

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: P333173-927

Luminaire Tested: **S125DIP-S610D590U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333173-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S610D590U927-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3523.3 lumens
Efficiency: N/A
Efficacy: 107.4 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

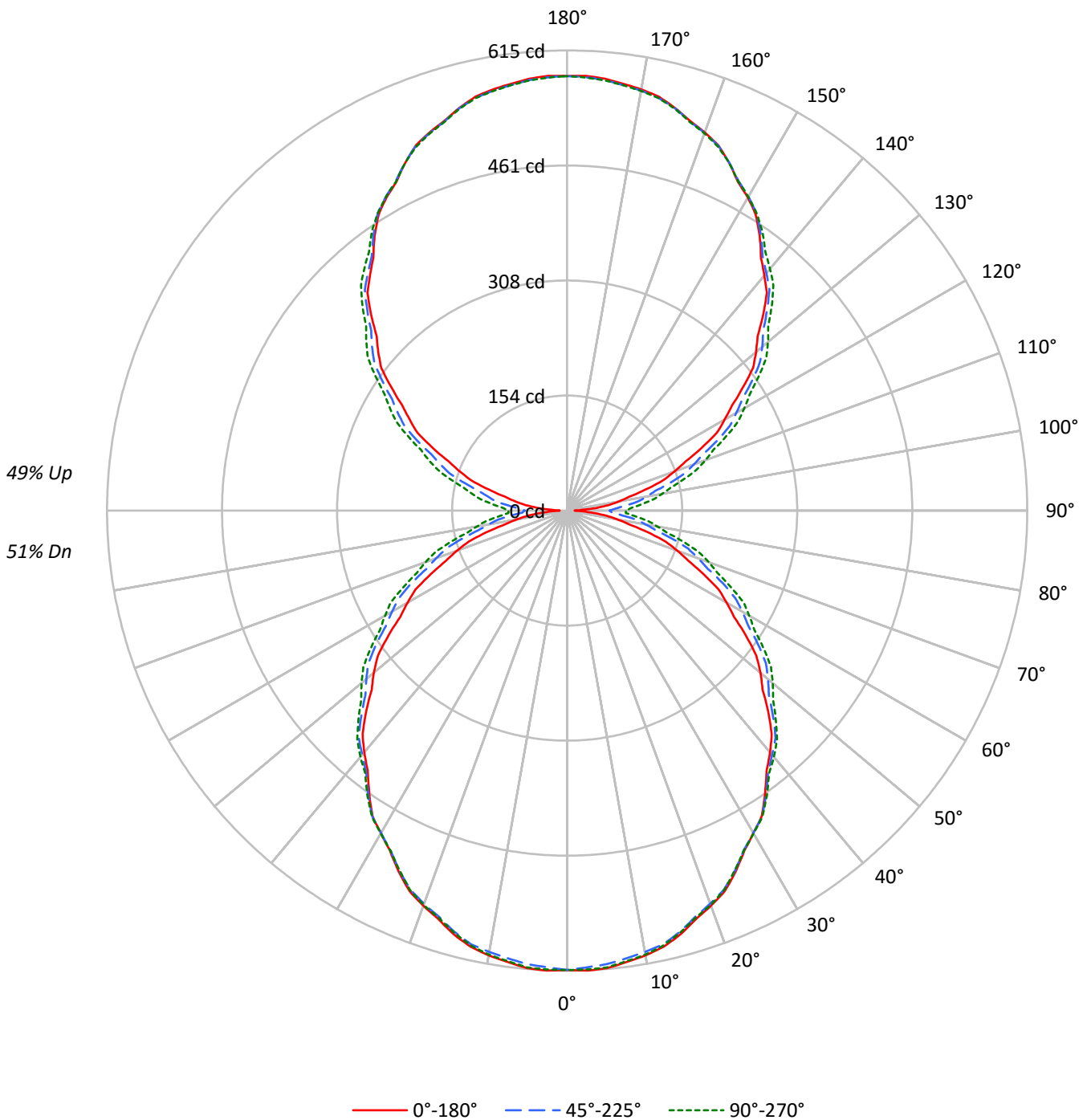
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	97	93	88	85	89	85	82	79	72	70	67	60	58	56	49	48	46	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	47	43	40	39	34
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	38	35	32	28
4	73	62	54	48	67	58	50	45	49	43	39	41	37	33	33	30	28	24
5	67	55	47	41	62	51	44	38	44	38	33	37	32	29	30	27	24	21
6	62	49	41	35	57	46	39	33	39	33	29	33	29	25	27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26	30	25	22	25	21	19	16
8	53	40	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	28	23	30	24	20	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	20	27	22	18	23	19	16	19	16	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	1.6
10°-20°	164.8	4.7
20°-30°	245.1	7.0
30°-40°	290.3	8.2
40°-50°	300.2	8.5
50°-60°	276.5	7.8
60°-70°	223.5	6.3
70°-80°	149.7	4.2
80°-90°	78.9	2.2
90°-100°	82.5	2.3
100°-110°	147.0	4.2
110°-120°	216.1	6.1
120°-130°	268.3	7.6
130°-140°	292.2	8.3
140°-150°	282.3	8.0
150°-160°	236.2	6.7
160°-170°	157.0	4.5
170°-180°	54.9	1.6
0°-30°	467.9	13.3
0°-40°	758.2	21.5
0°-60°	1334.9	37.9
0°-90°	1786.9	50.7
90°-120°	445.5	12.6
90°-150°	1288.2	36.6
90°-180°	1736.0	49.3
0°-180°	3523.3	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	33	57	72	78	8
95°	37	54	79	94	100	37
105°	108	121	141	155	161	116
115°	198	205	221	231	234	196
125°	287	289	301	310	312	257
135°	371	373	378	385	387	286
145°	448	450	451	454	455	280
155°	512	512	513	514	512	236
165°	557	556	557	558	556	157
175°	579	578	578	580	577	55
180°	581	581	581	581	581	



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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	23.3	27.7	32.2	36.6	41.2	45.9	50.5	55.3	60.0	63.1
90°	10.1	15.1	20.3	25.3	30.4	35.6	40.8	46.1	51.3	56.6	60.1
92.5°	19.6	24.2	28.7	33.2	37.7	42.7	48.2	53.7	59.3	64.8	68.4
95°	37.2	40.9	44.5	48.2	51.9	56.6	62.1	67.7	73.2	78.7	82.4
97.5°	55.9	59.1	62.3	65.5	68.8	73.3	79.0	84.8	90.5	96.3	99.8
100°	69.9	72.7	75.5	78.3	81.1	85.3	90.9	96.5	102.1	107.7	111.4
102.5°	84.9	87.9	90.9	94.0	97.0	100.8	105.7	110.5	115.3	120.2	123.9
105°	108.4	111.1	113.8	116.4	119.0	122.6	127.3	131.9	136.5	141.1	144.4
107.5°	134.5	136.8	139.1	141.5	143.8	147.1	151.4	155.7	160.0	164.4	167.3
110°	152.4	154.6	156.7	158.8	160.9	164.0	168.0	172.1	176.1	180.1	183.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	171.3	172.8	174.4	175.9	177.4	180.2	184.3	188.2	192.3	196.3	198.8
115°	198.4	199.7	201.1	202.4	203.7	206.3	209.9	213.6	217.3	220.9	223.2
117.5°	225.6	226.4	227.2	228.0	228.8	230.9	234.4	237.9	241.4	244.9	247.2
120°	243.0	243.9	244.8	245.7	246.6	248.7	251.8	255.0	258.2	261.3	263.6
122.5°	261.3	261.7	262.1	262.4	262.8	264.6	267.8	271.0	274.3	277.5	279.6
125°	286.7	287.2	287.6	288.0	288.5	290.2	292.9	295.7	298.5	301.3	303.2
127.5°	313.1	313.4	313.6	313.8	314.0	315.3	317.6	319.9	322.2	324.6	326.4
130°	329.5	329.8	330.2	330.6	330.9	332.2	334.2	336.3	338.3	340.4	342.2
132.5°	345.2	346.0	346.8	347.6	348.4	349.5	350.9	352.4	353.7	355.1	356.9
135°	370.9	371.4	371.8	372.2	372.7	373.5	374.5	375.6	376.6	377.6	379.4
137.5°	395.0	395.5	395.9	396.4	396.9	397.4	398.2	398.8	399.5	400.1	401.9
140°	410.0	410.5	411.1	411.5	412.0	412.5	413.0	413.4	413.8	414.2	415.9
142.5°	425.6	425.9	426.2	426.5	426.8	427.2	427.6	428.0	428.4	428.8	430.2
145°	448.5	448.7	449.0	449.2	449.6	449.8	450.1	450.4	450.8	451.0	451.7
147.5°	469.0	469.2	469.4	469.7	469.9	470.1	470.3	470.6	470.9	471.1	471.5
150°	483.1	483.0	482.9	482.8	482.7	482.8	483.2	483.6	484.0	484.4	484.4
152.5°	494.6	494.8	495.0	495.1	495.2	495.4	495.5	495.7	495.8	496.1	496.3
155°	512.5	512.5	512.5	512.5	512.5	512.5	512.6	512.7	512.9	512.9	513.3
157.5°	528.4	528.1	527.9	527.8	527.5	527.4	527.5	527.7	527.8	527.8	528.2
160°	537.8	537.5	537.2	536.9	536.5	536.5	536.5	536.7	536.8	536.9	537.3
162.5°	546.1	545.9	545.7	545.4	545.2	545.1	545.1	545.2	545.2	545.2	545.7
165°	557.2	557.0	556.8	556.6	556.4	556.3	556.4	556.6	556.7	556.7	557.1
167.5°	566.6	566.3	565.8	565.4	565.0	564.8	564.8	564.8	564.8	564.8	565.4
170°	571.6	571.2	570.8	570.5	570.1	569.9	569.9	569.9	569.9	569.9	570.5
172.5°	575.3	574.9	574.5	574.1	573.7	573.5	573.5	573.5	573.5	573.5	574.1
175°	579.3	578.9	578.5	578.1	577.7	577.6	577.6	577.6	577.6	577.6	578.1
177.5°	581.5	581.1	580.8	580.5	580.1	580.0	579.9	579.8	579.7	579.6	580.1
180°	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7



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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°	66.3	69.5	72.6	74.8	75.7	76.8	77.7	78.7
90°	63.8	67.3	70.9	73.3	74.5	75.8	77.0	78.3
92.5°	72.0	75.7	79.3	81.7	82.9	84.1	85.2	86.3
95°	86.0	89.7	93.3	95.7	96.9	98.0	99.1	100.3
97.5°	103.3	106.8	110.2	112.5	113.5	114.5	115.6	116.6
100°	115.1	118.8	122.6	124.8	125.9	126.9	127.9	128.9
102.5°	127.5	131.3	134.9	137.4	138.4	139.5	140.6	141.6
105°	147.7	150.9	154.2	156.5	157.7	159.0	160.2	161.4
107.5°	170.2	173.2	176.2	178.0	178.8	179.7	180.5	181.3
110°	185.8	188.7	191.5	193.4	194.2	195.0	195.8	196.7



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CATALOG NUMBER: S125DIP-S610D590U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	201.5	204.0	206.6	208.3	209.0	209.8	210.5	211.3
115°	225.6	227.9	230.2	231.7	232.4	233.1	233.8	234.5
117.5°	249.5	251.9	254.2	255.6	256.2	256.7	257.2	257.7
120°	265.9	268.2	270.5	271.8	272.2	272.6	273.0	273.4
122.5°	281.7	283.8	285.8	287.1	287.6	288.1	288.6	289.1
125°	305.1	307.0	309.0	310.3	310.9	311.4	312.0	312.5
127.5°	328.3	330.2	332.0	333.3	333.8	334.4	335.0	335.6
130°	344.0	345.8	347.5	348.6	349.1	349.6	350.1	350.5
132.5°	358.7	360.4	362.3	363.2	363.5	363.8	364.1	364.4
135°	381.1	382.9	384.6	385.6	385.9	386.1	386.4	386.7
137.5°	403.5	405.3	406.9	407.8	407.8	407.9	407.9	408.0
140°	417.6	419.3	421.0	421.8	421.8	421.8	421.9	421.9
142.5°	431.6	433.0	434.4	435.1	435.1	435.1	435.1	435.2
145°	452.3	453.0	453.7	454.2	454.4	454.6	454.9	455.1
147.5°	472.0	472.5	472.9	472.9	472.5	472.1	471.6	471.1
150°	484.4	484.4	484.4	484.4	484.3	484.3	484.3	484.2
152.5°	496.5	496.8	497.0	496.9	496.6	496.3	495.9	495.6
155°	513.7	514.1	514.5	514.5	514.0	513.5	512.9	512.5
157.5°	528.6	529.0	529.4	529.3	528.6	528.0	527.4	526.6
160°	537.7	538.1	538.4	538.4	538.0	537.4	536.9	536.5
162.5°	546.1	546.6	547.2	547.1	546.5	545.9	545.3	544.7
165°	557.5	557.9	558.4	558.3	557.7	557.1	556.4	555.9
167.5°	566.0	566.6	567.2	567.2	566.6	565.9	565.3	564.7
170°	571.1	571.6	572.3	572.2	571.6	570.8	570.1	569.4
172.5°	574.7	575.3	575.9	575.9	575.3	574.6	574.0	573.4
175°	578.8	579.3	580.0	579.9	579.2	578.5	577.8	577.1
177.5°	580.6	581.1	581.5	581.5	581.0	580.4	579.8	579.2
180°	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7

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