

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: P333670-930

Luminaire Tested: **S125RDIW-S610D1050U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333670-930
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-S610D1050U930-4F0-1E-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: 5355.7 lumens
Efficiency: N/A
Efficacy: 118.5 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

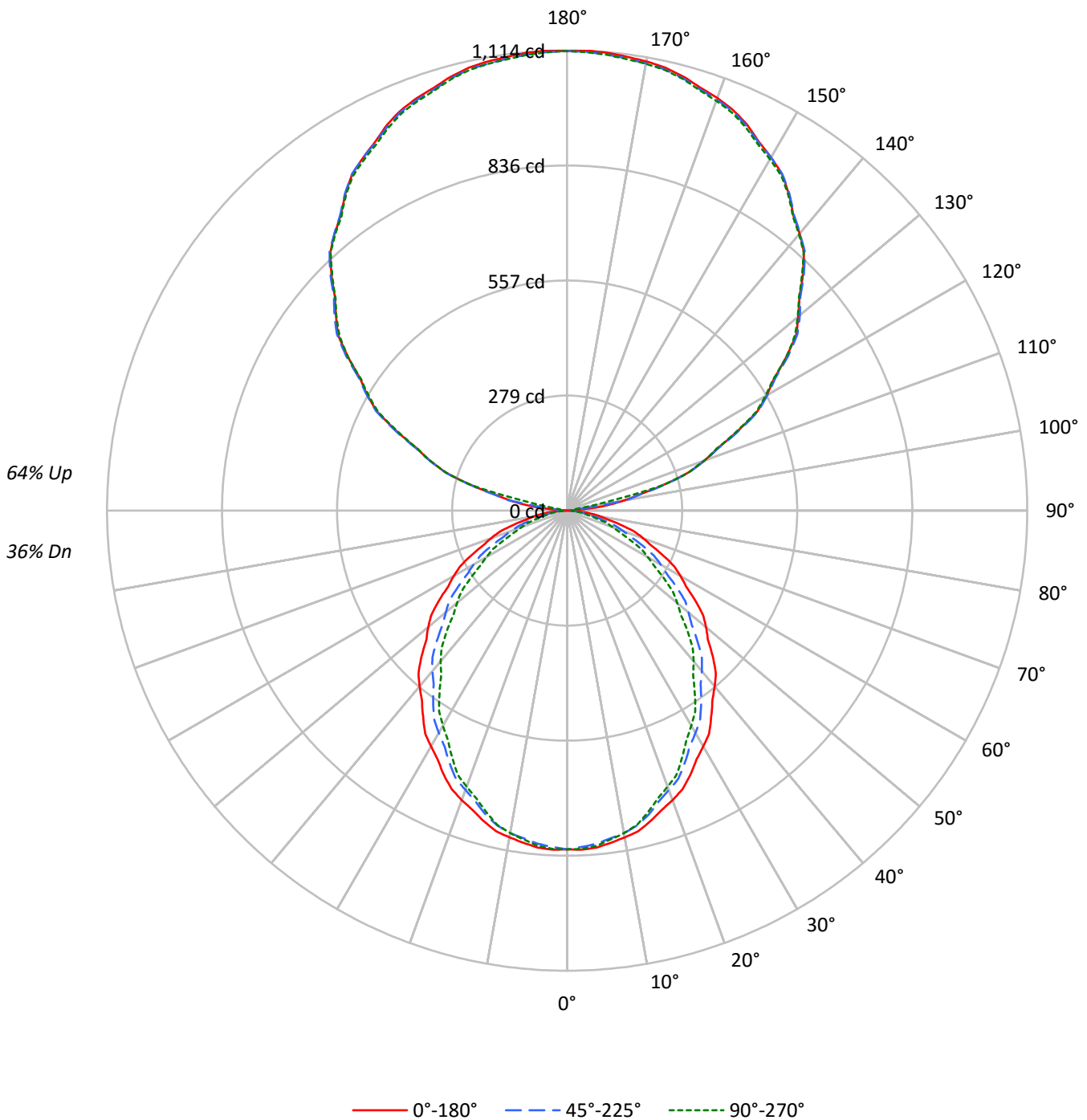
Input Watts (W): 45.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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	50	30	10	0
RCR																					
0	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43	36			36
1	95	91	87	84	86	82	79	76	66	64	62	52	51	49	39	38	37	31			31
2	86	79	73	68	78	72	67	63	58	55	52	46	43	41	34	33	31	26			26
3	79	70	63	57	71	63	57	53	52	47	44	41	38	35	30	28	27	22			22
4	72	62	54	48	65	56	50	45	46	41	37	36	33	30	27	25	23	19			19
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17			17
6	61	49	41	36	55	45	38	33	37	32	28	29	26	23	22	20	18	15			15
7	56	44	37	31	51	41	34	29	33	28	25	27	23	20	20	18	16	13			13
8	52	40	33	28	47	37	30	26	30	25	22	24	21	18	19	16	14	12			12
9	49	37	29	25	44	34	27	23	28	23	19	22	19	16	17	15	13	11			11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	16	14	12	10			10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5297	5297	5297
5°	5309	5249	5281
10°	5269	5200	5200
15°	5207	5094	5053
20°	5126	4947	4887
25°	5032	4802	4697
30°	4915	4633	4486
35°	4796	4459	4249
40°	4684	4278	4016
45°	4549	4074	3763
50°	4413	3852	3497
55°	4255	3640	3216
60°	4097	3384	2913
65°	3909	3085	2566
70°	3697	2713	2211
75°	3401	2286	1839
80°	2998	1796	1543
85°	2527	1467	1378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.1	1.4
10°-20°	215.5	4.0
20°-30°	312.5	5.8
30°-40°	356.2	6.7
40°-50°	347.2	6.5
50°-60°	292.3	5.5
60°-70°	204.9	3.8
70°-80°	105.3	2.0
80°-90°	28.9	0.5
90°-100°	40.4	0.8
100°-110°	249.1	4.7
110°-120°	451.8	8.4
120°-130°	579.9	10.8
130°-140°	623.7	11.6
140°-150°	585.4	10.9
150°-160°	473.6	8.8
160°-170°	306.3	5.7
170°-180°	105.6	2.0
0°-30°	605.2	11.3
0°-40°	961.4	18.0
0°-60°	1600.8	29.9
0°-90°	1939.9	36.2
90°-120°	741.4	13.8
90°-150°	2530.3	47.2
90°-180°	3416.0	63.8
0°-180°	5355.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	819	816	810	815	815	78
15°	779	774	762	761	756	219
25°	706	696	674	666	659	325
35°	608	593	566	548	539	381
45°	498	479	446	422	412	384
55°	378	357	323	296	286	338
65°	256	234	202	178	168	253
75°	136	117	92	79	74	144
85°	34	23	20	19	19	38
90°	1	7	13	17	20	4
95°	47	43	13	17	17	60
105°	242	246	246	246	245	257
115°	455	459	460	457	452	451
125°	647	653	653	650	647	578
135°	807	812	811	809	804	622
145°	936	937	938	938	933	585
155°	1031	1026	1027	1029	1023	475
165°	1088	1083	1084	1088	1082	307
175°	1112	1108	1108	1114	1107	106
180°	1112	1112	1112	1112	1112	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2
2.5°	821.7	821.3	821.0	820.7	820.4	819.6	818.5	817.4	816.3	815.2	816.3
5°	818.9	818.4	817.8	817.3	816.7	815.7	814.2	812.7	811.1	809.6	811.0
7.5°	810.9	810.3	809.8	809.3	808.8	807.6	805.8	804.0	802.2	800.3	801.3
10°	803.4	803.0	802.6	802.2	801.8	800.6	798.7	796.8	794.8	792.9	793.3
12.5°	795.0	794.5	793.9	793.4	792.9	791.3	788.8	786.2	783.6	781.0	781.3
15°	778.7	777.8	777.0	776.2	775.3	773.5	770.6	767.7	764.8	761.9	761.8
17.5°	760.2	759.0	757.7	756.4	755.1	752.7	749.0	745.4	741.8	738.2	737.4
20°	745.8	744.4	743.1	741.7	740.3	737.4	733.0	728.6	724.2	719.8	719.1
22.5°	729.9	728.6	727.2	725.9	724.5	721.5	716.8	712.2	707.6	703.0	701.6
25°	706.2	704.1	702.1	700.0	697.9	694.3	689.3	684.1	679.1	673.9	672.2
27.5°	678.9	676.5	673.9	671.4	668.9	665.0	659.5	654.0	648.6	643.1	640.6
30°	659.1	656.5	653.9	651.3	648.7	644.4	638.6	632.9	627.1	621.3	618.2
32.5°	639.8	636.7	633.7	630.6	627.5	623.1	617.2	611.3	605.4	599.5	596.0
35°	608.3	605.0	601.7	598.4	595.1	590.4	584.2	578.0	571.8	565.6	561.6
37.5°	577.5	573.4	569.4	565.4	561.4	556.2	549.8	543.4	537.0	530.6	525.9
40°	555.6	551.5	547.4	543.2	539.2	533.8	527.2	520.6	514.0	507.4	502.1
42.5°	532.9	528.6	524.4	520.2	515.9	510.4	503.5	496.7	489.9	483.1	478.0
45°	498.1	494.1	490.1	486.1	482.1	476.3	468.7	461.1	453.6	446.0	440.5
47.5°	462.0	457.8	453.6	449.4	445.2	439.2	431.6	424.0	416.4	408.7	403.1
50°	439.2	434.6	430.1	425.6	421.0	414.8	407.0	399.2	391.3	383.4	377.6
52.5°	414.4	409.8	405.1	400.5	395.8	389.8	382.4	375.0	367.5	360.1	353.9
55°	377.9	373.5	369.1	364.7	360.3	354.2	346.5	338.8	331.1	323.3	317.2
57.5°	341.0	336.2	331.5	326.9	322.1	316.0	308.6	301.2	293.8	286.3	280.2
60°	317.2	312.3	307.5	302.7	297.9	291.8	284.3	276.9	269.5	262.0	256.0
62.5°	291.9	287.3	282.7	278.1	273.5	267.4	259.9	252.3	244.8	237.3	231.6
65°	255.8	251.2	246.5	241.8	237.1	231.1	223.8	216.5	209.2	201.9	196.4
67.5°	220.0	215.3	210.7	206.0	201.3	195.5	188.5	181.5	174.5	167.5	162.5
70°	195.8	191.1	186.4	181.7	177.0	171.2	164.4	157.5	150.6	143.7	139.4
72.5°	171.9	167.4	162.8	158.2	153.7	148.1	141.7	135.3	128.8	122.4	118.5
75°	136.3	132.2	128.0	123.9	119.8	114.8	109.0	103.2	97.4	91.6	88.6
77.5°	100.9	97.5	94.2	90.9	87.6	83.6	79.0	74.4	69.8	65.1	63.0
80°	80.6	77.2	73.9	70.6	67.3	63.8	59.8	56.0	52.2	48.3	47.0
82.5°	60.7	57.7	54.8	51.8	48.8	46.0	43.4	40.7	38.1	35.5	34.9
85°	34.1	31.6	29.1	26.7	24.1	22.6	21.9	21.2	20.5	19.8	19.6
87.5°	11.6	11.1	10.6	10.1	9.6	9.5	9.6	9.8	9.9	10.1	10.3
90°	0.8	2.3	3.8	5.2	6.7	8.1	9.4	10.6	11.9	13.2	14.1
92.5°	12.7	11.7	10.7	9.6	8.6	8.6	9.8	10.9	12.1	13.2	14.1
95°	47.0	46.5	45.9	45.3	44.8	41.0	34.1	27.1	20.1	13.2	14.1
97.5°	98.2	99.1	100.1	101.1	102.1	95.7	81.9	68.2	54.4	40.6	35.4
100°	137.7	138.3	138.8	139.3	139.9	140.6	141.3	142.0	142.8	143.5	116.2
102.5°	178.0	178.6	179.4	180.0	180.8	181.3	181.7	182.1	182.6	183.0	177.9
105°	242.4	243.1	243.9	244.6	245.3	245.7	245.7	245.7	245.7	245.7	245.7
107.5°	309.4	309.4	309.4	309.4	309.4	309.6	309.9	310.3	310.6	311.0	311.0
110°	352.9	352.9	352.9	352.9	352.9	353.1	353.4	353.8	354.2	354.6	354.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	393.8	394.3	394.7	395.1	395.6	395.9	396.2	396.3	396.6	396.8	396.1
115°	455.2	456.1	457.0	457.9	458.9	459.3	459.6	459.7	459.9	460.1	459.3
117.5°	518.7	518.6	518.6	518.5	518.5	518.9	519.5	520.2	520.9	521.6	520.7
120°	558.2	558.1	557.8	557.7	557.5	557.7	558.2	558.8	559.3	559.9	559.5
122.5°	593.2	593.9	594.6	595.3	596.0	596.5	596.7	597.0	597.2	597.5	597.1
125°	647.3	648.6	649.9	651.1	652.4	653.1	653.1	653.1	653.1	653.1	652.3
127.5°	698.9	699.9	700.7	701.6	702.5	703.0	702.9	702.8	702.6	702.5	702.1
130°	730.6	731.5	732.4	733.3	734.3	734.7	735.0	735.2	735.3	735.5	735.0
132.5°	762.2	763.3	764.3	765.4	766.5	766.8	766.4	766.0	765.6	765.2	765.1
135°	807.2	808.4	809.4	810.6	811.6	812.0	811.6	811.3	810.9	810.6	810.2
137.5°	848.6	849.6	850.5	851.5	852.5	852.8	852.5	852.2	851.7	851.4	851.5
140°	875.7	876.0	876.4	876.8	877.2	877.3	877.1	876.9	876.7	876.5	876.9
142.5°	900.1	900.3	900.6	900.7	901.0	901.2	901.5	901.7	902.0	902.2	902.3
145°	935.9	936.3	936.6	937.0	937.3	937.5	937.5	937.5	937.5	937.5	937.8
147.5°	967.2	967.2	967.1	967.0	966.9	967.0	967.2	967.4	967.7	967.8	968.1
150°	987.0	986.7	986.3	985.9	985.5	985.5	985.9	986.3	986.7	987.0	987.4
152.5°	1006.2	1005.3	1004.5	1003.7	1002.9	1002.7	1003.1	1003.5	1003.8	1004.1	1004.5
155°	1030.7	1029.6	1028.5	1027.4	1026.3	1026.0	1026.3	1026.7	1027.0	1027.4	1027.9
157.5°	1049.7	1049.0	1048.4	1047.7	1047.0	1046.8	1046.8	1046.8	1046.8	1046.8	1047.5
160°	1062.9	1061.8	1060.7	1059.6	1058.5	1058.0	1058.2	1058.4	1058.6	1058.7	1059.5
162.5°	1073.4	1072.4	1071.2	1070.2	1069.0	1068.5	1068.8	1068.9	1069.1	1069.3	1070.3
165°	1087.6	1086.5	1085.4	1084.3	1083.2	1082.7	1083.0	1083.1	1083.3	1083.5	1084.6
167.5°	1098.1	1097.1	1095.9	1094.8	1093.6	1093.2	1093.3	1093.5	1093.7	1093.9	1095.2
170°	1104.1	1102.9	1101.6	1100.2	1098.9	1098.5	1098.6	1098.8	1098.9	1099.2	1100.7
172.5°	1108.1	1106.8	1105.5	1104.2	1102.9	1102.4	1102.8	1103.1	1103.4	1103.8	1105.1
175°	1112.3	1111.3	1110.1	1109.1	1107.9	1107.5	1107.7	1107.8	1108.1	1108.2	1109.7
177.5°	1114.4	1113.5	1112.6	1111.7	1110.8	1110.4	1110.6	1110.8	1110.8	1111.0	1112.1
180°	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2
2.5°	817.4	818.5	819.6	820.1	820.0	819.9	819.8	819.7
5°	812.4	813.8	815.1	815.7	815.4	815.1	814.9	814.6
7.5°	802.3	803.2	804.2	804.5	804.2	803.9	803.6	803.3
10°	793.7	794.1	794.6	794.6	794.1	793.7	793.3	792.9
12.5°	781.6	782.0	782.2	782.0	781.4	780.8	780.2	779.5
15°	761.7	761.5	761.4	760.7	759.5	758.2	757.0	755.7
17.5°	736.8	736.1	735.4	734.5	733.5	732.5	731.5	730.4
20°	718.4	717.7	717.1	716.1	714.9	713.6	712.4	711.1
22.5°	700.3	698.9	697.6	696.3	695.4	694.3	693.3	692.3
25°	670.4	668.6	666.8	665.1	663.7	662.1	660.6	659.1
27.5°	638.1	635.6	633.1	631.1	629.7	628.2	626.7	625.3
30°	615.0	611.8	608.6	606.4	605.2	604.0	602.8	601.5
32.5°	592.5	589.1	585.5	583.0	581.4	579.8	578.3	576.7
35°	557.6	553.6	549.6	546.7	544.7	542.7	540.9	538.9
37.5°	521.1	516.2	511.4	508.1	506.2	504.4	502.6	500.7
40°	496.8	491.6	486.4	483.0	481.4	479.6	478.0	476.4
42.5°	473.0	468.0	463.0	459.3	456.9	454.4	452.0	449.6
45°	435.0	429.5	424.0	420.2	418.2	416.0	414.0	412.0
47.5°	397.4	391.7	386.0	382.0	379.8	377.5	375.2	372.9
50°	371.9	366.1	360.3	356.4	354.3	352.3	350.2	348.1
52.5°	347.7	341.4	335.3	331.1	329.1	327.0	324.9	322.9
55°	311.0	304.8	298.6	294.4	292.2	290.0	287.8	285.6
57.5°	274.2	268.2	262.1	258.0	256.1	254.1	252.3	250.3
60°	249.9	243.9	237.8	233.7	231.7	229.6	227.6	225.5
62.5°	226.0	220.4	214.7	210.9	208.9	206.8	204.7	202.7
65°	190.9	185.4	179.9	176.1	174.1	172.0	169.9	167.9
67.5°	157.4	152.4	147.3	144.0	142.4	140.7	139.0	137.4
70°	135.2	130.9	126.6	123.7	122.1	120.4	118.7	117.1
72.5°	114.5	110.6	106.6	104.1	103.1	101.9	100.9	99.7
75°	85.6	82.6	79.6	77.5	76.6	75.7	74.7	73.7
77.5°	60.9	58.8	56.7	55.3	54.5	53.8	53.2	52.4
80°	45.8	44.6	43.4	42.6	42.3	42.1	41.7	41.5
82.5°	34.2	33.7	33.1	32.8	32.6	32.4	32.3	32.1
85°	19.6	19.4	19.2	19.2	19.0	18.8	18.8	18.6
87.5°	10.4	10.6	10.8	10.9	10.9	10.9	10.9	10.9
90°	15.0	16.0	16.9	17.6	18.2	18.7	19.2	19.8
92.5°	15.0	16.0	16.9	17.4	17.7	17.9	18.2	18.5
95°	15.0	16.0	16.9	17.3	17.3	17.3	17.3	17.3
97.5°	30.2	25.0	19.9	17.3	17.3	17.3	17.3	17.3
100°	88.9	61.6	34.2	20.2	19.5	18.8	18.0	17.3
102.5°	172.7	167.5	162.4	153.6	141.1	128.7	116.2	103.7
105°	245.7	245.7	245.7	245.6	245.5	245.2	245.1	244.9
107.5°	311.1	311.1	311.2	311.0	310.4	309.8	309.2	308.8
110°	353.4	352.9	352.4	352.2	352.4	352.5	352.7	352.9



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CATALOG NUMBER: S125RDIW-S610D1050U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	395.4	394.7	394.0	393.5	393.3	393.0	392.7	392.5
115°	458.6	457.9	457.1	456.2	455.2	454.0	453.0	451.8
117.5°	519.8	518.8	517.8	517.1	516.7	516.2	515.7	515.2
120°	559.1	558.8	558.4	557.7	556.8	556.0	555.1	554.1
122.5°	596.7	596.4	596.0	595.3	594.3	593.2	592.2	591.1
125°	651.6	650.9	650.1	649.5	649.0	648.4	647.8	647.3
127.5°	701.7	701.3	700.9	700.0	698.7	697.3	695.9	694.6
130°	734.4	733.9	733.3	732.5	731.6	730.8	729.9	729.0
132.5°	765.0	764.8	764.8	764.3	763.4	762.4	761.5	760.6
135°	809.8	809.4	809.1	808.4	807.2	806.2	805.0	804.0
137.5°	851.6	851.7	851.7	851.3	850.4	849.4	848.5	847.5
140°	877.3	877.6	878.0	877.6	876.5	875.4	874.3	873.2
142.5°	902.4	902.5	902.5	902.0	900.9	899.8	898.7	897.6
145°	937.9	938.1	938.2	937.8	936.7	935.6	934.5	933.4
147.5°	968.3	968.6	968.7	968.2	966.9	965.6	964.3	963.0
150°	987.7	988.1	988.5	987.9	986.4	985.0	983.5	982.0
152.5°	1004.9	1005.3	1005.6	1005.2	1003.8	1002.5	1001.2	999.9
155°	1028.5	1029.1	1029.6	1029.2	1027.7	1026.2	1024.7	1023.3
157.5°	1048.1	1048.6	1049.2	1048.8	1047.3	1045.9	1044.4	1042.9
160°	1060.2	1060.9	1061.7	1061.3	1059.9	1058.4	1057.0	1055.5
162.5°	1071.4	1072.4	1073.4	1073.1	1071.5	1069.9	1068.3	1066.7
165°	1085.7	1086.8	1087.9	1087.7	1086.2	1084.8	1083.3	1081.8
167.5°	1096.5	1097.8	1099.2	1099.0	1097.3	1095.7	1094.1	1092.4
170°	1102.1	1103.6	1105.1	1104.9	1103.3	1101.6	1100.0	1098.3
172.5°	1106.4	1107.7	1109.1	1108.9	1107.3	1105.5	1103.9	1102.3
175°	1111.2	1112.6	1114.1	1114.0	1112.3	1110.7	1109.1	1107.4
177.5°	1113.0	1114.1	1115.2	1115.1	1113.9	1112.7	1111.6	1110.4
180°	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3

(END OF REPORT)