

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: SHAPER

Report Number: P316059

Luminaire Tested: **ShSe-TRAP-1-L30-90-UNV-STD**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P316059
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1811-037-6)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: ShSe-TRAP-1-L30-90-UNV-STD
Description: SHAPER SENSE SQUARE
LIGHT LEVEL 1
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2487.4 lumens
Efficiency: N/A
Efficacy: 84.0 lumens/watt
Spacing Criteria (0/90/45): 2.4 / 1.51 / 1.84
Luminous Opening: Rectangular w/ Sides (W: 2.92' x L: 2.92' x H: 1.75')
CIE Type: General Diffuse

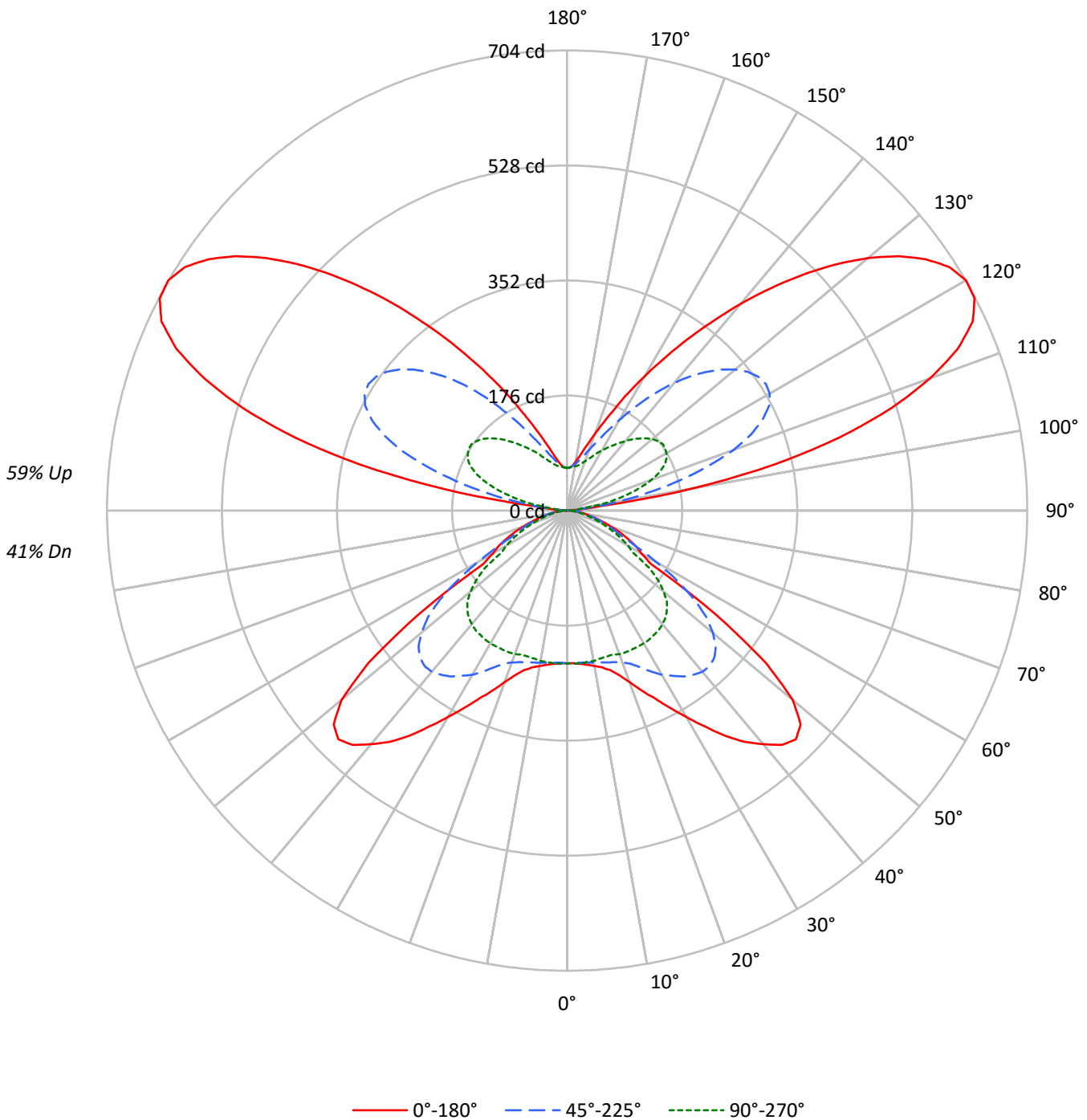
Input Watts (W): 29.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	43	42	41	35
2	87	80	74	69	79	73	68	64	60	57	53	49	46	44	38	36	34	29
3	80	70	63	57	72	64	58	53	53	48	45	43	39	37	33	31	29	25
4	72	62	54	48	66	57	50	44	47	42	38	38	34	31	29	27	25	21
5	66	55	47	41	60	50	43	38	42	36	32	34	30	27	26	23	21	18
6	61	49	41	35	55	45	38	32	37	32	28	30	26	23	23	21	18	15
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	39	32	26	47	36	29	24	30	25	21	24	20	17	19	16	14	11
9	48	36	28	23	44	33	26	22	27	22	18	22	18	15	17	15	12	10
10	45	32	25	20	41	30	23	19	25	20	16	20	16	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	296	296	296
5°	284	276	283
10°	280	264	272
15°	285	257	261
20°	308	255	258
25°	345	265	256
30°	396	285	254
35°	457	300	252
40°	513	311	249
45°	553	308	241
50°	517	285	221
55°	332	236	183
60°	163	161	134
65°	134	96	105
70°	100	72	77
75°	69	50	52
80°	44	32	33
85°	24	19	14



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.4	0.9
10°-20°	68.9	2.8
20°-30°	126.2	5.1
30°-40°	199.3	8.0
40°-50°	259.1	10.4
50°-60°	202.9	8.2
60°-70°	93.2	3.7
70°-80°	45.2	1.8
80°-90°	13.9	0.6
90°-100°	28.2	1.1
100°-110°	234.1	9.4
110°-120°	372.3	15.0
120°-130°	349.5	14.1
130°-140°	245.0	9.9
140°-150°	135.2	5.4
150°-160°	61.1	2.5
160°-170°	24.3	1.0
170°-180°	6.5	0.3
0°-30°	217.6	8.7
0°-40°	416.9	16.8
0°-60°	878.9	35.3
0°-90°	1031.1	41.5
90°-120°	634.6	25.5
90°-150°	1364.3	54.8
90°-180°	1456.0	58.5
0°-180°	2487.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	234	234	234	234	234	
5°	235	234	234	233	234	23
15°	252	248	240	233	231	73
25°	317	300	264	240	234	149
35°	420	386	310	244	232	264
45°	495	459	318	234	216	372
55°	279	312	237	171	154	245
65°	103	101	91	86	80	101
75°	45	45	43	38	34	49
85°	13	15	14	9	8	14
90°	0	1	1	1	2	1
95°	9	12	12	12	12	44
105°	431	344	178	115	97	440
115°	685	571	330	201	164	665
125°	670	574	357	218	178	597
135°	510	444	300	186	156	396
145°	318	282	206	140	122	204
155°	171	157	124	99	92	83
165°	94	91	83	74	73	28
175°	67	67	67	66	67	7
180°	65	65	65	65	65	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	233.7	233.7	233.7	233.7	233.7	233.7	233.7	233.7	233.7	233.7	233.7
2.5°	233.7	232.8	233.7	234.5	233.7	232.8	232.8	234.5	232.0	234.5	232.8
5°	235.4	234.5	235.4	235.4	235.4	234.5	234.5	235.4	232.8	235.4	233.7
7.5°	238.0	237.1	238.0	238.0	237.1	236.3	236.3	237.1	234.5	236.3	234.5
10°	241.4	240.5	240.5	240.5	240.5	238.8	238.8	239.7	237.1	238.0	236.3
12.5°	245.7	244.8	244.8	245.7	244.0	243.1	242.2	243.1	239.7	240.5	238.0
15°	252.5	251.7	251.7	250.8	250.0	248.2	247.4	247.4	243.1	244.0	240.5
17.5°	263.6	261.9	261.9	260.2	258.5	255.1	254.2	252.5	248.2	247.4	243.1
20°	279.1	277.3	276.5	275.6	272.2	268.8	266.2	262.8	255.1	252.5	247.4
22.5°	297.9	295.3	293.6	291.9	287.6	283.3	280.8	276.5	266.2	261.9	253.4
25°	316.7	315.0	313.3	310.7	304.7	299.6	296.2	290.2	279.1	273.1	264.5
27.5°	339.8	337.3	335.6	332.1	324.4	318.4	315.0	306.4	293.6	287.6	277.3
30°	364.7	362.9	359.5	356.1	346.7	340.7	334.7	325.3	311.6	303.0	290.2
32.5°	391.2	389.5	385.2	380.9	368.9	362.1	356.1	345.8	330.4	318.4	299.6
35°	420.3	416.9	413.4	407.5	393.8	386.1	378.4	368.1	350.1	330.4	309.9
37.5°	446.0	441.7	438.3	432.3	417.7	409.2	402.3	389.5	362.9	340.7	316.7
40°	466.5	463.1	458.8	451.1	437.4	428.9	422.9	406.6	374.1	348.4	321.9
42.5°	486.2	482.8	478.5	469.9	454.5	446.0	438.3	413.4	379.2	351.8	322.7
45°	494.8	491.3	487.1	479.4	467.4	458.8	447.7	414.3	376.6	348.4	318.4
47.5°	484.5	481.9	479.4	475.1	467.4	458.8	442.6	407.5	368.9	338.1	308.2
50°	450.3	446.0	446.8	448.5	446.8	433.1	417.7	386.9	351.8	321.0	291.0
52.5°	383.5	381.8	387.8	394.6	396.3	385.2	374.1	351.0	321.0	295.3	268.8
55°	279.1	285.0	295.3	311.6	316.7	312.4	307.3	295.3	277.3	258.5	237.1
57.5°	151.5	155.8	166.9	189.2	212.3	221.7	225.1	229.4	223.4	214.0	199.4
60°	131.0	130.1	130.1	129.3	126.7	127.5	133.5	154.1	163.5	163.5	157.5
62.5°	119.0	118.1	118.1	118.1	117.3	115.6	113.8	110.4	110.4	119.8	119.0
65°	102.7	102.7	102.7	103.6	102.7	101.0	101.0	98.4	95.0	91.6	90.7
67.5°	87.3	86.5	87.3	88.2	87.3	86.5	85.6	84.7	81.3	79.6	77.9
70°	71.9	71.0	71.9	71.9	71.9	71.0	71.0	70.2	68.5	66.8	65.1
72.5°	57.4	57.4	58.2	59.1	58.2	57.4	57.4	57.4	55.6	55.6	53.9
75°	45.4	45.4	45.4	46.2	45.4	45.4	45.4	46.2	44.5	44.5	42.8
77.5°	34.2	34.2	35.1	36.0	35.1	35.1	35.1	36.0	35.1	34.2	33.4
80°	26.5	26.5	26.5	27.4	27.4	27.4	27.4	27.4	26.5	25.7	25.7
82.5°	21.4	21.4	21.4	22.3	22.3	21.4	21.4	21.4	20.5	19.7	18.8
85°	12.8	13.7	14.6	14.6	15.4	15.4	15.4	15.4	14.6	14.6	13.7
87.5°	6.8	6.8	7.7	8.6	9.4	9.4	9.4	9.4	9.4	9.4	8.6
90°	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
92.5°	1.7	1.7	2.6	1.7	2.6	2.6	1.7	1.7	2.6	2.6	2.6
95°	9.4	10.3	11.1	11.1	11.1	12.0	12.0	11.1	11.1	11.1	12.0
97.5°	53.1	58.2	56.5	51.4	52.2	53.1	49.6	44.5	44.5	41.1	36.0
100°	196.0	202.0	196.9	166.9	156.6	150.7	143.0	122.4	109.6	94.2	80.5
102.5°	324.4	332.1	321.9	287.6	261.9	251.7	238.8	206.3	181.5	153.2	128.4
105°	430.6	438.3	431.4	382.6	355.2	344.1	325.3	283.3	250.0	212.3	178.0
107.5°	519.6	527.3	516.2	470.8	435.7	422.0	402.3	354.4	310.7	267.1	226.0
110°	590.6	598.3	588.1	548.7	505.9	487.9	464.8	412.6	363.8	313.3	270.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	647.1	652.3	639.4	604.3	558.1	536.7	511.9	457.1	404.0	351.0	304.7
115°	684.8	686.5	672.0	641.1	594.9	571.0	543.6	487.1	431.4	379.2	330.4
117.5°	702.8	701.9	686.5	657.4	614.6	589.8	561.5	504.2	449.4	397.2	348.4
120°	704.5	701.9	684.8	658.3	618.9	595.8	567.5	511.0	458.0	406.6	357.8
122.5°	693.4	689.9	672.8	647.1	611.2	590.6	564.1	510.2	458.0	408.3	360.4
125°	670.2	666.8	649.7	626.6	592.4	574.4	551.3	501.6	451.1	402.3	357.0
127.5°	639.4	636.9	620.6	599.2	567.5	550.4	530.7	485.4	438.3	392.0	348.4
130°	600.9	597.5	582.1	564.1	534.1	518.7	501.6	462.2	417.7	374.9	335.6
132.5°	557.3	554.7	542.7	523.9	497.3	483.6	467.4	434.0	394.6	355.2	319.3
135°	510.2	507.6	498.2	481.9	456.2	444.3	429.7	400.6	366.4	331.3	299.6
137.5°	461.4	459.7	451.1	436.6	414.3	403.2	390.3	364.7	335.6	306.4	278.2
140°	412.6	410.0	403.2	390.3	371.5	361.2	351.0	327.8	303.0	278.2	255.1
142.5°	363.8	362.1	357.0	346.7	329.6	321.0	311.6	292.8	271.4	250.8	230.3
145°	318.4	316.7	313.3	303.9	289.3	282.5	274.8	258.5	239.7	223.4	206.3
147.5°	275.6	274.8	271.4	264.5	251.7	246.5	240.5	226.0	210.6	196.9	181.5
150°	237.1	237.1	234.5	228.6	218.3	214.0	208.9	196.0	182.3	171.2	160.1
152.5°	202.9	202.0	200.3	195.2	185.8	182.3	178.9	169.5	159.2	149.8	140.4
155°	171.2	171.2	169.5	166.1	159.2	156.6	154.1	146.4	137.8	131.0	124.1
157.5°	145.5	146.4	144.7	142.1	136.1	135.2	132.7	127.5	121.6	115.6	110.4
160°	125.0	124.1	123.3	122.4	118.1	116.4	114.7	111.3	107.0	103.6	99.3
162.5°	107.9	107.0	107.0	106.1	102.7	102.7	101.0	98.4	95.9	93.3	89.9
165°	94.2	94.2	94.2	93.3	91.6	90.7	89.9	88.2	86.5	84.7	83.0
167.5°	83.9	83.9	83.9	83.9	82.2	82.2	82.2	80.5	79.6	77.9	77.0
170°	76.2	76.2	76.2	76.2	75.3	75.3	75.3	74.5	73.6	73.6	72.8
172.5°	70.2	71.0	71.0	71.0	70.2	70.2	70.2	70.2	69.3	69.3	69.3
175°	66.8	66.8	66.8	67.6	66.8	66.8	66.8	66.8	66.8	66.8	66.8
177.5°	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.9	65.9
180°	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	233.7	233.7	233.7	233.7	233.7	233.7	233.7	233.7	233.7	233.7
2.5°	233.7	233.7	232.8	233.7	232.8	233.7	234.5	234.5	233.7	234.5
5°	233.7	234.5	232.8	233.7	232.8	233.7	234.5	234.5	233.7	234.5
7.5°	234.5	234.5	233.7	233.7	232.8	233.7	233.7	233.7	232.8	233.7
10°	236.3	235.4	233.7	234.5	232.8	233.7	233.7	233.7	232.8	233.7
12.5°	238.0	236.3	234.5	234.5	232.8	232.8	232.8	232.8	231.1	232.0
15°	239.7	238.0	234.5	234.5	232.8	232.8	232.0	232.0	230.3	231.1
17.5°	241.4	238.8	235.4	234.5	232.0	232.8	232.8	232.0	231.1	231.1
20°	244.0	241.4	238.8	238.0	235.4	236.3	235.4	234.5	232.8	233.7
22.5°	249.1	246.5	242.2	241.4	238.8	238.8	237.1	236.3	234.5	234.5
25°	257.7	252.5	246.5	244.0	240.5	239.7	238.0	236.3	234.5	234.5
27.5°	267.9	257.7	249.1	245.7	242.2	241.4	238.0	236.3	233.7	234.5
30°	277.3	264.5	252.5	246.5	243.1	242.2	238.8	237.1	233.7	234.5
32.5°	284.2	270.5	255.9	247.4	243.1	241.4	238.0	236.3	232.8	233.7
35°	291.9	275.6	259.4	249.1	244.0	242.2	238.0	235.4	232.0	232.0
37.5°	297.0	279.1	261.9	250.0	243.1	240.5	236.3	233.7	230.3	230.3
40°	298.7	279.9	261.9	250.0	242.2	238.8	233.7	230.3	226.8	226.8
42.5°	298.7	277.3	259.4	247.4	239.7	235.4	229.4	226.0	222.6	222.6
45°	293.6	271.4	253.4	241.4	234.5	229.4	222.6	219.1	215.7	215.7
47.5°	283.3	261.9	244.0	232.8	226.0	221.7	214.0	210.6	207.2	207.2
50°	267.9	247.4	230.3	219.1	213.1	209.7	201.2	197.7	192.6	192.6
52.5°	245.7	226.8	211.4	201.2	195.2	191.7	184.0	178.9	175.5	175.5
55°	217.4	201.2	185.8	176.3	171.2	168.6	161.8	157.5	154.9	154.1
57.5°	182.3	168.6	156.6	149.8	145.5	143.0	132.7	124.1	119.0	118.1
60°	146.4	134.4	125.0	113.0	109.6	110.4	109.6	108.7	107.9	107.9
62.5°	111.3	101.0	100.2	101.0	99.3	99.3	97.6	95.9	95.0	94.2
65°	89.0	88.2	87.3	86.5	85.6	85.6	83.9	82.2	80.5	80.5
67.5°	76.2	75.3	73.6	73.6	71.9	71.0	70.2	68.5	66.8	66.8
70°	64.2	62.5	60.8	59.9	58.2	58.2	57.4	56.5	54.8	54.8
72.5°	53.1	51.4	49.6	48.8	47.9	47.1	46.2	45.4	44.5	43.7
75°	41.9	41.1	39.4	38.5	37.7	37.7	36.8	36.0	35.1	34.2
77.5°	32.5	31.7	30.8	30.0	29.1	29.1	28.2	27.4	27.4	26.5
80°	24.8	24.0	23.1	22.3	21.4	21.4	20.5	20.5	19.7	19.7
82.5°	18.0	17.1	16.3	16.3	15.4	15.4	14.6	13.7	13.7	12.8
85°	12.8	12.0	11.1	10.3	9.4	9.4	8.6	8.6	7.7	7.7
87.5°	7.7	6.8	6.8	6.0	6.0	6.0	6.0	5.1	5.1	5.1
90°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.7	1.7	1.7
92.5°	2.6	3.4	2.6	3.4	3.4	2.6	3.4	3.4	3.4	2.6
95°	11.1	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
97.5°	32.5	30.8	27.4	25.7	25.7	24.0	23.1	22.3	22.3	20.5
100°	74.5	67.6	59.9	57.4	56.5	53.9	50.5	49.6	49.6	47.1
102.5°	119.0	106.1	94.2	88.2	86.5	83.0	77.9	76.2	77.0	73.6
105°	161.8	143.8	125.8	118.1	114.7	109.6	102.7	101.0	100.2	96.7
107.5°	204.6	178.9	156.6	146.4	141.2	135.2	126.7	123.3	121.6	118.1
110°	241.4	211.4	185.8	171.2	165.2	158.4	148.1	143.0	141.2	137.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	271.4	238.0	209.7	192.6	184.9	177.2	166.1	159.2	155.8	152.4
115°	293.6	258.5	229.4	209.7	201.2	192.6	179.8	172.1	166.9	164.4
117.5°	309.0	272.2	242.2	221.7	212.3	203.7	189.2	179.8	174.6	171.2
120°	317.6	280.8	250.8	228.6	218.3	209.7	194.3	184.9	178.9	175.5
122.5°	320.1	283.3	254.2	231.1	220.0	211.4	196.9	186.6	181.5	178.0
125°	317.6	281.6	252.5	229.4	218.3	208.9	194.3	185.8	180.6	178.0
127.5°	310.7	276.5	248.2	225.1	214.0	205.4	190.0	182.3	177.2	174.6
130°	298.7	267.1	239.7	217.4	206.3	197.7	184.0	176.3	172.1	170.3
132.5°	285.9	255.1	229.4	208.9	197.7	188.3	177.2	169.5	165.2	163.5
135°	268.8	240.5	216.6	196.0	185.8	178.9	168.6	161.8	157.5	155.8
137.5°	250.0	224.3	202.9	183.2	174.6	168.6	159.2	152.4	148.9	148.1
140°	230.3	207.2	185.8	170.3	162.6	157.5	149.8	143.0	139.5	138.7
142.5°	209.7	187.5	171.2	157.5	151.5	146.4	139.5	133.5	131.0	130.1
145°	187.5	170.3	156.6	145.5	140.4	136.1	130.1	125.0	122.4	121.6
147.5°	166.9	153.2	143.0	134.4	129.3	125.8	121.6	117.3	114.7	113.8
150°	148.9	137.8	130.1	122.4	119.0	116.4	112.1	108.7	107.0	106.1
152.5°	131.8	123.3	117.3	111.3	107.9	106.1	103.6	100.2	98.4	99.3
155°	118.1	111.3	106.1	101.9	99.3	97.6	95.0	92.4	91.6	91.6
157.5°	106.1	100.2	96.7	93.3	90.7	89.9	88.2	85.6	85.6	85.6
160°	95.9	91.6	89.0	85.6	84.7	83.0	82.2	80.5	79.6	80.5
162.5°	88.2	84.7	83.0	80.5	78.8	77.9	77.0	75.3	75.3	76.2
165°	81.3	78.8	77.9	75.3	74.5	74.5	73.6	71.9	71.9	72.8
167.5°	76.2	74.5	73.6	71.9	71.0	71.0	70.2	70.2	70.2	70.2
170°	71.9	70.2	70.2	69.3	68.5	68.5	68.5	67.6	68.5	68.5
172.5°	68.5	67.6	67.6	67.6	66.8	66.8	66.8	66.8	66.8	67.6
175°	66.8	65.9	66.8	65.9	65.9	65.9	65.9	65.9	65.9	66.8
177.5°	65.9	65.1	65.9	65.1	65.1	65.9	65.9	65.1	65.1	65.9
180°	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1

(END OF REPORT)