

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: P333372-930

Luminaire Tested: **S125DIW-S610D470U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333372-930
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: S125DIW-S610D470U930-4F0-1E-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: 3486.0 lumens
Efficiency: N/A
Efficacy: 115.4 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

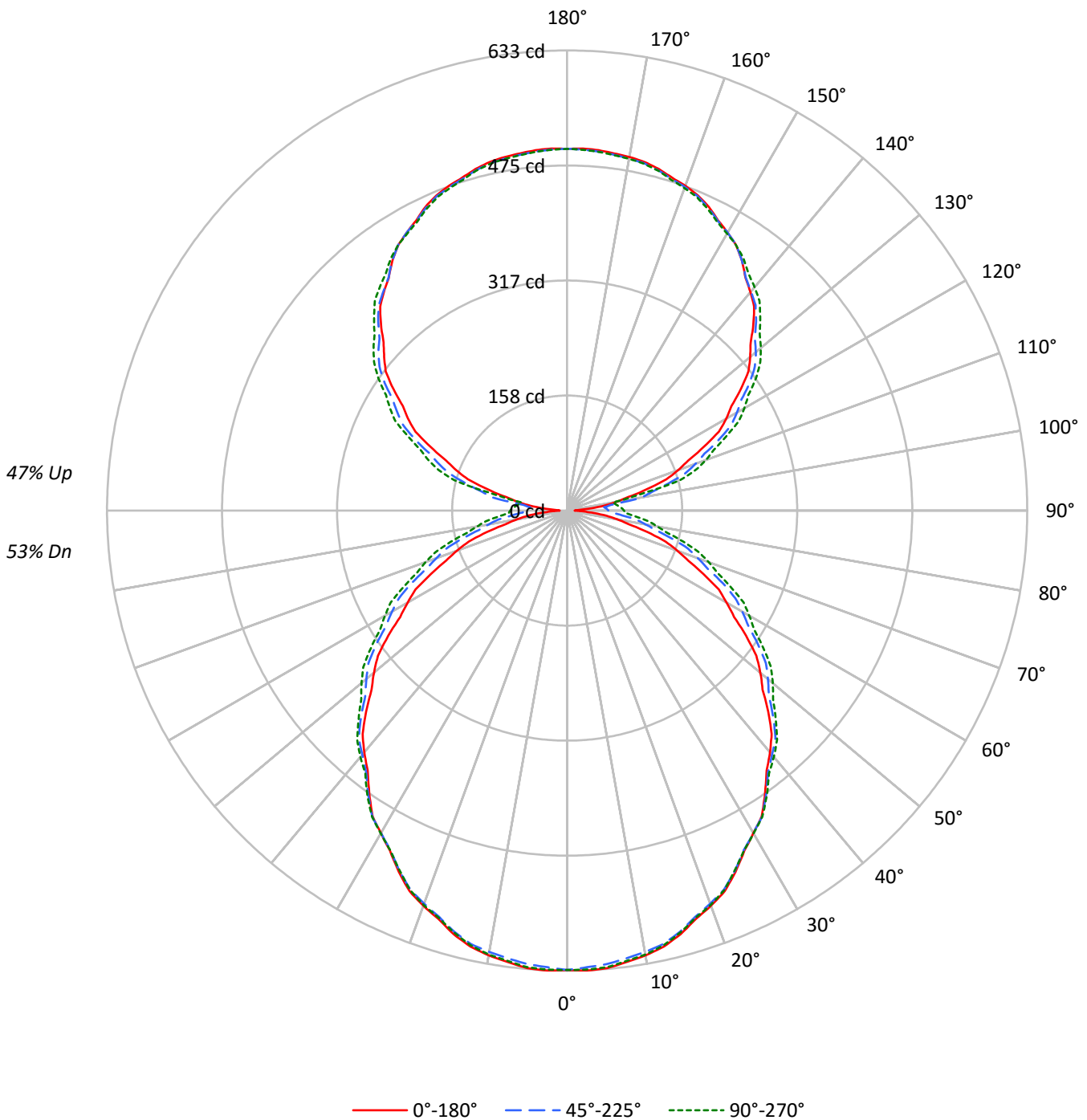
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333372-930

CATALOG NUMBER: S125DIW-S610D470U930-4F0-1E-UDD-D

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°	4081	4081	4081
5°	4089	4005	4018
10°	4060	3934	3927
15°	4011	3849	3813
20°	3946	3742	3698
25°	3869	3629	3558
30°	3775	3505	3429
35°	3687	3390	3311
40°	3598	3269	3193
45°	3497	3166	3089
50°	3401	3054	2996
55°	3285	2948	2886
60°	3159	2827	2775
65°	3027	2702	2650
70°	2876	2529	2521
75°	2639	2363	2363
80°	2328	2164	2190
85°	2041	2028	2136



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	1.7
10°-20°	169.6	4.9
20°-30°	252.2	7.2
30°-40°	298.8	8.6
40°-50°	308.9	8.9
50°-60°	284.6	8.2
60°-70°	230.0	6.6
70°-80°	154.0	4.4
80°-90°	80.9	2.3
90°-100°	62.9	1.8
100°-110°	144.5	4.1
110°-120°	224.3	6.4
120°-130°	272.0	7.8
130°-140°	284.5	8.2
140°-150°	263.0	7.5
150°-160°	211.8	6.1
160°-170°	137.0	3.9
170°-180°	47.3	1.4
0°-30°	481.6	13.8
0°-40°	780.4	22.4
0°-60°	1373.8	39.4
0°-90°	1838.8	52.7
90°-120°	431.6	12.4
90°-150°	1251.1	35.9
90°-180°	1647.0	47.2
0°-180°	3486.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	632	630	626	631	631	60
15°	603	604	600	603	601	170
25°	548	550	546	548	546	252
35°	474	478	477	479	479	297
45°	391	398	401	405	406	302
55°	300	310	320	327	330	268
65°	207	221	236	245	248	205
75°	114	130	150	162	165	121
85°	34	55	76	89	95	36
90°	10	33	57	72	78	7
95°	29	44	51	66	71	33
105°	114	126	144	156	160	121
115°	207	214	230	239	241	205
125°	292	295	306	314	317	261
135°	362	364	368	375	376	279
145°	419	419	419	423	423	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	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	633.3	633.1	632.9	632.7	632.4	631.9	631.2	630.4	629.7	628.8	629.7
5°	631.9	631.5	631.3	631.0	630.7	630.1	629.2	628.2	627.2	626.2	627.4
7.5°	626.2	626.1	626.1	625.9	625.8	625.3	624.3	623.3	622.3	621.3	622.2
10°	621.3	621.3	621.3	621.3	621.3	620.8	619.6	618.6	617.4	616.4	617.3
12.5°	614.4	614.5	614.6	614.7	614.8	614.4	613.5	612.7	611.8	610.9	611.6
15°	603.3	603.5	603.6	603.7	603.9	603.5	602.5	601.5	600.6	599.7	600.5
17.5°	589.0	589.2	589.5	589.8	590.1	589.7	588.8	587.8	586.9	585.9	586.5
20°	578.5	578.9	579.1	579.4	579.7	579.4	578.4	577.4	576.4	575.4	575.8
22.5°	566.7	567.2	567.7	568.2	568.7	568.3	567.3	566.2	565.2	564.1	564.6
25°	548.2	548.6	549.0	549.4	549.8	549.7	548.9	548.0	547.1	546.3	546.9
27.5°	527.7	528.2	528.9	529.5	530.1	529.9	529.0	528.1	527.1	526.2	526.5
30°	512.3	513.1	514.0	514.8	515.6	515.6	514.8	514.0	513.1	512.3	512.6
32.5°	498.4	499.1	499.9	500.6	501.2	501.3	500.8	500.1	499.5	498.9	499.2
35°	474.5	475.5	476.5	477.4	478.3	478.7	478.3	477.8	477.4	477.0	477.4
37.5°	450.6	451.5	452.3	453.2	454.1	454.4	454.4	454.2	454.0	454.0	454.4
40°	434.2	435.4	436.4	437.6	438.6	439.1	439.0	438.9	438.7	438.5	439.1
42.5°	416.4	417.8	419.2	420.7	422.2	423.0	423.3	423.6	423.9	424.2	424.9
45°	390.9	392.4	393.9	395.4	397.0	398.0	398.8	399.4	400.1	400.8	401.8
47.5°	364.8	366.2	367.5	368.9	370.4	371.6	372.8	374.0	375.2	376.3	377.8
50°	346.9	348.4	349.9	351.5	352.9	354.5	356.0	357.5	359.0	360.5	362.1
52.5°	328.1	329.9	331.7	333.6	335.4	337.3	339.2	341.0	342.8	344.6	346.3
55°	300.4	302.6	304.8	307.0	309.2	311.4	313.6	315.8	318.0	320.2	321.8
57.5°	272.2	274.8	277.4	280.1	282.7	285.4	287.9	290.4	292.9	295.5	297.2
60°	253.4	256.1	258.9	261.6	264.4	267.1	269.9	272.6	275.4	278.1	280.2
62.5°	235.1	237.7	240.5	243.3	246.1	248.9	251.8	254.9	257.8	260.8	263.1
65°	206.9	210.1	213.2	216.4	219.6	222.8	226.1	229.4	232.7	236.0	238.1
67.5°	180.4	183.4	186.5	189.6	192.6	195.8	199.2	202.5	205.9	209.3	211.7
70°	161.0	164.2	167.4	170.6	173.7	177.1	180.7	184.3	187.8	191.4	194.0
72.5°	142.2	145.5	148.8	152.1	155.3	158.9	162.8	166.7	170.6	174.6	177.4
75°	114.0	117.6	121.2	124.7	128.3	132.3	136.7	141.1	145.5	149.9	152.6
77.5°	86.8	91.0	95.1	99.2	103.4	107.5	111.8	116.0	120.3	124.5	127.5
80°	70.0	74.1	78.3	82.4	86.5	90.9	95.6	100.3	104.9	109.7	112.7
82.5°	54.6	58.9	63.3	67.7	72.1	76.6	81.4	86.2	91.0	95.8	98.7
85°	34.1	38.6	43.1	47.7	52.3	56.9	61.7	66.5	71.3	76.2	79.2
87.5°	19.4	24.0	28.5	33.0	37.6	42.2	47.0	51.8	56.6	61.4	64.7
90°	10.3	15.3	20.4	25.4	30.5	35.7	40.9	46.2	51.4	56.7	60.3
92.5°	14.6	18.2	21.9	25.4	29.0	33.5	38.8	44.1	49.4	54.7	58.2
95°	29.1	32.4	35.7	39.1	42.4	44.8	46.4	48.0	49.6	51.1	54.5
97.5°	51.2	54.9	58.5	62.2	65.9	66.9	65.2	63.6	61.9	60.3	60.8
100°	68.4	71.6	74.7	77.8	81.0	84.9	89.6	94.3	99.1	103.8	94.5
102.5°	85.9	88.9	91.9	94.8	97.8	101.6	106.1	110.6	115.0	119.5	120.0
105°	114.0	116.5	119.0	121.6	124.2	127.4	131.6	135.7	139.8	144.0	146.8
107.5°	143.2	145.1	147.0	148.9	150.7	153.7	157.8	162.0	166.1	170.2	172.9
110°	162.2	163.9	165.5	167.1	168.8	171.6	175.7	179.7	183.7	187.7	190.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	180.5	182.0	183.5	185.1	186.5	189.2	193.1	196.9	200.8	204.6	206.8
115°	207.3	208.7	210.0	211.4	212.8	215.3	219.0	222.7	226.3	230.0	232.1
117.5°	235.1	235.7	236.4	236.9	237.6	239.7	243.4	247.1	250.8	254.5	256.4
120°	252.8	253.2	253.5	253.8	254.1	256.0	259.4	262.9	266.2	269.6	271.8
122.5°	267.9	268.5	269.0	269.5	269.9	271.8	275.0	278.1	281.3	284.5	286.6
125°	292.0	292.4	292.9	293.3	293.8	295.4	298.1	300.8	303.6	306.4	308.3
127.5°	314.5	314.8	315.0	315.3	315.6	316.8	319.0	321.2	323.4	325.6	327.5
130°	328.6	328.9	329.2	329.5	329.7	330.8	332.9	334.9	336.9	338.9	340.6
132.5°	342.3	342.8	343.2	343.6	344.1	345.0	346.3	347.6	348.9	350.2	352.1
135°	362.3	362.6	363.1	363.4	363.8	364.4	365.1	365.9	366.7	367.5	369.2
137.5°	380.7	381.1	381.3	381.6	382.0	382.3	382.6	382.9	383.3	383.6	385.2
140°	392.3	392.5	392.6	392.8	393.0	393.1	393.1	393.2	393.2	393.3	395.0
142.5°	403.2	403.2	403.2	403.2	403.2	403.2	403.4	403.6	403.7	403.8	405.1
145°	419.2	419.3	419.3	419.3	419.4	419.4	419.4	419.4	419.4	419.4	420.1
147.5°	432.7	432.6	432.6	432.5	432.5	432.5	432.7	432.8	432.8	432.9	433.3
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	630.4	631.2	631.9	632.3	632.2	632.1	631.9	631.9
5°	628.4	629.6	630.6	631.1	631.0	630.9	630.7	630.6
7.5°	623.2	624.2	625.2	625.6	625.4	625.3	625.2	625.0
10°	618.3	619.2	620.2	620.6	620.5	620.4	620.2	620.0
12.5°	612.4	613.1	613.9	614.1	613.7	613.3	613.0	612.6
15°	601.3	602.1	602.9	603.1	602.5	601.9	601.4	600.9
17.5°	587.2	587.7	588.4	588.6	588.2	587.9	587.6	587.3
20°	576.3	576.7	577.2	577.3	577.3	577.3	577.3	577.3
22.5°	565.1	565.7	566.1	566.2	565.9	565.6	565.2	564.9
25°	547.5	548.0	548.5	548.5	547.8	547.1	546.4	545.8
27.5°	526.9	527.3	527.7	527.7	527.5	527.3	527.0	526.8
30°	512.8	513.1	513.4	513.5	513.3	513.1	513.1	512.9
32.5°	499.5	499.7	500.0	500.1	499.9	499.8	499.7	499.5
35°	477.8	478.3	478.7	478.8	478.8	478.8	478.8	478.8
37.5°	455.0	455.6	456.2	456.4	456.3	456.2	456.2	456.2
40°	439.7	440.3	440.8	441.2	441.5	441.7	442.1	442.3
42.5°	425.5	426.2	426.8	427.2	427.3	427.3	427.4	427.5
45°	402.7	403.7	404.6	405.2	405.4	405.4	405.6	405.8
47.5°	379.2	380.6	382.0	382.9	383.2	383.4	383.8	384.1
50°	363.5	365.1	366.6	367.5	367.9	368.4	368.8	369.2
52.5°	347.9	349.5	351.1	352.1	352.5	352.7	353.0	353.4
55°	323.3	324.8	326.3	327.3	327.9	328.5	329.0	329.5
57.5°	299.0	300.7	302.4	303.5	303.9	304.4	304.8	305.2
60°	282.3	284.3	286.4	287.6	288.0	288.5	288.9	289.3
62.5°	265.4	267.7	269.9	271.3	271.8	272.4	272.9	273.5
65°	240.1	242.2	244.3	245.6	246.1	246.7	247.2	247.8
67.5°	214.3	216.8	219.2	220.9	221.6	222.3	223.1	223.7
70°	196.7	199.3	201.9	203.6	204.4	205.2	206.1	206.9
72.5°	180.3	183.0	185.9	187.6	188.3	188.8	189.5	190.0
75°	155.4	158.2	160.9	162.7	163.3	164.0	164.7	165.4
77.5°	130.5	133.6	136.6	138.4	138.9	139.5	140.1	140.6
80°	115.7	118.7	121.7	123.5	124.1	124.7	125.2	125.7
82.5°	101.6	104.5	107.5	109.4	110.4	111.4	112.3	113.3
85°	82.3	85.3	88.3	90.3	91.5	92.5	93.7	94.7
87.5°	67.9	71.2	74.4	76.5	77.5	78.5	79.6	80.6
90°	63.8	67.4	71.0	73.4	74.6	75.8	77.0	78.3
92.5°	61.6	65.1	68.6	70.8	71.9	73.0	74.1	75.2
95°	58.0	61.5	64.9	67.1	68.1	69.0	70.0	70.9
97.5°	61.4	62.0	62.6	63.3	64.2	65.2	66.1	67.1
100°	85.2	75.8	66.5	62.1	62.6	63.1	63.6	64.1
102.5°	120.5	121.0	121.4	119.3	114.5	109.8	105.0	100.3
105°	149.5	152.2	155.0	156.8	157.7	158.6	159.5	160.4
107.5°	175.7	178.5	181.2	182.9	183.4	184.1	184.7	185.3
110°	192.5	194.9	197.2	198.9	199.9	201.0	202.0	203.1



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CATALOG NUMBER: S125DIW-S610D470U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	209.0	211.2	213.4	214.9	215.7	216.6	217.4	218.3
115°	234.2	236.4	238.6	239.8	240.1	240.5	240.8	241.2
117.5°	258.4	260.2	262.2	263.5	264.2	265.0	265.6	266.4
120°	274.0	276.1	278.3	279.6	280.1	280.5	280.9	281.3
122.5°	288.6	290.7	292.8	293.9	294.3	294.6	295.0	295.4
125°	310.1	312.0	313.9	315.0	315.4	315.9	316.3	316.8
127.5°	329.4	331.3	333.0	334.1	334.3	334.5	334.7	334.8
130°	342.3	344.0	345.6	346.6	346.9	347.2	347.5	347.7
132.5°	354.0	355.9	357.8	358.7	358.9	359.1	359.2	359.4
135°	370.8	372.4	374.1	375.0	375.1	375.4	375.5	375.7
137.5°	386.9	388.6	390.2	391.1	391.3	391.3	391.5	391.6
140°	396.6	398.4	400.0	400.9	401.0	401.0	401.0	401.1
142.5°	406.5	407.8	409.1	409.9	409.9	409.9	410.0	410.1
145°	420.9	421.7	422.5	422.9	422.9	423.0	423.1	423.1
147.5°	433.6	433.9	434.2	434.2	433.8	433.5	433.2	432.8
150°	441.8	442.0	442.1	442.0	441.5	440.9	440.4	439.9
152.5°	449.5	449.6	449.8	449.6	449.1	448.5	447.9	447.4
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

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