

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: P333372-927

Luminaire Tested: **S125DIW-S610D470U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333372-927
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-S610D470U927-4F0-1E-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: 3387.1 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

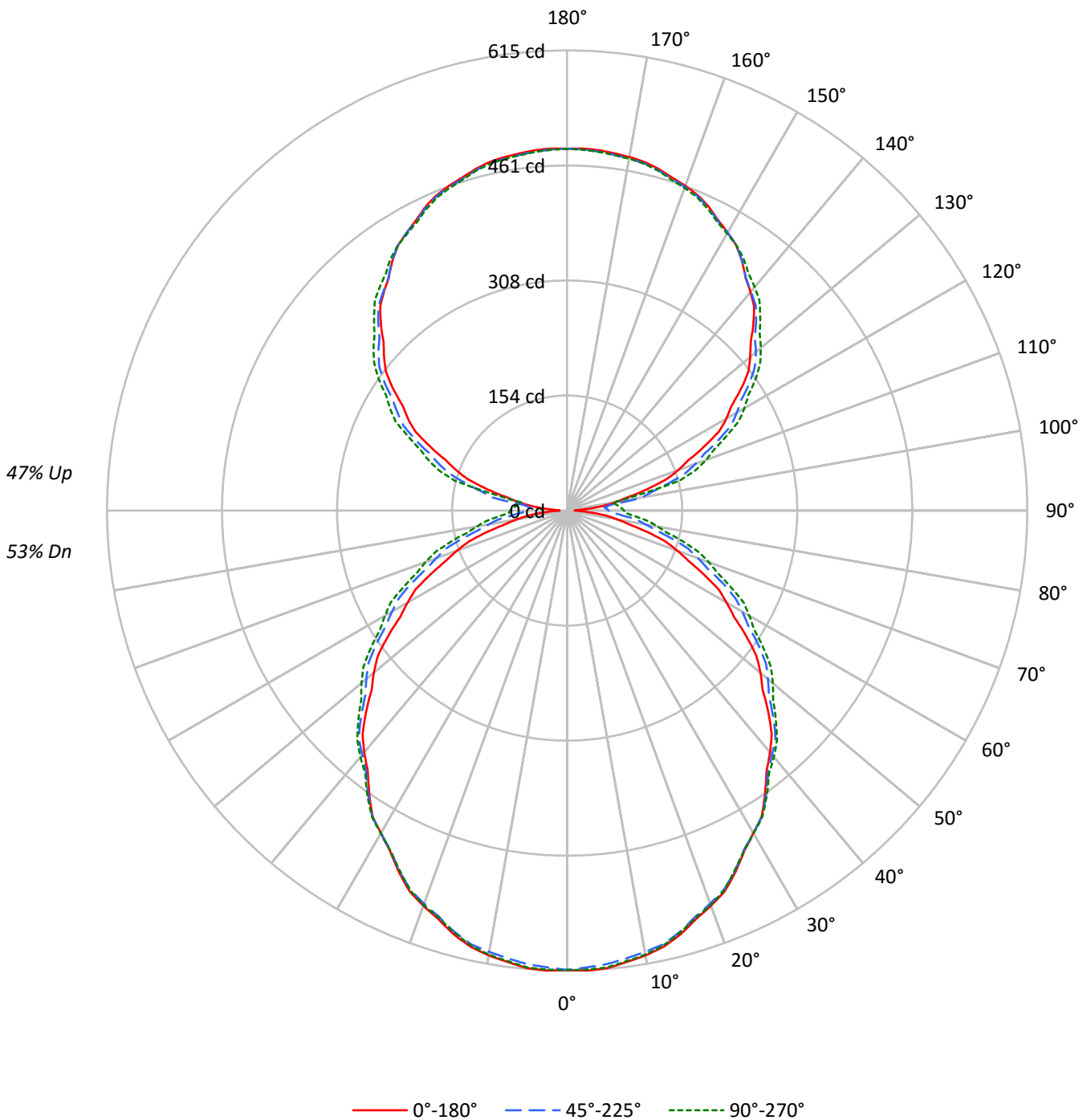
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333372-927

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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°	3965	3965	3965
5°	3973	3892	3904
10°	3945	3822	3817
15°	3898	3740	3705
20°	3834	3636	3593
25°	3759	3526	3457
30°	3667	3405	3332
35°	3583	3293	3217
40°	3496	3176	3103
45°	3398	3076	3001
50°	3305	2967	2910
55°	3192	2865	2804
60°	3069	2747	2697
65°	2942	2625	2574
70°	2795	2458	2451
75°	2563	2297	2296
80°	2262	2101	2129
85°	1981	1972	2077



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	1.7
10°-20°	164.8	4.9
20°-30°	245.1	7.2
30°-40°	290.3	8.6
40°-50°	300.2	8.9
50°-60°	276.5	8.2
60°-70°	223.5	6.6
70°-80°	149.7	4.4
80°-90°	78.6	2.3
90°-100°	61.1	1.8
100°-110°	140.4	4.1
110°-120°	217.9	6.4
120°-130°	264.2	7.8
130°-140°	276.4	8.2
140°-150°	255.5	7.5
150°-160°	205.8	6.1
160°-170°	133.1	3.9
170°-180°	45.9	1.4
0°-30°	467.9	13.8
0°-40°	758.2	22.4
0°-60°	1334.9	39.4
0°-90°	1786.7	52.7
90°-120°	419.4	12.4
90°-150°	1215.6	35.9
90°-180°	1600.0	47.2
0°-180°	3387.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	614	613	608	613	613	58
15°	586	587	583	586	584	165
25°	533	534	531	533	530	245
35°	461	465	463	465	465	288
45°	380	386	389	393	394	293
55°	292	302	311	318	320	261
65°	201	215	229	238	241	199
75°	111	127	146	157	161	117
85°	33	53	74	87	92	35
90°	10	32	55	70	76	7
95°	28	42	50	64	69	32
105°	111	122	140	151	156	117
115°	202	208	224	232	234	200
125°	284	286	298	306	308	253
135°	352	354	357	364	365	271
145°	407	408	408	411	411	255
155°	448	446	447	447	445	206
165°	473	471	471	473	470	133
175°	484	481	482	484	481	46
180°	484	484	484	484	484	



TEST NUMBER: P333372-927

CATALOG NUMBER: S125DIW-S610D470U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	615.4	615.1	615.0	614.7	614.5	614.0	613.3	612.5	611.8	611.0	611.8
5°	613.9	613.6	613.4	613.1	612.8	612.3	611.3	610.4	609.4	608.5	609.6
7.5°	608.5	608.4	608.3	608.2	608.1	607.5	606.6	605.6	604.7	603.7	604.6
10°	603.7	603.7	603.7	603.7	603.7	603.2	602.1	601.0	599.9	598.9	599.8
12.5°	597.0	597.1	597.1	597.3	597.4	597.0	596.1	595.3	594.5	593.6	594.3
15°	586.2	586.4	586.5	586.6	586.8	586.4	585.4	584.5	583.6	582.7	583.4
17.5°	572.3	572.5	572.8	573.1	573.4	573.0	572.1	571.2	570.2	569.3	569.9
20°	562.1	562.4	562.7	563.0	563.2	562.9	562.0	561.0	560.1	559.1	559.5
22.5°	550.6	551.1	551.6	552.1	552.5	552.2	551.2	550.2	549.1	548.1	548.6
25°	532.7	533.1	533.5	533.9	534.2	534.1	533.3	532.5	531.6	530.8	531.4
27.5°	512.7	513.3	513.9	514.4	515.1	514.9	514.0	513.1	512.1	511.3	511.6
30°	497.7	498.6	499.4	500.2	501.0	501.0	500.2	499.4	498.6	497.7	498.0
32.5°	484.3	485.0	485.7	486.4	487.0	487.1	486.6	485.9	485.4	484.7	485.1
35°	461.1	462.0	463.0	463.8	464.8	465.1	464.7	464.2	463.8	463.4	463.8
37.5°	437.8	438.7	439.5	440.4	441.2	441.6	441.5	441.3	441.2	441.1	441.6
40°	421.9	423.0	424.1	425.2	426.2	426.7	426.5	426.4	426.3	426.1	426.7
42.5°	404.6	406.0	407.3	408.8	410.2	411.0	411.3	411.6	411.9	412.2	412.8
45°	379.8	381.3	382.7	384.2	385.7	386.7	387.5	388.1	388.7	389.4	390.4
47.5°	354.4	355.8	357.1	358.5	359.9	361.1	362.3	363.4	364.6	365.7	367.1
50°	337.1	338.5	340.0	341.5	342.9	344.4	345.9	347.4	348.8	350.3	351.8
52.5°	318.8	320.5	322.3	324.2	325.9	327.7	329.5	331.3	333.1	334.9	336.4
55°	291.9	294.1	296.2	298.3	300.5	302.6	304.8	306.9	309.0	311.2	312.7
57.5°	264.5	267.0	269.6	272.2	274.7	277.3	279.7	282.2	284.6	287.1	288.8
60°	246.2	248.8	251.5	254.2	256.9	259.5	262.2	264.9	267.6	270.2	272.3
62.5°	228.4	231.0	233.7	236.4	239.1	241.9	244.7	247.6	250.5	253.4	255.6
65°	201.1	204.1	207.2	210.2	213.3	216.5	219.7	222.9	226.1	229.3	231.3
67.5°	175.3	178.2	181.2	184.2	187.1	190.3	193.5	196.8	200.0	203.4	205.7
70°	156.5	159.5	162.6	165.7	168.8	172.1	175.5	179.0	182.5	186.0	188.5
72.5°	138.2	141.4	144.6	147.7	150.9	154.4	158.2	162.0	165.8	169.6	172.4
75°	110.7	114.2	117.7	121.2	124.7	128.6	132.8	137.1	141.4	145.7	148.3
77.5°	84.4	88.4	92.4	96.4	100.4	104.5	108.6	112.7	116.8	121.0	123.9
80°	68.0	72.0	76.0	80.1	84.1	88.3	92.9	97.4	102.0	106.5	109.5
82.5°	53.1	57.3	61.6	65.8	70.0	74.5	79.1	83.7	88.4	93.1	95.9
85°	33.1	37.5	41.9	46.3	50.8	55.3	60.0	64.6	69.3	74.1	77.0
87.5°	18.9	23.3	27.6	32.1	36.5	41.0	45.7	50.3	55.0	59.7	62.8
90°	10.0	14.9	19.8	24.7	29.6	34.7	39.8	44.9	50.0	55.1	58.5
92.5°	14.2	17.7	21.2	24.7	28.2	32.6	37.7	42.9	48.0	53.2	56.6
95°	28.3	31.5	34.7	37.9	41.2	43.6	45.1	46.7	48.2	49.7	53.0
97.5°	49.7	53.3	56.9	60.4	64.0	65.0	63.4	61.8	60.1	58.5	59.1
100°	66.5	69.6	72.6	75.6	78.7	82.5	87.1	91.7	96.3	100.8	91.8
102.5°	83.5	86.3	89.3	92.1	95.1	98.7	103.1	107.4	111.8	116.1	116.6
105°	110.7	113.2	115.7	118.2	120.6	123.8	127.9	131.9	135.9	139.9	142.6
107.5°	139.2	141.0	142.8	144.7	146.4	149.3	153.4	157.4	161.4	165.4	168.0
110°	157.6	159.2	160.8	162.4	164.0	166.8	170.7	174.6	178.5	182.4	184.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	175.4	176.8	178.3	179.8	181.3	183.9	187.6	191.3	195.1	198.8	201.0
115°	201.5	202.8	204.1	205.4	206.8	209.2	212.8	216.3	219.9	223.5	225.5
117.5°	228.5	229.0	229.7	230.2	230.8	232.9	236.5	240.1	243.7	247.3	249.1
120°	245.7	246.0	246.3	246.6	246.9	248.7	252.1	255.4	258.6	262.0	264.1
122.5°	260.3	260.9	261.3	261.8	262.3	264.1	267.2	270.2	273.3	276.4	278.5
125°	283.8	284.2	284.6	285.0	285.4	287.0	289.6	292.3	295.0	297.7	299.5
127.5°	305.5	305.9	306.1	306.3	306.7	307.8	310.0	312.1	314.3	316.4	318.2
130°	319.3	319.6	319.9	320.1	320.4	321.5	323.4	325.4	327.3	329.3	331.0
132.5°	332.6	333.0	333.5	333.9	334.4	335.2	336.4	337.7	339.0	340.2	342.1
135°	352.0	352.4	352.8	353.1	353.5	354.0	354.7	355.5	356.3	357.1	358.7
137.5°	369.9	370.3	370.5	370.8	371.1	371.5	371.8	372.1	372.4	372.7	374.3
140°	381.2	381.4	381.5	381.7	381.8	381.9	382.0	382.1	382.1	382.1	383.8
142.5°	391.8	391.8	391.8	391.7	391.7	391.8	392.0	392.1	392.2	392.4	393.6
145°	407.3	407.4	407.4	407.4	407.5	407.5	407.5	407.5	407.5	407.5	408.2
147.5°	420.4	420.3	420.3	420.3	420.3	420.3	420.4	420.5	420.6	420.6	421.0
150°	429.0	428.8	428.6	428.5	428.3	428.3	428.5	428.6	428.8	429.0	429.1
152.5°	437.3	437.0	436.6	436.3	435.9	435.8	435.9	436.1	436.3	436.4	436.6
155°	448.0	447.5	447.0	446.6	446.1	445.9	446.1	446.2	446.4	446.6	446.8
157.5°	456.2	455.9	455.7	455.3	455.0	455.0	455.0	455.0	455.0	455.0	455.3
160°	461.9	461.4	461.0	460.5	460.0	459.9	459.9	460.0	460.1	460.2	460.5
162.5°	466.5	466.0	465.6	465.1	464.6	464.5	464.5	464.6	464.7	464.8	465.2
165°	472.7	472.2	471.7	471.3	470.8	470.6	470.6	470.7	470.8	470.9	471.3
167.5°	477.3	476.8	476.3	475.8	475.3	475.1	475.2	475.2	475.3	475.4	476.0
170°	479.9	479.3	478.7	478.2	477.6	477.4	477.4	477.5	477.6	477.7	478.3
172.5°	481.6	481.0	480.5	479.9	479.3	479.2	479.3	479.4	479.6	479.7	480.3
175°	483.5	483.0	482.5	482.0	481.6	481.3	481.4	481.5	481.6	481.6	482.3
177.5°	484.3	483.9	483.5	483.2	482.8	482.6	482.7	482.8	482.8	482.9	483.3
180°	483.5	483.5	483.5	483.5	483.5	483.5	483.5	483.5	483.5	483.5	483.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	612.5	613.3	614.0	614.3	614.3	614.2	614.0	613.9
5°	610.6	611.7	612.8	613.2	613.1	613.0	612.8	612.8
7.5°	605.5	606.5	607.4	607.8	607.7	607.6	607.4	607.3
10°	600.8	601.7	602.6	603.0	602.9	602.8	602.6	602.5
12.5°	595.0	595.7	596.5	596.7	596.3	596.0	595.6	595.2
15°	584.2	585.0	585.8	586.0	585.4	584.9	584.4	583.8
17.5°	570.5	571.1	571.7	571.9	571.6	571.2	570.9	570.6
20°	560.0	560.4	560.8	560.9	560.9	560.9	560.9	560.9
22.5°	549.1	549.6	550.1	550.2	549.9	549.5	549.2	548.9
25°	532.0	532.5	533.0	533.0	532.3	531.6	530.9	530.3
27.5°	512.0	512.4	512.8	512.8	512.5	512.3	512.1	511.8
30°	498.3	498.6	498.8	498.9	498.8	498.6	498.5	498.4
32.5°	485.3	485.5	485.8	485.9	485.8	485.6	485.5	485.4
35°	464.2	464.7	465.1	465.2	465.2	465.2	465.2	465.2
37.5°	442.1	442.7	443.2	443.5	443.4	443.3	443.3	443.2
40°	427.2	427.8	428.3	428.6	429.0	429.2	429.5	429.8
42.5°	413.4	414.1	414.7	415.1	415.2	415.2	415.3	415.3
45°	391.3	392.2	393.2	393.7	393.9	394.0	394.1	394.3
47.5°	368.4	369.8	371.1	372.0	372.3	372.6	372.9	373.2
50°	353.2	354.7	356.2	357.1	357.5	357.9	358.3	358.7
52.5°	338.0	339.6	341.2	342.1	342.5	342.7	343.0	343.3
55°	314.1	315.6	317.0	318.1	318.6	319.2	319.6	320.2
57.5°	290.5	292.2	293.8	294.9	295.3	295.7	296.1	296.5
60°	274.3	276.2	278.3	279.5	279.9	280.3	280.7	281.1
62.5°	257.9	260.1	262.3	263.6	264.1	264.7	265.1	265.7
65°	233.3	235.4	237.3	238.6	239.2	239.7	240.2	240.7
67.5°	208.2	210.6	213.0	214.6	215.3	216.0	216.7	217.4
70°	191.1	193.6	196.1	197.8	198.6	199.4	200.3	201.1
72.5°	175.2	177.8	180.6	182.3	182.9	183.5	184.1	184.7
75°	151.0	153.7	156.4	158.0	158.7	159.4	160.0	160.7
77.5°	126.8	129.8	132.8	134.5	135.0	135.5	136.1	136.7
80°	112.4	115.3	118.3	120.0	120.6	121.1	121.7	122.2
82.5°	98.7	101.6	104.4	106.3	107.3	108.2	109.2	110.1
85°	79.9	82.9	85.8	87.8	88.9	89.9	91.0	92.1
87.5°	66.0	69.2	72.2	74.3	75.3	76.3	77.3	78.3
90°	62.0	65.5	69.0	71.3	72.5	73.7	74.9	76.0
92.5°	59.9	63.3	66.6	68.8	69.9	70.9	72.0	73.0
95°	56.3	59.7	63.1	65.2	66.1	67.0	68.0	68.9
97.5°	59.7	60.3	60.8	61.6	62.4	63.4	64.2	65.2
100°	82.8	73.7	64.6	60.4	60.8	61.3	61.8	62.3
102.5°	117.1	117.6	118.0	115.9	111.3	106.7	102.0	97.4
105°	145.3	147.9	150.6	152.3	153.2	154.1	155.0	155.8
107.5°	170.7	173.4	176.0	177.7	178.2	178.9	179.4	180.1
110°	187.0	189.3	191.6	193.3	194.2	195.3	196.3	197.3



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CATALOG NUMBER: S125DIW-S610D470U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	203.1	205.2	207.3	208.8	209.6	210.5	211.3	212.1
115°	227.6	229.7	231.8	233.0	233.3	233.7	234.0	234.3
117.5°	251.0	252.9	254.8	256.0	256.7	257.5	258.1	258.8
120°	266.3	268.3	270.5	271.7	272.1	272.5	272.9	273.3
122.5°	280.4	282.4	284.5	285.6	286.0	286.3	286.6	287.0
125°	301.3	303.2	305.0	306.1	306.5	307.0	307.4	307.8
127.5°	320.0	321.9	323.6	324.6	324.8	325.0	325.2	325.3
130°	332.6	334.2	335.8	336.8	337.1	337.3	337.6	337.9
132.5°	344.0	345.8	347.6	348.6	348.7	348.9	349.0	349.2
135°	360.3	361.9	363.5	364.3	364.5	364.7	364.9	365.0
137.5°	376.0	377.6	379.1	380.0	380.2	380.2	380.4	380.5
140°	385.4	387.1	388.6	389.5	389.6	389.7	389.7	389.8
142.5°	395.0	396.2	397.5	398.2	398.2	398.3	398.4	398.5
145°	409.0	409.7	410.5	410.9	410.9	411.0	411.1	411.1
147.5°	421.3	421.6	421.9	421.9	421.5	421.2	420.9	420.6
150°	429.3	429.4	429.6	429.4	429.0	428.4	427.9	427.5
152.5°	436.7	436.9	437.0	436.9	436.3	435.8	435.2	434.7
155°	447.0	447.3	447.5	447.3	446.6	446.0	445.4	444.7
157.5°	455.5	455.7	456.0	455.8	455.2	454.6	453.9	453.3
160°	460.8	461.1	461.4	461.3	460.7	460.0	459.4	458.8
162.5°	465.6	466.1	466.5	466.4	465.7	465.0	464.3	463.6
165°	471.9	472.4	472.9	472.8	472.1	471.4	470.8	470.2
167.5°	476.6	477.1	477.7	477.7	476.9	476.2	475.5	474.8
170°	479.0	479.7	480.3	480.2	479.5	478.8	478.1	477.4
172.5°	480.9	481.4	482.0	482.0	481.3	480.5	479.8	479.1
175°	482.9	483.5	484.2	484.2	483.5	482.8	482.0	481.3
177.5°	483.8	484.2	484.7	484.7	484.1	483.6	483.1	482.6
180°	483.5	483.5	483.5	483.5	483.5	483.5	483.5	483.5

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