

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: P333670

Luminaire Tested: **S125RDIW-S610D1050U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333670
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: S125RDIW-S610D1050U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1050 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6569.0 lumens
Efficiency: N/A
Efficacy: 145.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

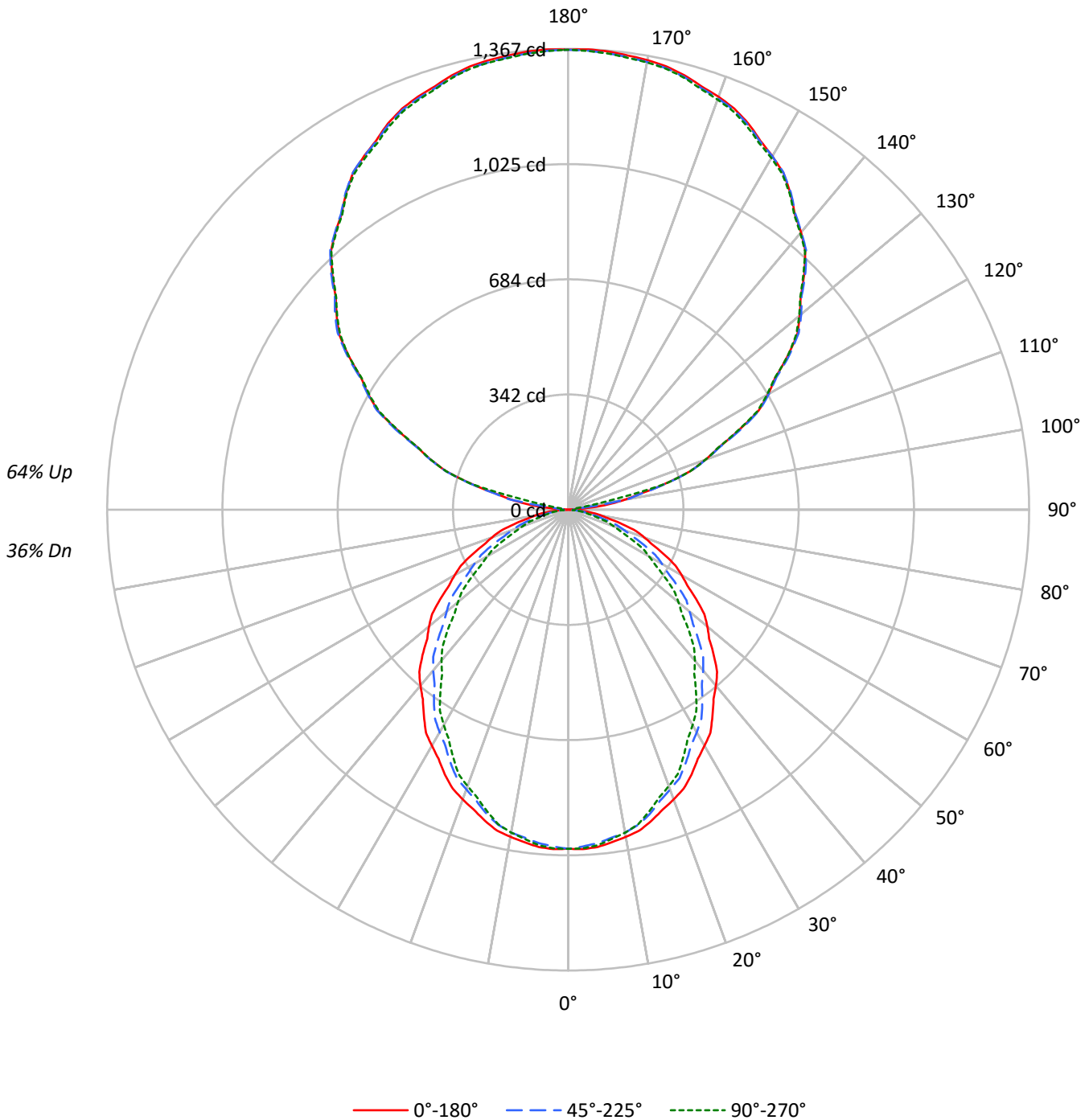
Input Watts (W): 45.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43	36
1	95	91	87	84	86	82	79	76	66	64	62	52	51	49	39	38	37	31
2	86	79	73	68	78	72	67	63	58	55	52	46	43	41	34	33	31	26
3	79	70	63	57	71	63	57	53	52	47	44	41	38	35	30	28	27	22
4	72	62	54	48	65	56	50	45	46	41	37	36	33	30	27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17
6	61	49	41	36	55	45	38	33	37	32	28	29	26	23	22	20	18	15
7	56	44	37	31	51	41	34	29	33	28	25	27	23	20	20	18	16	13
8	52	40	33	28	47	37	30	26	30	25	22	24	21	18	19	16	14	12
9	49	37	29	25	44	34	27	23	28	23	19	22	19	16	17	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6497	6497	6497
5°	6512	6438	6477
10°	6462	6378	6378
15°	6386	6248	6197
20°	6287	6068	5994
25°	6173	5890	5761
30°	6029	5683	5502
35°	5882	5469	5211
40°	5746	5246	4926
45°	5580	4996	4615
50°	5413	4725	4290
55°	5219	4466	3944
60°	5025	4151	3573
65°	4795	3785	3147
70°	4534	3329	2712
75°	4172	2805	2256
80°	3675	2205	1893
85°	3097	1801	1690



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.6	1.4
10°-20°	264.3	4.0
20°-30°	383.3	5.8
30°-40°	436.9	6.7
40°-50°	425.9	6.5
50°-60°	358.5	5.5
60°-70°	251.3	3.8
70°-80°	129.2	2.0
80°-90°	35.5	0.5
90°-100°	49.6	0.8
100°-110°	305.6	4.7
110°-120°	554.2	8.4
120°-130°	711.2	10.8
130°-140°	765.0	11.6
140°-150°	718.0	10.9
150°-160°	580.8	8.8
160°-170°	375.7	5.7
170°-180°	129.6	2.0
0°-30°	742.3	11.3
0°-40°	1179.2	18.0
0°-60°	1963.5	29.9
0°-90°	2379.4	36.2
90°-120°	909.3	13.8
90°-150°	3103.6	47.2
90°-180°	4190.0	63.8
0°-180°	6569.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	1004	1001	993	1000	999	95
15°	955	950	934	933	927	269
25°	866	854	827	817	808	398
35°	746	727	694	672	661	467
45°	611	588	547	518	505	471
55°	464	438	397	364	350	414
65°	314	287	248	218	206	311
75°	167	144	112	96	90	177
85°	42	29	24	24	23	47
90°	1	9	16	21	24	4
95°	58	53	16	21	21	73
105°	297	301	301	301	300	315
115°	558	563	564	560	554	553
125°	794	801	801	797	794	709
135°	990	996	994	992	986	763
145°	1148	1150	1150	1151	1145	718
155°	1264	1259	1260	1263	1255	582
165°	1334	1328	1329	1334	1327	377
175°	1364	1359	1359	1366	1358	130
180°	1364	1364	1364	1364	1364	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0
2.5°	1007.8	1007.4	1007.0	1006.6	1006.2	1005.3	1003.9	1002.6	1001.2	999.9	1001.2
5°	1004.4	1003.8	1003.1	1002.4	1001.7	1000.5	998.6	996.8	994.9	993.0	994.7
7.5°	994.6	993.9	993.3	992.6	992.0	990.6	988.3	986.1	983.9	981.6	982.8
10°	985.4	984.9	984.4	983.9	983.4	982.0	979.6	977.3	974.9	972.5	973.0
12.5°	975.1	974.5	973.8	973.2	972.5	970.6	967.5	964.3	961.1	957.9	958.3
15°	955.1	954.0	953.0	952.0	951.0	948.7	945.2	941.6	938.1	934.5	934.4
17.5°	932.4	930.9	929.3	927.8	926.2	923.2	918.7	914.3	909.8	905.4	904.5
20°	914.8	913.1	911.4	909.7	908.0	904.5	899.1	893.7	888.3	882.9	882.0
22.5°	895.3	893.6	892.0	890.3	888.6	884.9	879.2	873.6	867.9	862.2	860.6
25°	866.2	863.6	861.1	858.6	856.0	851.6	845.4	839.1	832.9	826.6	824.5
27.5°	832.7	829.7	826.6	823.5	820.4	815.6	808.9	802.2	795.5	788.8	785.7
30°	808.4	805.2	802.0	798.8	795.6	790.4	783.3	776.3	769.2	762.1	758.2
32.5°	784.7	781.0	777.2	773.5	769.7	764.2	757.0	749.8	742.5	735.3	731.0
35°	746.1	742.1	738.0	734.0	729.9	724.1	716.5	708.9	701.3	693.7	688.8
37.5°	708.3	703.3	698.4	693.5	688.6	682.2	674.3	666.5	658.7	650.8	645.0
40°	681.5	676.5	671.4	666.3	661.3	654.7	646.6	638.5	630.4	622.3	615.9
42.5°	653.6	648.4	643.2	638.0	632.8	626.0	617.6	609.2	600.9	592.5	586.3
45°	610.9	606.0	601.1	596.2	591.3	584.2	574.9	565.6	556.3	547.0	540.3
47.5°	566.7	561.5	556.3	551.2	546.0	538.7	529.4	520.0	510.7	501.3	494.4
50°	538.7	533.1	527.5	522.0	516.4	508.8	499.2	489.6	479.9	470.3	463.2
52.5°	508.3	502.6	496.9	491.2	485.5	478.1	469.0	459.9	450.8	441.7	434.1
55°	463.5	458.1	452.7	447.3	441.9	434.4	425.0	415.5	406.1	396.6	389.0
57.5°	418.2	412.4	406.6	400.9	395.1	387.6	378.5	369.4	360.3	351.2	343.7
60°	389.0	383.1	377.2	371.3	365.4	357.9	348.7	339.6	330.5	321.4	314.0
62.5°	358.0	352.4	346.7	341.1	335.5	328.0	318.8	309.5	300.3	291.0	284.1
65°	313.8	308.1	302.3	296.6	290.8	283.5	274.5	265.6	256.6	247.7	240.9
67.5°	269.9	264.1	258.4	252.7	246.9	239.8	231.2	222.6	214.0	205.4	199.3
70°	240.1	234.4	228.6	222.9	217.1	210.0	201.6	193.2	184.7	176.3	171.0
72.5°	210.9	205.3	199.7	194.1	188.5	181.7	173.8	165.9	158.0	150.1	145.3
75°	167.2	162.1	157.0	152.0	146.9	140.8	133.7	126.6	119.5	112.4	108.7
77.5°	123.7	119.6	115.6	111.5	107.5	102.6	96.9	91.3	85.6	79.9	77.3
80°	98.8	94.7	90.7	86.6	82.6	78.2	73.4	68.7	64.0	59.3	57.7
82.5°	74.5	70.8	67.2	63.5	59.9	56.4	53.2	49.9	46.7	43.5	42.8
85°	41.8	38.7	35.7	32.7	29.6	27.7	26.8	26.0	25.2	24.3	24.1
87.5°	14.2	13.6	13.0	12.4	11.8	11.6	11.8	12.0	12.2	12.4	12.6
90°	1.0	2.8	4.6	6.4	8.2	9.9	11.5	13.0	14.6	16.2	17.3
92.5°	15.6	14.3	13.1	11.8	10.5	10.6	12.0	13.4	14.8	16.2	17.3
95°	57.6	57.0	56.3	55.6	55.0	50.3	41.8	33.3	24.7	16.2	17.3
97.5°	120.4	121.6	122.8	124.0	125.2	117.4	100.5	83.6	66.7	49.8	43.4
100°	168.9	169.6	170.2	170.9	171.6	172.4	173.3	174.2	175.1	176.0	142.5
102.5°	218.3	219.1	220.0	220.8	221.7	222.4	222.9	223.4	224.0	224.5	218.2
105°	297.3	298.2	299.1	300.0	300.9	301.4	301.4	301.4	301.4	301.4	301.4
107.5°	379.5	379.5	379.5	379.5	379.5	379.7	380.1	380.6	381.0	381.5	381.5
110°	432.9	432.9	432.9	432.9	432.9	433.1	433.5	434.0	434.4	434.9	434.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	483.0	483.6	484.1	484.6	485.2	485.6	485.9	486.1	486.4	486.7	485.8
115°	558.3	559.4	560.5	561.6	562.8	563.4	563.7	563.9	564.1	564.3	563.4
117.5°	636.2	636.1	636.1	636.0	636.0	636.4	637.2	638.1	638.9	639.8	638.6
120°	684.7	684.5	684.2	684.0	683.8	684.0	684.7	685.4	686.0	686.7	686.3
122.5°	727.6	728.4	729.3	730.1	731.0	731.6	731.9	732.2	732.5	732.8	732.4
125°	793.9	795.5	797.1	798.6	800.2	801.0	801.0	801.0	801.0	801.0	800.1
127.5°	857.2	858.4	859.5	860.6	861.7	862.2	862.1	862.0	861.8	861.7	861.2
130°	896.1	897.2	898.3	899.4	900.6	901.2	901.5	901.7	901.9	902.1	901.5
132.5°	934.9	936.2	937.5	938.8	940.1	940.5	940.0	939.5	939.0	938.6	938.4
135°	990.1	991.5	992.8	994.2	995.5	996.0	995.5	995.1	994.6	994.2	993.7
137.5°	1040.9	1042.1	1043.2	1044.4	1045.6	1046.0	1045.6	1045.2	1044.7	1044.3	1044.4
140°	1074.1	1074.5	1075.0	1075.4	1075.9	1076.0	1075.8	1075.5	1075.3	1075.1	1075.5
142.5°	1104.0	1104.3	1104.6	1104.8	1105.1	1105.4	1105.7	1106.0	1106.3	1106.6	1106.7
145°	1147.9	1148.4	1148.8	1149.3	1149.7	1149.9	1149.9	1149.9	1149.9	1149.9	1150.2
147.5°	1186.3	1186.3	1186.2	1186.1	1186.0	1186.1	1186.3	1186.6	1186.9	1187.1	1187.4
150°	1210.6	1210.2	1209.7	1209.3	1208.8	1208.8	1209.3	1209.7	1210.2	1210.6	1211.1
152.5°	1234.1	1233.1	1232.1	1231.1	1230.1	1229.9	1230.3	1230.8	1231.2	1231.6	1232.1
155°	1264.2	1262.9	1261.5	1260.2	1258.8	1258.4	1258.8	1259.3	1259.7	1260.2	1260.8
157.5°	1287.5	1286.7	1285.9	1285.1	1284.2	1283.9	1283.9	1283.9	1284.0	1284.0	1284.8
160°	1303.7	1302.3	1301.0	1299.6	1298.3	1297.7	1297.9	1298.2	1298.4	1298.6	1299.5
162.5°	1316.6	1315.3	1313.9	1312.6	1311.2	1310.6	1310.9	1311.1	1311.3	1311.5	1312.8
165°	1334.0	1332.7	1331.3	1330.0	1328.6	1328.0	1328.3	1328.5	1328.7	1328.9	1330.3
167.5°	1346.9	1345.6	1344.2	1342.8	1341.4	1340.8	1341.0	1341.2	1341.5	1341.7	1343.3
170°	1354.2	1352.7	1351.1	1349.5	1347.9	1347.3	1347.5	1347.7	1347.9	1348.2	1350.0
172.5°	1359.1	1357.5	1355.9	1354.4	1352.8	1352.2	1352.6	1353.0	1353.4	1353.8	1355.4
175°	1364.3	1363.0	1361.6	1360.3	1358.9	1358.4	1358.6	1358.8	1359.1	1359.3	1361.1
177.5°	1366.8	1365.7	1364.6	1363.5	1362.5	1362.0	1362.2	1362.4	1362.5	1362.7	1364.0
180°	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0
2.5°	1002.6	1003.9	1005.3	1005.9	1005.8	1005.6	1005.5	1005.4
5°	996.4	998.1	999.8	1000.5	1000.1	999.8	999.5	999.1
7.5°	984.0	985.2	986.4	986.8	986.4	986.0	985.7	985.3
10°	973.5	974.0	974.6	974.6	974.0	973.5	973.0	972.5
12.5°	958.7	959.1	959.4	959.2	958.4	957.7	956.9	956.1
15°	934.2	934.0	933.9	933.0	931.5	930.0	928.5	926.9
17.5°	903.7	902.8	902.0	900.9	899.7	898.4	897.2	895.9
20°	881.2	880.3	879.5	878.3	876.8	875.3	873.8	872.2
22.5°	858.9	857.2	855.6	854.1	852.9	851.6	850.4	849.1
25°	822.3	820.1	817.9	815.8	814.0	812.1	810.3	808.4
27.5°	782.7	779.6	776.5	774.1	772.3	770.5	768.7	766.9
30°	754.3	750.4	746.5	743.8	742.3	740.8	739.3	737.8
32.5°	726.7	722.5	718.2	715.1	713.1	711.2	709.3	707.4
35°	683.9	679.0	674.1	670.5	668.1	665.7	663.4	661.0
37.5°	639.1	633.2	627.3	623.2	620.9	618.7	616.4	614.1
40°	609.4	603.0	596.6	592.4	590.4	588.3	586.3	584.3
42.5°	580.2	574.0	567.9	563.3	560.4	557.4	554.4	551.5
45°	533.5	526.8	520.0	515.4	512.9	510.3	507.8	505.3
47.5°	487.4	480.4	473.5	468.6	465.8	463.0	460.2	457.4
50°	456.1	449.0	441.9	437.1	434.6	432.1	429.5	427.0
52.5°	426.5	418.8	411.2	406.1	403.6	401.1	398.5	396.0
55°	381.4	373.8	366.2	361.1	358.4	355.7	353.0	350.3
57.5°	336.3	328.9	321.5	316.5	314.1	311.7	309.4	307.0
60°	306.5	299.1	291.7	286.7	284.2	281.6	279.1	276.6
62.5°	277.2	270.3	263.4	258.7	256.2	253.7	251.1	248.6
65°	234.2	227.4	220.7	216.0	213.5	211.0	208.4	205.9
67.5°	193.1	186.9	180.7	176.6	174.6	172.6	170.5	168.5
70°	165.8	160.6	155.3	151.7	149.7	147.7	145.6	143.6
72.5°	140.5	135.6	130.8	127.7	126.4	125.0	123.7	122.3
75°	105.0	101.3	97.6	95.1	94.0	92.8	91.6	90.4
77.5°	74.7	72.1	69.5	67.8	66.9	66.0	65.2	64.3
80°	56.2	54.7	53.2	52.3	51.9	51.6	51.2	50.9
82.5°	42.0	41.3	40.6	40.2	40.0	39.8	39.6	39.4
85°	24.0	23.8	23.6	23.5	23.3	23.1	23.0	22.8
87.5°	12.8	13.0	13.3	13.4	13.4	13.4	13.4	13.4
90°	18.4	19.6	20.7	21.6	22.3	22.9	23.6	24.3
92.5°	18.4	19.6	20.7	21.4	21.7	22.0	22.3	22.7
95°	18.4	19.6	20.7	21.2	21.2	21.2	21.2	21.2
97.5°	37.1	30.7	24.4	21.2	21.2	21.2	21.2	21.2
100°	109.0	75.5	42.0	24.8	23.9	23.0	22.1	21.2
102.5°	211.8	205.5	199.2	188.4	173.1	157.8	142.5	127.2
105°	301.4	301.4	301.4	301.3	301.1	300.8	300.6	300.4
107.5°	381.6	381.6	381.7	381.4	380.7	380.0	379.3	378.7
110°	433.5	432.9	432.2	432.0	432.2	432.4	432.6	432.9



TEST NUMBER: P333670

CATALOG NUMBER: S125RDIW-S610D1050U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	485.0	484.1	483.3	482.7	482.4	482.0	481.7	481.4
115°	562.5	561.6	560.7	559.6	558.3	556.9	555.6	554.2
117.5°	637.5	636.3	635.1	634.2	633.7	633.1	632.5	631.9
120°	685.8	685.4	684.9	684.1	683.0	681.9	680.8	679.6
122.5°	731.9	731.5	731.0	730.2	728.9	727.6	726.3	725.0
125°	799.2	798.3	797.4	796.6	796.0	795.3	794.6	793.9
127.5°	860.7	860.2	859.7	858.6	857.0	855.3	853.6	852.0
130°	900.8	900.1	899.4	898.5	897.4	896.3	895.2	894.1
132.5°	938.3	938.1	938.0	937.4	936.3	935.1	934.0	932.9
135°	993.3	992.8	992.4	991.5	990.1	988.8	987.4	986.1
137.5°	1044.5	1044.6	1044.7	1044.2	1043.0	1041.8	1040.7	1039.5
140°	1076.0	1076.4	1076.9	1076.4	1075.1	1073.7	1072.4	1071.0
142.5°	1106.8	1106.9	1107.0	1106.4	1105.0	1103.7	1102.3	1101.0
145°	1150.4	1150.6	1150.8	1150.3	1148.9	1147.6	1146.2	1144.9
147.5°	1187.7	1188.0	1188.2	1187.6	1185.9	1184.3	1182.7	1181.1
150°	1211.5	1212.0	1212.4	1211.7	1209.9	1208.1	1206.3	1204.5
152.5°	1232.5	1233.0	1233.4	1232.9	1231.2	1229.6	1228.0	1226.4
155°	1261.5	1262.2	1262.9	1262.3	1260.5	1258.7	1256.9	1255.1
157.5°	1285.5	1286.2	1286.9	1286.4	1284.6	1282.8	1281.0	1279.2
160°	1300.4	1301.3	1302.2	1301.7	1300.0	1298.2	1296.4	1294.6
162.5°	1314.1	1315.3	1316.6	1316.2	1314.2	1312.3	1310.3	1308.3
165°	1331.6	1333.0	1334.3	1334.1	1332.3	1330.5	1328.7	1326.9
167.5°	1344.9	1346.5	1348.2	1348.0	1345.9	1343.9	1341.9	1339.9
170°	1351.8	1353.6	1355.4	1355.2	1353.2	1351.2	1349.2	1347.1
172.5°	1357.1	1358.7	1360.3	1360.1	1358.1	1356.0	1354.0	1352.0
175°	1362.9	1364.7	1366.5	1366.4	1364.3	1362.3	1360.3	1358.3
177.5°	1365.2	1366.5	1367.8	1367.7	1366.2	1364.8	1363.4	1361.9
180°	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3

(END OF REPORT)