

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: P333674-930

Luminaire Tested: **S125RDIW-S610D1340U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333674-930
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-S610D1340U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6313.4 lumens
Efficiency: N/A
Efficacy: 117.4 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

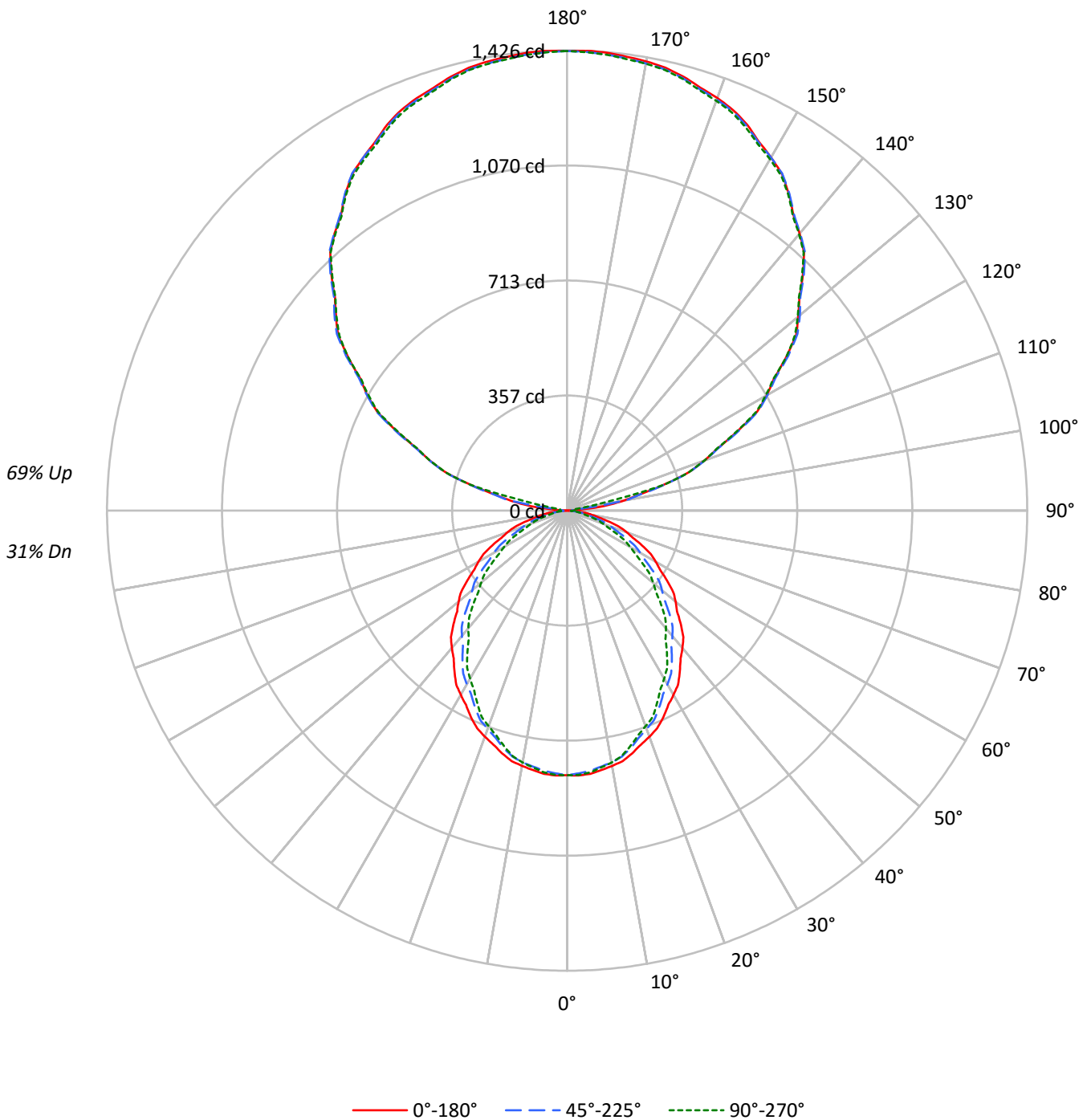
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	38	38	38	31
1	94	89	86	82	84	81	77	75	64	62	60	48	47	46	34	33	33	26
2	85	78	72	67	76	70	66	61	56	53	50	43	40	38	30	29	28	22
3	78	69	62	56	70	62	56	51	49	45	42	38	35	33	27	25	24	19
4	71	61	53	48	64	55	48	43	44	39	36	34	30	28	24	22	20	16
5	65	54	46	41	58	49	42	37	39	34	31	30	27	24	22	20	18	14
6	60	48	41	35	54	44	37	32	35	30	27	27	24	21	20	17	16	13
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	40	32	27	46	36	29	25	29	24	21	23	19	17	16	14	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	15	13	11	9
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8

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	1.2
10°-20°	215.5	3.4
20°-30°	312.5	5.0
30°-40°	356.2	5.6
40°-50°	347.2	5.5
50°-60°	292.3	4.6
60°-70°	204.9	3.2
70°-80°	105.3	1.7
80°-90°	29.6	0.5
90°-100°	51.7	0.8
100°-110°	318.9	5.1
110°-120°	578.4	9.2
120°-130°	742.3	11.8
130°-140°	798.4	12.6
140°-150°	749.4	11.9
150°-160°	606.3	9.6
160°-170°	392.1	6.2
170°-180°	135.2	2.1
0°-30°	605.2	9.6
0°-40°	961.4	15.2
0°-60°	1600.8	25.4
0°-90°	1940.5	30.7
90°-120°	949.1	15.0
90°-150°	3239.3	51.3
90°-180°	4373.0	69.3
0°-180°	6313.4	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	10	17	22	25	4
95°	60	55	17	22	22	77
105°	310	314	314	314	314	329
115°	583	588	589	585	578	577
125°	829	836	836	832	829	740
135°	1034	1039	1038	1035	1029	796
145°	1198	1200	1200	1201	1195	749
155°	1320	1314	1315	1318	1310	608
165°	1392	1386	1387	1393	1385	393
175°	1424	1418	1419	1426	1418	136
180°	1424	1424	1424	1424	1424	



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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	11.3	10.8	10.4	10.0	9.9	10.2	10.4	10.6	10.8	11.0
90°	1.1	2.9	4.8	6.7	8.6	10.4	12.0	13.6	15.2	16.9	18.1
92.5°	16.2	14.9	13.6	12.3	11.0	11.1	12.6	13.9	15.4	16.9	18.1
95°	60.2	59.4	58.8	58.0	57.3	52.5	43.6	34.7	25.8	16.9	18.1
97.5°	125.6	126.9	128.2	129.4	130.7	122.5	104.8	87.2	69.5	51.9	45.3
100°	176.3	177.0	177.7	178.4	179.1	179.9	180.8	181.8	182.7	183.7	148.7
102.5°	227.8	228.7	229.6	230.5	231.4	232.1	232.7	233.3	233.7	234.3	227.7
105°	310.4	311.3	312.3	313.2	314.1	314.5	314.5	314.5	314.5	314.5	314.5
107.5°	396.1	396.1	396.1	396.1	396.1	396.3	396.8	397.2	397.7	398.2	398.2
110°	451.8	451.8	451.8	451.8	451.8	452.0	452.5	453.0	453.5	453.9	453.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	504.2	504.8	505.3	505.8	506.4	506.9	507.1	507.4	507.7	507.9	507.0
115°	582.7	583.8	585.1	586.2	587.4	588.1	588.3	588.6	588.8	589.1	588.1
117.5°	664.0	663.9	663.9	663.8	663.8	664.2	665.1	666.0	666.9	667.8	666.6
120°	714.6	714.4	714.2	714.0	713.7	714.0	714.6	715.3	716.1	716.7	716.3
122.5°	759.4	760.3	761.2	762.1	763.0	763.6	763.9	764.3	764.6	764.9	764.4
125°	828.7	830.3	831.9	833.6	835.2	836.0	836.0	836.0	836.0	836.0	835.1
127.5°	894.7	895.9	897.1	898.2	899.4	899.9	899.8	899.7	899.5	899.4	898.9
130°	935.2	936.5	937.6	938.8	940.0	940.7	940.9	941.1	941.3	941.6	940.9
132.5°	975.8	977.1	978.5	979.9	981.2	981.7	981.1	980.6	980.2	979.6	979.5
135°	1033.5	1034.9	1036.2	1037.6	1039.1	1039.5	1039.1	1038.6	1038.1	1037.6	1037.2
137.5°	1086.5	1087.6	1088.8	1090.1	1091.3	1091.7	1091.3	1090.9	1090.5	1090.1	1090.1
140°	1121.0	1121.5	1122.0	1122.4	1122.9	1123.1	1122.8	1122.6	1122.3	1122.1	1122.6
142.5°	1152.3	1152.6	1152.8	1153.2	1153.4	1153.7	1154.1	1154.4	1154.7	1155.0	1155.1
145°	1198.1	1198.6	1199.1	1199.5	1200.0	1200.2	1200.2	1200.2	1200.2	1200.2	1200.4
147.5°	1238.2	1238.1	1238.0	1238.0	1237.9	1238.0	1238.2	1238.5	1238.8	1239.1	1239.3
150°	1263.6	1263.1	1262.7	1262.2	1261.7	1261.7	1262.2	1262.7	1263.1	1263.6	1264.0
152.5°	1288.0	1287.0	1286.0	1285.0	1283.9	1283.6	1284.1	1284.6	1285.1	1285.5	1286.0
155°	1319.5	1318.1	1316.7	1315.3	1313.9	1313.4	1313.9	1314.3	1314.8	1315.3	1316.0
157.5°	1343.8	1343.0	1342.1	1341.2	1340.4	1340.0	1340.0	1340.1	1340.2	1340.2	1340.9
160°	1360.7	1359.3	1357.9	1356.4	1355.0	1354.5	1354.7	1354.9	1355.2	1355.4	1356.3
162.5°	1374.2	1372.8	1371.3	1369.9	1368.6	1368.0	1368.2	1368.5	1368.6	1368.9	1370.2
165°	1392.4	1390.9	1389.5	1388.1	1386.7	1386.1	1386.3	1386.6	1386.8	1387.1	1388.5
167.5°	1405.8	1404.4	1403.0	1401.5	1400.0	1399.5	1399.6	1399.9	1400.1	1400.4	1402.1
170°	1413.5	1411.9	1410.1	1408.5	1406.9	1406.1	1406.4	1406.6	1406.9	1407.1	1409.0
172.5°	1418.5	1416.9	1415.3	1413.6	1411.9	1411.4	1411.8	1412.2	1412.6	1413.0	1414.7
175°	1424.0	1422.6	1421.2	1419.8	1418.4	1417.8	1418.1	1418.3	1418.5	1418.7	1420.6
177.5°	1426.5	1425.4	1424.3	1423.2	1422.0	1421.6	1421.8	1422.0	1422.1	1422.3	1423.7
180°	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0



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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°	11.3	11.5	11.7	11.9	11.9	11.9	12.0	12.0
90°	19.2	20.4	21.6	22.5	23.2	23.9	24.6	25.4
92.5°	19.2	20.4	21.6	22.3	22.7	23.0	23.3	23.6
95°	19.2	20.4	21.6	22.2	22.2	22.2	22.2	22.2
97.5°	38.7	32.1	25.4	22.2	22.2	22.2	22.2	22.2
100°	113.7	78.8	43.9	25.9	24.9	24.1	23.1	22.2
102.5°	221.1	214.5	207.9	196.6	180.7	164.7	148.7	132.8
105°	314.5	314.5	314.5	314.5	314.2	314.0	313.7	313.5
107.5°	398.3	398.4	398.4	398.0	397.3	396.6	395.9	395.3
110°	452.5	451.8	451.1	450.9	451.1	451.3	451.6	451.8



TEST NUMBER: P333674-930

CATALOG NUMBER: S125RDIW-S610D1340U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	506.1	505.3	504.4	503.8	503.4	503.1	502.8	502.5
115°	587.2	586.2	585.3	584.1	582.7	581.3	579.8	578.5
117.5°	665.4	664.1	662.9	661.9	661.4	660.8	660.1	659.6
120°	715.8	715.3	714.9	714.0	712.9	711.7	710.5	709.4
122.5°	763.9	763.4	763.0	762.1	760.8	759.4	758.0	756.7
125°	834.1	833.2	832.3	831.4	830.8	830.1	829.3	828.7
127.5°	898.4	897.8	897.3	896.2	894.5	892.8	891.0	889.2
130°	940.2	939.5	938.8	937.8	936.7	935.5	934.3	933.2
132.5°	979.3	979.2	979.0	978.4	977.2	976.1	974.9	973.7
135°	1036.7	1036.2	1035.8	1034.9	1033.5	1032.0	1030.6	1029.2
137.5°	1090.2	1090.3	1090.4	1089.8	1088.6	1087.4	1086.1	1084.9
140°	1123.1	1123.5	1124.0	1123.5	1122.1	1120.7	1119.3	1117.9
142.5°	1155.2	1155.4	1155.4	1154.8	1153.3	1151.9	1150.6	1149.2
145°	1200.7	1200.9	1201.2	1200.6	1199.1	1197.8	1196.4	1195.0
147.5°	1239.7	1239.9	1240.2	1239.5	1237.8	1236.1	1234.4	1232.7
150°	1264.5	1264.9	1265.4	1264.7	1262.8	1260.9	1259.1	1257.2
152.5°	1286.5	1286.9	1287.4	1286.8	1285.1	1283.4	1281.7	1280.0
155°	1316.7	1317.4	1318.1	1317.5	1315.6	1313.8	1311.9	1310.0
157.5°	1341.7	1342.5	1343.2	1342.6	1340.8	1338.9	1337.0	1335.1
160°	1357.3	1358.2	1359.2	1358.7	1356.8	1354.9	1353.1	1351.2
162.5°	1371.5	1372.9	1374.2	1373.8	1371.7	1369.6	1367.6	1365.5
165°	1389.8	1391.3	1392.7	1392.4	1390.6	1388.7	1386.8	1384.9
167.5°	1403.8	1405.4	1407.1	1406.9	1404.8	1402.7	1400.6	1398.5
170°	1410.9	1412.8	1414.6	1414.5	1412.4	1410.3	1408.2	1406.1
172.5°	1416.4	1418.1	1419.8	1419.6	1417.5	1415.4	1413.2	1411.1
175°	1422.5	1424.3	1426.2	1426.1	1424.0	1421.9	1419.8	1417.6
177.5°	1425.0	1426.3	1427.6	1427.5	1426.0	1424.5	1422.9	1421.5
180°	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0

(END OF REPORT)