

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: P333384-927

Luminaire Tested: **S125DIW-S610D1050U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333384-927
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-S610D1050U927-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5222.8 lumens
Efficiency: N/A
Efficacy: 115.5 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: Semi-Indirect

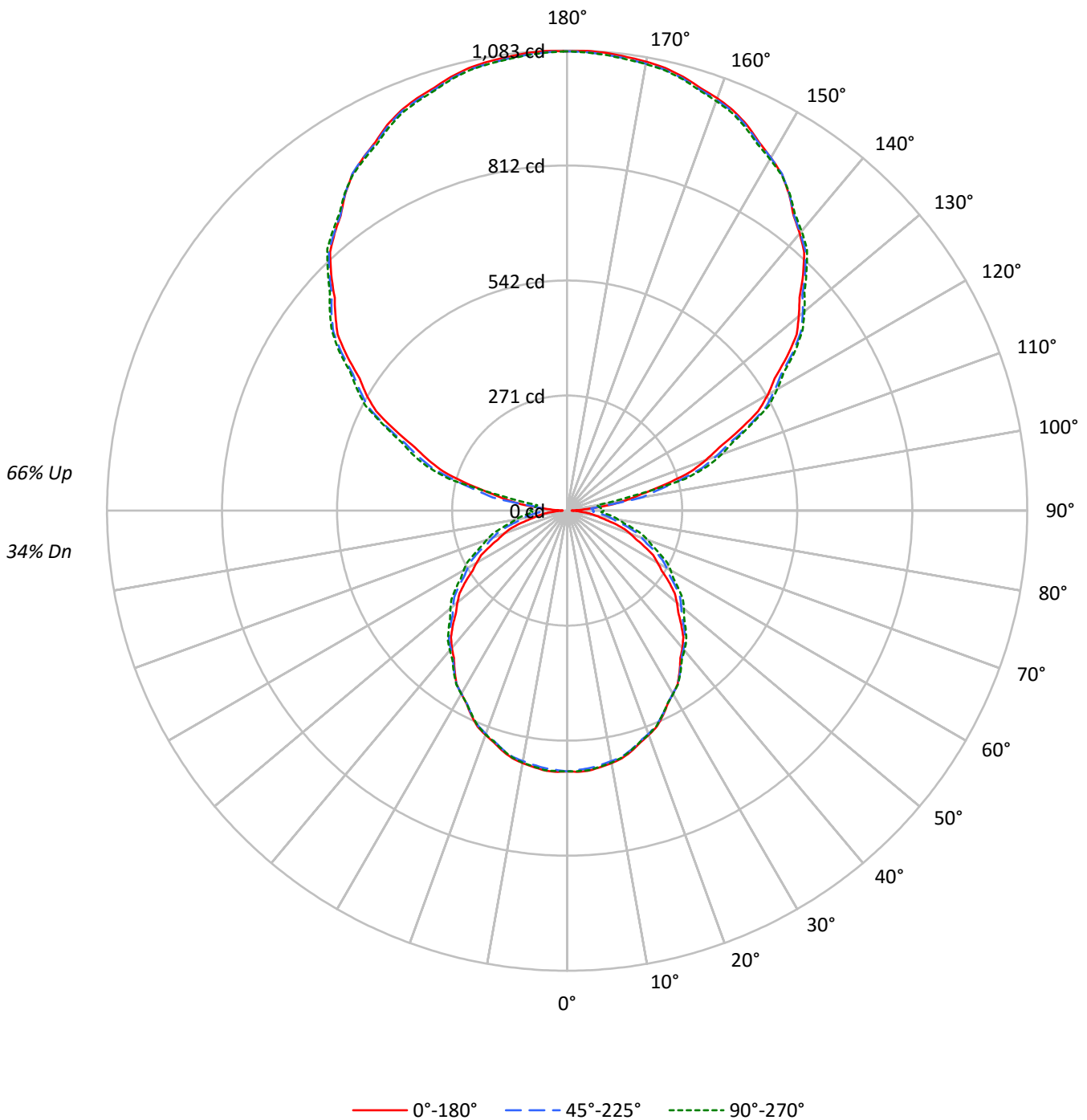
Input Watts (W): 45.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	75	75	75	57	57	57	42	42	42	34
1	94	89	85	82	84	81	77	74	64	62	60	50	48	47	36	35	34	28
2	85	78	71	66	76	70	65	60	56	52	49	43	41	39	31	30	28	23
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19
4	71	60	52	46	63	54	48	42	44	39	35	34	30	28	25	22	20	16
5	65	53	45	39	58	48	41	36	39	34	30	30	27	24	22	20	18	14
6	60	48	40	34	53	43	36	31	35	30	26	27	23	21	20	17	15	12
7	55	43	35	30	49	39	32	27	32	26	23	25	21	18	18	16	14	11
8	51	39	31	26	46	35	29	24	29	24	20	22	19	16	17	14	12	10
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	15	13	11	9
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	12	10	8

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	1.1
10°-20°	164.8	3.2
20°-30°	245.1	4.7
30°-40°	290.3	5.6
40°-50°	300.2	5.7
50°-60°	276.5	5.3
60°-70°	223.5	4.3
70°-80°	149.7	2.9
80°-90°	79.9	1.5
90°-100°	82.8	1.6
100°-110°	274.2	5.2
110°-120°	460.5	8.8
120°-130°	575.6	11.0
130°-140°	611.3	11.7
140°-150°	569.9	10.9
150°-160°	460.1	8.8
160°-170°	297.6	5.7
170°-180°	102.6	2.0
0°-30°	467.9	9.0
0°-40°	758.2	14.5
0°-60°	1334.9	25.6
0°-90°	1787.9	34.2
90°-120°	817.6	15.7
90°-150°	2574.5	49.3
90°-180°	3435.0	65.8
0°-180°	5222.8	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	36	62	79	87	8
95°	54	65	57	73	78	64
105°	241	254	272	283	287	255
115°	446	455	471	478	477	442
125°	631	637	648	654	656	564
135°	786	790	792	798	797	605
145°	910	911	911	914	912	569
155°	1002	997	998	1000	994	461
165°	1057	1052	1053	1057	1051	298
175°	1081	1076	1077	1082	1076	103
180°	1081	1081	1081	1081	1081	



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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	23.5	28.0	32.6	37.2	41.9	46.7	51.5	56.2	61.1	64.3
90°	10.5	16.2	21.9	27.6	33.3	39.0	44.8	50.6	56.4	62.2	66.1
92.5°	21.0	24.0	26.9	29.9	32.9	37.2	42.9	48.7	54.5	60.3	64.1
95°	53.5	56.4	59.4	62.3	65.3	65.6	63.4	61.2	58.9	56.7	60.6
97.5°	102.4	106.5	110.6	114.7	118.8	116.4	107.3	98.4	89.4	80.3	78.1
100°	140.5	143.8	147.1	150.4	153.8	158.0	163.0	167.9	172.9	177.9	154.2
102.5°	179.0	182.3	185.6	188.9	192.1	196.1	200.7	205.3	209.8	214.4	212.1
105°	241.0	243.8	246.7	249.5	252.4	255.8	259.8	263.8	267.8	271.9	274.6
107.5°	305.3	307.1	309.0	310.8	312.6	315.6	319.8	324.0	328.2	332.4	335.1
110°	347.1	348.7	350.3	352.0	353.6	356.4	360.5	364.6	368.7	372.8	374.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	386.9	388.6	390.3	392.0	393.7	396.5	400.4	404.2	408.1	411.9	413.7
115°	445.8	447.7	449.5	451.4	453.2	455.9	459.5	463.2	466.9	470.6	472.2
117.5°	507.0	507.6	508.1	508.7	509.3	511.5	515.6	519.5	523.5	527.4	528.8
120°	545.4	545.7	545.9	546.1	546.3	548.2	551.8	555.5	559.0	562.7	564.6
122.5°	578.9	579.8	580.7	581.5	582.3	584.4	587.6	590.8	594.1	597.3	599.0
125°	631.4	632.5	633.6	634.7	635.8	637.7	640.4	643.0	645.7	648.4	649.8
127.5°	680.9	681.7	682.4	683.2	683.9	685.3	687.5	689.5	691.6	693.7	695.3
130°	711.7	712.4	713.2	713.9	714.7	716.1	718.1	720.2	722.2	724.3	725.6
132.5°	742.0	743.0	743.9	745.0	746.0	747.0	748.1	749.1	750.2	751.2	753.0
135°	785.6	786.5	787.4	788.4	789.3	790.0	790.7	791.2	791.8	792.4	793.8
137.5°	825.7	826.5	827.3	828.1	828.9	829.4	829.6	829.7	829.8	830.0	831.6
140°	851.4	851.8	852.2	852.5	852.9	853.0	853.0	852.9	852.9	852.9	854.7
142.5°	875.2	875.3	875.4	875.5	875.6	875.8	876.1	876.4	876.6	876.9	878.2
145°	910.0	910.1	910.4	910.6	910.9	910.9	910.9	910.9	910.9	910.9	911.8
147.5°	939.8	939.8	939.7	939.6	939.5	939.6	939.8	940.0	940.2	940.4	940.9
150°	959.0	958.7	958.3	958.0	957.6	957.6	958.0	958.3	958.7	959.0	959.4
152.5°	977.6	976.8	976.0	975.3	974.5	974.3	974.6	975.0	975.3	975.7	976.0
155°	1001.5	1000.4	999.3	998.3	997.2	996.9	997.2	997.6	997.9	998.3	998.8
157.5°	1019.9	1019.3	1018.7	1018.0	1017.3	1017.1	1017.1	1017.1	1017.2	1017.2	1017.8
160°	1032.8	1031.7	1030.6	1029.5	1028.5	1028.0	1028.2	1028.4	1028.6	1028.7	1029.4
162.5°	1043.0	1042.0	1040.8	1039.8	1038.7	1038.2	1038.5	1038.6	1038.8	1038.9	1040.0
165°	1056.8	1055.7	1054.6	1053.6	1052.5	1052.0	1052.3	1052.4	1052.6	1052.7	1053.8
167.5°	1067.0	1066.0	1064.9	1063.7	1062.6	1062.2	1062.3	1062.5	1062.7	1062.9	1064.1
170°	1072.8	1071.6	1070.3	1069.1	1067.8	1067.3	1067.5	1067.6	1067.8	1068.0	1069.4
172.5°	1076.7	1075.4	1074.1	1072.9	1071.7	1071.2	1071.5	1071.8	1072.1	1072.5	1073.7
175°	1080.8	1079.7	1078.6	1077.6	1076.5	1076.1	1076.3	1076.4	1076.7	1076.8	1078.2
177.5°	1082.8	1081.9	1081.0	1080.1	1079.3	1079.0	1079.1	1079.3	1079.3	1079.5	1080.5
180°	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8



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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°	67.6	70.8	74.1	76.2	77.2	78.3	79.4	80.4
90°	70.1	74.1	78.0	80.7	82.2	83.7	85.2	86.7
92.5°	68.0	71.9	75.7	78.2	79.4	80.6	81.8	82.9
95°	64.4	68.3	72.1	74.5	75.4	76.4	77.3	78.2
97.5°	75.9	73.7	71.5	70.8	71.8	72.6	73.6	74.5
100°	130.5	106.8	83.0	71.2	71.3	71.5	71.5	71.6
102.5°	209.8	207.5	205.2	198.4	187.0	175.8	164.5	153.1
105°	277.2	279.9	282.6	284.3	285.0	285.8	286.5	287.3
107.5°	337.8	340.5	343.2	344.7	344.9	345.2	345.5	345.9
110°	376.8	378.8	380.8	382.4	383.5	384.6	385.7	386.8



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CATALOG NUMBER: S125DIW-S610D1050U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	415.4	417.2	418.9	420.2	420.8	421.5	422.2	422.9
115°	474.0	475.6	477.3	478.0	477.8	477.5	477.2	477.0
117.5°	530.1	531.5	532.8	533.7	534.2	534.6	535.0	535.5
120°	566.5	568.4	570.4	571.2	571.2	571.1	571.0	570.9
122.5°	600.9	602.7	604.5	605.3	605.1	604.8	604.6	604.4
125°	651.3	652.7	654.1	654.9	655.0	655.1	655.3	655.5
127.5°	696.9	698.5	700.1	700.5	700.1	699.5	698.9	698.4
130°	727.0	728.3	729.7	730.2	730.0	729.8	729.5	729.3
132.5°	754.7	756.5	758.3	759.0	758.7	758.4	758.0	757.6
135°	795.1	796.5	797.9	798.4	798.0	797.6	797.2	796.8
137.5°	833.3	834.9	836.5	837.2	836.8	836.4	836.0	835.6
140°	856.5	858.3	860.2	860.9	860.3	859.8	859.2	858.7
142.5°	879.6	880.9	882.3	882.6	882.1	881.5	881.0	880.5
145°	912.7	913.5	914.3	914.5	913.9	913.5	912.9	912.4
147.5°	941.3	941.7	942.1	941.8	940.8	939.8	938.7	937.7
150°	959.7	960.1	960.4	960.0	958.7	957.4	956.1	954.8
152.5°	976.4	976.8	977.1	976.7	975.4	974.1	972.9	971.6
155°	999.3	999.9	1000.4	1000.0	998.5	997.1	995.7	994.3
157.5°	1018.4	1018.9	1019.5	1019.1	1017.6	1016.2	1014.8	1013.4
160°	1030.2	1030.9	1031.6	1031.2	1029.8	1028.4	1027.0	1025.6
162.5°	1041.0	1042.0	1043.0	1042.7	1041.1	1039.6	1038.0	1036.4
165°	1054.9	1056.0	1057.0	1056.9	1055.4	1054.0	1052.6	1051.1
167.5°	1065.4	1066.7	1068.0	1067.9	1066.2	1064.6	1063.0	1061.4
170°	1070.9	1072.3	1073.7	1073.6	1072.0	1070.4	1068.8	1067.1
172.5°	1075.1	1076.3	1077.6	1077.4	1075.9	1074.2	1072.6	1071.0
175°	1079.7	1081.1	1082.5	1082.4	1080.8	1079.2	1077.6	1076.0
177.5°	1081.5	1082.5	1083.5	1083.5	1082.3	1081.2	1080.1	1078.9
180°	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8

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