

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: P333245-935

Luminaire Tested: **S125DIP-S850D1205U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333245-935
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-S850D1205U935-4F0-1E-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: 6415.4 lumens
Efficiency: N/A
Efficacy: 112.7 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

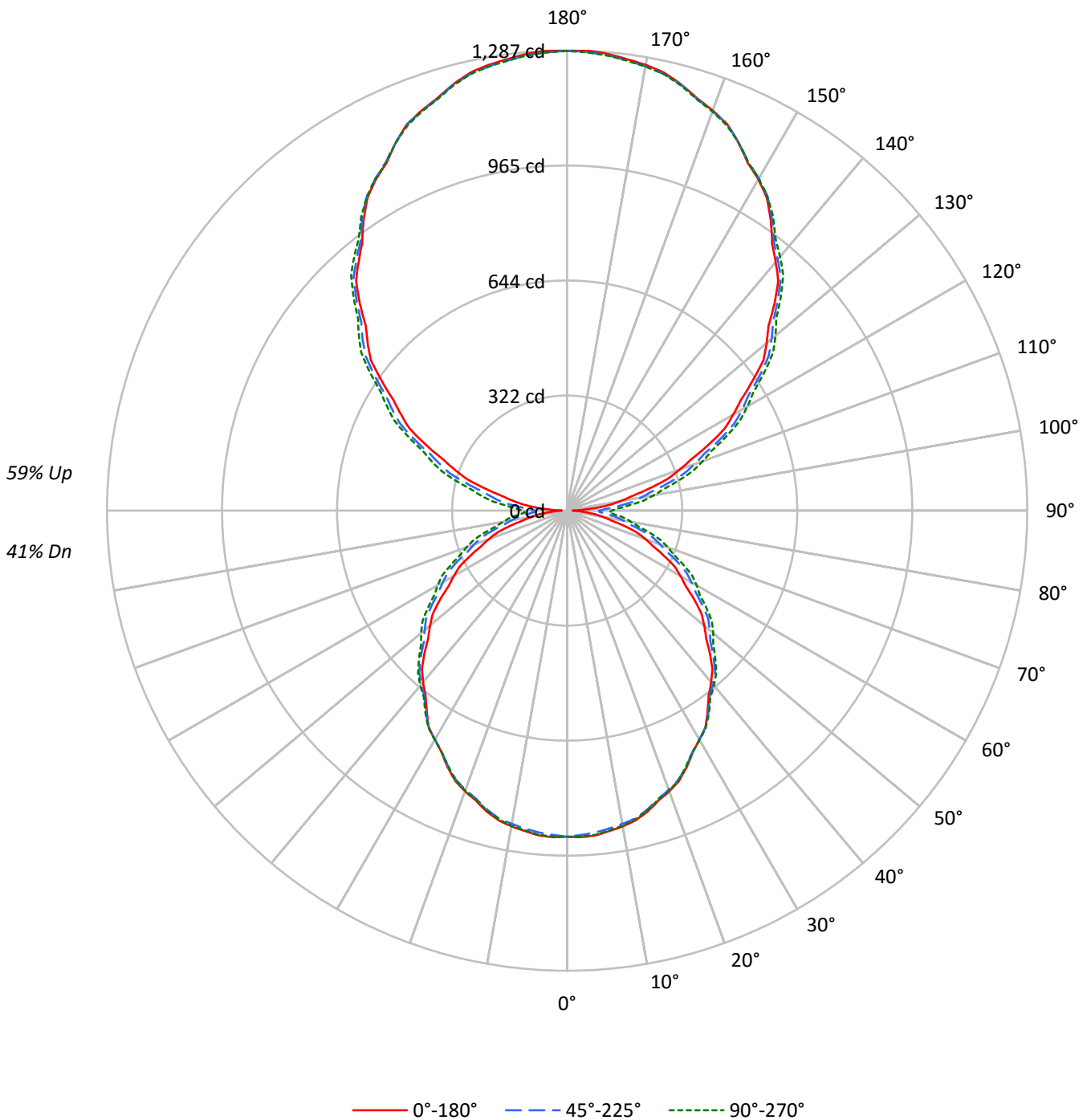
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5891	5891	5891
5°	5902	5782	5800
10°	5860	5679	5670
15°	5791	5555	5505
20°	5697	5402	5339
25°	5585	5239	5135
30°	5449	5059	4950
35°	5322	4893	4780
40°	5194	4719	4609
45°	5048	4570	4458
50°	4910	4408	4325
55°	4742	4256	4166
60°	4560	4082	4006
65°	4369	3900	3826
70°	4153	3651	3640
75°	3809	3412	3412
80°	3363	3122	3163
85°	2945	2924	3085



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.2	1.3
10°-20°	244.8	3.8
20°-30°	364.1	5.7
30°-40°	431.3	6.7
40°-50°	445.9	7.0
50°-60°	410.8	6.4
60°-70°	332.0	5.2
70°-80°	222.4	3.5
80°-90°	118.1	1.8
90°-100°	150.8	2.4
100°-110°	302.0	4.7
110°-120°	462.7	7.2
120°-130°	585.0	9.1
130°-140°	643.1	10.0
140°-150°	624.1	9.7
150°-160°	522.9	8.1
160°-170°	347.5	5.4
170°-180°	121.6	1.9
0°-30°	695.2	10.8
0°-40°	1126.5	17.6
0°-60°	1983.2	30.9
0°-90°	2655.7	41.4
90°-120°	915.5	14.3
90°-150°	2767.7	43.1
90°-180°	3760.0	58.6
0°-180°	6415.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	912	912	912	912	912	
5°	912	910	904	911	910	86
15°	871	872	866	870	867	245
25°	791	794	789	792	788	364
35°	685	691	688	691	691	428
45°	564	574	578	584	586	435
55°	434	448	462	472	476	388
65°	299	319	341	354	358	296
75°	164	188	216	234	239	175
85°	49	79	110	129	137	52
90°	15	52	89	114	124	13
95°	77	103	142	168	177	79
105°	236	256	288	311	321	252
115°	437	448	472	487	492	432
125°	633	639	657	669	673	566
135°	820	825	833	844	845	632
145°	992	995	998	1003	1004	620
155°	1135	1135	1136	1139	1135	522
165°	1234	1232	1233	1236	1231	348
175°	1283	1279	1279	1284	1278	122
180°	1286	1286	1286	1286	1286	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1
2.5°	914.2	914.0	913.6	913.3	912.9	912.2	911.1	910.0	908.9	907.8	908.9
5°	912.1	911.7	911.3	910.9	910.5	909.6	908.2	906.8	905.4	904.0	905.6
7.5°	904.0	903.9	903.7	903.5	903.4	902.6	901.2	899.7	898.3	896.9	898.3
10°	896.9	896.9	896.9	896.9	896.9	896.1	894.5	892.9	891.3	889.8	891.1
12.5°	886.8	887.0	887.2	887.3	887.5	886.9	885.7	884.4	883.1	881.8	883.0
15°	871.0	871.2	871.3	871.5	871.8	871.2	869.8	868.4	866.9	865.6	866.8
17.5°	850.2	850.6	851.0	851.4	851.8	851.3	849.9	848.5	847.1	845.8	846.6
20°	835.2	835.6	835.9	836.4	836.8	836.3	834.9	833.5	832.1	830.7	831.3
22.5°	818.0	818.7	819.4	820.2	820.9	820.4	818.9	817.3	815.8	814.2	815.0
25°	791.3	791.9	792.6	793.2	793.8	793.4	792.3	791.1	789.9	788.7	789.5
27.5°	761.6	762.6	763.4	764.3	765.2	764.9	763.6	762.2	760.9	759.6	760.1
30°	739.5	740.7	741.9	743.0	744.2	744.2	743.0	741.9	740.7	739.5	739.9
32.5°	719.5	720.5	721.5	722.6	723.6	723.7	722.8	721.9	721.1	720.2	720.6
35°	684.9	686.4	687.8	689.1	690.5	691.0	690.3	689.7	689.1	688.5	689.1
37.5°	650.4	651.7	653.0	654.3	655.6	656.1	655.8	655.7	655.5	655.3	656.1
40°	626.8	628.4	630.0	631.6	633.2	633.9	633.7	633.5	633.3	633.1	633.9
42.5°	601.1	603.1	605.2	607.3	609.3	610.6	611.1	611.5	611.9	612.3	613.3
45°	564.2	566.5	568.6	570.8	573.0	574.5	575.6	576.5	577.6	578.5	580.0
47.5°	526.5	528.6	530.5	532.6	534.6	536.5	538.2	539.9	541.6	543.3	545.4
50°	500.8	502.9	505.1	507.3	509.5	511.7	513.8	516.1	518.2	520.4	522.6
52.5°	473.6	476.2	478.9	481.6	484.2	486.9	489.6	492.2	494.9	497.6	499.9
55°	433.7	436.9	440.1	443.2	446.4	449.6	452.8	456.0	459.1	462.3	464.5
57.5°	392.9	396.7	400.5	404.3	408.2	411.9	415.6	419.2	422.8	426.5	429.0
60°	365.8	369.7	373.7	377.6	381.6	385.6	389.6	393.6	397.5	401.5	404.5
62.5°	339.2	343.2	347.2	351.2	355.2	359.3	363.6	367.9	372.1	376.4	379.8
65°	298.7	303.2	307.8	312.4	316.9	321.6	326.4	331.1	336.0	340.7	343.7
67.5°	260.4	264.8	269.2	273.6	278.0	282.7	287.5	292.4	297.2	302.0	305.7
70°	232.5	237.0	241.6	246.2	250.8	255.6	260.8	266.0	271.1	276.3	280.1
72.5°	205.3	210.0	214.7	219.5	224.2	229.4	235.1	240.7	246.3	252.0	256.1
75°	164.5	169.7	174.9	180.0	185.2	191.0	197.3	203.7	210.0	216.4	220.3
77.5°	125.4	131.3	137.3	143.3	149.2	155.2	161.4	167.5	173.6	179.8	184.1
80°	101.1	107.0	113.0	118.9	124.9	131.2	138.0	144.7	151.5	158.3	162.6
82.5°	78.9	85.2	91.4	97.7	104.0	110.6	117.5	124.4	131.3	138.3	142.5
85°	49.2	55.7	62.3	68.9	75.4	82.1	89.1	96.1	103.1	109.9	114.3
87.5°	28.1	34.8	41.5	48.2	54.9	61.8	68.9	75.9	83.1	90.1	94.9
90°	15.3	23.4	31.6	39.7	47.9	56.1	64.4	72.7	81.0	89.4	95.1
92.5°	37.1	44.3	51.3	58.5	65.6	73.6	82.4	91.3	100.0	108.9	114.8
95°	76.6	82.3	87.9	93.5	99.1	106.4	115.4	124.3	133.4	142.3	148.3
97.5°	118.6	123.5	128.3	133.1	137.9	145.2	154.7	164.3	173.9	183.5	189.1
100°	149.9	154.1	158.3	162.5	166.6	173.3	182.5	191.8	201.0	210.3	216.5
102.5°	183.7	188.4	193.1	197.9	202.6	208.8	216.5	224.1	231.8	239.4	245.6
105°	236.2	240.5	244.8	249.0	253.3	259.2	266.4	273.7	281.0	288.3	293.6
107.5°	294.3	298.2	302.0	305.7	309.6	314.9	321.6	328.4	335.1	341.8	346.5
110°	334.4	337.9	341.4	344.9	348.4	353.3	359.5	365.8	372.0	378.2	382.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	376.1	378.5	381.0	383.5	386.0	390.4	396.6	402.9	409.1	415.3	419.3
115°	436.6	438.9	441.2	443.4	445.7	449.7	455.3	460.9	466.5	472.1	475.4
117.5°	497.3	498.6	500.0	501.3	502.6	505.9	511.2	516.4	521.8	527.0	530.6
120°	535.7	537.4	539.2	540.9	542.6	545.8	550.6	555.4	560.2	565.0	568.3
122.5°	576.7	577.3	578.0	578.7	579.4	582.2	587.2	592.2	597.2	602.2	605.2
125°	632.9	634.0	635.2	636.3	637.5	640.2	644.3	648.5	652.7	656.9	659.6
127.5°	692.1	692.6	693.2	693.7	694.3	696.3	699.8	703.4	706.9	710.4	713.2
130°	728.1	729.0	729.9	730.8	731.7	733.7	737.0	740.2	743.5	746.7	749.2
132.5°	763.4	765.2	766.9	768.7	770.5	772.4	774.5	776.5	778.6	780.7	783.2
135°	820.2	821.4	822.5	823.6	824.8	826.1	827.8	829.4	831.0	832.6	835.2
137.5°	873.7	874.8	875.9	877.0	878.2	879.3	880.5	881.7	882.9	884.0	886.6
140°	907.4	908.4	909.6	910.7	911.8	912.8	913.7	914.6	915.4	916.3	918.9
142.5°	941.8	942.5	943.3	944.1	944.9	945.7	946.6	947.4	948.4	949.3	951.4
145°	992.4	993.1	993.8	994.5	995.1	995.8	996.5	997.2	997.8	998.5	999.5
147.5°	1038.4	1038.8	1039.3	1039.8	1040.3	1040.8	1041.4	1041.9	1042.4	1042.9	1043.8
150°	1069.5	1069.4	1069.1	1068.9	1068.7	1069.0	1069.9	1070.7	1071.7	1072.5	1072.5
152.5°	1095.2	1095.5	1095.8	1096.1	1096.4	1096.7	1097.1	1097.4	1097.9	1098.2	1098.7
155°	1134.6	1134.6	1134.6	1134.6	1134.6	1134.7	1135.0	1135.1	1135.4	1135.6	1136.5
157.5°	1169.8	1169.3	1168.8	1168.4	1167.9	1167.7	1167.9	1168.2	1168.4	1168.6	1169.5
160°	1190.6	1190.0	1189.3	1188.6	1187.9	1187.7	1187.9	1188.2	1188.4	1188.6	1189.5
162.5°	1209.0	1208.6	1208.1	1207.6	1207.0	1206.9	1206.9	1206.9	1206.9	1207.0	1208.1
165°	1233.6	1233.2	1232.8	1232.3	1231.8	1231.7	1232.0	1232.2	1232.4	1232.6	1233.6
167.5°	1254.5	1253.5	1252.7	1251.8	1250.9	1250.4	1250.4	1250.4	1250.4	1250.4	1251.8
170°	1265.7	1264.8	1263.9	1263.0	1262.1	1261.6	1261.6	1261.6	1261.6	1261.6	1263.0
172.5°	1273.7	1272.8	1271.9	1271.0	1270.1	1269.6	1269.6	1269.6	1269.6	1269.6	1271.0
175°	1282.6	1281.8	1280.9	1280.0	1279.1	1278.7	1278.7	1278.7	1278.7	1278.7	1280.0
177.5°	1287.3	1286.6	1285.8	1285.1	1284.4	1284.0	1283.8	1283.7	1283.4	1283.2	1284.4
180°	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1
2.5°	910.0	911.1	912.2	912.7	912.6	912.4	912.2	912.1
5°	907.2	908.8	910.4	911.1	910.9	910.7	910.5	910.3
7.5°	899.7	901.0	902.4	903.0	902.8	902.7	902.4	902.2
10°	892.5	893.9	895.3	895.9	895.7	895.5	895.3	895.1
12.5°	884.0	885.1	886.1	886.4	885.9	885.4	884.8	884.3
15°	868.0	869.2	870.4	870.6	869.8	868.9	868.1	867.4
17.5°	847.6	848.5	849.4	849.6	849.1	848.7	848.2	847.7
20°	831.9	832.5	833.1	833.4	833.4	833.4	833.4	833.4
22.5°	815.8	816.5	817.3	817.4	816.9	816.5	816.0	815.5
25°	790.3	791.1	791.9	791.8	790.7	789.8	788.8	787.8
27.5°	760.6	761.2	761.7	761.9	761.5	761.1	760.8	760.4
30°	740.3	740.7	741.1	741.2	741.0	740.8	740.6	740.4
32.5°	721.0	721.3	721.8	721.9	721.7	721.5	721.3	721.1
35°	689.7	690.3	691.0	691.2	691.2	691.2	691.2	691.2
37.5°	656.9	657.6	658.4	658.8	658.8	658.7	658.6	658.5
40°	634.6	635.5	636.3	636.9	637.2	637.7	638.1	638.4
42.5°	614.2	615.2	616.1	616.6	616.7	616.8	616.9	617.0
45°	581.3	582.7	584.1	584.9	585.1	585.3	585.5	585.7
47.5°	547.3	549.4	551.4	552.7	553.1	553.5	554.0	554.4
50°	524.8	527.0	529.2	530.5	531.2	531.8	532.4	533.0
52.5°	502.2	504.5	506.9	508.3	508.8	509.2	509.6	510.1
55°	466.7	468.9	471.1	472.5	473.3	474.2	474.9	475.7
57.5°	431.5	434.0	436.5	438.1	438.7	439.3	439.9	440.5
60°	407.4	410.4	413.5	415.2	415.8	416.4	417.0	417.6
62.5°	383.1	386.3	389.7	391.7	392.4	393.2	393.9	394.7
65°	346.6	349.7	352.6	354.5	355.3	356.1	356.9	357.7
67.5°	309.3	312.9	316.5	318.8	319.9	320.9	321.9	323.0
70°	283.9	287.7	291.4	293.9	295.1	296.3	297.5	298.7
72.5°	260.2	264.2	268.4	270.9	271.7	272.6	273.5	274.3
75°	224.4	228.3	232.3	234.8	235.7	236.8	237.7	238.8
77.5°	188.5	192.9	197.3	199.8	200.6	201.4	202.2	203.0
80°	167.0	171.4	175.7	178.3	179.2	179.9	180.7	181.5
82.5°	146.6	150.8	155.1	157.9	159.4	160.7	162.2	163.7
85°	118.7	123.1	127.5	130.4	132.1	133.6	135.3	136.8
87.5°	99.7	104.5	109.3	112.4	114.0	115.5	117.0	118.6
90°	100.7	106.4	112.1	115.9	118.0	120.0	122.1	124.2
92.5°	120.6	126.5	132.4	136.3	138.2	140.0	141.9	143.8
95°	154.2	160.1	166.0	169.9	171.8	173.6	175.4	177.3
97.5°	194.8	200.4	206.0	209.7	211.3	212.9	214.5	216.1
100°	222.7	228.9	235.0	238.9	240.6	242.2	243.8	245.5
102.5°	251.8	258.0	264.2	268.2	270.1	271.9	273.7	275.5
105°	298.9	304.2	309.5	313.2	315.3	317.4	319.4	321.4
107.5°	351.0	355.7	360.2	363.2	364.4	365.5	366.7	367.9
110°	387.1	391.5	396.0	398.8	399.9	401.1	402.3	403.5



TEST NUMBER: P333245-935

CATALOG NUMBER: S125DIP-S850D1205U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	423.2	427.1	431.1	433.5	434.5	435.5	436.5	437.5
115°	478.8	482.2	485.5	487.7	488.6	489.7	490.6	491.5
117.5°	534.2	537.7	541.2	543.3	543.7	544.2	544.7	545.1
120°	571.8	575.1	578.5	580.3	580.7	581.0	581.3	581.6
122.5°	608.2	611.3	614.3	616.0	616.6	617.1	617.5	618.0
125°	662.4	665.1	667.9	669.6	670.4	671.1	671.9	672.7
127.5°	715.8	718.6	721.3	723.0	723.7	724.4	725.1	725.8
130°	751.8	754.4	756.9	758.5	759.1	759.6	760.1	760.7
132.5°	785.7	788.3	790.9	792.3	792.5	792.7	792.9	793.2
135°	837.8	840.3	842.9	844.3	844.4	844.5	844.6	844.6
137.5°	889.2	891.8	894.4	895.6	895.3	894.9	894.7	894.3
140°	921.5	924.2	926.8	928.0	927.6	927.3	927.0	926.7
142.5°	953.6	955.6	957.8	958.7	958.4	958.0	957.8	957.4
145°	1000.5	1001.5	1002.5	1003.1	1003.2	1003.3	1003.4	1003.6
147.5°	1044.7	1045.5	1046.4	1046.2	1045.1	1043.9	1042.8	1041.6
150°	1072.5	1072.5	1072.5	1072.5	1072.2	1071.9	1071.7	1071.4
152.5°	1099.2	1099.8	1100.3	1100.2	1099.4	1098.6	1097.9	1097.2
155°	1137.4	1138.2	1139.2	1139.0	1137.9	1136.8	1135.7	1134.6
157.5°	1170.4	1171.3	1172.2	1171.9	1170.4	1169.0	1167.5	1166.1
160°	1190.4	1191.3	1192.1	1192.1	1190.9	1189.8	1188.7	1187.7
162.5°	1209.2	1210.2	1211.3	1211.2	1209.9	1208.6	1207.3	1206.0
165°	1234.4	1235.3	1236.2	1236.0	1234.7	1233.3	1232.0	1230.6
167.5°	1253.1	1254.5	1255.8	1255.8	1254.4	1253.0	1251.6	1250.3
170°	1264.3	1265.7	1267.0	1266.9	1265.3	1263.8	1262.2	1260.7
172.5°	1272.3	1273.7	1275.0	1275.0	1273.6	1272.2	1270.8	1269.5
175°	1281.3	1282.6	1284.0	1283.9	1282.4	1280.8	1279.2	1277.6
177.5°	1285.4	1286.5	1287.5	1287.5	1286.2	1285.0	1283.8	1282.5
180°	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6

(END OF REPORT)