

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: P333378-927

Luminaire Tested: **S125DIW-S610D770U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333378-927
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-S610D770U927-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4334.8 lumens
Efficiency: N/A
Efficacy: 115.3 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

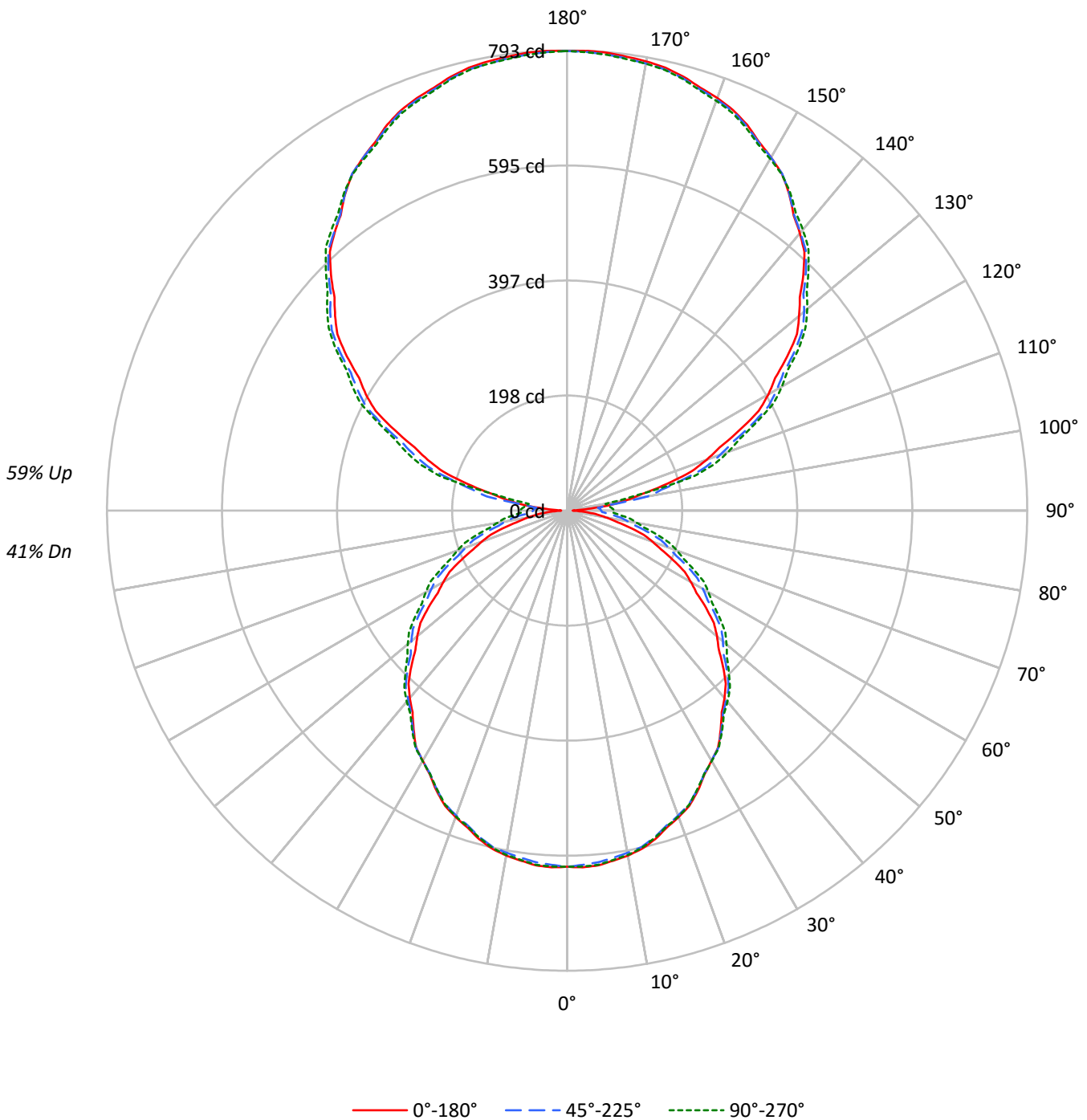
Input Watts (W): 37.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333378-927

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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	105	105	105	105	96	96	96	96	78	78	78	63	63	63	48	48	48	41
1	95	91	87	83	87	83	79	76	68	65	63	54	52	51	41	40	39	33
2	86	79	72	67	78	72	67	62	59	55	52	47	44	42	36	34	33	28
3	79	69	62	56	71	63	57	51	52	47	43	41	38	35	32	30	28	23
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	28	26	24	20
5	66	54	46	40	60	50	42	37	41	36	31	33	29	26	25	23	20	17
6	61	48	40	34	55	44	37	32	37	31	27	30	26	22	23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	40	32	26	47	36	29	25	30	25	21	25	21	18	19	16	14	12
9	48	36	29	23	44	33	26	22	28	22	19	23	19	16	18	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	14	12	9

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	1.3
10°-20°	164.8	3.8
20°-30°	245.1	5.7
30°-40°	290.3	6.7
40°-50°	300.2	6.9
50°-60°	276.5	6.4
60°-70°	223.5	5.2
70°-80°	149.7	3.5
80°-90°	79.3	1.8
90°-100°	72.3	1.7
100°-110°	209.5	4.8
110°-120°	343.2	7.9
120°-130°	425.0	9.8
130°-140°	449.3	10.4
140°-150°	417.8	9.6
150°-160°	337.1	7.8
160°-170°	218.0	5.0
170°-180°	75.2	1.7
0°-30°	467.9	10.8
0°-40°	758.2	17.5
0°-60°	1334.9	30.8
0°-90°	1787.3	41.2
90°-120°	625.0	14.4
90°-150°	1917.1	44.2
90°-180°	2547.0	58.8
0°-180°	4334.8	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	34	59	75	82	8
95°	41	54	53	69	74	49
105°	178	190	208	220	224	189
115°	328	335	351	359	360	325
125°	463	467	479	486	487	413
135°	576	579	582	588	588	444
145°	667	667	667	671	670	417
155°	734	730	731	733	728	338
165°	774	771	771	774	770	219
175°	792	789	789	793	788	75
180°	792	792	792	792	792	



TEST NUMBER: P333378-927

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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	23.4	27.9	32.4	36.8	41.4	46.2	50.9	55.7	60.4	63.6
90°	10.2	15.5	20.8	26.2	31.5	36.9	42.4	47.8	53.3	58.8	62.5
92.5°	17.7	20.9	24.2	27.4	30.7	34.9	40.4	45.9	51.3	56.8	60.4
95°	41.3	44.4	47.5	50.5	53.6	55.0	54.6	54.2	53.7	53.3	57.0
97.5°	76.9	80.8	84.6	88.5	92.3	91.5	86.1	80.6	75.3	69.8	68.9
100°	104.6	107.8	111.1	114.2	117.5	121.4	126.3	131.0	135.9	140.7	124.1
102.5°	132.8	135.9	139.0	142.1	145.2	148.9	153.4	158.0	162.4	166.9	166.0
105°	178.0	180.6	183.3	186.0	188.6	191.9	196.0	200.0	204.0	208.0	210.7
107.5°	224.9	226.7	228.5	230.4	232.2	235.2	239.3	243.4	247.5	251.6	254.3
110°	255.5	257.1	258.6	260.2	261.9	264.7	268.7	272.7	276.7	280.7	282.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	284.6	286.1	287.7	289.4	291.0	293.7	297.5	301.3	305.0	308.8	310.8
115°	327.6	329.2	330.8	332.4	334.0	336.6	340.2	343.8	347.4	351.0	352.9
117.5°	372.2	372.8	373.4	374.0	374.5	376.8	380.6	384.4	388.1	391.9	393.5
120°	400.4	400.7	400.9	401.2	401.5	403.4	406.8	410.3	413.8	417.2	419.2
122.5°	424.8	425.5	426.2	426.8	427.5	429.4	432.6	435.8	438.9	442.0	443.9
125°	463.2	464.0	464.8	465.5	466.3	468.0	470.7	473.4	476.0	478.7	480.4
127.5°	499.3	499.9	500.3	500.9	501.4	502.7	504.9	506.9	509.1	511.2	512.9
130°	521.9	522.4	522.9	523.4	523.9	525.2	527.2	529.2	531.2	533.2	534.7
132.5°	543.9	544.6	545.4	546.1	546.8	547.8	549.0	550.1	551.3	552.4	554.2
135°	575.8	576.5	577.2	577.8	578.5	579.1	579.8	580.4	581.1	581.8	583.3
137.5°	605.2	605.8	606.3	606.9	607.5	607.9	608.1	608.3	608.6	608.8	610.4
140°	624.0	624.2	624.5	624.8	625.0	625.1	625.2	625.2	625.2	625.2	626.9
142.5°	641.4	641.4	641.4	641.5	641.5	641.7	641.9	642.1	642.3	642.5	643.8
145°	666.9	666.9	667.1	667.2	667.3	667.4	667.4	667.4	667.4	667.4	668.2
147.5°	688.6	688.5	688.4	688.4	688.3	688.4	688.6	688.6	688.8	689.0	689.4
150°	702.6	702.3	702.1	701.8	701.6	701.6	701.8	702.1	702.3	702.6	702.9
152.5°	716.2	715.7	715.1	714.5	713.9	713.8	714.1	714.3	714.5	714.8	715.1
155°	733.7	732.9	732.1	731.3	730.6	730.3	730.6	730.9	731.1	731.3	731.7
157.5°	747.2	746.8	746.3	745.8	745.4	745.1	745.1	745.2	745.2	745.2	745.7
160°	756.6	755.8	755.0	754.2	753.5	753.1	753.3	753.4	753.5	753.7	754.2
162.5°	764.1	763.3	762.6	761.8	761.0	760.7	760.8	761.0	761.0	761.2	761.9
165°	774.2	773.4	772.7	771.9	771.1	770.8	770.9	771.0	771.2	771.3	772.1
167.5°	781.7	780.9	780.1	779.3	778.5	778.2	778.3	778.4	778.6	778.7	779.6
170°	786.0	785.1	784.1	783.2	782.3	781.9	782.0	782.2	782.3	782.4	783.5
172.5°	788.8	787.9	787.0	786.0	785.1	784.8	785.1	785.3	785.5	785.8	786.6
175°	791.9	791.1	790.3	789.5	788.7	788.4	788.5	788.6	788.8	788.9	790.0
177.5°	793.2	792.6	792.0	791.4	790.8	790.4	790.6	790.7	790.8	790.9	791.6
180°	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9



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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°	66.8	70.0	73.2	75.3	76.4	77.3	78.3	79.4
90°	66.2	69.9	73.7	76.2	77.6	78.8	80.2	81.5
92.5°	64.1	67.7	71.3	73.7	74.8	75.9	77.0	78.2
95°	60.5	64.1	67.7	69.9	70.9	71.9	72.8	73.8
97.5°	68.0	67.2	66.3	66.4	67.3	68.2	69.1	69.9
100°	107.4	90.8	74.1	66.0	66.2	66.5	66.8	67.1
102.5°	164.9	164.0	163.0	158.4	150.4	142.4	134.3	126.2
105°	213.3	216.0	218.7	220.5	221.3	222.0	222.9	223.7
107.5°	257.0	259.7	262.3	263.9	264.4	264.7	265.2	265.6
110°	285.0	287.2	289.3	290.9	292.0	293.0	294.1	295.2



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CATALOG NUMBER: S125DIW-S610D770U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	312.7	314.7	316.6	317.9	318.7	319.4	320.2	320.9
115°	354.8	356.6	358.5	359.5	359.5	359.6	359.6	359.6
117.5°	395.1	396.7	398.3	399.3	400.0	400.5	401.1	401.6
120°	421.3	423.3	425.2	426.4	426.5	426.7	426.8	427.0
122.5°	445.8	447.7	449.6	450.7	450.7	450.8	450.8	450.8
125°	482.0	483.5	485.2	486.2	486.4	486.7	487.0	487.3
127.5°	514.6	516.3	517.9	518.7	518.5	518.3	518.2	517.9
130°	536.1	537.7	539.2	539.9	539.9	540.0	540.0	540.0
132.5°	556.0	557.8	559.6	560.5	560.4	560.2	560.2	560.1
135°	584.8	586.2	587.7	588.4	588.3	588.2	588.0	588.0
137.5°	612.0	613.6	615.3	616.0	615.9	615.8	615.6	615.4
140°	628.6	630.3	632.1	632.8	632.6	632.3	632.1	631.8
142.5°	645.2	646.4	647.8	648.2	648.0	647.8	647.5	647.3
145°	669.0	669.8	670.6	670.9	670.6	670.3	670.1	669.9
147.5°	689.8	690.1	690.5	690.3	689.6	688.9	688.2	687.5
150°	703.1	703.4	703.7	703.3	702.4	701.5	700.6	699.7
152.5°	715.3	715.6	715.9	715.6	714.6	713.7	712.8	711.9
155°	732.1	732.5	732.9	732.6	731.6	730.6	729.5	728.4
157.5°	746.1	746.5	746.9	746.6	745.5	744.5	743.5	742.4
160°	754.7	755.3	755.7	755.5	754.5	753.4	752.4	751.3
162.5°	762.6	763.3	764.1	763.9	762.8	761.6	760.5	759.3
165°	772.9	773.6	774.4	774.3	773.2	772.2	771.2	770.1
167.5°	780.5	781.5	782.4	782.4	781.2	780.0	778.8	777.6
170°	784.5	785.6	786.6	786.6	785.4	784.2	783.0	781.9
172.5°	787.6	788.5	789.5	789.3	788.2	787.0	785.8	784.7
175°	791.0	792.0	793.1	793.0	791.9	790.7	789.5	788.3
177.5°	792.3	793.1	793.8	793.8	792.9	792.1	791.2	790.4
180°	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9

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