

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: P333345-840

Luminaire Tested: **S125DIW-S375D470U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333345-840
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: S125DIW-S375D470U840-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3177.6 lumens
Efficiency: N/A
Efficacy: 138.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

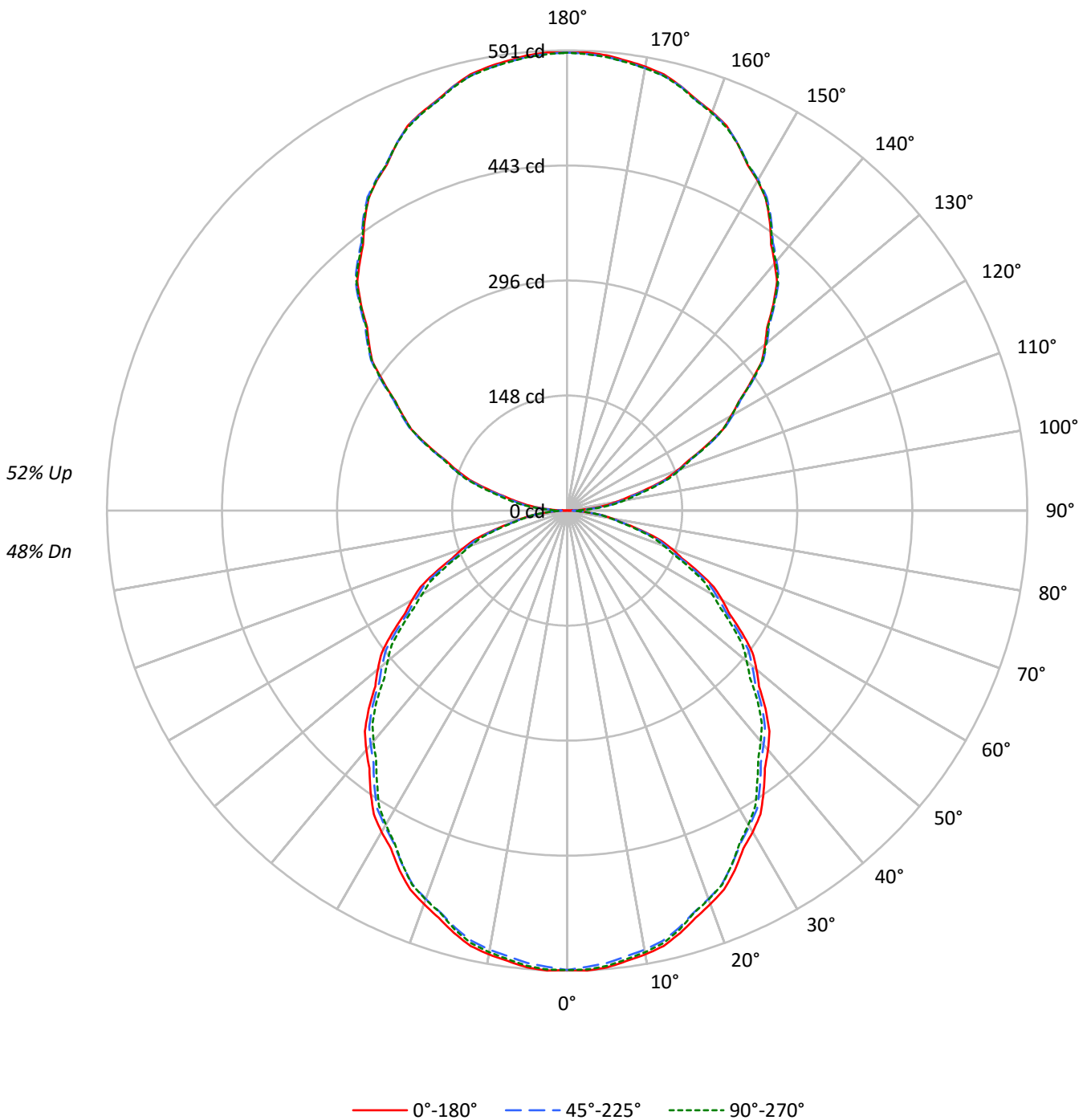
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	68	68	68	55	55	55	48
1	97	93	89	86	89	86	82	79	72	70	68	60	58	56	48	47	46	41
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	40	39	34
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33	29
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	31	28	25
5	68	56	48	42	62	52	45	39	44	39	34	37	33	29	30	27	25	21
6	62	50	42	36	57	47	40	34	40	34	30	33	29	26	27	24	22	19
7	58	45	38	32	53	42	35	30	36	30	26	30	26	23	25	22	19	17
8	54	41	34	28	49	38	31	27	33	27	23	28	23	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	13
10	47	35	27	23	43	32	26	21	28	23	19	24	19	17	20	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3810	3810	3810
5°	3818	3782	3806
10°	3796	3756	3777
15°	3754	3710	3726
20°	3696	3647	3654
25°	3632	3572	3569
30°	3554	3491	3473
35°	3470	3404	3356
40°	3384	3309	3262
45°	3291	3222	3159
50°	3189	3118	3024
55°	3090	3001	2916
60°	2971	2882	2780
65°	2832	2740	2647
70°	2696	2574	2485
75°	2458	2376	2293
80°	2187	2153	2101
85°	1904	1941	1830



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.6	1.8
10°-20°	157.1	4.9
20°-30°	232.0	7.3
30°-40°	270.7	8.5
40°-50°	271.9	8.6
50°-60°	238.7	7.5
60°-70°	177.8	5.6
70°-80°	101.7	3.2
80°-90°	30.9	1.0
90°-100°	39.4	1.2
100°-110°	116.3	3.7
110°-120°	197.1	6.2
120°-130°	259.3	8.2
130°-140°	290.6	9.1
140°-150°	284.8	9.0
150°-160°	239.2	7.5
160°-170°	159.0	5.0
170°-180°	55.6	1.8
0°-30°	444.7	14.0
0°-40°	715.5	22.5
0°-60°	1226.0	38.6
0°-90°	1536.4	48.4
90°-120°	352.8	11.1
90°-150°	1187.4	37.4
90°-180°	1641.0	51.6
0°-180°	3177.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	589	588	583	587	587	56
15°	562	560	555	557	557	158
25°	510	507	501	502	501	234
35°	440	438	432	429	426	275
45°	360	358	353	348	346	278
55°	274	273	266	262	259	245
65°	185	184	179	175	173	184
75°	98	98	95	94	92	105
85°	26	26	26	26	25	29
90°	0	4	7	10	11	3
95°	30	31	35	38	39	32
105°	104	107	109	112	114	111
115°	197	199	200	200	199	195
125°	288	290	291	290	290	258
135°	374	377	378	378	376	288
145°	454	455	457	457	455	283
155°	519	519	520	521	519	239
165°	564	564	564	565	563	159
175°	587	585	585	587	584	56
180°	588	588	588	588	588	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	591.4	591.2	591.0	590.7	590.5	589.9	589.1	588.2	587.4	586.5	587.4
5°	589.0	588.8	588.5	588.3	588.1	587.5	586.5	585.5	584.4	583.4	584.3
7.5°	583.6	583.4	583.2	583.0	582.8	582.1	581.0	579.8	578.7	577.5	578.5
10°	578.8	578.6	578.3	578.1	577.9	577.2	576.1	574.9	573.8	572.7	573.5
12.5°	572.8	572.4	572.0	571.7	571.3	570.6	569.5	568.5	567.3	566.3	566.9
15°	561.5	561.2	560.9	560.6	560.2	559.5	558.4	557.2	556.0	554.9	555.4
17.5°	548.5	548.1	547.5	547.1	546.6	545.8	544.6	543.5	542.3	541.1	541.8
20°	537.7	537.5	537.2	537.0	536.8	536.0	534.7	533.3	532.0	530.7	531.4
22.5°	526.8	526.4	526.0	525.7	525.3	524.5	523.2	522.0	520.7	519.5	520.0
25°	509.7	509.2	508.6	508.1	507.6	506.6	505.3	503.9	502.6	501.3	501.5
27.5°	489.6	489.3	489.0	488.7	488.4	487.5	486.1	484.7	483.3	481.9	482.0
30°	476.6	476.3	475.8	475.5	475.2	474.3	472.8	471.2	469.7	468.1	467.9
32.5°	462.3	461.8	461.4	460.9	460.4	459.5	458.1	456.7	455.3	453.9	453.5
35°	440.1	439.7	439.3	438.9	438.5	437.5	436.1	434.6	433.1	431.7	431.2
37.5°	417.1	416.6	416.1	415.5	415.0	414.0	412.6	411.3	409.9	408.6	407.8
40°	401.4	400.8	400.3	399.8	399.3	398.3	396.9	395.5	393.9	392.5	391.6
42.5°	384.6	384.2	383.7	383.2	382.8	381.9	380.4	379.0	377.5	376.1	375.3
45°	360.3	359.9	359.5	359.1	358.6	357.8	356.6	355.4	354.1	352.8	351.6
47.5°	334.2	334.2	334.2	334.3	334.3	333.6	332.0	330.5	329.0	327.5	326.3
50°	317.4	317.1	316.8	316.4	316.1	315.4	314.1	312.9	311.6	310.3	309.0
52.5°	300.2	299.9	299.7	299.5	299.3	298.5	297.2	295.9	294.5	293.2	292.1
55°	274.4	274.1	273.8	273.5	273.2	272.3	270.8	269.4	267.9	266.5	265.6
57.5°	247.3	247.1	246.9	246.8	246.6	245.9	244.7	243.5	242.3	241.1	239.8
60°	230.0	229.6	229.2	228.8	228.4	227.6	226.5	225.4	224.2	223.1	222.1
62.5°	212.2	211.9	211.5	211.2	210.9	210.2	209.2	208.2	207.2	206.3	205.2
65°	185.3	185.1	184.9	184.7	184.5	183.8	182.7	181.5	180.4	179.3	178.2
67.5°	159.3	158.9	158.3	157.9	157.5	156.8	156.0	155.1	154.3	153.5	152.7
70°	142.8	142.3	141.8	141.3	140.8	140.0	139.1	138.1	137.2	136.3	135.6
72.5°	124.9	124.5	124.2	123.8	123.5	123.0	122.4	121.8	121.2	120.6	119.9
75°	98.5	98.3	98.1	97.9	97.7	97.3	96.7	96.2	95.7	95.2	94.9
77.5°	74.1	74.0	73.9	73.8	73.8	73.6	73.3	73.0	72.7	72.4	72.2
80°	58.8	58.8	58.8	58.8	58.8	58.7	58.5	58.3	58.1	57.9	57.8
82.5°	45.3	45.2	45.0	44.8	44.7	44.6	44.5	44.5	44.4	44.4	44.2
85°	25.7	25.8	25.9	26.0	26.1	26.2	26.2	26.2	26.2	26.2	26.1
87.5°	10.2	10.3	10.5	10.7	10.8	10.9	11.0	11.0	11.1	11.2	11.3
90°	0.5	1.3	2.1	2.9	3.7	4.4	5.2	5.9	6.6	7.4	7.9
92.5°	11.1	11.6	12.2	12.8	13.3	14.0	14.9	15.9	16.7	17.6	18.3
95°	29.8	30.0	30.2	30.4	30.6	31.2	32.2	33.2	34.2	35.2	36.0
97.5°	49.4	49.5	49.6	49.7	49.8	50.5	51.9	53.3	54.7	56.1	56.8
100°	64.1	64.1	64.1	64.1	64.1	64.7	66.0	67.4	68.7	70.0	71.0
102.5°	79.8	80.2	80.7	81.1	81.5	82.0	82.7	83.3	84.0	84.6	85.6
105°	104.3	104.8	105.3	105.8	106.4	106.9	107.6	108.2	108.8	109.4	110.0
107.5°	131.5	132.0	132.5	133.0	133.5	134.0	134.4	134.9	135.4	135.8	136.1
110°	150.2	150.7	151.2	151.7	152.2	152.6	152.9	153.2	153.5	153.8	154.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	169.2	169.5	169.7	170.0	170.3	170.6	171.0	171.4	171.7	172.1	172.3
115°	197.2	197.6	198.1	198.5	198.9	199.2	199.4	199.7	199.9	200.1	200.0
117.5°	225.5	225.6	225.8	226.0	226.2	226.4	226.6	226.7	226.9	227.1	227.2
120°	243.1	243.6	244.1	244.6	245.1	245.4	245.5	245.6	245.7	245.8	245.8
122.5°	262.1	262.3	262.5	262.7	262.8	263.1	263.3	263.6	263.9	264.1	264.0
125°	287.9	288.5	289.1	289.7	290.3	290.7	290.8	290.9	291.0	291.1	290.9
127.5°	315.4	315.7	316.1	316.4	316.8	317.0	317.1	317.2	317.3	317.5	317.4
130°	331.8	332.3	332.9	333.4	333.9	334.3	334.5	334.7	334.9	335.1	335.0
132.5°	348.3	349.1	350.0	350.8	351.6	352.0	352.0	351.9	351.9	351.8	351.7
135°	374.4	375.1	375.7	376.3	376.9	377.2	377.3	377.4	377.5	377.6	377.6
137.5°	398.9	399.5	400.1	400.7	401.3	401.7	401.9	402.1	402.3	402.6	402.7
140°	414.7	415.2	415.7	416.2	416.7	417.2	417.5	417.8	418.1	418.4	418.6
142.5°	430.4	430.8	431.3	431.7	432.1	432.5	432.9	433.3	433.7	434.1	434.2
145°	453.6	454.0	454.4	454.8	455.2	455.6	455.9	456.2	456.5	456.8	456.8
147.5°	475.0	475.2	475.4	475.6	475.9	476.2	476.4	476.7	476.9	477.2	477.4
150°	489.3	489.2	489.1	489.0	488.9	489.1	489.5	489.9	490.3	490.7	490.7
152.5°	501.0	501.2	501.3	501.4	501.6	501.7	501.9	502.1	502.2	502.4	502.6
155°	519.1	519.1	519.1	519.1	519.1	519.1	519.2	519.3	519.4	519.5	519.9
157.5°	535.1	534.9	534.7	534.5	534.2	534.2	534.3	534.4	534.5	534.6	535.0
160°	544.7	544.4	544.0	543.7	543.4	543.3	543.4	543.5	543.6	543.7	544.2
162.5°	553.1	552.9	552.7	552.4	552.2	552.1	552.1	552.1	552.2	552.2	552.7
165°	564.3	564.1	563.9	563.7	563.5	563.5	563.6	563.7	563.8	563.9	564.3
167.5°	573.9	573.5	573.1	572.7	572.3	572.1	572.1	572.1	572.1	572.1	572.7
170°	579.0	578.6	578.1	577.7	577.3	577.1	577.1	577.1	577.1	577.1	577.7
172.5°	582.7	582.3	581.9	581.5	581.1	580.9	580.9	580.9	580.9	580.9	581.5
175°	586.8	586.3	585.9	585.5	585.1	584.9	584.9	584.9	584.9	584.9	585.5
177.5°	588.9	588.5	588.2	587.9	587.5	587.3	587.3	587.2	587.1	587.0	587.5
180°	588.1	588.1	588.1	588.1	588.1	588.1	588.1	588.1	588.1	588.1	588.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	588.2	589.1	589.9	590.3	590.2	590.1	590.1	590.0
5°	585.2	586.2	587.1	587.5	587.4	587.3	587.2	587.1
7.5°	579.4	580.3	581.2	581.6	581.5	581.4	581.3	581.2
10°	574.3	575.1	576.0	576.3	576.2	576.1	576.0	575.9
12.5°	567.6	568.4	569.0	569.3	569.3	569.3	569.3	569.2
15°	555.9	556.4	557.0	557.2	557.2	557.2	557.2	557.2
17.5°	542.4	543.0	543.7	543.7	543.2	542.7	542.2	541.7
20°	532.1	532.8	533.5	533.7	533.1	532.6	532.1	531.6
22.5°	520.4	520.9	521.4	521.4	521.1	520.7	520.4	520.0
25°	501.7	501.9	502.1	502.0	501.7	501.4	501.1	500.8
27.5°	482.0	482.0	482.1	482.0	481.6	481.3	481.0	480.7
30°	467.7	467.5	467.3	467.1	466.8	466.5	466.1	465.7
32.5°	453.2	452.8	452.4	452.0	451.4	450.8	450.3	449.7
35°	430.7	430.2	429.6	429.0	428.2	427.3	426.5	425.7
37.5°	407.1	406.3	405.5	404.9	404.3	403.9	403.4	402.9
40°	390.6	389.7	388.8	388.2	387.9	387.5	387.2	386.9
42.5°	374.4	373.5	372.6	372.0	371.5	371.0	370.6	370.1
45°	350.3	349.1	347.9	347.1	346.8	346.5	346.2	345.9
47.5°	325.0	323.8	322.4	321.4	320.7	320.0	319.3	318.6
50°	307.7	306.3	305.0	304.0	303.2	302.5	301.7	301.0
52.5°	290.8	289.6	288.4	287.5	286.7	285.9	285.1	284.3
55°	264.6	263.7	262.8	262.0	261.3	260.4	259.7	259.0
57.5°	238.6	237.4	236.2	235.4	235.0	234.6	234.2	233.8
60°	221.1	219.9	218.9	218.0	217.3	216.6	215.9	215.2
62.5°	204.1	202.9	201.8	201.0	200.5	199.9	199.2	198.7
65°	177.3	176.4	175.5	174.8	174.4	174.0	173.6	173.2
67.5°	151.9	151.1	150.3	149.8	149.6	149.3	149.1	148.8
70°	135.0	134.4	133.8	133.3	132.9	132.5	132.0	131.6
72.5°	119.2	118.5	117.8	117.2	116.8	116.4	115.9	115.5
75°	94.6	94.3	93.9	93.6	93.2	92.8	92.4	91.9
77.5°	72.1	71.9	71.7	71.5	71.2	70.9	70.6	70.3
80°	57.7	57.6	57.5	57.3	57.1	56.9	56.7	56.5
82.5°	44.0	43.8	43.7	43.5	43.5	43.5	43.4	43.4
85°	26.0	25.9	25.8	25.5	25.3	25.1	24.9	24.7
87.5°	11.4	11.5	11.6	11.6	11.5	11.4	11.3	11.1
90°	8.4	8.9	9.4	9.8	10.1	10.4	10.7	11.0
92.5°	18.9	19.6	20.3	20.7	20.9	21.1	21.4	21.6
95°	36.7	37.4	38.1	38.6	38.8	39.0	39.2	39.4
97.5°	57.5	58.2	58.8	59.2	59.3	59.5	59.6	59.7
100°	71.9	72.8	73.7	74.2	74.4	74.6	74.8	75.0
102.5°	86.6	87.7	88.7	89.3	89.6	89.9	90.2	90.5
105°	110.6	111.2	111.8	112.3	112.6	112.9	113.2	113.5
107.5°	136.4	136.7	137.0	137.2	137.2	137.1	137.1	137.1
110°	154.4	154.7	155.0	155.1	155.0	154.9	154.8	154.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	172.4	172.5	172.7	172.7	172.5	172.3	172.1	171.9
115°	199.9	199.8	199.7	199.5	199.4	199.3	199.2	199.1
117.5°	227.3	227.3	227.4	227.3	226.9	226.5	226.0	225.6
120°	245.8	245.8	245.8	245.6	245.2	244.8	244.4	244.0
122.5°	264.0	263.9	263.8	263.6	263.3	263.0	262.6	262.3
125°	290.7	290.5	290.3	290.1	290.0	289.9	289.8	289.7
127.5°	317.3	317.2	317.1	316.9	316.7	316.5	316.3	316.1
130°	334.9	334.8	334.7	334.5	334.3	334.1	333.9	333.7
132.5°	351.6	351.5	351.4	351.3	351.0	350.7	350.4	350.1
135°	377.6	377.6	377.6	377.4	377.0	376.6	376.2	375.8
137.5°	402.8	402.9	403.1	402.9	402.4	401.9	401.3	400.8
140°	418.8	419.0	419.2	419.0	418.5	418.0	417.5	417.0
142.5°	434.3	434.4	434.5	434.3	433.8	433.3	432.8	432.3
145°	456.8	456.8	456.8	456.7	456.4	456.1	455.8	455.4
147.5°	477.6	477.9	478.1	477.9	477.2	476.5	475.7	475.1
150°	490.7	490.7	490.7	490.6	490.4	490.2	490.0	489.8
152.5°	502.9	503.1	503.3	503.3	502.9	502.6	502.2	501.8
155°	520.3	520.7	521.1	521.1	520.6	520.1	519.6	519.1
157.5°	535.4	535.8	536.2	536.1	535.4	534.7	534.1	533.4
160°	544.6	545.0	545.4	545.3	544.8	544.3	543.8	543.3
162.5°	553.2	553.6	554.1	554.1	553.5	552.9	552.3	551.7
165°	564.7	565.1	565.5	565.4	564.8	564.2	563.6	563.0
167.5°	573.3	573.9	574.5	574.5	573.8	573.2	572.6	572.0
170°	578.3	579.0	579.7	579.6	578.9	578.1	577.4	576.7
172.5°	582.1	582.7	583.3	583.3	582.6	582.0	581.4	580.8
175°	586.1	586.8	587.4	587.3	586.6	585.9	585.2	584.5
177.5°	588.0	588.5	589.1	589.0	588.4	587.8	587.2	586.7
180°	588.1	588.1	588.1	588.1	588.1	588.1	588.1	588.1

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