

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: P333248-927

Luminaire Tested: **S125DIP-S850D1205U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333248-927
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-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH 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: 6009.5 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

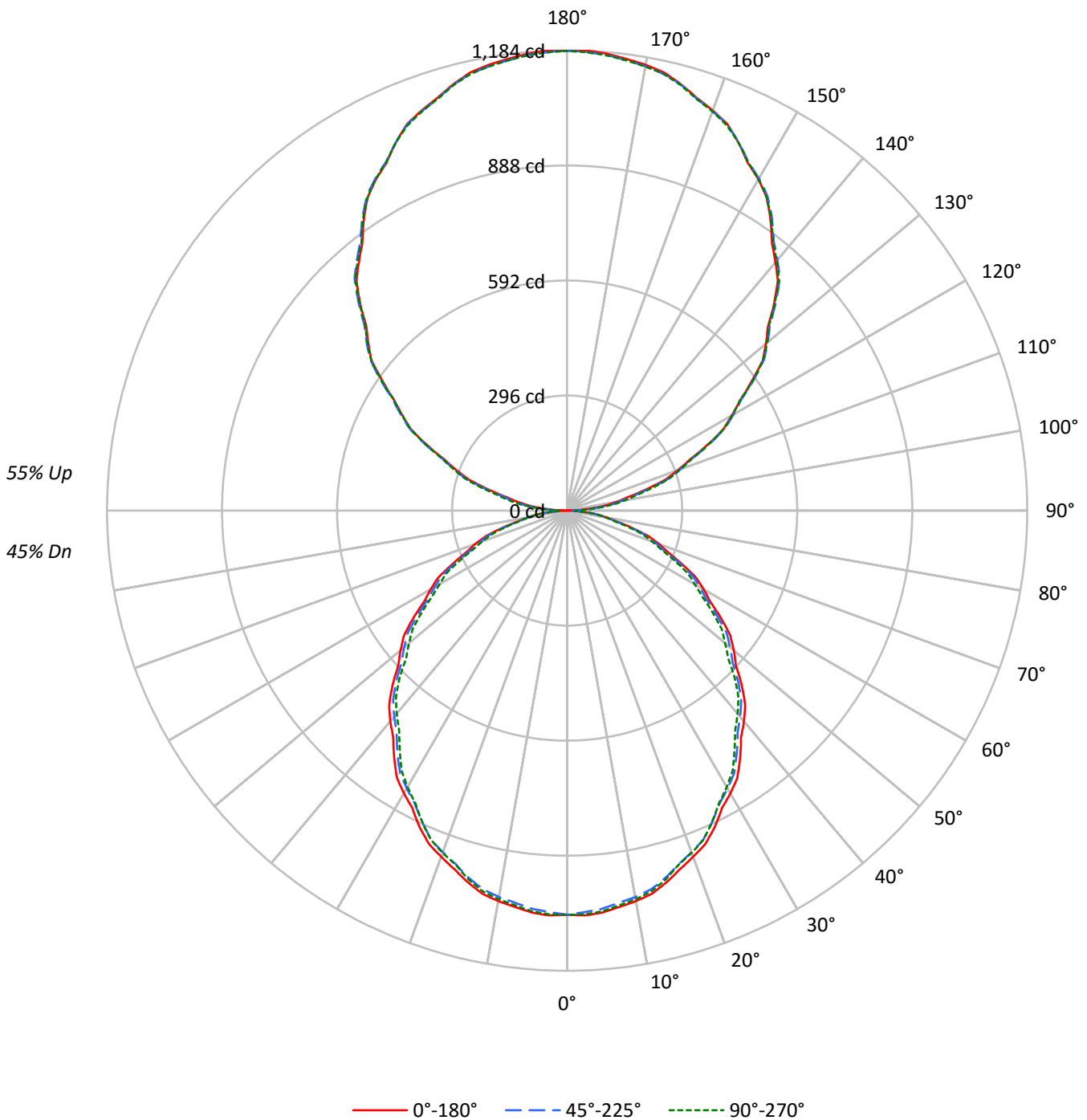
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333248-927

CATALOG NUMBER: S125DIP-S850D1205U927-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333248-927

CATALOG NUMBER: S125DIP-S850D1205U927-4F0-1E-UDD-F1

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	52	52	52	45
1	97	92	88	85	88	85	81	78	71	68	66	58	56	54	45	44	43	38
2	88	81	74	69	80	74	69	64	62	58	55	50	48	45	40	38	37	32
3	80	71	63	58	73	65	59	54	54	50	46	45	41	38	35	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	28	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18	15
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16	14
9	49	37	30	25	45	35	28	23	29	24	20	25	20	18	20	17	15	13
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6716	6716	6716
5°	6731	6667	6710
10°	6690	6620	6658
15°	6618	6540	6568
20°	6514	6429	6441
25°	6402	6297	6291
30°	6264	6154	6123
35°	6117	6000	5916
40°	5966	5833	5751
45°	5802	5681	5569
50°	5621	5497	5332
55°	5447	5290	5141
60°	5239	5079	4899
65°	4991	4828	4664
70°	4755	4538	4381
75°	4332	4190	4045
80°	3857	3794	3704
85°	3349	3416	3231



TEST NUMBER: P333248-927

CATALOG NUMBER: S125DIP-S850D1205U927-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.1	1.6
10°-20°	277.0	4.6
20°-30°	409.0	6.8
30°-40°	477.2	7.9
40°-50°	479.3	8.0
50°-60°	420.7	7.0
60°-70°	313.5	5.2
70°-80°	179.3	3.0
80°-90°	54.7	0.9
90°-100°	79.2	1.3
100°-110°	234.0	3.9
110°-120°	396.3	6.6
120°-130°	521.5	8.7
130°-140°	584.4	9.7
140°-150°	572.7	9.5
150°-160°	481.1	8.0
160°-170°	319.8	5.3
170°-180°	111.9	1.9
0°-30°	784.0	13.0
0°-40°	1261.2	21.0
0°-60°	2161.2	36.0
0°-90°	2708.7	45.1
90°-120°	709.5	11.8
90°-150°	2388.1	39.7
90°-180°	3301.0	54.9
0°-180°	6009.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1040	1040	1040	1040	1040	
5°	1038	1036	1028	1035	1035	98
15°	990	987	978	982	982	279
25°	898	894	884	885	883	413
35°	776	772	761	757	750	485
45°	635	631	622	612	610	489
55°	484	481	470	462	457	432
65°	327	325	316	309	305	324
75°	174	172	168	165	162	185
85°	45	46	46	45	44	51
90°	1	8	15	19	22	6
95°	60	62	71	77	79	64
105°	210	215	220	225	228	224
115°	397	400	402	401	400	392
125°	579	584	586	584	583	518
135°	753	758	760	759	756	580
145°	912	916	919	919	916	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	



TEST NUMBER: P333248-927

CATALOG NUMBER: S125DIP-S850D1205U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9
2.5°	1042.6	1042.1	1041.7	1041.2	1040.8	1039.8	1038.4	1037.0	1035.5	1034.0	1035.5
5°	1038.3	1037.9	1037.5	1037.2	1036.8	1035.7	1033.9	1032.1	1030.2	1028.4	1030.1
7.5°	1028.7	1028.4	1028.0	1027.6	1027.3	1026.1	1024.1	1022.1	1020.1	1018.0	1019.6
10°	1020.2	1019.9	1019.5	1019.1	1018.7	1017.6	1015.5	1013.5	1011.5	1009.5	1011.0
12.5°	1009.6	1009.0	1008.4	1007.7	1007.0	1005.8	1003.9	1002.0	1000.1	998.3	999.5
15°	989.8	989.2	988.6	988.1	987.5	986.3	984.3	982.2	980.2	978.2	979.1
17.5°	966.9	966.1	965.3	964.5	963.7	962.2	960.1	958.1	955.9	953.9	955.0
20°	947.8	947.5	947.1	946.7	946.3	944.9	942.5	940.2	937.8	935.4	936.8
22.5°	928.7	928.0	927.4	926.7	926.1	924.6	922.4	920.1	917.9	915.7	916.6
25°	898.4	897.5	896.6	895.6	894.8	893.1	890.7	888.4	886.0	883.6	884.0
27.5°	863.0	862.5	862.0	861.4	860.9	859.4	856.9	854.4	852.0	849.5	849.6
30°	840.0	839.5	838.9	838.4	837.8	836.1	833.5	830.7	827.9	825.2	824.8
32.5°	815.0	814.1	813.3	812.5	811.7	810.0	807.6	805.1	802.6	800.2	799.5
35°	775.9	775.1	774.4	773.6	772.9	771.3	768.7	766.1	763.6	761.0	760.1
37.5°	735.2	734.3	733.3	732.5	731.5	729.8	727.5	725.0	722.6	720.3	718.8
40°	707.6	706.6	705.8	704.8	703.9	702.2	699.6	697.0	694.5	691.9	690.3
42.5°	677.9	677.2	676.4	675.7	674.9	673.2	670.7	668.0	665.5	663.0	661.5
45°	635.2	634.4	633.7	633.0	632.2	630.7	628.6	626.4	624.2	622.0	619.8
47.5°	589.1	589.1	589.1	589.1	589.2	588.0	585.3	582.7	580.0	577.4	575.1
50°	559.4	558.9	558.3	557.8	557.3	555.9	553.7	551.5	549.3	547.1	544.7
52.5°	529.2	528.8	528.4	528.0	527.6	526.2	523.9	521.5	519.2	516.8	514.8
55°	483.8	483.2	482.7	482.1	481.6	480.0	477.4	474.9	472.3	469.8	468.1
57.5°	435.9	435.6	435.3	435.0	434.7	433.5	431.3	429.2	427.0	424.8	422.7
60°	405.6	404.9	404.2	403.4	402.7	401.3	399.3	397.3	395.3	393.2	391.4
62.5°	374.0	373.4	372.9	372.2	371.7	370.5	368.8	367.1	365.4	363.6	361.7
65°	326.6	326.2	325.9	325.5	325.2	324.0	321.9	320.0	317.9	315.9	314.3
67.5°	280.7	280.0	279.2	278.4	277.7	276.5	275.0	273.5	272.0	270.5	269.1
70°	251.8	250.8	249.9	249.0	248.1	246.8	245.2	243.5	241.9	240.3	239.2
72.5°	220.1	219.5	218.9	218.3	217.7	216.8	215.8	214.7	213.7	212.6	211.4
75°	173.6	173.3	172.9	172.5	172.1	171.5	170.6	169.7	168.7	167.9	167.3
77.5°	130.6	130.5	130.4	130.2	130.1	129.8	129.2	128.7	128.2	127.7	127.4
80°	103.7	103.7	103.7	103.7	103.7	103.5	103.1	102.7	102.3	102.0	101.9
82.5°	79.9	79.7	79.4	79.1	78.8	78.6	78.5	78.5	78.4	78.3	78.0
85°	45.2	45.5	45.6	45.8	45.9	46.1	46.1	46.1	46.1	46.1	45.9
87.5°	18.0	18.3	18.6	18.9	19.3	19.5	19.6	19.8	19.9	20.0	20.3
90°	1.0	2.5	4.2	5.9	7.4	9.0	10.5	11.9	13.3	14.7	15.8
92.5°	22.3	23.4	24.6	25.7	26.9	28.3	30.1	31.8	33.6	35.3	36.7
95°	59.8	60.2	60.7	61.1	61.5	62.7	64.7	66.8	68.8	70.9	72.3
97.5°	99.4	99.6	99.7	99.9	100.1	101.6	104.4	107.2	110.0	112.9	114.2
100°	128.9	128.9	128.9	128.9	128.9	130.2	132.8	135.5	138.2	140.9	142.7
102.5°	160.6	161.4	162.2	163.0	163.8	164.9	166.3	167.6	169.0	170.3	172.3
105°	209.8	210.9	211.9	212.9	214.0	215.1	216.3	217.5	218.8	220.0	221.3
107.5°	264.4	265.4	266.4	267.4	268.5	269.4	270.4	271.3	272.3	273.2	273.9
110°	302.0	302.9	304.0	305.0	306.0	306.8	307.4	308.1	308.7	309.3	309.9



TEST NUMBER: P333248-927

CATALOG NUMBER: S125DIP-S850D1205U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	340.2	340.8	341.3	341.8	342.4	343.0	343.8	344.6	345.3	346.1	346.4
115°	396.7	397.6	398.4	399.2	400.1	400.6	401.1	401.5	401.9	402.3	402.1
117.5°	453.4	453.8	454.2	454.6	455.0	455.3	455.7	456.1	456.4	456.8	456.9
120°	488.8	489.8	490.8	491.9	492.9	493.5	493.7	493.9	494.2	494.3	494.3
122.5°	527.1	527.5	527.8	528.2	528.5	529.0	529.6	530.1	530.6	531.2	531.0
125°	579.0	580.3	581.5	582.7	583.9	584.6	584.9	585.0	585.3	585.5	585.0
127.5°	634.3	634.9	635.6	636.4	637.1	637.5	637.8	638.0	638.3	638.5	638.3
130°	667.4	668.4	669.5	670.5	671.5	672.2	672.6	673.0	673.4	673.8	673.7
132.5°	700.5	702.2	703.9	705.6	707.3	708.1	708.0	707.9	707.8	707.7	707.5
135°	753.0	754.2	755.5	756.7	758.0	758.7	758.8	759.1	759.2	759.5	759.5
137.5°	802.3	803.5	804.7	805.9	807.1	807.9	808.3	808.8	809.3	809.7	809.9
140°	834.0	835.0	836.1	837.1	838.1	838.9	839.6	840.2	840.7	841.4	841.8
142.5°	865.7	866.6	867.4	868.2	869.1	870.0	870.7	871.5	872.3	873.1	873.3
145°	912.3	913.1	913.9	914.7	915.5	916.2	916.9	917.5	918.1	918.7	918.7
147.5°	955.4	955.8	956.2	956.7	957.1	957.6	958.1	958.6	959.1	959.6	960.0
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



TEST NUMBER: P333248-927

CATALOG NUMBER: S125DIP-S850D1205U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9
2.5°	1037.0	1038.4	1039.8	1040.5	1040.4	1040.2	1040.1	1039.9
5°	1031.7	1033.3	1035.0	1035.7	1035.5	1035.4	1035.1	1035.0
7.5°	1021.3	1022.9	1024.5	1025.2	1025.0	1024.8	1024.6	1024.5
10°	1012.4	1013.9	1015.3	1016.0	1015.8	1015.6	1015.4	1015.3
12.5°	1000.6	1001.8	1003.0	1003.5	1003.5	1003.5	1003.5	1003.4
15°	980.1	981.0	981.9	982.3	982.3	982.3	982.3	982.3
17.5°	956.2	957.3	958.4	958.5	957.6	956.7	955.8	954.9
20°	938.0	939.3	940.6	940.7	939.8	938.9	938.0	937.1
22.5°	917.3	918.2	919.1	919.2	918.5	917.9	917.3	916.7
25°	884.3	884.7	885.1	884.9	884.5	883.9	883.4	882.8
27.5°	849.7	849.8	849.9	849.6	849.1	848.5	848.0	847.4
30°	824.5	824.1	823.7	823.3	822.8	822.2	821.7	821.1
32.5°	798.8	798.2	797.6	796.7	795.7	794.7	793.8	792.8
35°	759.2	758.3	757.4	756.2	754.7	753.3	751.8	750.4
37.5°	717.5	716.1	714.8	713.7	712.9	712.0	711.2	710.3
40°	688.6	687.0	685.3	684.2	683.7	683.2	682.6	682.1
42.5°	660.0	658.5	657.0	655.8	655.0	654.1	653.2	652.4
45°	617.6	615.4	613.2	611.8	611.3	610.8	610.2	609.7
47.5°	572.9	570.7	568.5	566.7	565.5	564.2	562.8	561.6
50°	542.3	540.0	537.6	535.8	534.5	533.2	532.0	530.7
52.5°	512.7	510.6	508.5	506.8	505.3	503.9	502.5	501.1
55°	466.5	464.9	463.2	461.8	460.4	459.1	457.9	456.6
57.5°	420.6	418.5	416.4	414.9	414.2	413.6	412.9	412.2
60°	389.6	387.8	386.0	384.4	383.1	381.8	380.6	379.3
62.5°	359.7	357.7	355.8	354.3	353.3	352.3	351.3	350.3
65°	312.7	311.0	309.3	308.2	307.4	306.7	305.9	305.2
67.5°	267.8	266.3	265.0	264.0	263.6	263.2	262.7	262.3
70°	238.1	236.9	235.8	235.0	234.2	233.5	232.7	232.0
72.5°	210.1	208.9	207.6	206.6	205.9	205.2	204.5	203.7
75°	166.8	166.2	165.6	165.0	164.3	163.5	162.8	162.1
77.5°	127.1	126.7	126.4	126.0	125.4	124.9	124.5	123.9
80°	101.6	101.5	101.3	101.0	100.7	100.3	99.9	99.6
82.5°	77.6	77.3	77.0	76.8	76.8	76.7	76.6	76.5
85°	45.7	45.6	45.3	45.1	44.7	44.4	44.0	43.6
87.5°	20.4	20.7	20.9	20.9	20.8	20.5	20.4	20.2
90°	16.8	17.8	18.9	19.6	20.3	20.8	21.5	22.1
92.5°	38.0	39.4	40.7	41.7	42.1	42.5	43.0	43.4
95°	73.8	75.2	76.6	77.6	78.0	78.3	78.7	79.1
97.5°	115.6	116.9	118.3	119.1	119.3	119.5	119.8	120.0
100°	144.5	146.4	148.2	149.3	149.7	150.1	150.6	151.0
102.5°	174.3	176.3	178.3	179.6	180.2	180.8	181.3	181.9
105°	222.4	223.7	224.9	225.9	226.5	227.0	227.7	228.3
107.5°	274.4	275.0	275.7	276.0	275.9	275.9	275.8	275.8
110°	310.5	311.2	311.7	312.0	311.7	311.6	311.3	311.2



TEST NUMBER: P333248-927

CATALOG NUMBER: S125DIP-S850D1205U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	346.7	347.0	347.3	347.2	346.9	346.5	346.1	345.8
115°	401.9	401.6	401.5	401.2	401.1	400.8	400.6	400.4
117.5°	457.1	457.2	457.4	457.1	456.3	455.5	454.6	453.8
120°	494.3	494.3	494.3	493.9	493.1	492.3	491.5	490.7
122.5°	530.8	530.7	530.5	530.1	529.4	528.8	528.1	527.5
125°	584.6	584.2	583.8	583.5	583.4	583.1	582.9	582.7
127.5°	638.1	637.9	637.7	637.4	637.0	636.5	636.1	635.7
130°	673.4	673.2	673.0	672.7	672.3	671.9	671.5	671.1
132.5°	707.3	707.1	706.9	706.5	705.9	705.4	704.8	704.3
135°	759.5	759.5	759.5	759.1	758.2	757.4	756.6	755.7
137.5°	810.2	810.5	810.7	810.3	809.3	808.3	807.2	806.2
140°	842.2	842.6	843.0	842.7	841.7	840.7	839.6	838.6
142.5°	873.5	873.8	874.0	873.6	872.6	871.6	870.6	869.6
145°	918.7	918.7	918.7	918.4	917.8	917.2	916.6	915.9
147.5°	960.6	961.1	961.6	961.1	959.7	958.3	957.0	955.5
150°	986.8	986.8	986.8	986.7	986.2	985.8	985.4	985.0
152.5°	1011.4	1011.9	1012.3	1012.3	1011.5	1010.7	1010.0	1009.3
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)