

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: P333679-930

Luminaire Tested: **S125RDIW-S610D1560U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333679-930
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-S610D1560U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6350.0 lumens
Efficiency: N/A
Efficacy: 104.8 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

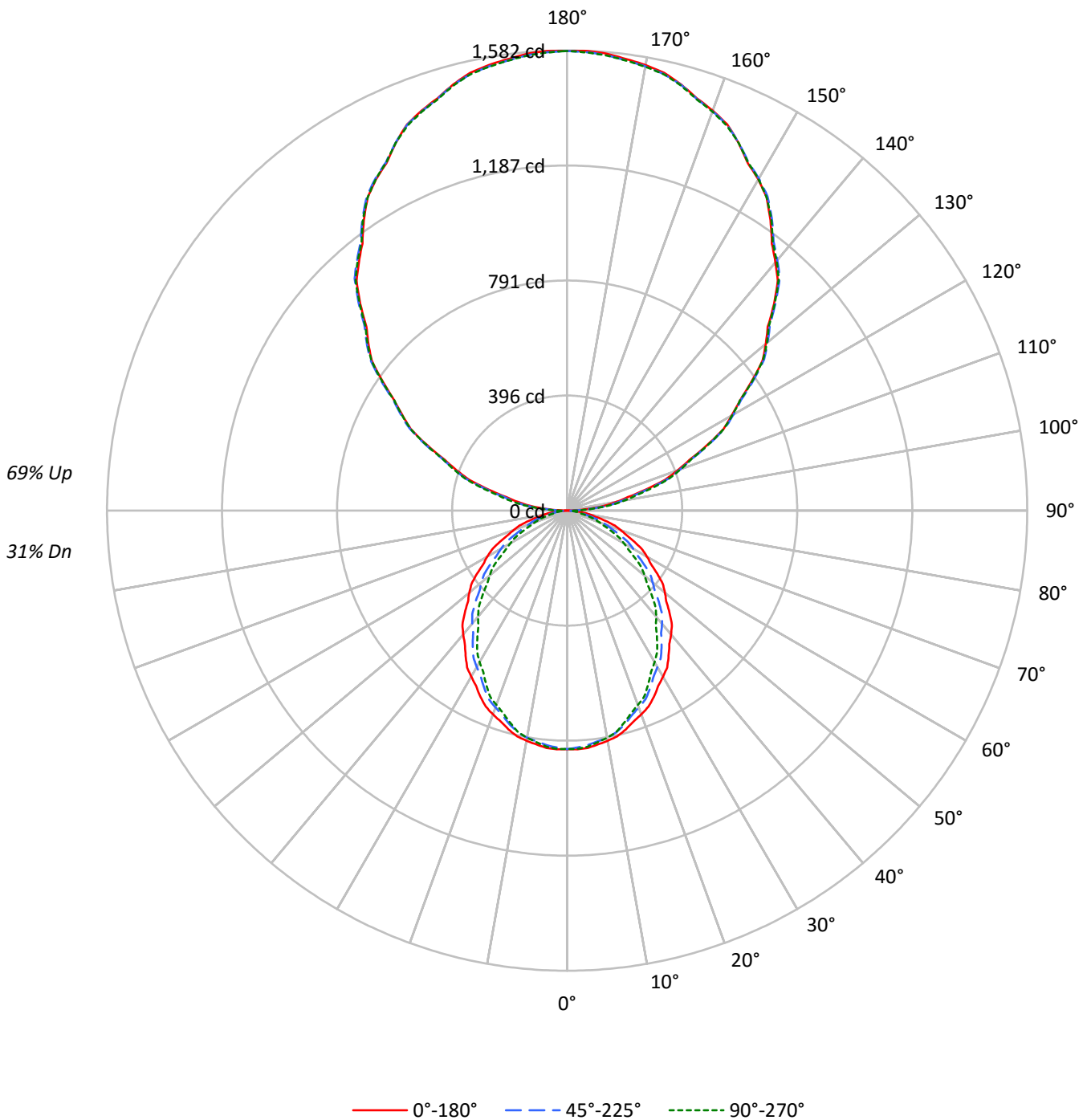
Input Watts (W): 60.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	80	77	75	64	62	60	48	47	46	34	33	33	26
2	85	78	72	67	76	70	65	61	56	52	50	42	40	38	30	29	28	22
3	78	69	62	56	70	62	56	51	49	45	42	38	35	32	27	25	24	19
4	71	61	53	47	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	19	18	14
6	60	48	41	35	54	44	37	32	35	30	27	27	24	21	20	17	16	12
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	12	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	4.9
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°	30.0	0.5
90°-100°	105.8	1.7
100°-110°	312.5	4.9
110°-120°	529.3	8.3
120°-130°	696.6	11.0
130°-140°	780.6	12.3
140°-150°	765.0	12.0
150°-160°	642.6	10.1
160°-170°	427.1	6.7
170°-180°	149.5	2.4
0°-30°	605.2	9.5
0°-40°	961.4	15.1
0°-60°	1600.8	25.2
0°-90°	1941.0	30.6
90°-120°	947.6	14.9
90°-150°	3189.8	50.2
90°-180°	4409.0	69.4
0°-180°	6350.0	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	11	20	26	30	6
95°	80	83	95	103	106	85
105°	280	287	294	301	305	299
115°	530	535	537	536	535	524
125°	773	780	782	780	778	692
135°	1006	1013	1014	1014	1010	775
145°	1218	1223	1227	1227	1223	761
155°	1394	1394	1396	1400	1394	642
165°	1516	1514	1515	1519	1512	428
175°	1576	1572	1571	1578	1570	150
180°	1580	1580	1580	1580	1580	



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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°	11.7	11.3	11.0	10.7	10.3	10.3	10.5	10.8	11.1	11.3	11.7
90°	1.2	3.4	5.6	7.8	9.9	12.0	13.9	15.8	17.8	19.6	21.0
92.5°	29.8	31.3	32.9	34.3	35.9	37.8	40.2	42.5	44.8	47.2	49.0
95°	79.9	80.5	81.0	81.5	82.1	83.7	86.5	89.2	92.0	94.7	96.6
97.5°	132.8	133.0	133.2	133.5	133.7	135.7	139.4	143.2	147.0	150.7	152.5
100°	172.1	172.1	172.1	172.1	172.1	173.9	177.5	181.0	184.6	188.1	190.6
102.5°	214.4	215.6	216.6	217.7	218.8	220.3	222.1	223.9	225.7	227.5	230.2
105°	280.4	281.7	283.1	284.5	285.8	287.3	288.9	290.6	292.2	293.9	295.5
107.5°	353.1	354.5	355.9	357.3	358.6	360.0	361.2	362.4	363.7	364.9	365.7
110°	403.3	404.7	406.0	407.4	408.8	409.9	410.7	411.5	412.3	413.1	413.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	454.4	455.2	455.9	456.6	457.3	458.2	459.2	460.2	461.3	462.4	462.7
115°	529.9	531.1	532.1	533.2	534.3	535.2	535.7	536.2	536.8	537.4	537.0
117.5°	605.7	606.2	606.7	607.2	607.6	608.1	608.6	609.1	609.6	610.2	610.3
120°	652.9	654.3	655.7	657.0	658.4	659.2	659.5	659.7	660.0	660.3	660.3
122.5°	704.1	704.6	705.1	705.6	706.0	706.6	707.4	708.1	708.7	709.5	709.2
125°	773.4	775.0	776.7	778.4	780.0	781.0	781.2	781.5	781.8	782.0	781.5
127.5°	847.2	848.2	849.1	849.9	850.9	851.6	851.9	852.2	852.6	852.9	852.6
130°	891.4	892.8	894.2	895.5	896.9	897.9	898.5	898.9	899.5	900.1	899.8
132.5°	935.7	938.0	940.2	942.5	944.7	945.7	945.7	945.5	945.4	945.3	945.0
135°	1005.8	1007.5	1009.1	1010.7	1012.4	1013.3	1013.6	1013.9	1014.2	1014.4	1014.4
137.5°	1071.7	1073.3	1074.9	1076.4	1078.1	1079.1	1079.8	1080.4	1080.9	1081.6	1081.9
140°	1114.0	1115.4	1116.7	1118.1	1119.5	1120.5	1121.4	1122.3	1123.1	1123.9	1124.4
142.5°	1156.3	1157.5	1158.6	1159.8	1160.9	1162.0	1163.0	1164.1	1165.1	1166.1	1166.4
145°	1218.5	1219.6	1220.7	1221.8	1222.9	1223.8	1224.7	1225.5	1226.3	1227.1	1227.1
147.5°	1276.1	1276.7	1277.2	1277.9	1278.5	1279.1	1279.8	1280.4	1281.1	1281.7	1282.4
150°	1314.4	1314.2	1313.9	1313.6	1313.4	1313.8	1314.8	1316.0	1317.0	1318.2	1318.2
152.5°	1345.9	1346.3	1346.7	1347.0	1347.4	1347.9	1348.3	1348.7	1349.2	1349.6	1350.3
155°	1394.4	1394.4	1394.4	1394.4	1394.4	1394.5	1394.8	1395.1	1395.3	1395.6	1396.7
157.5°	1437.6	1437.0	1436.5	1435.8	1435.3	1435.1	1435.3	1435.7	1435.9	1436.1	1437.3
160°	1463.2	1462.4	1461.6	1460.8	1460.0	1459.7	1460.0	1460.2	1460.5	1460.8	1461.8
162.5°	1485.9	1485.2	1484.7	1484.1	1483.4	1483.2	1483.2	1483.3	1483.4	1483.4	1484.7
165°	1516.1	1515.6	1515.0	1514.5	1513.9	1513.8	1514.1	1514.3	1514.6	1514.9	1516.0
167.5°	1541.6	1540.6	1539.5	1538.4	1537.3	1536.8	1536.8	1536.8	1536.8	1536.8	1538.4
170°	1555.4	1554.4	1553.2	1552.2	1551.1	1550.5	1550.5	1550.5	1550.5	1550.5	1552.2
172.5°	1565.3	1564.2	1563.1	1562.0	1560.9	1560.4	1560.4	1560.4	1560.4	1560.4	1562.0
175°	1576.4	1575.2	1574.2	1573.0	1572.0	1571.4	1571.4	1571.4	1571.4	1571.4	1573.0
177.5°	1582.0	1581.1	1580.3	1579.4	1578.5	1577.9	1577.8	1577.5	1577.3	1577.1	1578.4
180°	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1



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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°	11.9	12.1	12.5	12.6	12.7	12.7	12.8	12.8
90°	22.4	23.8	25.1	26.3	27.1	27.9	28.7	29.5
92.5°	50.8	52.6	54.5	55.6	56.3	56.8	57.4	58.0
95°	98.5	100.4	102.3	103.5	104.1	104.7	105.2	105.7
97.5°	154.3	156.1	157.9	159.1	159.4	159.7	160.0	160.4
100°	193.1	195.5	198.0	199.5	200.0	200.6	201.1	201.6
102.5°	232.8	235.5	238.1	239.9	240.7	241.4	242.2	243.0
105°	297.2	298.8	300.4	301.7	302.5	303.3	304.1	304.9
107.5°	366.6	367.4	368.2	368.6	368.5	368.5	368.4	368.4
110°	414.8	415.6	416.5	416.7	416.5	416.1	415.9	415.6



TEST NUMBER: P333679-930

CATALOG NUMBER: S125RDIW-S610D1560U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	463.1	463.5	463.8	463.8	463.3	462.8	462.4	461.9
115°	536.8	536.5	536.2	536.0	535.7	535.4	535.2	534.9
117.5°	610.6	610.8	611.0	610.6	609.4	608.4	607.3	606.2
120°	660.3	660.3	660.3	659.7	658.7	657.5	656.5	655.4
122.5°	709.1	708.8	708.6	708.1	707.2	706.3	705.4	704.6
125°	781.0	780.4	779.8	779.4	779.2	778.9	778.6	778.4
127.5°	852.3	852.1	851.7	851.3	850.8	850.3	849.7	849.1
130°	899.5	899.3	898.9	898.5	898.1	897.5	896.9	896.4
132.5°	944.8	944.5	944.2	943.7	943.0	942.2	941.4	940.6
135°	1014.4	1014.4	1014.4	1013.9	1012.8	1011.7	1010.6	1009.5
137.5°	1082.2	1082.6	1082.9	1082.4	1081.0	1079.6	1078.2	1076.8
140°	1124.9	1125.5	1126.0	1125.6	1124.3	1122.9	1121.5	1120.1
142.5°	1166.8	1167.1	1167.5	1166.9	1165.6	1164.2	1162.9	1161.5
145°	1227.1	1227.1	1227.1	1226.7	1225.9	1225.1	1224.3	1223.4
147.5°	1283.0	1283.7	1284.3	1283.8	1281.9	1280.0	1278.2	1276.4
150°	1318.2	1318.2	1318.2	1317.8	1317.3	1316.8	1316.2	1315.6
152.5°	1351.0	1351.6	1352.3	1352.1	1351.1	1350.1	1349.2	1348.2
155°	1397.7	1398.9	1400.0	1399.9	1398.5	1397.1	1395.7	1394.4
157.5°	1438.4	1439.5	1440.6	1440.2	1438.4	1436.6	1434.8	1433.0
160°	1463.0	1464.0	1465.2	1465.0	1463.6	1462.2	1460.9	1459.5
162.5°	1486.0	1487.4	1488.7	1488.5	1486.9	1485.3	1483.8	1482.1
165°	1517.0	1518.2	1519.2	1519.0	1517.4	1515.7	1514.1	1512.4
167.5°	1540.0	1541.6	1543.3	1543.3	1541.6	1539.9	1538.2	1536.5
170°	1553.8	1555.4	1557.1	1557.0	1555.0	1553.1	1551.2	1549.3
172.5°	1563.7	1565.3	1566.9	1566.9	1565.2	1563.5	1561.8	1560.2
175°	1574.8	1576.4	1578.0	1577.8	1576.0	1574.0	1572.1	1570.2
177.5°	1579.7	1581.0	1582.3	1582.3	1580.7	1579.2	1577.6	1576.1
180°	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1

(END OF REPORT)