

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: P333662-935

Luminaire Tested: **S125RDIW-S610D470U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333662-935
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-S610D470U935-4F0-1E-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: 3660.9 lumens
Efficiency: N/A
Efficacy: 121.2 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

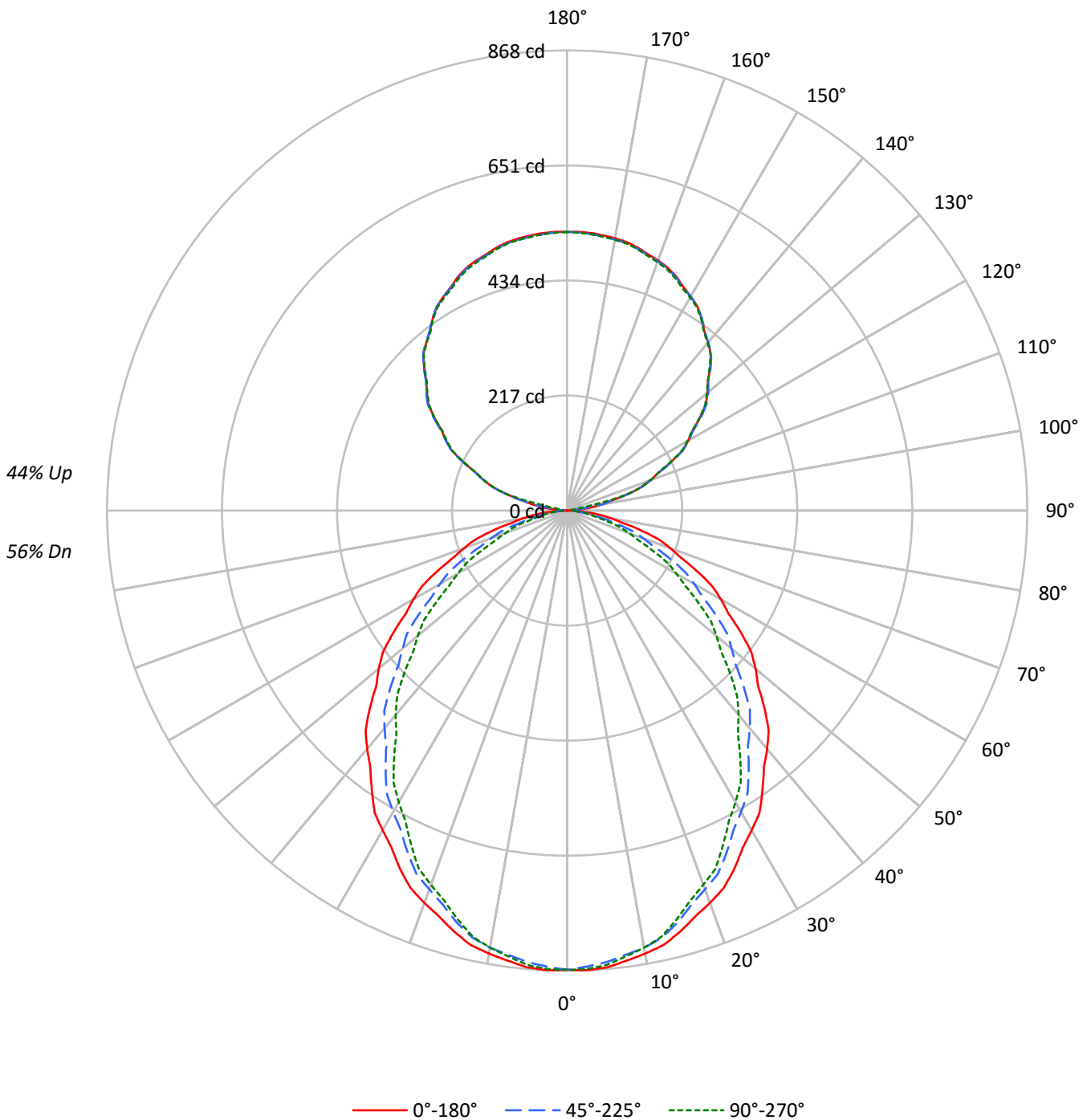
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	5594	5594	5594
5°	5607	5543	5577
10°	5564	5491	5491
15°	5498	5380	5336
20°	5413	5225	5161
25°	5315	5072	4960
30°	5190	4894	4737
35°	5065	4709	4487
40°	4947	4517	4242
45°	4804	4302	3974
50°	4660	4068	3693
55°	4494	3845	3396
60°	4326	3574	3077
65°	4129	3260	2709
70°	3903	2866	2334
75°	3593	2415	1941
80°	3165	1901	1629
85°	2668	1549	1452



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.4	2.2
10°-20°	227.6	6.2
20°-30°	330.1	9.0
30°-40°	376.2	10.3
40°-50°	366.7	10.0
50°-60°	308.6	8.4
60°-70°	216.4	5.9
70°-80°	111.2	3.0
80°-90°	29.2	0.8
90°-100°	19.1	0.5
100°-110°	117.7	3.2
110°-120°	213.4	5.8
120°-130°	273.9	7.5
130°-140°	294.6	8.0
140°-150°	276.5	7.6
150°-160°	223.7	6.1
160°-170°	144.7	4.0
170°-180°	49.9	1.4
0°-30°	639.1	17.5
0°-40°	1015.3	27.7
0°-60°	1690.5	46.2
0°-90°	2047.3	55.9
90°-120°	350.2	9.6
90°-150°	1195.3	32.7
90°-180°	1614.0	44.1
0°-180°	3660.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	865	862	855	861	860	82
15°	822	818	805	804	798	232
25°	746	735	712	703	696	343
35°	642	626	597	579	569	402
45°	526	506	471	446	435	406
55°	399	377	342	313	302	357
65°	270	247	213	188	177	268
75°	144	124	97	83	78	152
85°	36	25	21	20	20	40
90°	0	4	6	8	9	3
95°	22	20	6	8	8	28
105°	114	116	116	116	116	121
115°	215	217	217	216	213	213
125°	306	308	308	307	306	273
135°	381	384	383	382	380	294
145°	442	443	443	443	441	276
155°	487	485	485	486	483	224
165°	514	512	512	514	511	145
175°	526	523	524	526	523	50
180°	526	526	526	526	526	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	867.7	867.4	867.0	866.7	866.3	865.6	864.4	863.2	862.0	860.9	862.0
5°	864.8	864.3	863.7	863.1	862.5	861.4	859.8	858.2	856.6	855.0	856.4
7.5°	856.4	855.7	855.2	854.6	854.1	852.9	850.9	849.0	847.1	845.2	846.2
10°	848.4	848.0	847.6	847.1	846.7	845.5	843.4	841.5	839.4	837.3	837.8
12.5°	839.6	839.0	838.4	837.9	837.3	835.7	833.0	830.3	827.5	824.8	825.1
15°	822.3	821.4	820.5	819.7	818.8	816.8	813.8	810.7	807.7	804.6	804.5
17.5°	802.8	801.5	800.1	798.8	797.5	794.9	791.0	787.2	783.3	779.5	778.8
20°	787.6	786.2	784.7	783.3	781.8	778.8	774.1	769.5	764.8	760.2	759.4
22.5°	770.9	769.4	768.0	766.5	765.1	761.9	757.0	752.2	747.3	742.4	741.0
25°	745.8	743.6	741.4	739.3	737.0	733.2	727.9	722.5	717.1	711.7	709.9
27.5°	717.0	714.4	711.7	709.0	706.4	702.2	696.5	690.7	684.9	679.2	676.5
30°	696.0	693.3	690.5	687.8	685.0	680.5	674.4	668.4	662.3	656.2	652.8
32.5°	675.6	672.4	669.2	666.0	662.7	658.0	651.8	645.6	639.3	633.1	629.4
35°	642.4	638.9	635.4	632.0	628.4	623.5	616.9	610.4	603.8	597.3	593.1
37.5°	609.8	605.5	601.3	597.1	592.9	587.4	580.6	573.9	567.1	560.3	555.3
40°	586.8	582.5	578.1	573.7	569.4	563.7	556.7	549.7	542.8	535.8	530.3
42.5°	562.7	558.3	553.8	549.3	544.8	539.0	531.8	524.5	517.4	510.1	504.8
45°	526.0	521.8	517.5	513.3	509.1	503.0	495.0	487.0	479.0	471.0	465.2
47.5°	487.9	483.5	479.0	474.6	470.1	463.8	455.8	447.7	439.7	431.6	425.7
50°	463.8	459.0	454.2	449.4	444.6	438.1	429.8	421.5	413.2	404.9	398.8
52.5°	437.6	432.7	427.8	422.9	418.0	411.6	403.8	396.0	388.1	380.3	373.8
55°	399.1	394.4	389.8	385.1	380.5	374.0	365.9	357.7	349.7	341.5	334.9
57.5°	360.1	355.1	350.1	345.2	340.2	333.7	325.9	318.1	310.2	302.4	295.9
60°	334.9	329.8	324.8	319.7	314.6	308.2	300.2	292.4	284.6	276.7	270.4
62.5°	308.2	303.4	298.5	293.7	288.9	282.4	274.5	266.5	258.6	250.6	244.6
65°	270.2	265.3	260.3	255.4	250.4	244.1	236.3	228.7	220.9	213.3	207.4
67.5°	232.4	227.4	222.5	217.6	212.6	206.5	199.1	191.7	184.3	176.8	171.6
70°	206.7	201.8	196.8	191.9	186.9	180.8	173.6	166.3	159.0	151.8	147.2
72.5°	181.6	176.8	171.9	167.1	162.3	156.4	149.6	142.8	136.0	129.2	125.1
75°	144.0	139.6	135.2	130.9	126.5	121.2	115.1	109.0	102.9	96.8	93.6
77.5°	106.5	103.0	99.5	96.0	92.6	88.3	83.4	78.6	73.7	68.8	66.6
80°	85.1	81.5	78.1	74.6	71.1	67.3	63.2	59.2	55.1	51.1	49.7
82.5°	64.1	61.0	57.9	54.7	51.6	48.6	45.8	43.0	40.2	37.5	36.9
85°	36.0	33.3	30.7	28.2	25.5	23.8	23.1	22.4	21.7	20.9	20.8
87.5°	12.1	11.5	10.8	10.1	9.4	9.0	9.0	9.1	9.1	9.1	9.2
90°	0.4	1.1	1.8	2.5	3.2	3.8	4.4	5.0	5.6	6.2	6.6
92.5°	6.0	5.5	5.0	4.6	4.0	4.0	4.6	5.2	5.7	6.2	6.6
95°	22.2	22.0	21.7	21.4	21.2	19.4	16.1	12.8	9.6	6.2	6.6
97.5°	46.3	46.8	47.3	47.8	48.2	45.2	38.7	32.2	25.7	19.2	16.7
100°	65.0	65.3	65.6	65.9	66.1	66.4	66.7	67.1	67.4	67.8	54.8
102.5°	84.0	84.4	84.7	85.1	85.4	85.7	85.8	86.0	86.3	86.4	84.0
105°	114.5	114.9	115.2	115.5	115.9	116.1	116.1	116.1	116.1	116.1	116.1
107.5°	146.1	146.1	146.1	146.1	146.1	146.2	146.4	146.5	146.7	146.9	147.0
110°	166.7	166.7	166.7	166.7	166.7	166.8	166.9	167.1	167.3	167.5	167.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	186.1	186.2	186.4	186.7	186.8	187.0	187.1	187.3	187.4	187.4	187.1
115°	215.0	215.4	215.9	216.3	216.7	217.0	217.1	217.1	217.2	217.3	217.0
117.5°	245.0	245.0	245.0	245.0	245.0	245.1	245.4	245.7	246.1	246.4	246.0
120°	263.7	263.6	263.6	263.5	263.4	263.5	263.7	264.0	264.2	264.5	264.3
122.5°	280.3	280.5	280.9	281.2	281.5	281.7	281.9	282.0	282.1	282.2	282.1
125°	305.7	306.3	306.9	307.5	308.2	308.5	308.5	308.5	308.5	308.5	308.2
127.5°	330.1	330.6	331.1	331.5	331.9	332.1	332.0	332.0	331.9	331.8	331.7
130°	345.1	345.5	345.9	346.4	346.8	347.1	347.2	347.2	347.3	347.4	347.2
132.5°	360.1	360.6	361.1	361.5	362.1	362.2	362.1	361.9	361.6	361.4	361.4
135°	381.3	381.9	382.4	382.9	383.4	383.6	383.4	383.2	383.1	382.9	382.7
137.5°	400.9	401.3	401.7	402.3	402.7	402.9	402.7	402.5	402.3	402.2	402.3
140°	413.6	413.8	414.0	414.1	414.3	414.4	414.3	414.2	414.1	414.1	414.2
142.5°	425.2	425.3	425.4	425.5	425.6	425.7	425.9	425.9	426.1	426.2	426.2
145°	442.1	442.3	442.5	442.6	442.8	442.9	442.9	442.9	442.9	442.9	443.0
147.5°	456.9	456.8	456.8	456.8	456.8	456.8	456.9	457.0	457.1	457.2	457.3
150°	466.2	466.1	465.9	465.7	465.5	465.5	465.7	465.9	466.1	466.2	466.4
152.5°	475.3	474.9	474.5	474.2	473.7	473.6	473.8	474.0	474.2	474.3	474.5
155°	486.9	486.4	485.9	485.3	484.8	484.7	484.8	485.0	485.2	485.3	485.6
157.5°	495.8	495.5	495.2	494.9	494.6	494.5	494.5	494.5	494.5	494.6	494.8
160°	502.0	501.5	501.0	500.5	500.0	499.8	499.9	500.0	500.1	500.2	500.5
162.5°	507.0	506.5	506.0	505.5	505.0	504.8	504.9	505.0	505.1	505.1	505.6
165°	513.8	513.2	512.7	512.2	511.7	511.4	511.5	511.6	511.7	511.8	512.3
167.5°	518.8	518.2	517.7	517.1	516.6	516.3	516.4	516.5	516.6	516.7	517.4
170°	521.6	521.0	520.3	519.7	519.1	518.8	518.9	519.0	519.1	519.2	519.9
172.5°	523.4	522.8	522.2	521.6	521.0	520.8	520.9	521.1	521.2	521.4	522.0
175°	525.5	525.0	524.4	523.9	523.4	523.1	523.2	523.3	523.4	523.5	524.2
177.5°	526.4	526.0	525.6	525.1	524.7	524.5	524.6	524.7	524.8	524.9	525.3
180°	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	863.2	864.4	865.6	866.1	866.0	865.8	865.7	865.6
5°	857.9	859.4	860.8	861.4	861.1	860.8	860.6	860.2
7.5°	847.2	848.3	849.3	849.6	849.3	848.9	848.7	848.3
10°	838.2	838.6	839.1	839.1	838.6	838.2	837.8	837.3
12.5°	825.4	825.8	826.0	825.9	825.2	824.6	823.9	823.2
15°	804.3	804.2	804.1	803.3	802.0	800.7	799.4	798.1
17.5°	778.1	777.3	776.6	775.7	774.6	773.5	772.5	771.4
20°	758.7	757.9	757.2	756.2	754.9	753.6	752.3	751.0
22.5°	739.5	738.0	736.7	735.4	734.3	733.2	732.2	731.1
25°	708.0	706.1	704.2	702.4	700.9	699.2	697.7	696.0
27.5°	673.9	671.2	668.6	666.5	665.0	663.4	661.9	660.3
30°	649.5	646.1	642.7	640.4	639.1	637.8	636.5	635.2
32.5°	625.7	622.1	618.4	615.7	614.0	612.3	610.7	609.1
35°	588.8	584.6	580.4	577.3	575.2	573.2	571.2	569.1
37.5°	550.3	545.2	540.1	536.6	534.6	532.7	530.7	528.7
40°	524.7	519.2	513.7	510.1	508.3	506.5	504.8	503.1
42.5°	499.6	494.2	489.0	485.0	482.5	479.9	477.3	474.8
45°	459.3	453.6	447.7	443.8	441.6	439.4	437.2	435.1
47.5°	419.7	413.6	407.7	403.5	401.1	398.6	396.2	393.8
50°	392.7	386.6	380.5	376.3	374.2	372.0	369.8	367.6
52.5°	367.2	360.6	354.0	349.7	347.5	345.3	343.1	341.0
55°	328.4	321.8	315.3	310.9	308.6	306.3	303.9	301.6
57.5°	289.6	283.2	276.8	272.5	270.4	268.4	266.4	264.3
60°	263.9	257.5	251.2	246.8	244.7	242.5	240.3	238.2
62.5°	238.7	232.7	226.8	222.7	220.6	218.4	216.2	214.0
65°	201.6	195.8	190.0	186.0	183.8	181.7	179.4	177.3
67.5°	166.3	160.9	155.6	152.1	150.3	148.6	146.8	145.1
70°	142.8	138.3	133.7	130.6	128.9	127.2	125.4	123.6
72.5°	121.0	116.8	112.6	109.9	108.8	107.6	106.5	105.3
75°	90.4	87.2	84.0	81.9	80.9	79.9	78.9	77.8
77.5°	64.3	62.1	59.8	58.4	57.6	56.8	56.1	55.4
80°	48.4	47.1	45.8	45.0	44.7	44.4	44.1	43.8
82.5°	36.2	35.6	35.0	34.6	34.4	34.3	34.1	33.9
85°	20.7	20.5	20.3	20.2	20.1	19.9	19.8	19.6
87.5°	9.3	9.4	9.5	9.5	9.4	9.3	9.3	9.2
90°	7.1	7.5	7.9	8.4	8.6	8.9	9.1	9.4
92.5°	7.1	7.5	7.9	8.3	8.4	8.5	8.6	8.7
95°	7.1	7.5	7.9	8.2	8.2	8.2	8.2	8.2
97.5°	14.3	11.9	9.4	8.2	8.2	8.2	8.2	8.2
100°	42.0	29.1	16.2	9.6	9.2	8.9	8.5	8.2
102.5°	81.6	79.1	76.7	72.6	66.6	60.8	54.8	49.0
105°	116.1	116.1	116.1	116.1	116.0	115.9	115.8	115.7
107.5°	147.0	147.0	147.0	146.9	146.6	146.4	146.1	145.9
110°	166.9	166.7	166.4	166.3	166.4	166.5	166.6	166.7



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CATALOG NUMBER: S125RDIW-S610D470U935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	186.8	186.4	186.1	185.9	185.8	185.6	185.5	185.4
115°	216.6	216.3	215.9	215.5	215.0	214.5	214.0	213.4
117.5°	245.5	245.0	244.6	244.3	244.0	243.8	243.6	243.4
120°	264.2	264.0	263.8	263.5	263.0	262.6	262.2	261.7
122.5°	281.9	281.7	281.5	281.2	280.7	280.2	279.7	279.2
125°	307.8	307.5	307.1	306.8	306.5	306.3	306.0	305.7
127.5°	331.5	331.3	331.1	330.7	330.0	329.4	328.7	328.1
130°	346.9	346.6	346.4	346.0	345.6	345.2	344.7	344.3
132.5°	361.4	361.3	361.3	361.0	360.6	360.2	359.7	359.3
135°	382.5	382.4	382.2	381.9	381.3	380.8	380.3	379.8
137.5°	402.3	402.3	402.3	402.2	401.7	401.2	400.8	400.4
140°	414.4	414.6	414.7	414.6	414.1	413.5	413.0	412.5
142.5°	426.3	426.3	426.4	426.1	425.6	425.1	424.6	424.0
145°	443.1	443.2	443.2	443.0	442.5	442.0	441.4	440.9
147.5°	457.4	457.5	457.6	457.4	456.8	456.2	455.5	454.9
150°	466.6	466.7	466.9	466.7	466.0	465.3	464.6	463.9
152.5°	474.7	474.8	475.0	474.8	474.2	473.6	472.9	472.3
155°	485.9	486.1	486.4	486.1	485.4	484.7	484.1	483.4
157.5°	495.1	495.3	495.6	495.4	494.7	494.0	493.4	492.7
160°	500.8	501.2	501.5	501.4	500.7	500.0	499.3	498.6
162.5°	506.1	506.6	507.0	507.0	506.2	505.4	504.6	503.9
165°	512.9	513.4	513.9	513.8	513.2	512.4	511.7	511.0
167.5°	518.0	518.6	519.2	519.2	518.3	517.5	516.8	516.0
170°	520.6	521.3	522.0	521.9	521.2	520.4	519.6	518.8
172.5°	522.6	523.2	523.9	523.8	523.1	522.3	521.5	520.7
175°	524.9	525.6	526.2	526.2	525.5	524.7	523.9	523.1
177.5°	525.8	526.2	526.8	526.8	526.2	525.6	525.0	524.5
180°	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5

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