

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: P333662-930

Luminaire Tested: **S125RDIW-S610D470U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333662-930
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-S610D470U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3466.5 lumens
Efficiency: N/A
Efficacy: 114.8 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: General Diffuse

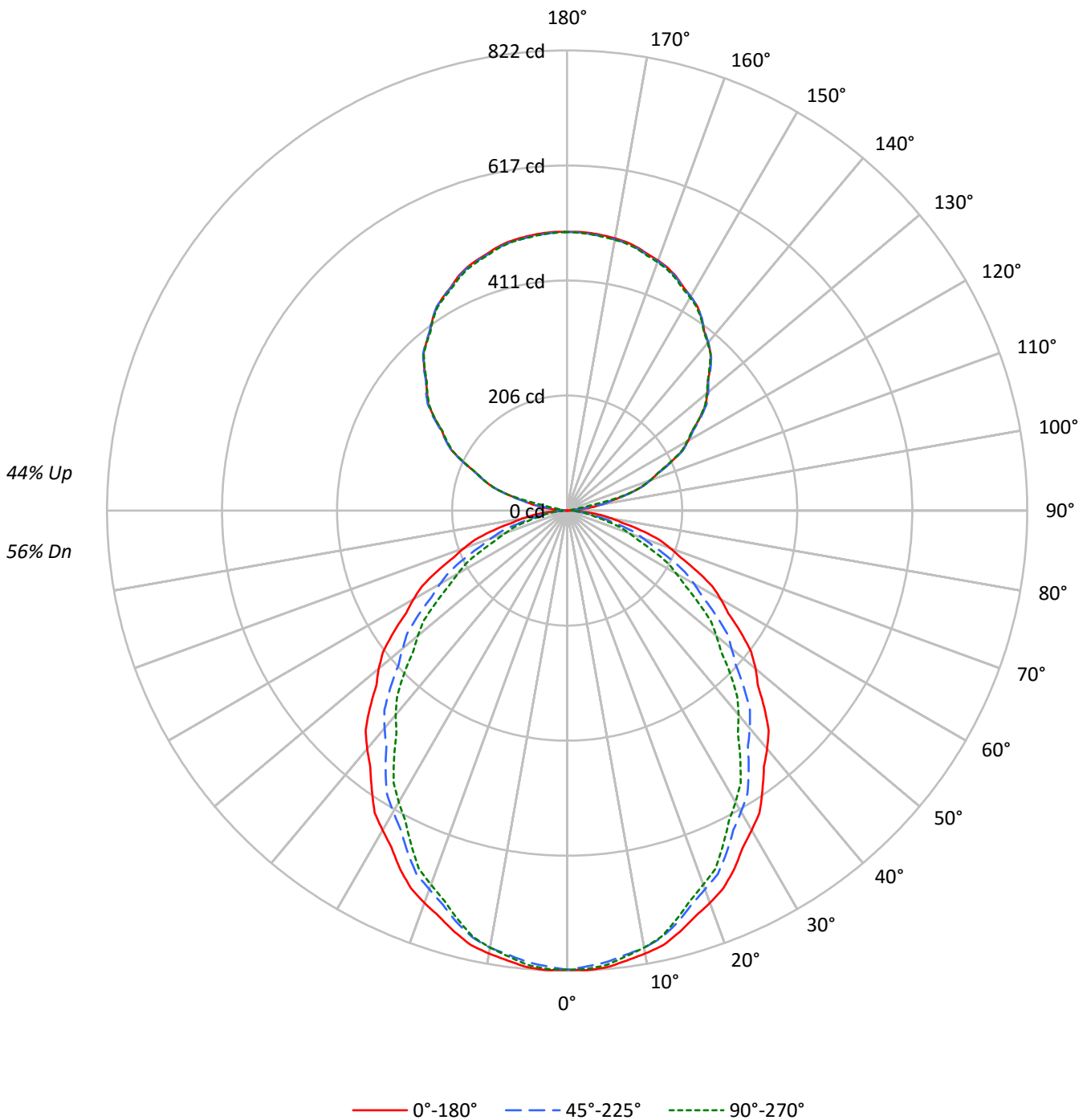
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333662-930

CATALOG NUMBER: S125RDIW-S610D470U930-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P333662-930

CATALOG NUMBER: S125RDIW-S610D470U930-4F0-1E-UDD-F

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56
1	99	95	91	88	92	89	85	82	76	74	72	65	63	62	55	54	53	48
2	91	83	77	72	84	78	72	68	67	63	60	57	55	52	49	46	45	40
3	83	73	66	60	77	69	62	57	59	55	51	51	47	44	43	40	38	34
4	76	65	57	51	70	61	54	49	53	48	43	46	41	38	39	36	33	30
5	70	58	50	44	65	55	47	42	48	42	37	41	37	33	35	32	29	26
6	64	52	44	38	60	49	42	37	43	37	33	37	33	29	32	28	26	23
7	60	47	39	34	55	44	37	32	39	33	29	34	29	26	29	26	23	20
8	55	43	35	30	51	40	33	29	36	30	26	31	27	23	27	23	21	18
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19	16
10	48	36	29	24	45	34	28	23	30	25	21	26	22	19	23	19	17	15

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



TEST NUMBER: P333662-930

CATALOG NUMBER: S125RDIW-S610D470U930-4F0-1E-UDD-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.1	2.2
10°-20°	215.5	6.2
20°-30°	312.5	9.0
30°-40°	356.2	10.3
40°-50°	347.2	10.0
50°-60°	292.3	8.4
60°-70°	204.9	5.9
70°-80°	105.3	3.0
80°-90°	27.6	0.8
90°-100°	18.1	0.5
100°-110°	111.4	3.2
110°-120°	202.1	5.8
120°-130°	259.4	7.5
130°-140°	279.0	8.0
140°-150°	261.9	7.6
150°-160°	211.8	6.1
160°-170°	137.0	4.0
170°-180°	47.3	1.4
0°-30°	605.2	17.5
0°-40°	961.4	27.7
0°-60°	1600.8	46.2
0°-90°	1938.6	55.9
90°-120°	331.6	9.6
90°-150°	1131.8	32.7
90°-180°	1528.0	44.1
0°-180°	3466.5	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°	0	3	6	8	9	2
95°	21	19	6	8	8	27
105°	108	110	110	110	110	115
115°	204	205	206	204	202	202
125°	290	292	292	291	290	259
135°	361	363	363	362	360	278
145°	419	419	419	420	418	262
155°	461	459	460	460	458	212
165°	486	484	485	487	484	137
175°	498	496	496	498	495	47
180°	498	498	498	498	498	



TEST NUMBER: P333662-930

CATALOG NUMBER: S125RDIW-S610D470U930-4F0-1E-UDD-F

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°	11.5	10.8	10.2	9.5	8.9	8.6	8.6	8.6	8.6	8.6	8.7
90°	0.4	1.1	1.7	2.4	3.0	3.6	4.2	4.7	5.3	5.9	6.3
92.5°	5.7	5.2	4.7	4.3	3.8	3.8	4.4	4.9	5.4	5.9	6.3
95°	21.0	20.8	20.5	20.3	20.1	18.3	15.2	12.1	9.0	5.9	6.3
97.5°	43.9	44.4	44.8	45.2	45.7	42.8	36.6	30.5	24.3	18.2	15.8
100°	61.6	61.9	62.1	62.4	62.6	62.9	63.2	63.5	63.8	64.2	51.9
102.5°	79.6	79.9	80.2	80.6	80.9	81.1	81.3	81.4	81.7	81.9	79.6
105°	108.4	108.8	109.1	109.4	109.7	109.9	109.9	109.9	109.9	109.9	109.9
107.5°	138.4	138.4	138.4	138.4	138.4	138.4	138.6	138.8	138.9	139.1	139.2
110°	157.8	157.8	157.8	157.8	157.8	157.9	158.1	158.2	158.4	158.6	158.3



TEST NUMBER: P333662-930

CATALOG NUMBER: S125RDIW-S610D470U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	176.2	176.3	176.5	176.8	176.9	177.1	177.2	177.3	177.4	177.5	177.2
115°	203.6	204.0	204.4	204.8	205.2	205.5	205.5	205.6	205.7	205.8	205.5
117.5°	232.0	232.0	232.0	232.0	232.0	232.1	232.4	232.7	233.0	233.3	232.9
120°	249.7	249.6	249.6	249.5	249.4	249.5	249.7	250.0	250.2	250.5	250.3
122.5°	265.4	265.6	266.0	266.3	266.6	266.8	266.9	267.0	267.2	267.3	267.1
125°	289.5	290.1	290.7	291.2	291.8	292.1	292.1	292.1	292.1	292.1	291.8
127.5°	312.6	313.1	313.5	313.9	314.3	314.5	314.4	314.4	314.3	314.2	314.1
130°	326.8	327.2	327.6	328.0	328.4	328.6	328.7	328.8	328.9	329.0	328.7
132.5°	341.0	341.4	341.9	342.3	342.8	343.0	342.8	342.7	342.4	342.3	342.3
135°	361.1	361.6	362.1	362.6	363.1	363.2	363.1	362.9	362.7	362.6	362.4
137.5°	379.6	380.0	380.4	380.9	381.3	381.5	381.3	381.2	381.0	380.8	380.9
140°	391.7	391.8	392.0	392.2	392.3	392.4	392.3	392.2	392.2	392.1	392.2
142.5°	402.6	402.8	402.8	402.9	403.0	403.1	403.2	403.3	403.5	403.6	403.6
145°	418.7	418.8	419.0	419.1	419.3	419.4	419.4	419.4	419.4	419.4	419.5
147.5°	432.7	432.6	432.6	432.5	432.5	432.5	432.7	432.8	432.8	432.9	433.0
150°	441.5	441.3	441.2	441.0	440.8	440.8	441.0	441.2	441.3	441.5	441.6
152.5°	450.0	449.7	449.3	449.0	448.6	448.5	448.7	448.8	449.0	449.1	449.3
155°	461.1	460.6	460.1	459.6	459.1	458.9	459.1	459.3	459.4	459.6	459.8
157.5°	469.5	469.2	469.0	468.6	468.3	468.2	468.2	468.2	468.2	468.3	468.6
160°	475.4	474.9	474.4	473.9	473.4	473.3	473.4	473.4	473.5	473.6	473.9
162.5°	480.1	479.6	479.2	478.7	478.2	478.0	478.1	478.2	478.3	478.3	478.7
165°	486.5	486.0	485.5	485.0	484.5	484.3	484.4	484.5	484.5	484.6	485.1
167.5°	491.2	490.7	490.2	489.7	489.2	488.9	489.0	489.1	489.2	489.3	489.9
170°	493.9	493.3	492.7	492.1	491.5	491.3	491.4	491.5	491.5	491.6	492.3
172.5°	495.6	495.0	494.5	493.9	493.3	493.2	493.3	493.4	493.6	493.7	494.3
175°	497.6	497.1	496.6	496.1	495.6	495.4	495.5	495.5	495.6	495.7	496.4
177.5°	498.5	498.1	497.7	497.3	496.8	496.7	496.8	496.8	496.9	497.0	497.4
180°	497.6	497.6	497.6	497.6	497.6	497.6	497.6	497.6	497.6	497.6	497.6



TEST NUMBER: P333662-930

CATALOG NUMBER: S125RDIW-S610D470U930-4F0-1E-UDD-F

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°	8.8	8.9	9.0	9.0	8.9	8.8	8.8	8.7
90°	6.7	7.1	7.5	7.9	8.2	8.4	8.6	8.9
92.5°	6.7	7.1	7.5	7.8	7.9	8.1	8.2	8.2
95°	6.7	7.1	7.5	7.7	7.7	7.7	7.7	7.7
97.5°	13.5	11.3	8.9	7.7	7.7	7.7	7.7	7.7
100°	39.8	27.6	15.3	9.0	8.7	8.4	8.1	7.7
102.5°	77.3	74.9	72.6	68.7	63.1	57.6	51.9	46.4
105°	109.9	109.9	109.9	109.9	109.8	109.7	109.7	109.6
107.5°	139.2	139.2	139.2	139.1	138.8	138.6	138.4	138.1
110°	158.1	157.8	157.6	157.5	157.6	157.7	157.8	157.8



TEST NUMBER: P333662-930

CATALOG NUMBER: S125RDIW-S610D470U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	176.8	176.5	176.3	176.0	175.9	175.8	175.7	175.5
115°	205.1	204.8	204.5	204.1	203.6	203.1	202.6	202.1
117.5°	232.4	232.0	231.6	231.3	231.1	230.9	230.6	230.5
120°	250.1	250.0	249.8	249.5	249.1	248.7	248.3	247.9
122.5°	266.9	266.8	266.6	266.3	265.8	265.3	264.9	264.4
125°	291.5	291.1	290.8	290.5	290.2	290.0	289.8	289.5
127.5°	313.9	313.7	313.6	313.2	312.5	311.9	311.3	310.7
130°	328.5	328.2	328.0	327.7	327.3	326.9	326.4	326.0
132.5°	342.2	342.1	342.1	341.9	341.4	341.0	340.6	340.2
135°	362.2	362.1	361.9	361.6	361.1	360.6	360.1	359.6
137.5°	380.9	381.0	381.0	380.8	380.3	379.9	379.5	379.1
140°	392.4	392.6	392.7	392.6	392.1	391.6	391.1	390.6
142.5°	403.7	403.7	403.7	403.5	403.0	402.5	402.0	401.5
145°	419.6	419.6	419.7	419.5	419.0	418.5	418.0	417.5
147.5°	433.2	433.3	433.3	433.1	432.5	431.9	431.3	430.7
150°	441.8	442.0	442.1	441.9	441.2	440.6	439.9	439.3
152.5°	449.5	449.6	449.8	449.6	449.0	448.4	447.8	447.3
155°	460.1	460.3	460.6	460.3	459.7	459.0	458.4	457.7
157.5°	468.8	469.0	469.3	469.1	468.5	467.8	467.2	466.5
160°	474.3	474.6	474.9	474.7	474.1	473.4	472.8	472.1
162.5°	479.2	479.7	480.1	480.0	479.3	478.6	477.8	477.1
165°	485.7	486.2	486.7	486.6	485.9	485.2	484.5	483.9
167.5°	490.5	491.1	491.6	491.6	490.8	490.1	489.3	488.6
170°	492.9	493.7	494.3	494.2	493.5	492.8	492.0	491.3
172.5°	494.9	495.5	496.1	496.0	495.3	494.6	493.8	493.1
175°	497.0	497.7	498.3	498.3	497.6	496.8	496.1	495.4
177.5°	497.9	498.3	498.8	498.8	498.2	497.7	497.2	496.7
180°	497.6	497.6	497.6	497.6	497.6	497.6	497.6	497.6

(END OF REPORT)