070.2	1070.1	1069.9	1069.7	1069.5	1069.3
152.5°	1096.9	1097.4	1097.9	1097.8	1097.1	1096.3	1095.6	1094.8
155°	1134.9	1135.8	1136.7	1136.6	1135.5	1134.3	1133.2	1132.1
157.5°	1167.8	1168.7	1169.6	1169.3	1167.9	1166.4	1164.9	1163.5
160°	1187.8	1188.7	1189.6	1189.5	1188.4	1187.3	1186.2	1185.0
162.5°	1206.5	1207.6	1208.7	1208.6	1207.3	1206.0	1204.7	1203.4
165°	1231.7	1232.6	1233.5	1233.3	1232.0	1230.6	1229.3	1228.0
167.5°	1250.4	1251.7	1253.1	1253.0	1251.7	1250.3	1248.9	1247.5
170°	1261.6	1262.9	1264.2	1264.1	1262.6	1261.0	1259.5	1257.9
172.5°	1269.6	1270.9	1272.2	1272.2	1270.8	1269.5	1268.1	1266.7
175°	1278.6	1279.9	1281.2	1281.1	1279.6	1278.0	1276.4	1274.9
177.5°	1282.6	1283.7	1284.7	1284.7	1283.4	1282.2	1280.9	1279.7
180°	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9

(END OF REPORT)