

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: P333671

Luminaire Tested: **S125RDIW-S610D1050U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333671
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: S125RDIW-S610D1050U835-4F0-1E-UDD-F1
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, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6012.6 lumens
Efficiency: N/A
Efficacy: 133.0 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

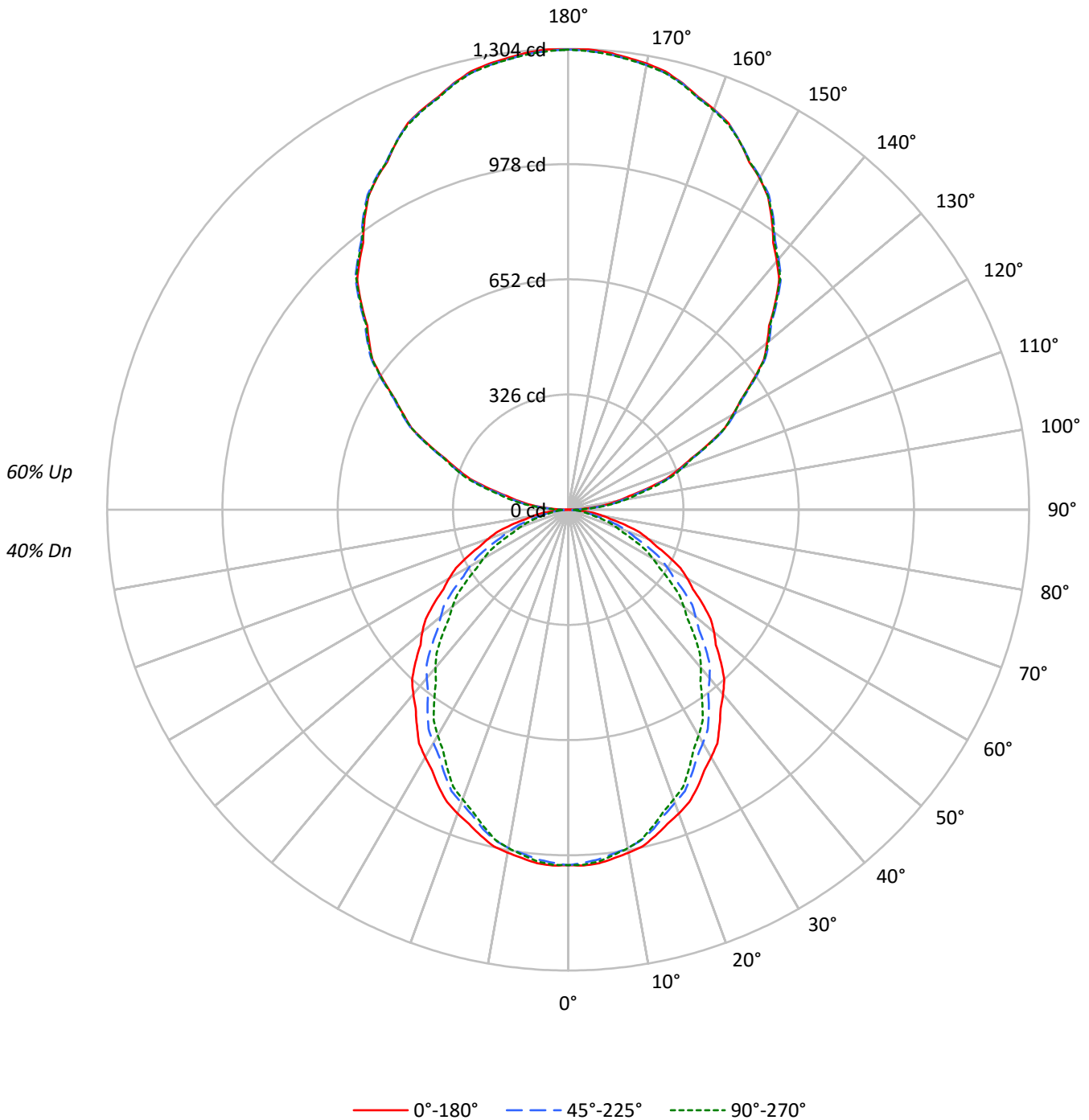
Input Watts (W): 45.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	96	91	88	84	87	83	80	77	68	66	64	54	53	51	41	40	40	34
2	87	80	74	69	79	73	68	64	60	56	53	48	45	43	37	35	34	28
3	80	70	63	58	72	64	58	53	53	48	45	42	39	37	33	31	29	24
4	73	62	55	49	66	57	50	45	47	42	38	38	34	31	29	27	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	26	24	22	18
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16
7	57	45	37	32	52	41	34	30	34	29	25	28	24	21	22	19	17	14
8	53	41	33	28	48	38	31	26	31	26	23	26	22	19	20	17	15	13
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	26	22	18	22	18	15	17	15	13	11

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	1.6
10°-20°	264.3	4.4
20°-30°	383.3	6.4
30°-40°	436.9	7.3
40°-50°	425.9	7.1
50°-60°	358.5	6.0
60°-70°	251.3	4.2
70°-80°	129.2	2.1
80°-90°	35.5	0.6
90°-100°	87.2	1.5
100°-110°	257.5	4.3
110°-120°	436.2	7.3
120°-130°	574.0	9.5
130°-140°	643.2	10.7
140°-150°	630.4	10.5
150°-160°	529.5	8.8
160°-170°	352.0	5.9
170°-180°	123.2	2.0
0°-30°	742.3	12.3
0°-40°	1179.2	19.6
0°-60°	1963.5	32.7
0°-90°	2379.4	39.6
90°-120°	780.9	13.0
90°-150°	2628.6	43.7
90°-180°	3633.0	60.4
0°-180°	6012.6	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	6
95°	66	68	78	85	87	70
105°	231	236	242	248	251	247
115°	437	441	443	442	441	432
125°	637	643	644	642	641	571
135°	829	835	836	836	832	639
145°	1004	1008	1011	1011	1008	627
155°	1149	1149	1150	1154	1149	529
165°	1249	1247	1248	1252	1246	352
175°	1299	1295	1295	1300	1294	123
180°	1302	1302	1302	1302	1302	



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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	13.1	14.6	16.2	17.3
92.5°	24.5	25.8	27.0	28.3	29.6	31.2	33.1	35.0	37.0	38.9	40.4
95°	65.9	66.3	66.8	67.2	67.7	69.0	71.3	73.5	75.8	78.0	79.6
97.5°	109.4	109.6	109.8	110.0	110.2	111.8	114.9	118.0	121.1	124.2	125.7
100°	141.9	141.9	141.9	141.9	141.9	143.3	146.2	149.2	152.1	155.0	157.1
102.5°	176.7	177.6	178.5	179.4	180.3	181.5	183.0	184.5	186.0	187.5	189.7
105°	231.0	232.1	233.3	234.4	235.5	236.8	238.1	239.5	240.8	242.2	243.5
107.5°	291.0	292.1	293.3	294.4	295.5	296.6	297.6	298.7	299.7	300.7	301.4
110°	332.3	333.5	334.6	335.7	336.9	337.8	338.4	339.1	339.8	340.5	341.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	374.5	375.1	375.7	376.3	376.8	377.6	378.4	379.3	380.1	381.0	381.3
115°	436.7	437.6	438.5	439.4	440.3	441.0	441.4	441.9	442.3	442.8	442.6
117.5°	499.1	499.5	499.9	500.3	500.8	501.2	501.6	502.0	502.4	502.8	503.0
120°	538.0	539.2	540.3	541.4	542.5	543.2	543.4	543.7	543.9	544.1	544.1
122.5°	580.2	580.6	581.0	581.4	581.8	582.3	582.9	583.5	584.1	584.7	584.5
125°	637.3	638.7	640.0	641.4	642.7	643.5	643.8	644.0	644.2	644.4	644.0
127.5°	698.1	698.9	699.7	700.4	701.2	701.7	702.0	702.3	702.5	702.8	702.6
130°	734.6	735.7	736.9	738.0	739.1	739.9	740.4	740.8	741.3	741.7	741.5
132.5°	771.1	772.9	774.8	776.6	778.5	779.4	779.3	779.2	779.1	779.0	778.8
135°	828.8	830.2	831.5	832.9	834.3	835.0	835.3	835.5	835.7	835.9	835.9
137.5°	883.2	884.5	885.8	887.1	888.4	889.3	889.8	890.3	890.8	891.3	891.5
140°	918.0	919.1	920.3	921.4	922.5	923.4	924.1	924.8	925.4	926.1	926.6
142.5°	952.9	953.8	954.8	955.7	956.7	957.6	958.4	959.3	960.1	961.0	961.2
145°	1004.1	1005.0	1005.9	1006.8	1007.7	1008.5	1009.2	1009.9	1010.6	1011.2	1011.2
147.5°	1051.6	1052.1	1052.6	1053.0	1053.5	1054.1	1054.6	1055.1	1055.7	1056.2	1056.8
150°	1083.2	1083.0	1082.7	1082.5	1082.3	1082.6	1083.5	1084.4	1085.3	1086.2	1086.2
152.5°	1109.1	1109.4	1109.7	1110.1	1110.4	1110.7	1111.1	1111.4	1111.8	1112.2	1112.7
155°	1149.0	1149.0	1149.0	1149.0	1149.0	1149.1	1149.4	1149.6	1149.8	1150.1	1151.0
157.5°	1184.7	1184.2	1183.7	1183.2	1182.7	1182.6	1182.8	1183.0	1183.3	1183.5	1184.4
160°	1205.8	1205.1	1204.4	1203.8	1203.1	1202.9	1203.1	1203.3	1203.5	1203.8	1204.7
162.5°	1224.4	1223.9	1223.4	1222.9	1222.4	1222.2	1222.3	1222.3	1222.4	1222.4	1223.5
165°	1249.4	1248.9	1248.4	1248.0	1247.5	1247.4	1247.7	1247.9	1248.1	1248.3	1249.2
167.5°	1270.4	1269.5	1268.6	1267.7	1266.8	1266.4	1266.4	1266.4	1266.4	1266.4	1267.7
170°	1281.8	1280.9	1280.0	1279.1	1278.2	1277.7	1277.7	1277.7	1277.7	1277.7	1279.1
172.5°	1289.9	1289.0	1288.1	1287.2	1286.3	1285.8	1285.8	1285.8	1285.8	1285.8	1287.2
175°	1299.0	1298.1	1297.2	1296.3	1295.4	1294.9	1294.9	1294.9	1294.9	1294.9	1296.3
177.5°	1303.7	1302.9	1302.2	1301.5	1300.8	1300.3	1300.1	1300.0	1299.8	1299.6	1300.7
180°	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0



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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°	18.5	19.6	20.7	21.6	22.3	23.0	23.6	24.3
92.5°	41.9	43.4	44.9	45.8	46.3	46.8	47.3	47.8
95°	81.2	82.7	84.3	85.3	85.8	86.2	86.7	87.1
97.5°	127.2	128.7	130.2	131.0	131.3	131.6	131.9	132.1
100°	159.1	161.1	163.1	164.4	164.8	165.3	165.7	166.2
102.5°	191.9	194.1	196.3	197.7	198.3	199.0	199.6	200.2
105°	244.9	246.2	247.6	248.6	249.3	249.9	250.6	251.3
107.5°	302.1	302.8	303.4	303.8	303.7	303.7	303.6	303.6
110°	341.8	342.5	343.2	343.4	343.2	342.9	342.7	342.5



TEST NUMBER: P333671

CATALOG NUMBER: S125RDIW-S610D1050U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	381.6	381.9	382.2	382.2	381.8	381.4	381.0	380.6
115°	442.3	442.1	441.9	441.7	441.4	441.2	441.0	440.8
117.5°	503.1	503.3	503.5	503.1	502.2	501.3	500.4	499.5
120°	544.1	544.1	544.1	543.7	542.8	541.9	541.0	540.1
122.5°	584.3	584.1	583.9	583.5	582.8	582.0	581.3	580.6
125°	643.5	643.1	642.6	642.3	642.1	641.8	641.6	641.4
127.5°	702.3	702.1	701.9	701.6	701.1	700.7	700.2	699.8
130°	741.3	741.0	740.8	740.5	740.0	739.6	739.1	738.7
132.5°	778.5	778.3	778.1	777.7	777.0	776.4	775.8	775.1
135°	835.9	835.9	835.9	835.5	834.6	833.7	832.8	831.9
137.5°	891.8	892.1	892.3	891.9	890.8	889.7	888.5	887.4
140°	927.0	927.5	927.9	927.6	926.5	925.3	924.2	923.1
142.5°	961.5	961.8	962.1	961.6	960.5	959.4	958.3	957.1
145°	1011.2	1011.2	1011.2	1010.9	1010.2	1009.5	1008.9	1008.2
147.5°	1057.3	1057.8	1058.4	1057.9	1056.4	1054.8	1053.3	1051.8
150°	1086.2	1086.2	1086.2	1086.0	1085.5	1085.1	1084.6	1084.2
152.5°	1113.2	1113.8	1114.3	1114.2	1113.4	1112.6	1111.7	1110.9
155°	1151.9	1152.8	1153.7	1153.5	1152.4	1151.3	1150.2	1149.0
157.5°	1185.3	1186.2	1187.1	1186.8	1185.3	1183.8	1182.3	1180.9
160°	1205.6	1206.5	1207.4	1207.2	1206.1	1205.0	1203.9	1202.7
162.5°	1224.6	1225.6	1226.7	1226.6	1225.3	1224.0	1222.7	1221.4
165°	1250.1	1251.0	1251.9	1251.7	1250.4	1249.0	1247.7	1246.3
167.5°	1269.1	1270.4	1271.8	1271.8	1270.4	1269.0	1267.6	1266.2
170°	1280.4	1281.8	1283.1	1283.0	1281.4	1279.9	1278.3	1276.7
172.5°	1288.5	1289.9	1291.2	1291.2	1289.8	1288.4	1287.0	1285.6
175°	1297.6	1299.0	1300.4	1300.2	1298.7	1297.1	1295.5	1293.9
177.5°	1301.8	1302.9	1303.9	1303.8	1302.6	1301.3	1300.1	1298.8
180°	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0

(END OF REPORT)