

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: P333372-935

Luminaire Tested: **S125DIW-S610D470U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333372-935
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: S125DIW-S610D470U935-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3681.4 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

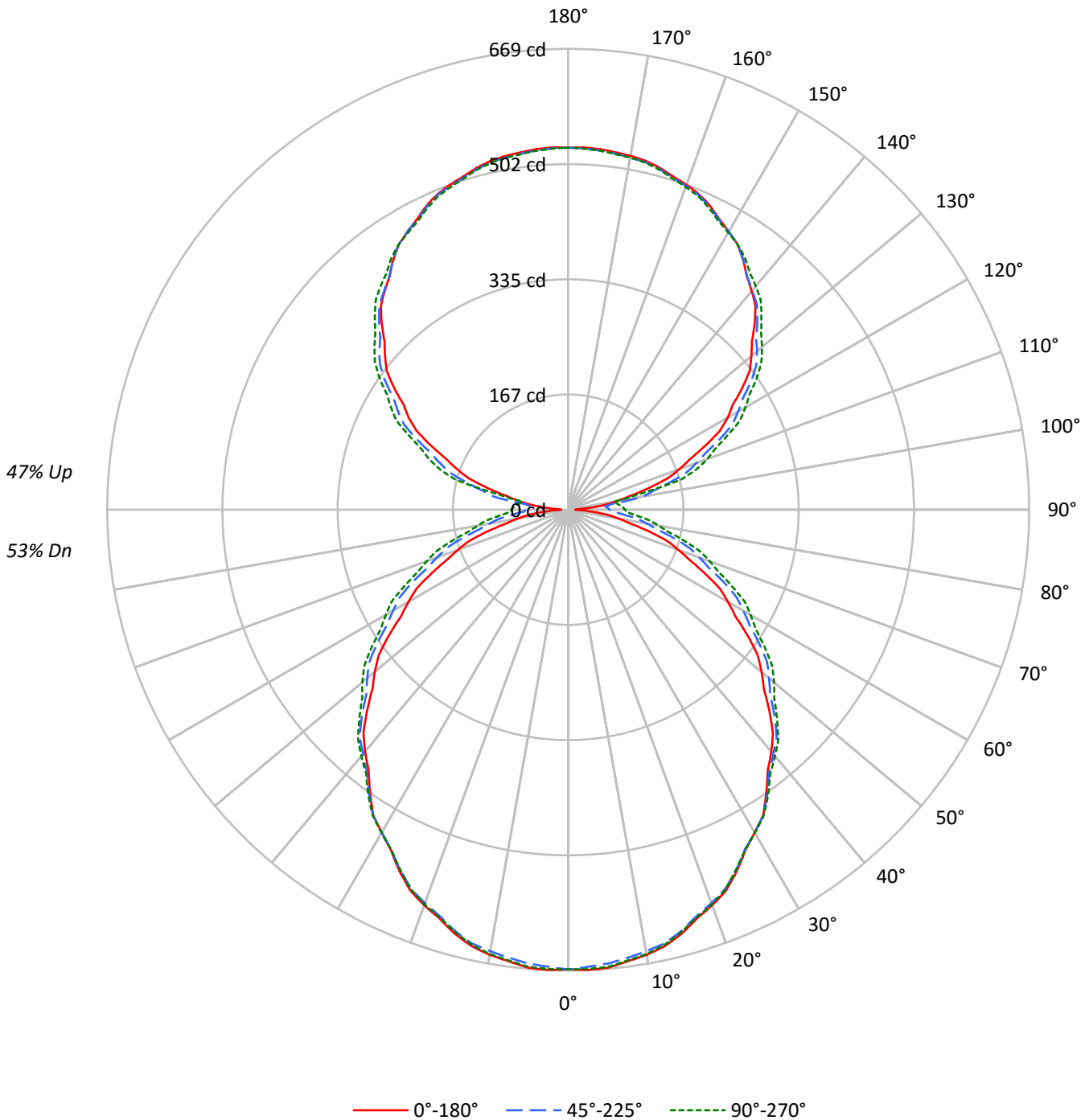
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53
1	98	93	89	85	90	86	82	79	73	71	68	61	60	58	51	49	48	43
2	89	81	74	69	82	75	69	64	64	59	56	54	50	48	44	42	40	35
3	81	71	63	57	74	66	59	53	56	51	47	47	43	40	39	36	34	29
4	74	62	54	48	68	58	51	45	50	44	39	42	37	34	35	31	29	25
5	68	56	47	41	62	52	44	39	44	38	34	37	33	29	31	28	25	22
6	62	50	41	35	57	46	39	33	40	34	29	34	29	26	28	25	22	19
7	57	45	37	31	53	42	34	29	36	30	26	31	26	23	26	22	19	17
8	53	41	33	27	49	38	31	26	33	27	23	28	23	20	24	20	17	15
9	50	37	29	24	46	35	28	23	30	24	21	26	21	18	22	18	16	13
10	46	34	27	22	43	32	25	21	28	22	18	24	19	16	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4310	4310	4310
5°	4318	4229	4243
10°	4288	4154	4148
15°	4236	4064	4027
20°	4168	3952	3906
25°	4086	3833	3757
30°	3987	3701	3622
35°	3894	3580	3497
40°	3800	3452	3372
45°	3693	3344	3261
50°	3592	3225	3163
55°	3469	3114	3048
60°	3336	2986	2931
65°	3196	2854	2799
70°	3036	2672	2663
75°	2788	2496	2496
80°	2461	2284	2314
85°	2155	2142	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.7
10°-20°	179.1	4.9
20°-30°	266.4	7.2
30°-40°	315.5	8.6
40°-50°	326.2	8.9
50°-60°	300.5	8.2
60°-70°	242.9	6.6
70°-80°	162.7	4.4
80°-90°	85.5	2.3
90°-100°	66.4	1.8
100°-110°	152.6	4.1
110°-120°	236.8	6.4
120°-130°	287.2	7.8
130°-140°	300.4	8.2
140°-150°	277.7	7.5
150°-160°	223.7	6.1
160°-170°	144.7	3.9
170°-180°	49.9	1.4
0°-30°	508.6	13.8
0°-40°	824.1	22.4
0°-60°	1450.8	39.4
0°-90°	1941.9	52.7
90°-120°	455.8	12.4
90°-150°	1321.2	35.9
90°-180°	1739.0	47.2
0°-180°	3681.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	667	666	661	666	666	63
15°	637	638	633	637	635	179
25°	579	581	577	579	576	266
35°	501	505	504	506	506	313
45°	413	420	423	428	428	318
55°	317	328	338	345	348	284
65°	218	234	249	259	262	217
75°	120	138	158	171	175	128
85°	36	58	80	94	100	38
90°	11	35	60	76	83	8
95°	31	46	54	70	75	35
105°	120	133	152	165	169	128
115°	219	226	243	253	255	217
125°	308	311	324	332	335	275
135°	383	384	388	396	397	295
145°	443	443	443	446	447	277
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°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	668.8	668.6	668.4	668.1	667.9	667.4	666.6	665.7	665.0	664.1	665.0
5°	667.3	666.9	666.7	666.4	666.1	665.5	664.4	663.4	662.4	661.3	662.5
7.5°	661.3	661.2	661.2	661.0	660.9	660.3	659.3	658.2	657.2	656.2	657.1
10°	656.2	656.2	656.2	656.2	656.2	655.6	654.4	653.2	652.0	650.9	651.9
12.5°	648.8	648.9	649.0	649.2	649.3	648.8	647.9	647.0	646.1	645.1	645.9
15°	637.1	637.3	637.5	637.6	637.7	637.3	636.3	635.2	634.3	633.3	634.1
17.5°	622.0	622.2	622.6	622.8	623.2	622.8	621.8	620.8	619.7	618.7	619.4
20°	611.0	611.3	611.6	611.9	612.2	611.8	610.8	609.8	608.7	607.7	608.1
22.5°	598.5	599.0	599.5	600.0	600.5	600.2	599.1	598.0	596.8	595.7	596.2
25°	578.9	579.4	579.8	580.2	580.7	580.5	579.6	578.8	577.8	577.0	577.6
27.5°	557.2	557.8	558.5	559.1	559.8	559.6	558.6	557.7	556.6	555.7	556.0
30°	541.0	541.9	542.8	543.6	544.5	544.5	543.6	542.8	541.9	541.0	541.3
32.5°	526.3	527.1	527.9	528.7	529.3	529.4	528.8	528.1	527.5	526.8	527.2
35°	501.1	502.1	503.2	504.1	505.1	505.5	505.1	504.5	504.1	503.7	504.1
37.5°	475.9	476.8	477.7	478.6	479.6	479.9	479.8	479.7	479.5	479.4	479.9
40°	458.6	459.8	460.9	462.1	463.2	463.7	463.6	463.5	463.3	463.1	463.7
42.5°	439.7	441.3	442.7	444.3	445.8	446.7	447.0	447.4	447.6	448.0	448.7
45°	412.8	414.4	415.9	417.6	419.2	420.3	421.1	421.8	422.5	423.3	424.3
47.5°	385.2	386.7	388.1	389.6	391.2	392.4	393.7	394.9	396.2	397.4	399.0
50°	366.4	367.9	369.5	371.2	372.7	374.4	375.9	377.5	379.1	380.7	382.4
52.5°	346.5	348.4	350.3	352.3	354.2	356.2	358.2	360.1	362.1	363.9	365.7
55°	317.3	319.6	321.9	324.3	326.6	328.9	331.2	333.6	335.9	338.2	339.8
57.5°	287.5	290.2	293.0	295.8	298.6	301.4	304.0	306.7	309.4	312.0	313.8
60°	267.6	270.4	273.4	276.3	279.2	282.1	285.0	287.9	290.8	293.7	295.9
62.5°	248.2	251.1	254.0	256.9	259.8	262.9	266.0	269.1	272.2	275.4	277.8
65°	218.5	221.9	225.2	228.5	231.9	235.3	238.8	242.3	245.7	249.3	251.4
67.5°	190.5	193.7	196.9	200.2	203.4	206.8	210.3	213.9	217.4	221.0	223.6
70°	170.0	173.4	176.8	180.1	183.5	187.0	190.8	194.6	198.4	202.2	204.9
72.5°	150.2	153.7	157.1	160.6	164.0	167.8	171.9	176.1	180.2	184.3	187.4
75°	120.4	124.2	127.9	131.7	135.5	139.7	144.4	149.0	153.7	158.3	161.2
77.5°	91.7	96.1	100.5	104.8	109.2	113.6	118.0	122.5	127.0	131.5	134.7
80°	74.0	78.3	82.7	87.0	91.4	96.0	101.0	105.9	110.8	115.8	119.0
82.5°	57.7	62.3	66.9	71.5	76.1	80.9	85.9	91.0	96.1	101.2	104.2
85°	36.0	40.8	45.5	50.4	55.2	60.1	65.2	70.3	75.3	80.5	83.7
87.5°	20.5	25.3	30.0	34.9	39.7	44.6	49.7	54.7	59.8	64.8	68.3
90°	10.8	16.2	21.5	26.9	32.2	37.7	43.2	48.8	54.3	59.8	63.6
92.5°	15.4	19.2	23.1	26.9	30.7	35.4	41.0	46.6	52.2	57.8	61.5
95°	30.7	34.3	37.7	41.2	44.8	47.4	49.0	50.7	52.3	54.0	57.6
97.5°	54.1	57.9	61.8	65.7	69.6	70.6	68.9	67.2	65.3	63.6	64.2
100°	72.2	75.6	78.9	82.1	85.5	89.6	94.6	99.6	104.6	109.6	99.8
102.5°	90.7	93.8	97.0	100.1	103.3	107.3	112.0	116.8	121.5	126.2	126.7
105°	120.4	123.0	125.7	128.5	131.1	134.6	139.0	143.4	147.7	152.1	155.0
107.5°	151.3	153.3	155.2	157.2	159.1	162.3	166.7	171.1	175.4	179.8	182.6
110°	171.3	173.1	174.8	176.5	178.2	181.2	185.5	189.8	194.0	198.2	200.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	190.6	192.2	193.8	195.4	197.0	199.8	203.9	207.9	212.1	216.1	218.4
115°	219.0	220.4	221.8	223.3	224.7	227.4	231.3	235.1	239.0	242.9	245.1
117.5°	248.3	248.9	249.6	250.2	250.9	253.1	257.1	261.0	264.8	268.8	270.8
120°	267.0	267.3	267.7	268.0	268.4	270.4	274.0	277.6	281.1	284.7	287.1
122.5°	282.9	283.5	284.0	284.6	285.1	287.1	290.4	293.7	297.0	300.4	302.6
125°	308.4	308.8	309.3	309.8	310.2	311.9	314.8	317.7	320.6	323.6	325.5
127.5°	332.1	332.4	332.7	332.9	333.3	334.6	336.9	339.2	341.6	343.9	345.9
130°	347.1	347.3	347.7	347.9	348.2	349.4	351.5	353.7	355.8	357.9	359.7
132.5°	361.5	362.0	362.5	362.9	363.4	364.3	365.7	367.0	368.4	369.8	371.9
135°	382.6	383.0	383.4	383.7	384.2	384.8	385.6	386.4	387.3	388.1	389.9
137.5°	402.1	402.4	402.7	403.0	403.4	403.7	404.1	404.4	404.8	405.1	406.8
140°	414.3	414.5	414.7	414.8	415.0	415.1	415.2	415.3	415.3	415.3	417.2
142.5°	425.9	425.9	425.9	425.8	425.8	425.9	426.0	426.2	426.3	426.5	427.8
145°	442.7	442.8	442.8	442.8	442.9	442.9	442.9	442.9	442.9	442.9	443.7
147.5°	456.9	456.8	456.8	456.8	456.8	456.8	456.9	457.0	457.1	457.2	457.5
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°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	665.7	666.6	667.4	667.7	667.6	667.5	667.4	667.3
5°	663.7	664.9	666.0	666.5	666.4	666.2	666.1	666.0
7.5°	658.1	659.2	660.2	660.6	660.5	660.4	660.2	660.0
10°	653.0	653.9	655.0	655.4	655.3	655.1	655.0	654.8
12.5°	646.7	647.5	648.3	648.5	648.1	647.7	647.4	647.0
15°	635.0	635.8	636.7	636.9	636.3	635.7	635.2	634.6
17.5°	620.1	620.7	621.4	621.6	621.2	620.9	620.5	620.2
20°	608.6	609.1	609.5	609.7	609.7	609.7	609.7	609.7
22.5°	596.8	597.4	597.9	598.0	597.6	597.3	596.9	596.6
25°	578.2	578.8	579.3	579.3	578.5	577.8	577.0	576.4
27.5°	556.5	556.9	557.3	557.3	557.1	556.8	556.6	556.3
30°	541.6	541.9	542.2	542.3	542.1	541.9	541.8	541.7
32.5°	527.4	527.7	528.1	528.1	528.0	527.8	527.7	527.5
35°	504.5	505.1	505.5	505.7	505.7	505.7	505.7	505.7
37.5°	480.5	481.1	481.7	482.0	481.9	481.8	481.8	481.7
40°	464.3	464.9	465.5	465.9	466.2	466.5	466.8	467.1
42.5°	449.4	450.0	450.7	451.2	451.3	451.3	451.3	451.4
45°	425.2	426.3	427.3	427.9	428.1	428.2	428.3	428.5
47.5°	400.5	401.9	403.4	404.3	404.7	404.9	405.3	405.6
50°	383.9	385.6	387.1	388.1	388.6	389.0	389.4	389.9
52.5°	367.4	369.1	370.8	371.9	372.2	372.5	372.8	373.2
55°	341.4	343.0	344.6	345.7	346.3	346.9	347.4	348.0
57.5°	315.7	317.5	319.3	320.5	321.0	321.4	321.8	322.3
60°	298.1	300.2	302.5	303.8	304.2	304.6	305.1	305.5
62.5°	280.3	282.7	285.1	286.5	287.1	287.7	288.2	288.8
65°	253.6	255.8	258.0	259.3	259.9	260.5	261.1	261.7
67.5°	226.3	228.9	231.5	233.2	234.0	234.8	235.6	236.3
70°	207.7	210.4	213.2	215.0	215.9	216.7	217.7	218.5
72.5°	190.4	193.3	196.3	198.1	198.8	199.4	200.1	200.7
75°	164.1	167.0	170.0	171.8	172.5	173.2	173.9	174.7
77.5°	137.8	141.1	144.3	146.2	146.7	147.3	147.9	148.5
80°	122.2	125.4	128.5	130.4	131.0	131.6	132.2	132.8
82.5°	107.3	110.4	113.5	115.5	116.6	117.6	118.6	119.7
85°	86.9	90.1	93.2	95.4	96.6	97.7	98.9	100.0
87.5°	71.7	75.2	78.5	80.8	81.9	82.9	84.0	85.1
90°	67.4	71.2	75.0	77.5	78.8	80.1	81.4	82.7
92.5°	65.1	68.8	72.4	74.8	75.9	77.1	78.3	79.4
95°	61.2	64.9	68.5	70.9	71.9	72.8	73.9	74.9
97.5°	64.8	65.5	66.1	66.9	67.8	68.9	69.8	70.9
100°	90.0	80.1	70.3	65.6	66.1	66.6	67.2	67.7
102.5°	127.3	127.8	128.2	126.0	121.0	116.0	110.9	105.9
105°	157.9	160.7	163.7	165.6	166.5	167.5	168.4	169.4
107.5°	185.5	188.5	191.3	193.1	193.7	194.4	195.0	195.7
110°	203.3	205.8	208.3	210.1	211.1	212.2	213.4	214.5



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CATALOG NUMBER: S125DIW-S610D470U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	220.8	223.0	225.3	227.0	227.8	228.8	229.6	230.6
115°	247.4	249.7	251.9	253.2	253.6	254.0	254.3	254.7
117.5°	272.9	274.8	276.9	278.3	279.1	279.8	280.5	281.3
120°	289.4	291.6	293.9	295.3	295.8	296.2	296.6	297.0
122.5°	304.8	306.9	309.2	310.4	310.8	311.2	311.5	311.9
125°	327.5	329.5	331.5	332.7	333.1	333.6	334.1	334.6
127.5°	347.8	349.8	351.7	352.8	353.0	353.3	353.4	353.6
130°	361.4	363.3	365.0	366.0	366.4	366.6	367.0	367.2
132.5°	373.8	375.8	377.8	378.8	379.0	379.2	379.4	379.5
135°	391.6	393.3	395.0	396.0	396.1	396.4	396.6	396.7
137.5°	408.6	410.4	412.1	413.0	413.2	413.3	413.5	413.5
140°	418.9	420.7	422.4	423.4	423.4	423.5	423.5	423.6
142.5°	429.3	430.7	432.0	432.8	432.8	432.9	433.0	433.1
145°	444.5	445.3	446.2	446.6	446.6	446.7	446.8	446.8
147.5°	457.9	458.2	458.6	458.6	458.1	457.8	457.4	457.1
150°	466.6	466.7	466.9	466.7	466.2	465.6	465.1	464.6
152.5°	474.7	474.8	475.0	474.8	474.2	473.6	473.0	472.4
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

(END OF REPORT)