

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: P333172-935

Luminaire Tested: **S125DIP-S610D590U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333172-935
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: S125DIP-S610D590U935-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4103.1 lumens
Efficiency: N/A
Efficacy: 125.1 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

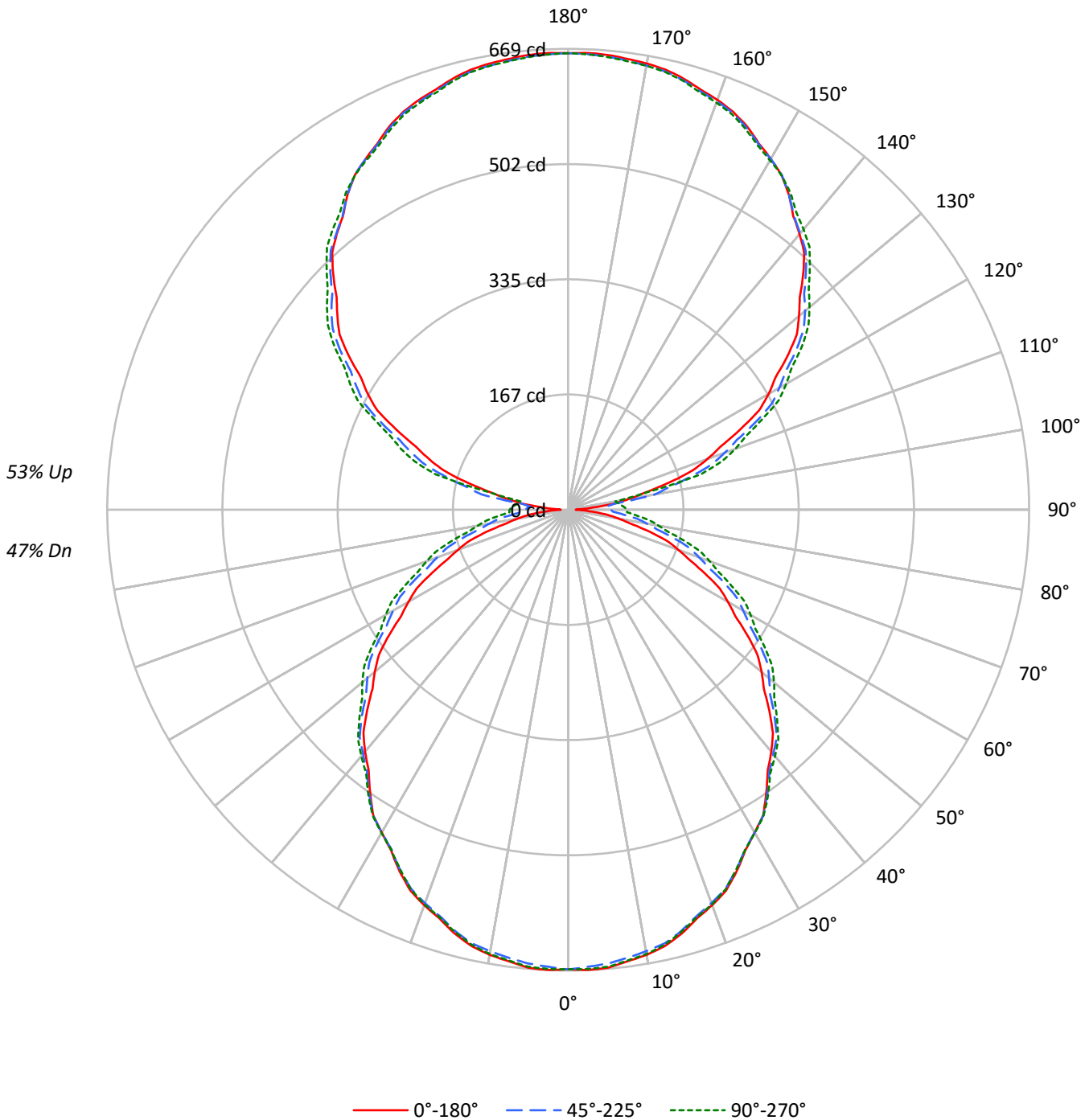
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333172-935

CATALOG NUMBER: S125DIP-S610D590U935-4F0-1E-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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	47
1	96	92	88	84	88	84	81	78	71	68	66	58	56	54	46	45	44	38
2	88	80	73	68	80	73	68	63	62	57	54	51	48	45	40	38	36	32
3	80	70	62	56	73	64	58	52	54	49	45	44	41	38	36	33	31	26
4	73	62	54	47	67	57	50	44	48	42	38	39	35	32	32	29	26	23
5	67	55	47	40	61	51	43	38	43	37	33	35	31	28	28	25	23	19
6	61	49	41	35	56	45	38	33	38	33	28	32	27	24	26	22	20	17
7	57	44	36	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15
8	53	40	32	27	48	37	30	25	32	26	22	26	22	19	22	18	16	13
9	49	37	29	24	45	34	27	23	29	24	20	24	20	17	20	17	14	12
10	46	34	26	21	42	31	25	20	27	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4310	4310	4310
5°	4318	4229	4243
10°	4288	4154	4148
15°	4236	4064	4027
20°	4168	3952	3906
25°	4086	3833	3757
30°	3987	3701	3622
35°	3894	3580	3497
40°	3800	3452	3372
45°	3693	3344	3261
50°	3592	3225	3163
55°	3469	3114	3048
60°	3336	2986	2931
65°	3196	2854	2799
70°	3036	2672	2663
75°	2788	2496	2496
80°	2461	2284	2314
85°	2155	2142	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.5
10°-20°	179.1	4.4
20°-30°	266.4	6.5
30°-40°	315.5	7.7
40°-50°	326.2	8.0
50°-60°	300.5	7.3
60°-70°	242.9	5.9
70°-80°	162.7	4.0
80°-90°	85.7	2.1
90°-100°	71.4	1.7
100°-110°	183.3	4.5
110°-120°	292.6	7.1
120°-130°	358.7	8.7
130°-140°	377.4	9.2
140°-150°	349.9	8.5
150°-160°	282.1	6.9
160°-170°	182.5	4.4
170°-180°	62.9	1.5
0°-30°	508.6	12.4
0°-40°	824.1	20.1
0°-60°	1450.8	35.4
0°-90°	1942.2	47.3
90°-120°	547.3	13.3
90°-150°	1633.3	39.8
90°-180°	2161.0	52.7
0°-180°	4103.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	667	666	661	666	666	63
15°	637	638	633	637	635	179
25°	579	581	577	579	576	266
35°	501	505	504	506	506	313
45°	413	420	423	428	428	318
55°	317	328	338	345	348	284
65°	218	234	249	259	262	217
75°	120	138	158	171	175	128
85°	36	58	80	94	100	38
90°	11	36	62	78	85	8
95°	36	51	56	72	77	42
105°	150	163	182	195	200	159
115°	275	283	300	309	310	273
125°	388	392	404	412	414	347
135°	482	485	488	495	496	372
145°	558	558	558	562	562	349
155°	614	611	612	613	610	283
165°	648	645	646	648	644	183
175°	663	660	660	664	660	63
180°	663	663	663	663	663	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	668.8	668.6	668.4	668.1	667.9	667.4	666.6	665.7	665.0	664.1	665.0
5°	667.3	666.9	666.7	666.4	666.1	665.5	664.4	663.4	662.4	661.3	662.5
7.5°	661.3	661.2	661.2	661.0	660.9	660.3	659.3	658.2	657.2	656.2	657.1
10°	656.2	656.2	656.2	656.2	656.2	655.6	654.4	653.2	652.0	650.9	651.9
12.5°	648.8	648.9	649.0	649.2	649.3	648.8	647.9	647.0	646.1	645.1	645.9
15°	637.1	637.3	637.5	637.6	637.7	637.3	636.3	635.2	634.3	633.3	634.1
17.5°	622.0	622.2	622.6	622.8	623.2	622.8	621.8	620.8	619.7	618.7	619.4
20°	611.0	611.3	611.6	611.9	612.2	611.8	610.8	609.8	608.7	607.7	608.1
22.5°	598.5	599.0	599.5	600.0	600.5	600.2	599.1	598.0	596.8	595.7	596.2
25°	578.9	579.4	579.8	580.2	580.7	580.5	579.6	578.8	577.8	577.0	577.6
27.5°	557.2	557.8	558.5	559.1	559.8	559.6	558.6	557.7	556.6	555.7	556.0
30°	541.0	541.9	542.8	543.6	544.5	544.5	543.6	542.8	541.9	541.0	541.3
32.5°	526.3	527.1	527.9	528.7	529.3	529.4	528.8	528.1	527.5	526.8	527.2
35°	501.1	502.1	503.2	504.1	505.1	505.5	505.1	504.5	504.1	503.7	504.1
37.5°	475.9	476.8	477.7	478.6	479.6	479.9	479.8	479.7	479.5	479.4	479.9
40°	458.6	459.8	460.9	462.1	463.2	463.7	463.6	463.5	463.3	463.1	463.7
42.5°	439.7	441.3	442.7	444.3	445.8	446.7	447.0	447.4	447.6	448.0	448.7
45°	412.8	414.4	415.9	417.6	419.2	420.3	421.1	421.8	422.5	423.3	424.3
47.5°	385.2	386.7	388.1	389.6	391.2	392.4	393.7	394.9	396.2	397.4	399.0
50°	366.4	367.9	369.5	371.2	372.7	374.4	375.9	377.5	379.1	380.7	382.4
52.5°	346.5	348.4	350.3	352.3	354.2	356.2	358.2	360.1	362.1	363.9	365.7
55°	317.3	319.6	321.9	324.3	326.6	328.9	331.2	333.6	335.9	338.2	339.8
57.5°	287.5	290.2	293.0	295.8	298.6	301.4	304.0	306.7	309.4	312.0	313.8
60°	267.6	270.4	273.4	276.3	279.2	282.1	285.0	287.9	290.8	293.7	295.9
62.5°	248.2	251.1	254.0	256.9	259.8	262.9	266.0	269.1	272.2	275.4	277.8
65°	218.5	221.9	225.2	228.5	231.9	235.3	238.8	242.3	245.7	249.3	251.4
67.5°	190.5	193.7	196.9	200.2	203.4	206.8	210.3	213.9	217.4	221.0	223.6
70°	170.0	173.4	176.8	180.1	183.5	187.0	190.8	194.6	198.4	202.2	204.9
72.5°	150.2	153.7	157.1	160.6	164.0	167.8	171.9	176.1	180.2	184.3	187.4
75°	120.4	124.2	127.9	131.7	135.5	139.7	144.4	149.0	153.7	158.3	161.2
77.5°	91.7	96.1	100.5	104.8	109.2	113.6	118.0	122.5	127.0	131.5	134.7
80°	74.0	78.3	82.7	87.0	91.4	96.0	101.0	105.9	110.8	115.8	119.0
82.5°	57.7	62.3	66.9	71.5	76.1	80.9	85.9	91.0	96.1	101.2	104.2
85°	36.0	40.8	45.5	50.4	55.2	60.1	65.2	70.3	75.3	80.5	83.7
87.5°	20.5	25.3	30.1	35.0	39.8	44.8	49.9	54.9	60.1	65.2	68.6
90°	10.9	16.4	22.0	27.6	33.1	38.7	44.3	50.1	55.8	61.5	65.3
92.5°	17.0	20.7	24.4	28.1	31.8	36.5	42.2	48.0	53.6	59.4	63.2
95°	36.5	40.0	43.4	46.8	50.3	52.4	53.2	54.0	54.8	55.6	59.3
97.5°	66.2	70.2	74.1	78.2	82.1	82.4	79.0	75.5	72.1	68.6	68.6
100°	89.2	92.6	96.0	99.4	102.7	107.0	112.1	117.2	122.3	127.3	114.2
102.5°	112.7	115.9	119.2	122.3	125.6	129.7	134.4	139.2	144.0	148.9	148.7
105°	150.3	153.1	155.8	158.6	161.4	164.9	169.3	173.7	178.0	182.4	185.3
107.5°	189.4	191.4	193.4	195.4	197.3	200.5	204.9	209.3	213.7	218.1	221.0
110°	214.8	216.5	218.3	220.1	221.8	224.8	229.1	233.4	237.7	241.9	244.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	239.2	240.8	242.5	244.2	245.8	248.7	252.8	256.8	261.0	265.0	267.3
115°	275.1	276.6	278.2	279.7	281.4	284.0	287.9	291.9	295.8	299.6	301.8
117.5°	312.3	312.9	313.6	314.2	314.9	317.2	321.2	325.1	329.2	333.1	335.0
120°	335.9	336.1	336.5	336.8	337.2	339.1	342.9	346.5	350.2	353.8	356.1
122.5°	356.1	356.8	357.4	358.0	358.6	360.6	364.0	367.4	370.7	374.1	376.3
125°	388.2	388.8	389.4	390.1	390.7	392.4	395.4	398.3	401.2	404.1	406.0
127.5°	418.4	418.7	419.1	419.6	419.9	421.3	423.6	425.9	428.3	430.6	432.5
130°	437.2	437.6	438.0	438.4	438.8	440.1	442.2	444.4	446.5	448.7	450.4
132.5°	455.6	456.2	456.8	457.4	458.0	458.9	460.3	461.6	462.9	464.3	466.2
135°	482.2	482.8	483.3	483.8	484.2	484.9	485.7	486.6	487.3	488.1	489.8
137.5°	506.8	507.2	507.6	508.1	508.6	508.9	509.2	509.5	509.8	510.1	511.9
140°	522.4	522.5	522.8	523.0	523.2	523.3	523.4	523.4	523.5	523.5	525.3
142.5°	536.9	536.9	536.9	536.9	536.9	537.0	537.3	537.4	537.6	537.8	539.2
145°	558.2	558.3	558.4	558.4	558.5	558.5	558.5	558.5	558.5	558.5	559.4
147.5°	576.2	576.2	576.1	576.1	576.0	576.1	576.2	576.4	576.4	576.6	577.0
150°	588.0	587.8	587.5	587.4	587.1	587.1	587.4	587.5	587.8	588.0	588.2
152.5°	599.4	598.9	598.5	598.0	597.4	597.4	597.5	597.8	598.0	598.2	598.5
155°	614.1	613.4	612.8	612.1	611.4	611.2	611.4	611.7	611.8	612.1	612.4
157.5°	625.3	624.9	624.6	624.1	623.8	623.6	623.6	623.6	623.6	623.7	624.1
160°	633.2	632.6	631.9	631.2	630.6	630.3	630.4	630.5	630.6	630.8	631.2
162.5°	639.5	638.9	638.2	637.5	636.9	636.6	636.7	636.8	636.9	637.1	637.7
165°	647.9	647.3	646.6	646.0	645.3	645.1	645.1	645.2	645.4	645.5	646.1
167.5°	654.2	653.6	652.9	652.2	651.5	651.3	651.3	651.4	651.5	651.7	652.5
170°	657.8	657.0	656.3	655.5	654.7	654.4	654.4	654.6	654.7	654.8	655.7
172.5°	660.1	659.4	658.6	657.8	657.0	656.8	656.9	657.2	657.4	657.5	658.3
175°	662.7	662.0	661.3	660.7	660.0	659.8	659.9	660.0	660.1	660.2	661.1
177.5°	663.8	663.3	662.8	662.3	661.8	661.5	661.6	661.7	661.8	661.9	662.5
180°	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	665.7	666.6	667.4	667.7	667.6	667.5	667.4	667.3
5°	663.7	664.9	666.0	666.5	666.4	666.2	666.1	666.0
7.5°	658.1	659.2	660.2	660.6	660.5	660.4	660.2	660.0
10°	653.0	653.9	655.0	655.4	655.3	655.1	655.0	654.8
12.5°	646.7	647.5	648.3	648.5	648.1	647.7	647.4	647.0
15°	635.0	635.8	636.7	636.9	636.3	635.7	635.2	634.6
17.5°	620.1	620.7	621.4	621.6	621.2	620.9	620.5	620.2
20°	608.6	609.1	609.5	609.7	609.7	609.7	609.7	609.7
22.5°	596.8	597.4	597.9	598.0	597.6	597.3	596.9	596.6
25°	578.2	578.8	579.3	579.3	578.5	577.8	577.0	576.4
27.5°	556.5	556.9	557.3	557.3	557.1	556.8	556.6	556.3
30°	541.6	541.9	542.2	542.3	542.1	541.9	541.8	541.7
32.5°	527.4	527.7	528.1	528.1	528.0	527.8	527.7	527.5
35°	504.5	505.1	505.5	505.7	505.7	505.7	505.7	505.7
37.5°	480.5	481.1	481.7	482.0	481.9	481.8	481.8	481.7
40°	464.3	464.9	465.5	465.9	466.2	466.5	466.8	467.1
42.5°	449.4	450.0	450.7	451.2	451.3	451.3	451.3	451.4
45°	425.2	426.3	427.3	427.9	428.1	428.2	428.3	428.5
47.5°	400.5	401.9	403.4	404.3	404.7	404.9	405.3	405.6
50°	383.9	385.6	387.1	388.1	388.6	389.0	389.4	389.9
52.5°	367.4	369.1	370.8	371.9	372.2	372.5	372.8	373.2
55°	341.4	343.0	344.6	345.7	346.3	346.9	347.4	348.0
57.5°	315.7	317.5	319.3	320.5	321.0	321.4	321.8	322.3
60°	298.1	300.2	302.5	303.8	304.2	304.6	305.1	305.5
62.5°	280.3	282.7	285.1	286.5	287.1	287.7	288.2	288.8
65°	253.6	255.8	258.0	259.3	259.9	260.5	261.1	261.7
67.5°	226.3	228.9	231.5	233.2	234.0	234.8	235.6	236.3
70°	207.7	210.4	213.2	215.0	215.9	216.7	217.7	218.5
72.5°	190.4	193.3	196.3	198.1	198.8	199.4	200.1	200.7
75°	164.1	167.0	170.0	171.8	172.5	173.2	173.9	174.7
77.5°	137.8	141.1	144.3	146.2	146.7	147.3	147.9	148.5
80°	122.2	125.4	128.5	130.4	131.0	131.6	132.2	132.8
82.5°	107.3	110.4	113.5	115.5	116.6	117.6	118.6	119.7
85°	86.9	90.1	93.2	95.4	96.6	97.7	98.9	100.0
87.5°	72.1	75.5	79.0	81.3	82.3	83.4	84.5	85.6
90°	69.3	73.2	77.1	79.6	81.0	82.4	83.7	85.1
92.5°	67.0	70.7	74.5	77.0	78.2	79.3	80.5	81.6
95°	63.1	66.8	70.6	73.0	74.0	75.0	76.0	77.1
97.5°	68.6	68.5	68.5	69.1	70.0	71.0	72.0	73.0
100°	100.9	87.7	74.5	68.1	68.5	69.0	69.4	69.8
102.5°	148.5	148.4	148.3	144.9	138.4	131.8	125.3	118.7
105°	188.2	191.1	194.0	195.9	196.8	197.7	198.6	199.6
107.5°	223.9	226.9	229.7	231.4	232.0	232.6	233.2	233.8
110°	246.8	249.3	251.8	253.5	254.6	255.7	256.8	258.0



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CATALOG NUMBER: S125DIP-S610D590U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	269.5	271.7	274.0	275.5	276.4	277.2	278.1	279.0
115°	304.0	306.2	308.3	309.5	309.8	310.0	310.2	310.4
117.5°	336.9	338.8	340.8	342.1	342.8	343.5	344.1	344.8
120°	358.3	360.6	362.8	364.1	364.5	364.8	365.2	365.4
122.5°	378.4	380.6	382.7	383.8	384.1	384.4	384.6	384.9
125°	407.9	409.7	411.6	412.8	413.2	413.6	414.0	414.4
127.5°	434.4	436.3	438.2	439.2	439.2	439.3	439.3	439.4
130°	452.0	453.7	455.5	456.4	456.6	456.8	456.9	457.1
132.5°	468.2	470.1	472.1	473.1	473.2	473.3	473.3	473.4
135°	491.5	493.1	494.8	495.7	495.8	495.8	495.8	495.9
137.5°	513.7	515.4	517.2	518.1	518.1	518.1	518.1	518.1
140°	527.1	528.9	530.7	531.7	531.6	531.5	531.4	531.3
142.5°	540.6	542.0	543.4	544.1	544.0	543.9	543.9	543.8
145°	560.2	561.0	561.9	562.2	562.1	562.1	562.1	562.0
147.5°	577.3	577.7	578.1	578.0	577.5	577.0	576.4	575.9
150°	588.4	588.7	588.8	588.7	587.9	587.2	586.4	585.7
152.5°	598.7	598.9	599.1	598.8	598.1	597.3	596.6	595.8
155°	612.8	613.0	613.4	613.1	612.3	611.4	610.5	609.6
157.5°	624.4	624.7	625.1	624.8	624.0	623.0	622.2	621.3
160°	631.6	632.1	632.5	632.2	631.4	630.5	629.6	628.8
162.5°	638.3	638.9	639.5	639.3	638.3	637.4	636.5	635.4
165°	646.8	647.5	648.1	648.0	647.1	646.3	645.4	644.5
167.5°	653.2	654.0	654.8	654.7	653.8	652.7	651.8	650.7
170°	656.6	657.5	658.3	658.2	657.3	656.3	655.3	654.4
172.5°	659.1	660.0	660.7	660.6	659.6	658.7	657.6	656.7
175°	661.9	662.8	663.7	663.7	662.7	661.7	660.7	659.7
177.5°	663.1	663.7	664.3	664.3	663.6	662.9	662.2	661.5
180°	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7

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