

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: P333643

Luminaire Tested: **S125RDIW-S375D470U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333643
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: S125RDIW-S375D470U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3072.1 lumens
Efficiency: N/A
Efficacy: 133.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

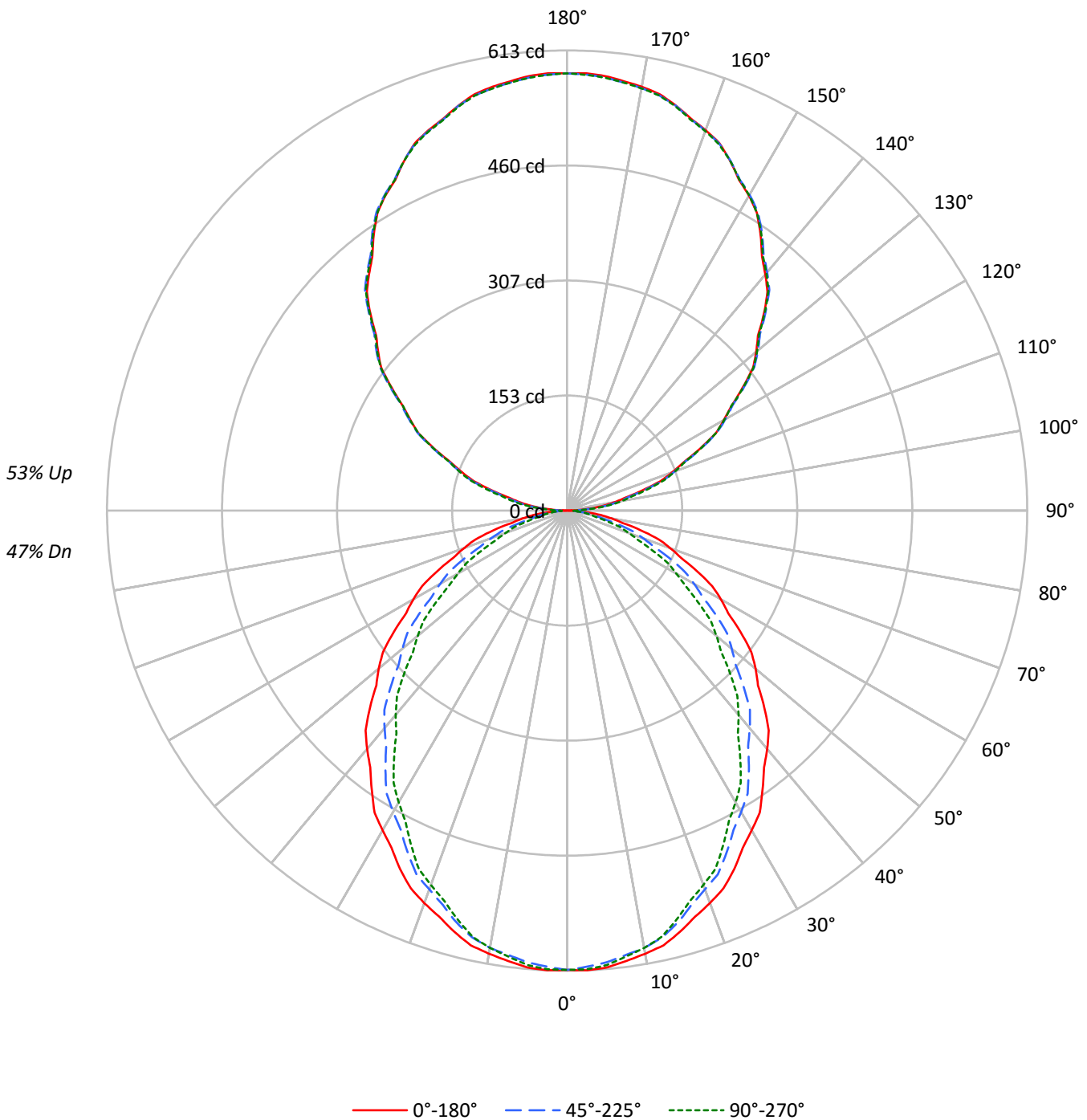
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47																				
1	97	93	89	86	89	86	83	80	72	70	68	59	58	56	48	47	46	40																				
2	89	82	76	70	81	75	70	66	63	59	56	52	50	47	42	40	39	34																				
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	37	35	33	29																				
4	74	64	56	50	68	59	52	47	50	45	41	41	38	35	34	31	29	25																				
5	68	57	49	43	62	53	46	40	45	39	35	37	33	30	30	27	25	22																				
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22	19																				
7	58	46	38	33	53	43	36	31	37	31	27	31	26	23	25	22	20	17																				
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18	15																				
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	21	18	16	14																				
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3952	3952	3952
5°	3961	3916	3940
10°	3931	3880	3880
15°	3884	3801	3770
20°	3824	3691	3647
25°	3755	3583	3504
30°	3667	3457	3347
35°	3578	3327	3170
40°	3495	3191	2996
45°	3394	3040	2807
50°	3293	2875	2609
55°	3174	2716	2399
60°	3056	2525	2173
65°	2917	2303	1913
70°	2757	2024	1648
75°	2538	1707	1372
80°	2235	1339	1153
85°	1882	1097	1030



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.5	1.9
10°-20°	160.8	5.2
20°-30°	233.2	7.6
30°-40°	265.7	8.7
40°-50°	259.0	8.4
50°-60°	218.0	7.1
60°-70°	152.8	5.0
70°-80°	78.6	2.6
80°-90°	21.1	0.7
90°-100°	39.0	1.3
100°-110°	115.2	3.7
110°-120°	195.1	6.4
120°-130°	256.8	8.4
130°-140°	287.7	9.4
140°-150°	282.0	9.2
150°-160°	236.9	7.7
160°-170°	157.4	5.1
170°-180°	55.1	1.8
0°-30°	451.5	14.7
0°-40°	717.3	23.3
0°-60°	1194.3	38.9
0°-90°	1446.9	47.1
90°-120°	349.3	11.4
90°-150°	1175.8	38.3
90°-180°	1625.0	52.9
0°-180°	3072.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	612	612	612	612	612	
5°	611	609	604	608	608	58
15°	581	578	568	568	564	164
25°	527	519	503	497	492	242
35°	454	442	422	409	402	284
45°	372	358	333	315	307	287
55°	282	267	241	221	213	252
65°	191	175	151	133	125	189
75°	102	88	68	59	55	108
85°	25	17	15	14	14	29
90°	0	4	7	10	11	3
95°	30	31	35	38	39	31
105°	103	106	108	111	112	110
115°	195	197	198	198	197	193
125°	285	288	288	287	287	255
135°	371	373	374	374	372	286
145°	449	451	452	452	451	281
155°	514	514	514	516	514	237
165°	559	558	558	560	558	158
175°	581	579	579	582	579	55
180°	582	582	582	582	582	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9
2.5°	613.0	612.8	612.5	612.3	612.0	611.5	610.7	609.8	609.0	608.2	609.0
5°	611.0	610.6	610.2	609.7	609.3	608.6	607.4	606.3	605.2	604.0	605.1
7.5°	605.0	604.6	604.2	603.8	603.4	602.5	601.2	599.8	598.5	597.1	597.8
10°	599.4	599.1	598.8	598.5	598.2	597.3	595.9	594.4	593.0	591.6	591.9
12.5°	593.1	592.7	592.4	592.0	591.6	590.4	588.5	586.6	584.6	582.7	582.9
15°	580.9	580.3	579.7	579.1	578.5	577.1	574.9	572.8	570.6	568.5	568.4
17.5°	567.2	566.2	565.3	564.3	563.4	561.6	558.8	556.1	553.4	550.7	550.2
20°	556.4	555.4	554.4	553.4	552.3	550.2	546.9	543.6	540.3	537.0	536.5
22.5°	544.6	543.6	542.6	541.5	540.5	538.3	534.8	531.4	527.9	524.5	523.5
25°	526.9	525.3	523.8	522.2	520.7	518.0	514.2	510.4	506.6	502.8	501.5
27.5°	506.5	504.7	502.8	500.9	499.0	496.1	492.0	487.9	483.9	479.8	477.9
30°	491.7	489.8	487.8	485.9	483.9	480.8	476.5	472.2	467.9	463.5	461.2
32.5°	477.3	475.0	472.8	470.5	468.2	464.9	460.5	456.1	451.7	447.3	444.7
35°	453.8	451.4	448.9	446.4	444.0	440.4	435.8	431.2	426.6	422.0	419.0
37.5°	430.8	427.8	424.8	421.8	418.8	414.9	410.2	405.4	400.7	395.9	392.3
40°	414.6	411.5	408.4	405.3	402.2	398.2	393.3	388.4	383.4	378.5	374.6
42.5°	397.5	394.4	391.2	388.1	384.9	380.8	375.7	370.6	365.5	360.4	356.7
45°	371.6	368.6	365.6	362.6	359.7	355.3	349.7	344.1	338.4	332.8	328.6
47.5°	344.7	341.5	338.4	335.2	332.1	327.7	322.0	316.3	310.6	304.9	300.7
50°	327.7	324.3	320.9	317.5	314.1	309.5	303.6	297.8	291.9	286.1	281.8
52.5°	309.2	305.7	302.2	298.8	295.3	290.8	285.3	279.7	274.2	268.7	264.1
55°	281.9	278.6	275.3	272.1	268.8	264.3	258.5	252.7	247.0	241.2	236.6
57.5°	254.4	250.9	247.3	243.8	240.3	235.8	230.2	224.7	219.2	213.6	209.1
60°	236.6	233.0	229.4	225.8	222.2	217.7	212.1	206.6	201.0	195.5	191.0
62.5°	217.8	214.3	210.9	207.5	204.0	199.5	193.9	188.3	182.6	177.0	172.8
65°	190.9	187.4	183.9	180.4	176.9	172.4	167.0	161.6	156.1	150.7	146.6
67.5°	164.2	160.7	157.2	153.7	150.2	145.8	140.6	135.4	130.2	125.0	121.2
70°	146.0	142.6	139.1	135.6	132.1	127.8	122.6	117.5	112.4	107.2	104.0
72.5°	128.3	124.9	121.5	118.1	114.7	110.5	105.7	100.9	96.1	91.3	88.4
75°	101.7	98.6	95.5	92.4	89.4	85.7	81.3	77.0	72.7	68.4	66.1
77.5°	75.2	72.8	70.3	67.8	65.4	62.4	59.0	55.5	52.1	48.6	47.0
80°	60.1	57.6	55.2	52.7	50.2	47.6	44.7	41.8	38.9	36.0	35.1
82.5°	45.3	43.1	40.9	38.6	36.4	34.3	32.4	30.4	28.4	26.4	26.0
85°	25.4	23.6	21.7	19.9	18.0	16.8	16.3	15.8	15.3	14.8	14.7
87.5°	8.6	8.2	7.8	7.4	6.9	6.8	6.8	6.9	6.9	7.0	7.1
90°	0.5	1.3	2.1	2.9	3.7	4.4	5.1	5.8	6.5	7.3	7.8
92.5°	11.0	11.5	12.1	12.7	13.2	13.9	14.8	15.7	16.5	17.4	18.1
95°	29.5	29.7	29.9	30.1	30.3	30.9	31.9	32.9	33.9	34.9	35.6
97.5°	48.9	49.0	49.1	49.2	49.3	50.0	51.4	52.8	54.2	55.6	56.2
100°	63.5	63.5	63.5	63.5	63.5	64.1	65.4	66.7	68.0	69.3	70.3
102.5°	79.0	79.4	79.9	80.3	80.7	81.2	81.9	82.5	83.2	83.8	84.8
105°	103.3	103.8	104.3	104.8	105.4	105.9	106.5	107.1	107.7	108.3	108.9
107.5°	130.2	130.7	131.2	131.7	132.2	132.7	133.1	133.6	134.1	134.5	134.8
110°	148.7	149.2	149.7	150.2	150.7	151.1	151.4	151.7	152.0	152.3	152.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	167.5	167.8	168.0	168.3	168.6	168.9	169.3	169.7	170.0	170.4	170.6
115°	195.3	195.7	196.2	196.6	197.0	197.3	197.5	197.7	197.9	198.1	198.0
117.5°	223.3	223.4	223.6	223.8	224.0	224.2	224.4	224.5	224.7	224.9	225.0
120°	240.7	241.2	241.7	242.2	242.7	243.0	243.1	243.2	243.3	243.4	243.4
122.5°	259.5	259.7	259.9	260.1	260.2	260.5	260.7	261.0	261.3	261.5	261.4
125°	285.1	285.7	286.3	286.9	287.5	287.9	288.0	288.1	288.2	288.3	288.1
127.5°	312.3	312.6	313.0	313.3	313.7	313.9	314.0	314.1	314.2	314.4	314.3
130°	328.6	329.1	329.6	330.1	330.6	331.0	331.2	331.4	331.6	331.8	331.7
132.5°	344.9	345.7	346.6	347.4	348.2	348.6	348.6	348.5	348.5	348.4	348.3
135°	370.7	371.4	372.0	372.6	373.2	373.5	373.6	373.7	373.8	373.9	373.9
137.5°	395.0	395.6	396.2	396.8	397.4	397.8	398.0	398.2	398.4	398.7	398.8
140°	410.6	411.1	411.6	412.1	412.6	413.1	413.4	413.7	414.0	414.3	414.5
142.5°	426.2	426.6	427.1	427.5	427.9	428.3	428.7	429.1	429.5	429.9	430.0
145°	449.2	449.6	450.0	450.4	450.8	451.1	451.4	451.7	452.0	452.3	452.3
147.5°	470.4	470.6	470.8	471.0	471.3	471.5	471.7	472.0	472.2	472.5	472.7
150°	484.5	484.4	484.3	484.2	484.1	484.3	484.7	485.1	485.5	485.9	485.9
152.5°	496.1	496.3	496.4	496.5	496.7	496.8	497.0	497.2	497.3	497.5	497.7
155°	514.0	514.0	514.0	514.0	514.0	514.0	514.1	514.2	514.3	514.4	514.8
157.5°	529.9	529.7	529.5	529.3	529.0	529.0	529.1	529.2	529.3	529.4	529.8
160°	539.4	539.1	538.7	538.4	538.1	538.0	538.1	538.2	538.3	538.4	538.9
162.5°	547.7	547.5	547.3	547.0	546.8	546.7	546.7	546.7	546.8	546.8	547.3
165°	558.8	558.6	558.4	558.2	558.0	558.0	558.1	558.2	558.3	558.4	558.8
167.5°	568.3	567.9	567.5	567.1	566.7	566.5	566.5	566.5	566.5	566.5	567.1
170°	573.3	572.9	572.5	572.1	571.7	571.5	571.5	571.5	571.5	571.5	572.1
172.5°	577.0	576.6	576.2	575.8	575.4	575.2	575.2	575.2	575.2	575.2	575.8
175°	581.1	580.6	580.2	579.8	579.4	579.2	579.2	579.2	579.2	579.2	579.8
177.5°	583.1	582.8	582.5	582.2	581.8	581.6	581.6	581.5	581.4	581.3	581.8
180°	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9
2.5°	609.8	610.7	611.5	611.9	611.8	611.7	611.6	611.5
5°	606.1	607.1	608.1	608.6	608.4	608.1	607.9	607.7
7.5°	598.5	599.3	600.0	600.2	600.0	599.8	599.6	599.3
10°	592.2	592.5	592.8	592.8	592.5	592.2	591.9	591.6
12.5°	583.1	583.4	583.6	583.5	583.0	582.5	582.1	581.6
15°	568.2	568.1	568.0	567.5	566.6	565.7	564.8	563.8
17.5°	549.7	549.2	548.7	548.0	547.3	546.5	545.7	545.0
20°	536.0	535.5	535.0	534.3	533.3	532.4	531.5	530.6
22.5°	522.4	521.4	520.4	519.5	518.8	518.0	517.3	516.5
25°	500.2	498.8	497.5	496.3	495.1	494.0	492.9	491.7
27.5°	476.1	474.2	472.3	470.9	469.8	468.7	467.6	466.5
30°	458.8	456.5	454.1	452.5	451.5	450.6	449.7	448.8
32.5°	442.1	439.5	436.8	435.0	433.8	432.6	431.4	430.3
35°	416.0	413.0	410.0	407.8	406.4	405.0	403.5	402.1
37.5°	388.7	385.2	381.6	379.1	377.7	376.3	374.9	373.5
40°	370.7	366.8	362.9	360.3	359.1	357.9	356.6	355.4
42.5°	352.9	349.2	345.4	342.7	340.9	339.0	337.2	335.4
45°	324.5	320.4	316.3	313.5	312.0	310.4	308.9	307.3
47.5°	296.5	292.2	288.0	285.0	283.3	281.6	279.9	278.2
50°	277.4	273.1	268.8	265.9	264.4	262.8	261.3	259.7
52.5°	259.4	254.8	250.1	247.0	245.5	244.0	242.4	240.9
55°	232.0	227.4	222.8	219.6	218.0	216.3	214.7	213.1
57.5°	204.6	200.1	195.5	192.5	191.1	189.6	188.2	186.7
60°	186.5	181.9	177.4	174.4	172.8	171.3	169.8	168.2
62.5°	168.6	164.4	160.2	157.4	155.8	154.3	152.8	151.2
65°	142.4	138.3	134.2	131.4	129.9	128.3	126.8	125.2
67.5°	117.4	113.7	109.9	107.4	106.2	105.0	103.7	102.5
70°	100.9	97.7	94.5	92.3	91.0	89.8	88.6	87.3
72.5°	85.4	82.5	79.6	77.7	76.9	76.1	75.2	74.4
75°	63.9	61.6	59.4	57.9	57.2	56.4	55.7	55.0
77.5°	45.5	43.9	42.3	41.2	40.7	40.2	39.6	39.1
80°	34.2	33.3	32.4	31.8	31.6	31.4	31.2	31.0
82.5°	25.6	25.1	24.7	24.4	24.3	24.2	24.1	23.9
85°	14.6	14.5	14.4	14.3	14.2	14.1	14.0	13.9
87.5°	7.2	7.3	7.4	7.4	7.4	7.4	7.4	7.4
90°	8.3	8.8	9.3	9.7	10.0	10.3	10.6	10.9
92.5°	18.7	19.4	20.1	20.5	20.7	20.9	21.2	21.4
95°	36.3	37.0	37.7	38.2	38.4	38.6	38.8	39.0
97.5°	56.9	57.6	58.2	58.6	58.7	58.9	59.0	59.1
100°	71.2	72.1	73.0	73.5	73.7	73.9	74.1	74.3
102.5°	85.8	86.8	87.8	88.4	88.7	89.0	89.3	89.6
105°	109.5	110.1	110.7	111.2	111.5	111.8	112.1	112.4
107.5°	135.1	135.4	135.7	135.9	135.9	135.8	135.8	135.8
110°	152.9	153.2	153.5	153.6	153.5	153.4	153.3	153.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	170.7	170.8	171.0	171.0	170.8	170.6	170.4	170.2
115°	197.9	197.8	197.7	197.6	197.5	197.4	197.3	197.2
117.5°	225.1	225.1	225.2	225.1	224.7	224.3	223.8	223.4
120°	243.4	243.4	243.4	243.2	242.8	242.4	242.0	241.6
122.5°	261.4	261.3	261.2	261.0	260.7	260.4	260.0	259.7
125°	287.9	287.7	287.5	287.3	287.2	287.1	287.0	286.9
127.5°	314.2	314.1	314.0	313.8	313.6	313.4	313.2	313.0
130°	331.6	331.5	331.4	331.2	331.0	330.8	330.6	330.4
132.5°	348.2	348.1	348.0	347.9	347.6	347.3	347.0	346.7
135°	373.9	373.9	373.9	373.7	373.3	372.9	372.5	372.1
137.5°	398.9	399.0	399.2	399.0	398.5	398.0	397.4	396.9
140°	414.7	414.9	415.1	414.9	414.4	413.9	413.4	412.9
142.5°	430.1	430.2	430.3	430.1	429.6	429.1	428.6	428.1
145°	452.3	452.3	452.3	452.2	451.9	451.6	451.3	451.0
147.5°	472.9	473.2	473.4	473.2	472.5	471.8	471.1	470.5
150°	485.9	485.9	485.9	485.8	485.6	485.4	485.2	485.0
152.5°	498.0	498.2	498.4	498.4	498.0	497.7	497.3	496.9
155°	515.2	515.6	516.0	516.0	515.5	515.0	514.5	514.0
157.5°	530.2	530.6	531.0	530.9	530.2	529.5	528.9	528.2
160°	539.3	539.7	540.1	540.0	539.5	539.0	538.5	538.0
162.5°	547.8	548.2	548.7	548.7	548.1	547.5	546.9	546.3
165°	559.2	559.6	560.0	559.9	559.3	558.7	558.1	557.5
167.5°	567.7	568.3	568.9	568.9	568.2	567.6	567.0	566.4
170°	572.7	573.3	574.0	573.9	573.2	572.5	571.8	571.1
172.5°	576.4	577.0	577.6	577.6	576.9	576.3	575.7	575.1
175°	580.4	581.1	581.7	581.6	580.9	580.2	579.5	578.8
177.5°	582.3	582.8	583.3	583.2	582.7	582.1	581.5	581.0
180°	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4

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