

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: P333663

Luminaire Tested: **S125RDIW-S610D470U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333663  
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-S610D470U835-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4003.0 lumens  
Efficiency: N/A  
Efficacy: 132.6 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

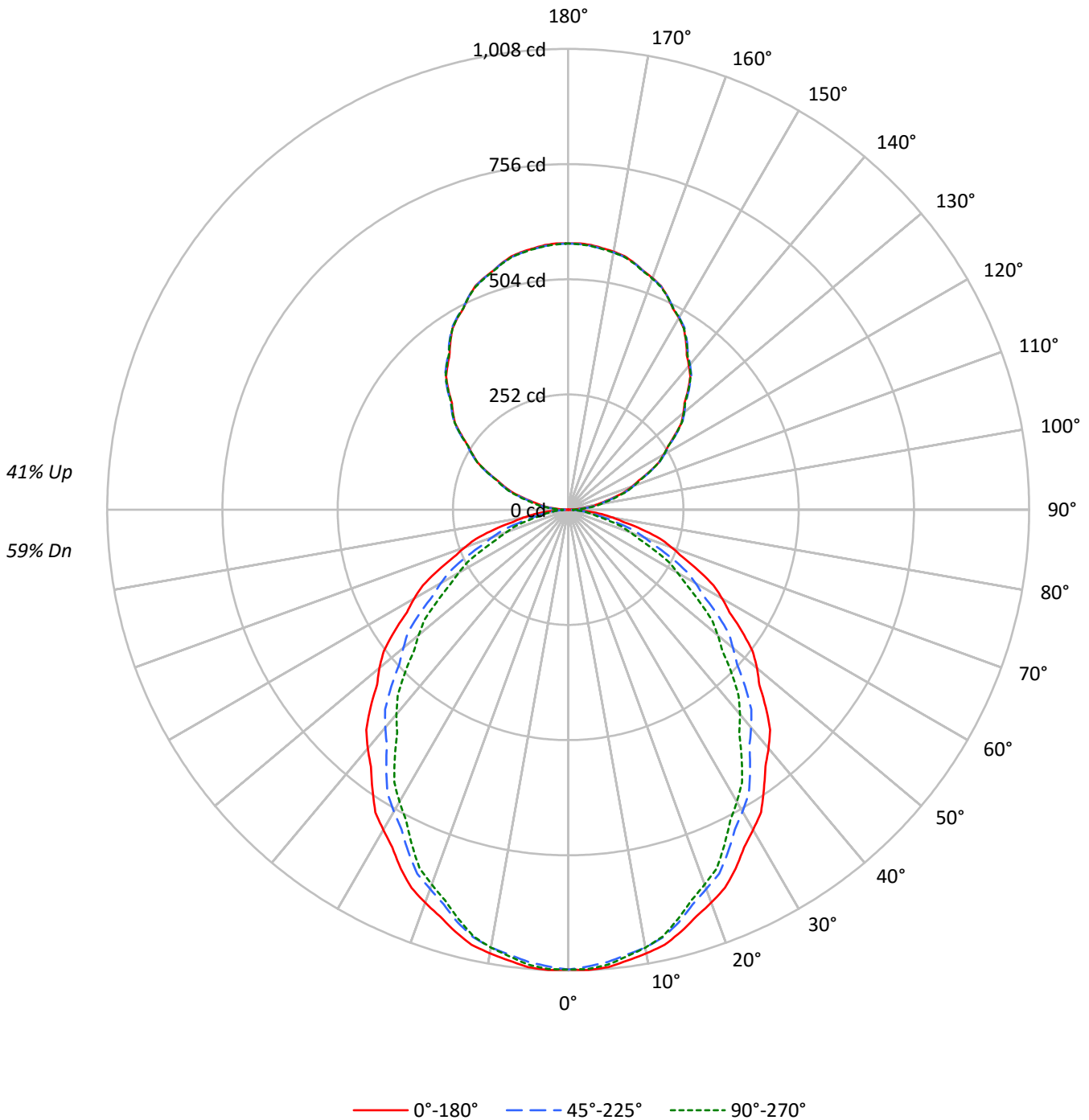
Input Watts (W): 30.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333663

CATALOG NUMBER: S125RDIW-S610D470U835-4F0-1E-UDD-F1

### Luminous Intensity Polar Plot





TEST NUMBER: P333663

CATALOG NUMBER: S125RDIW-S610D470U835-4F0-1E-UDD-F1

**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	102	102	102	102	89	89	89	76	76	76	65	65	65	59
1	100	96	92	89	93	90	86	83	78	76	73	67	66	64	58	56	55	51
2	91	84	78	73	85	79	73	69	69	65	61	60	57	54	51	49	47	43
3	84	74	67	61	78	69	63	58	61	56	52	53	49	46	45	43	40	36
4	77	66	58	52	71	62	55	49	54	49	44	47	43	39	41	38	35	31
5	70	59	51	45	66	55	48	42	49	43	38	43	38	34	37	33	30	27
6	65	53	45	39	61	50	42	37	44	38	34	39	34	30	33	30	27	24
7	60	48	40	34	56	45	38	33	40	34	30	35	30	27	31	27	24	22
8	56	44	36	30	52	41	34	29	37	31	27	32	28	24	28	24	22	19
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	22	20	18
10	49	37	29	25	46	35	28	24	31	25	22	28	23	20	24	21	18	16

**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



TEST NUMBER: P333663

CATALOG NUMBER: S125RDIW-S610D470U835-4F0-1E-UDD-F1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.6	2.4
10°-20°	264.3	6.6
20°-30°	383.3	9.6
30°-40°	436.9	10.9
40°-50°	425.9	10.6
50°-60°	358.5	9.0
60°-70°	251.3	6.3
70°-80°	129.2	3.2
80°-90°	33.9	0.8
90°-100°	39.0	1.0
100°-110°	115.2	2.9
110°-120°	195.1	4.9
120°-130°	256.8	6.4
130°-140°	287.7	7.2
140°-150°	282.0	7.0
150°-160°	236.9	5.9
160°-170°	157.4	3.9
170°-180°	55.1	1.4
0°-30°	742.3	18.5
0°-40°	1179.2	29.5
0°-60°	1963.5	49.0
0°-90°	2377.8	59.4
90°-120°	349.3	8.7
90°-150°	1175.8	29.4
90°-180°	1625.0	40.6
0°-180°	4003.0	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°	0	4	7	10	11	4
95°	30	31	35	38	39	31
105°	103	106	108	111	112	110
115°	195	197	198	198	197	193
125°	285	288	288	287	287	255
135°	371	373	374	374	372	286
145°	449	451	452	452	451	281
155°	514	514	514	516	514	237
165°	559	558	558	560	558	158
175°	581	579	579	582	579	55
180°	582	582	582	582	582	



TEST NUMBER: P333663

CATALOG NUMBER: S125RDIW-S610D470U835-4F0-1E-UDD-F1

**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°	14.1	13.3	12.5	11.7	10.9	10.5	10.6	10.6	10.6	10.6	10.7
90°	0.5	1.3	2.1	2.9	3.7	4.4	5.1	5.8	6.5	7.3	7.8
92.5°	11.0	11.5	12.1	12.7	13.2	13.9	14.8	15.7	16.5	17.4	18.1
95°	29.5	29.7	29.9	30.1	30.3	30.9	31.9	32.9	33.9	34.9	35.6
97.5°	48.9	49.0	49.1	49.2	49.3	50.0	51.4	52.8	54.2	55.6	56.2
100°	63.5	63.5	63.5	63.5	63.5	64.1	65.4	66.7	68.0	69.3	70.3
102.5°	79.0	79.4	79.9	80.3	80.7	81.2	81.9	82.5	83.2	83.8	84.8
105°	103.3	103.8	104.3	104.8	105.4	105.9	106.5	107.1	107.7	108.3	108.9
107.5°	130.2	130.7	131.2	131.7	132.2	132.7	133.1	133.6	134.1	134.5	134.8
110°	148.7	149.2	149.7	150.2	150.7	151.1	151.4	151.7	152.0	152.3	152.6



TEST NUMBER: P333663

CATALOG NUMBER: S125RDIW-S610D470U835-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	167.5	167.8	168.0	168.3	168.6	168.9	169.3	169.7	170.0	170.4	170.6
115°	195.3	195.7	196.2	196.6	197.0	197.3	197.5	197.7	197.9	198.1	198.0
117.5°	223.3	223.4	223.6	223.8	224.0	224.2	224.4	224.5	224.7	224.9	225.0
120°	240.7	241.2	241.7	242.2	242.7	243.0	243.1	243.2	243.3	243.4	243.4
122.5°	259.5	259.7	259.9	260.1	260.2	260.5	260.7	261.0	261.3	261.5	261.4
125°	285.1	285.7	286.3	286.9	287.5	287.9	288.0	288.1	288.2	288.3	288.1
127.5°	312.3	312.6	313.0	313.3	313.7	313.9	314.0	314.1	314.2	314.4	314.3
130°	328.6	329.1	329.6	330.1	330.6	331.0	331.2	331.4	331.6	331.8	331.7
132.5°	344.9	345.7	346.6	347.4	348.2	348.6	348.6	348.5	348.5	348.4	348.3
135°	370.7	371.4	372.0	372.6	373.2	373.5	373.6	373.7	373.8	373.9	373.9
137.5°	395.0	395.6	396.2	396.8	397.4	397.8	398.0	398.2	398.4	398.7	398.8
140°	410.6	411.1	411.6	412.1	412.6	413.1	413.4	413.7	414.0	414.3	414.5
142.5°	426.2	426.6	427.1	427.5	427.9	428.3	428.7	429.1	429.5	429.9	430.0
145°	449.2	449.6	450.0	450.4	450.8	451.1	451.4	451.7	452.0	452.3	452.3
147.5°	470.4	470.6	470.8	471.0	471.3	471.5	471.7	472.0	472.2	472.5	472.7
150°	484.5	484.4	484.3	484.2	484.1	484.3	484.7	485.1	485.5	485.9	485.9
152.5°	496.1	496.3	496.4	496.5	496.7	496.8	497.0	497.2	497.3	497.5	497.7
155°	514.0	514.0	514.0	514.0	514.0	514.0	514.1	514.2	514.3	514.4	514.8
157.5°	529.9	529.7	529.5	529.3	529.0	529.0	529.1	529.2	529.3	529.4	529.8
160°	539.4	539.1	538.7	538.4	538.1	538.0	538.1	538.2	538.3	538.4	538.9
162.5°	547.7	547.5	547.3	547.0	546.8	546.7	546.7	546.7	546.8	546.8	547.3
165°	558.8	558.6	558.4	558.2	558.0	558.0	558.1	558.2	558.3	558.4	558.8
167.5°	568.3	567.9	567.5	567.1	566.7	566.5	566.5	566.5	566.5	566.5	567.1
170°	573.3	572.9	572.5	572.1	571.7	571.5	571.5	571.5	571.5	571.5	572.1
172.5°	577.0	576.6	576.2	575.8	575.4	575.2	575.2	575.2	575.2	575.2	575.8
175°	581.1	580.6	580.2	579.8	579.4	579.2	579.2	579.2	579.2	579.2	579.8
177.5°	583.1	582.8	582.5	582.2	581.8	581.6	581.6	581.5	581.4	581.3	581.8
180°	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4



TEST NUMBER: P333663

CATALOG NUMBER: S125RDIW-S610D470U835-4F0-1E-UDD-F1

**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°	10.8	10.9	11.0	11.0	10.9	10.8	10.8	10.7
90°	8.3	8.8	9.3	9.7	10.0	10.3	10.6	10.9
92.5°	18.7	19.4	20.1	20.5	20.7	20.9	21.2	21.4
95°	36.3	37.0	37.7	38.2	38.4	38.6	38.8	39.0
97.5°	56.9	57.6	58.2	58.6	58.7	58.9	59.0	59.1
100°	71.2	72.1	73.0	73.5	73.7	73.9	74.1	74.3
102.5°	85.8	86.8	87.8	88.4	88.7	89.0	89.3	89.6
105°	109.5	110.1	110.7	111.2	111.5	111.8	112.1	112.4
107.5°	135.1	135.4	135.7	135.9	135.9	135.8	135.8	135.8
110°	152.9	153.2	153.5	153.6	153.5	153.4	153.3	153.2





TEST NUMBER: P333663

CATALOG NUMBER: S125RDIW-S610D470U835-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	170.7	170.8	171.0	171.0	170.8	170.6	170.4	170.2
115°	197.9	197.8	197.7	197.6	197.5	197.4	197.3	197.2
117.5°	225.1	225.1	225.2	225.1	224.7	224.3	223.8	223.4
120°	243.4	243.4	243.4	243.2	242.8	242.4	242.0	241.6
122.5°	261.4	261.3	261.2	261.0	260.7	260.4	260.0	259.7
125°	287.9	287.7	287.5	287.3	287.2	287.1	287.0	286.9
127.5°	314.2	314.1	314.0	313.8	313.6	313.4	313.2	313.0
130°	331.6	331.5	331.4	331.2	331.0	330.8	330.6	330.4
132.5°	348.2	348.1	348.0	347.9	347.6	347.3	347.0	346.7
135°	373.9	373.9	373.9	373.7	373.3	372.9	372.5	372.1
137.5°	398.9	399.0	399.2	399.0	398.5	398.0	397.4	396.9
140°	414.7	414.9	415.1	414.9	414.4	413.9	413.4	412.9
142.5°	430.1	430.2	430.3	430.1	429.6	429.1	428.6	428.1
145°	452.3	452.3	452.3	452.2	451.9	451.6	451.3	451.0
147.5°	472.9	473.2	473.4	473.2	472.5	471.8	471.1	470.5
150°	485.9	485.9	485.9	485.8	485.6	485.4	485.2	485.0
152.5°	498.0	498.2	498.4	498.4	498.0	497.7	497.3	496.9
155°	515.2	515.6	516.0	516.0	515.5	515.0	514.5	514.0
157.5°	530.2	530.6	531.0	530.9	530.2	529.5	528.9	528.2
160°	539.3	539.7	540.1	540.0	539.5	539.0	538.5	538.0
162.5°	547.8	548.2	548.7	548.7	548.1	547.5	546.9	546.3
165°	559.2	559.6	560.0	559.9	559.3	558.7	558.1	557.5
167.5°	567.7	568.3	568.9	568.9	568.2	567.6	567.0	566.4
170°	572.7	573.3	574.0	573.9	573.2	572.5	571.8	571.1
172.5°	576.4	577.0	577.6	577.6	576.9	576.3	575.7	575.1
175°	580.4	581.1	581.7	581.6	580.9	580.2	579.5	578.8
177.5°	582.3	582.8	583.3	583.2	582.7	582.1	581.5	581.0
180°	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4

(END OF REPORT)