

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: P333663-830

Luminaire Tested: **S125RDIW-S610D470U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333663-830  
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-S610D470U830-4F0-1E-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: 3773.0 lumens  
Efficiency: N/A  
Efficacy: 124.9 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

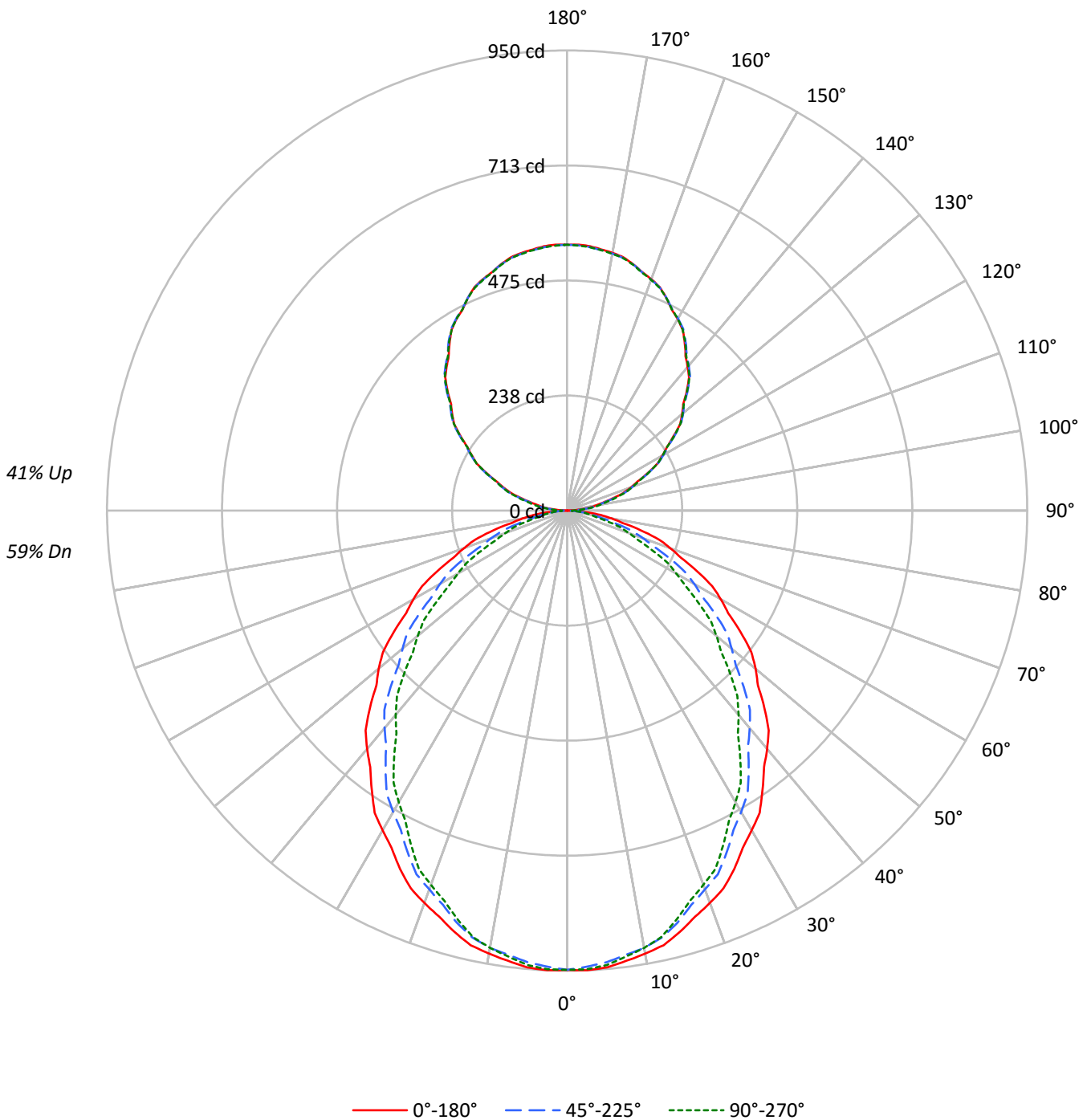
Input Watts (W): 30.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	6124	6124	6124
5°	6137	6067	6105
10°	6091	6011	6011
15°	6019	5889	5841
20°	5926	5720	5650
25°	5818	5552	5430
30°	5683	5357	5186
35°	5544	5155	4912
40°	5415	4945	4643
45°	5259	4709	4350
50°	5101	4454	4044
55°	4919	4209	3718
60°	4735	3912	3367
65°	4520	3568	2966
70°	4273	3138	2555
75°	3933	2643	2126
80°	3463	2079	1785
85°	2920	1697	1593



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.2	2.4
10°-20°	249.2	6.6
20°-30°	361.3	9.6
30°-40°	411.8	10.9
40°-50°	401.4	10.6
50°-60°	337.9	9.0
60°-70°	236.8	6.3
70°-80°	121.7	3.2
80°-90°	32.0	0.8
90°-100°	36.8	1.0
100°-110°	108.6	2.9
110°-120°	183.9	4.9
120°-130°	242.0	6.4
130°-140°	271.2	7.2
140°-150°	265.8	7.0
150°-160°	223.2	5.9
160°-170°	148.4	3.9
170°-180°	51.9	1.4
0°-30°	699.6	18.5
0°-40°	1111.4	29.5
0°-60°	1850.7	49.0
0°-90°	2241.2	59.4
90°-120°	329.3	8.7
90°-150°	1108.3	29.4
90°-180°	1532.0	40.6
0°-180°	3773.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	948	948	948	948	948	
5°	947	944	936	943	942	90
15°	900	895	881	880	874	254
25°	816	805	779	770	762	375
35°	703	685	654	634	623	440
45°	576	554	516	488	476	444
55°	437	413	374	343	330	391
65°	296	271	234	206	194	293
75°	158	136	106	91	85	167
85°	39	27	23	22	22	44
90°	0	4	7	9	10	3
95°	28	29	33	36	37	30
105°	97	100	102	105	106	104
115°	184	186	187	186	186	182
125°	269	271	272	271	270	241
135°	349	352	352	352	351	269
145°	423	425	426	426	425	265
155°	484	484	485	486	484	223
165°	527	526	526	528	526	149
175°	548	546	546	548	546	52
180°	549	549	549	549	549	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2
2.5°	949.9	949.5	949.1	948.8	948.4	947.5	946.2	945.0	943.7	942.4	943.7
5°	946.7	946.1	945.5	944.8	944.1	943.0	941.2	939.5	937.7	935.9	937.5
7.5°	937.5	936.8	936.2	935.6	935.0	933.7	931.5	929.4	927.4	925.2	926.3
10°	928.8	928.3	927.8	927.4	926.9	925.6	923.3	921.1	918.9	916.6	917.1
12.5°	919.1	918.5	917.8	917.3	916.6	914.8	911.9	908.9	905.9	902.9	903.2
15°	900.2	899.2	898.2	897.3	896.4	894.2	890.9	887.5	884.2	880.8	880.7
17.5°	878.8	877.4	875.9	874.5	873.0	870.2	865.9	861.8	857.5	853.4	852.5
20°	862.2	860.6	859.0	857.4	855.8	852.5	847.4	842.4	837.3	832.2	831.3
22.5°	843.9	842.3	840.7	839.1	837.5	834.1	828.7	823.4	818.0	812.7	811.2
25°	816.4	814.0	811.6	809.3	806.8	802.7	796.8	790.9	785.0	779.1	777.1
27.5°	784.9	782.0	779.1	776.2	773.3	768.7	762.4	756.1	749.8	743.5	740.6
30°	762.0	758.9	755.9	752.9	749.9	745.0	738.3	731.7	725.0	718.3	714.6
32.5°	739.6	736.1	732.5	729.1	725.5	720.3	713.5	706.7	699.8	693.1	689.0
35°	703.2	699.5	695.6	691.8	688.0	682.5	675.3	668.2	661.0	653.8	649.2
37.5°	667.6	662.9	658.3	653.7	649.0	643.0	635.6	628.2	620.9	613.4	607.9
40°	642.3	637.6	632.8	628.0	623.3	617.1	609.4	601.8	594.2	586.5	580.5
42.5°	616.0	611.1	606.2	601.3	596.4	590.0	582.1	574.2	566.4	558.5	552.6
45°	575.8	571.2	566.6	561.9	557.3	550.6	541.9	533.1	524.3	515.6	509.3
47.5°	534.1	529.2	524.3	519.5	514.6	507.7	499.0	490.1	481.4	472.5	466.0
50°	507.7	502.5	497.2	492.0	486.7	479.6	470.5	461.5	452.3	443.3	436.6
52.5°	479.1	473.7	468.3	463.0	457.6	450.6	442.1	433.5	424.9	416.3	409.2
55°	436.9	431.8	426.7	421.6	416.5	409.4	400.6	391.6	382.8	373.8	366.6
57.5°	394.2	388.7	383.2	377.9	372.4	365.3	356.8	348.2	339.6	331.0	324.0
60°	366.6	361.1	355.5	350.0	344.4	337.3	328.7	320.1	311.5	302.9	296.0
62.5°	337.4	332.2	326.8	321.5	316.2	309.2	300.5	291.7	283.0	274.3	267.8
65°	295.8	290.4	284.9	279.6	274.1	267.2	258.7	250.3	241.9	233.5	227.1
67.5°	254.4	248.9	243.6	238.2	232.7	226.0	217.9	209.8	201.7	193.6	187.8
70°	226.3	220.9	215.5	210.1	204.6	197.9	190.0	182.1	174.1	166.2	161.2
72.5°	198.8	193.5	188.2	182.9	177.7	171.3	163.8	156.4	148.9	141.5	137.0
75°	157.6	152.8	148.0	143.3	138.5	132.7	126.0	119.3	112.6	105.9	102.5
77.5°	116.6	112.7	109.0	105.1	101.3	96.7	91.3	86.1	80.7	75.3	72.9
80°	93.1	89.3	85.5	81.6	77.9	73.7	69.2	64.8	60.3	55.9	54.4
82.5°	70.2	66.7	63.3	59.9	56.5	53.2	50.1	47.0	44.0	41.0	40.3
85°	39.4	36.5	33.6	30.8	27.9	26.1	25.3	24.5	23.8	22.9	22.7
87.5°	13.3	12.5	11.8	11.0	10.3	9.9	10.0	10.0	10.0	10.0	10.1
90°	0.5	1.2	2.0	2.7	3.5	4.1	4.8	5.5	6.1	6.9	7.4
92.5°	10.4	10.8	11.4	12.0	12.4	13.1	13.9	14.8	15.6	16.4	17.1
95°	27.8	28.0	28.2	28.4	28.6	29.1	30.1	31.0	32.0	32.9	33.6
97.5°	46.1	46.2	46.3	46.4	46.5	47.1	48.4	49.8	51.1	52.4	53.0
100°	59.9	59.9	59.9	59.9	59.9	60.4	61.6	62.9	64.1	65.3	66.3
102.5°	74.5	74.8	75.3	75.7	76.1	76.5	77.2	77.8	78.4	79.0	79.9
105°	97.4	97.8	98.3	98.8	99.3	99.8	100.4	100.9	101.5	102.1	102.6
107.5°	122.7	123.2	123.7	124.1	124.6	125.1	125.5	125.9	126.4	126.8	127.1
110°	140.2	140.6	141.1	141.6	142.0	142.4	142.7	143.0	143.3	143.5	143.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	157.9	158.2	158.3	158.6	158.9	159.2	159.6	159.9	160.2	160.6	160.8
115°	184.1	184.5	184.9	185.3	185.7	186.0	186.2	186.3	186.5	186.7	186.6
117.5°	210.5	210.6	210.8	210.9	211.1	211.3	211.5	211.6	211.8	212.0	212.1
120°	226.9	227.3	227.8	228.3	228.8	229.0	229.1	229.2	229.3	229.4	229.4
122.5°	244.6	244.8	245.0	245.2	245.2	245.5	245.7	246.0	246.3	246.5	246.4
125°	268.7	269.3	269.8	270.4	271.0	271.4	271.5	271.5	271.6	271.7	271.5
127.5°	294.4	294.6	295.0	295.3	295.7	295.9	296.0	296.1	296.1	296.3	296.2
130°	309.7	310.2	310.7	311.1	311.6	312.0	312.2	312.4	312.5	312.7	312.6
132.5°	325.1	325.8	326.7	327.4	328.2	328.6	328.6	328.5	328.5	328.4	328.3
135°	349.4	350.1	350.6	351.2	351.8	352.0	352.1	352.2	352.3	352.4	352.4
137.5°	372.3	372.9	373.4	374.0	374.6	374.9	375.1	375.3	375.5	375.8	375.9
140°	387.0	387.5	388.0	388.4	388.9	389.4	389.6	389.9	390.2	390.5	390.7
142.5°	401.7	402.1	402.6	402.9	403.3	403.7	404.1	404.4	404.8	405.2	405.3
145°	423.4	423.8	424.1	424.5	424.9	425.2	425.5	425.7	426.0	426.3	426.3
147.5°	443.4	443.6	443.7	443.9	444.2	444.4	444.6	444.9	445.1	445.4	445.5
150°	456.7	456.6	456.5	456.4	456.3	456.5	456.9	457.2	457.6	458.0	458.0
152.5°	467.6	467.8	467.9	468.0	468.2	468.3	468.4	468.6	468.7	468.9	469.1
155°	484.5	484.5	484.5	484.5	484.5	484.5	484.6	484.7	484.7	484.8	485.2
157.5°	499.5	499.3	499.1	498.9	498.6	498.6	498.7	498.8	498.9	499.0	499.4
160°	508.4	508.1	507.7	507.5	507.2	507.1	507.2	507.3	507.4	507.5	507.9
162.5°	516.2	516.0	515.9	515.6	515.4	515.3	515.3	515.3	515.4	515.4	515.9
165°	526.7	526.5	526.3	526.1	525.9	525.9	526.0	526.1	526.2	526.3	526.7
167.5°	535.6	535.3	534.9	534.5	534.1	534.0	534.0	534.0	534.0	534.0	534.5
170°	540.4	540.0	539.6	539.2	538.9	538.7	538.7	538.7	538.7	538.7	539.2
172.5°	543.8	543.5	543.1	542.7	542.3	542.2	542.2	542.2	542.2	542.2	542.7
175°	547.7	547.2	546.9	546.5	546.1	545.9	545.9	545.9	545.9	545.9	546.5
177.5°	549.6	549.3	549.0	548.7	548.4	548.2	548.2	548.1	548.0	547.9	548.4
180°	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2
2.5°	945.0	946.2	947.5	948.1	948.0	947.8	947.7	947.6
5°	939.1	940.8	942.4	943.0	942.6	942.4	942.1	941.7
7.5°	927.5	928.6	929.7	930.1	929.7	929.3	929.1	928.7
10°	917.6	918.0	918.6	918.6	918.0	917.6	917.1	916.6
12.5°	903.6	904.0	904.3	904.1	903.3	902.7	901.9	901.2
15°	880.5	880.3	880.2	879.4	878.0	876.6	875.2	873.6
17.5°	851.8	850.9	850.2	849.1	848.0	846.8	845.6	844.4
20°	830.6	829.7	829.0	827.8	826.4	825.0	823.6	822.1
22.5°	809.5	807.9	806.4	805.0	803.9	802.7	801.5	800.3
25°	775.1	773.0	770.9	768.9	767.2	765.4	763.7	762.0
27.5°	737.7	734.8	731.9	729.6	727.9	726.2	724.5	722.8
30°	711.0	707.3	703.6	701.1	699.6	698.2	696.8	695.4
32.5°	684.9	681.0	676.9	674.0	672.1	670.3	668.5	666.8
35°	644.6	640.0	635.4	632.0	629.7	627.5	625.3	623.0
37.5°	602.4	596.8	591.3	587.4	585.2	583.2	581.0	578.8
40°	574.4	568.4	562.3	558.4	556.5	554.5	552.6	550.7
42.5°	546.9	541.0	535.3	530.9	528.2	525.4	522.5	519.8
45°	502.8	496.5	490.1	485.8	483.4	481.0	478.6	476.3
47.5°	459.4	452.8	446.3	441.7	439.0	436.4	433.8	431.1
50°	429.9	423.2	416.5	412.0	409.6	407.3	404.8	402.5
52.5°	402.0	394.7	387.6	382.8	380.4	378.1	375.6	373.2
55°	359.5	352.3	345.2	340.4	337.8	335.3	332.7	330.2
57.5°	317.0	310.0	303.0	298.3	296.1	293.8	291.6	289.4
60°	288.9	281.9	274.9	270.2	267.9	265.4	263.1	260.7
62.5°	261.3	254.8	248.3	243.8	241.5	239.1	236.7	234.3
65°	220.7	214.3	208.0	203.6	201.2	198.9	196.4	194.1
67.5°	182.0	176.2	170.3	166.5	164.6	162.7	160.7	158.8
70°	156.3	151.4	146.4	143.0	141.1	139.2	137.2	135.3
72.5°	132.4	127.8	123.3	120.4	119.1	117.8	116.6	115.3
75°	99.0	95.5	92.0	89.6	88.6	87.5	86.3	85.2
77.5°	70.4	68.0	65.5	63.9	63.1	62.2	61.5	60.6
80°	53.0	51.6	50.1	49.3	48.9	48.6	48.3	48.0
82.5°	39.6	38.9	38.3	37.9	37.7	37.5	37.3	37.1
85°	22.6	22.4	22.2	22.1	22.0	21.8	21.7	21.5
87.5°	10.2	10.3	10.4	10.4	10.3	10.2	10.2	10.1
90°	7.8	8.3	8.8	9.1	9.4	9.7	10.0	10.3
92.5°	17.6	18.3	18.9	19.3	19.5	19.7	20.0	20.2
95°	34.2	34.9	35.5	36.0	36.2	36.4	36.6	36.8
97.5°	53.6	54.3	54.9	55.2	55.3	55.5	55.6	55.7
100°	67.1	68.0	68.8	69.3	69.5	69.7	69.8	70.0
102.5°	80.9	81.8	82.8	83.3	83.6	83.9	84.2	84.5
105°	103.2	103.8	104.3	104.8	105.1	105.4	105.7	105.9
107.5°	127.3	127.6	127.9	128.1	128.1	128.0	128.0	128.0
110°	144.1	144.4	144.7	144.8	144.7	144.6	144.5	144.4





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CATALOG NUMBER: S125RDIW-S610D470U830-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	160.9	161.0	161.2	161.2	161.0	160.8	160.6	160.4
115°	186.5	186.4	186.3	186.2	186.2	186.1	186.0	185.9
117.5°	212.2	212.2	212.3	212.2	211.8	211.4	210.9	210.6
120°	229.4	229.4	229.4	229.2	228.8	228.5	228.1	227.7
122.5°	246.4	246.3	246.2	246.0	245.7	245.4	245.1	244.8
125°	271.4	271.2	271.0	270.8	270.7	270.6	270.5	270.4
127.5°	296.1	296.1	296.0	295.8	295.6	295.4	295.2	295.0
130°	312.5	312.5	312.4	312.2	312.0	311.8	311.6	311.4
132.5°	328.2	328.1	328.0	327.9	327.6	327.3	327.1	326.8
135°	352.4	352.4	352.4	352.2	351.9	351.5	351.1	350.7
137.5°	376.0	376.1	376.3	376.1	375.6	375.1	374.6	374.1
140°	390.9	391.1	391.2	391.1	390.6	390.1	389.6	389.2
142.5°	405.4	405.5	405.6	405.4	404.9	404.4	404.0	403.5
145°	426.3	426.3	426.3	426.2	425.9	425.7	425.4	425.1
147.5°	445.7	446.0	446.2	446.0	445.4	444.7	444.0	443.5
150°	458.0	458.0	458.0	457.9	457.7	457.5	457.3	457.1
152.5°	469.4	469.6	469.8	469.8	469.4	469.1	468.7	468.3
155°	485.6	486.0	486.4	486.4	485.9	485.4	484.9	484.5
157.5°	499.7	500.1	500.5	500.4	499.7	499.1	498.5	497.9
160°	508.3	508.7	509.1	509.0	508.5	508.0	507.6	507.1
162.5°	516.3	516.7	517.2	517.2	516.6	516.0	515.5	514.9
165°	527.1	527.4	527.8	527.7	527.2	526.6	526.0	525.5
167.5°	535.1	535.6	536.2	536.2	535.6	535.0	534.4	533.9
170°	539.8	540.4	541.0	540.9	540.3	539.6	538.9	538.3
172.5°	543.3	543.8	544.4	544.4	543.8	543.2	542.6	542.1
175°	547.1	547.7	548.3	548.2	547.5	546.9	546.2	545.5
177.5°	548.8	549.3	549.8	549.7	549.2	548.7	548.1	547.6
180°	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9

(END OF REPORT)