

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: P316060

Luminaire Tested: **ShSe-TRAP-1-L35-80-UNV-STD**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P316060
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1811-037-6)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: ShSe-TRAP-1-L35-80-UNV-STD
Description: SHAPER SENSE SQUARE
LIGHT LEVEL 1
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3092.7 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 2.4 / 1.51 / 1.84
Luminous Opening: Rectangular (W 2.92' x L: 2.92' x H: 0')
CIE Type: General Diffuse

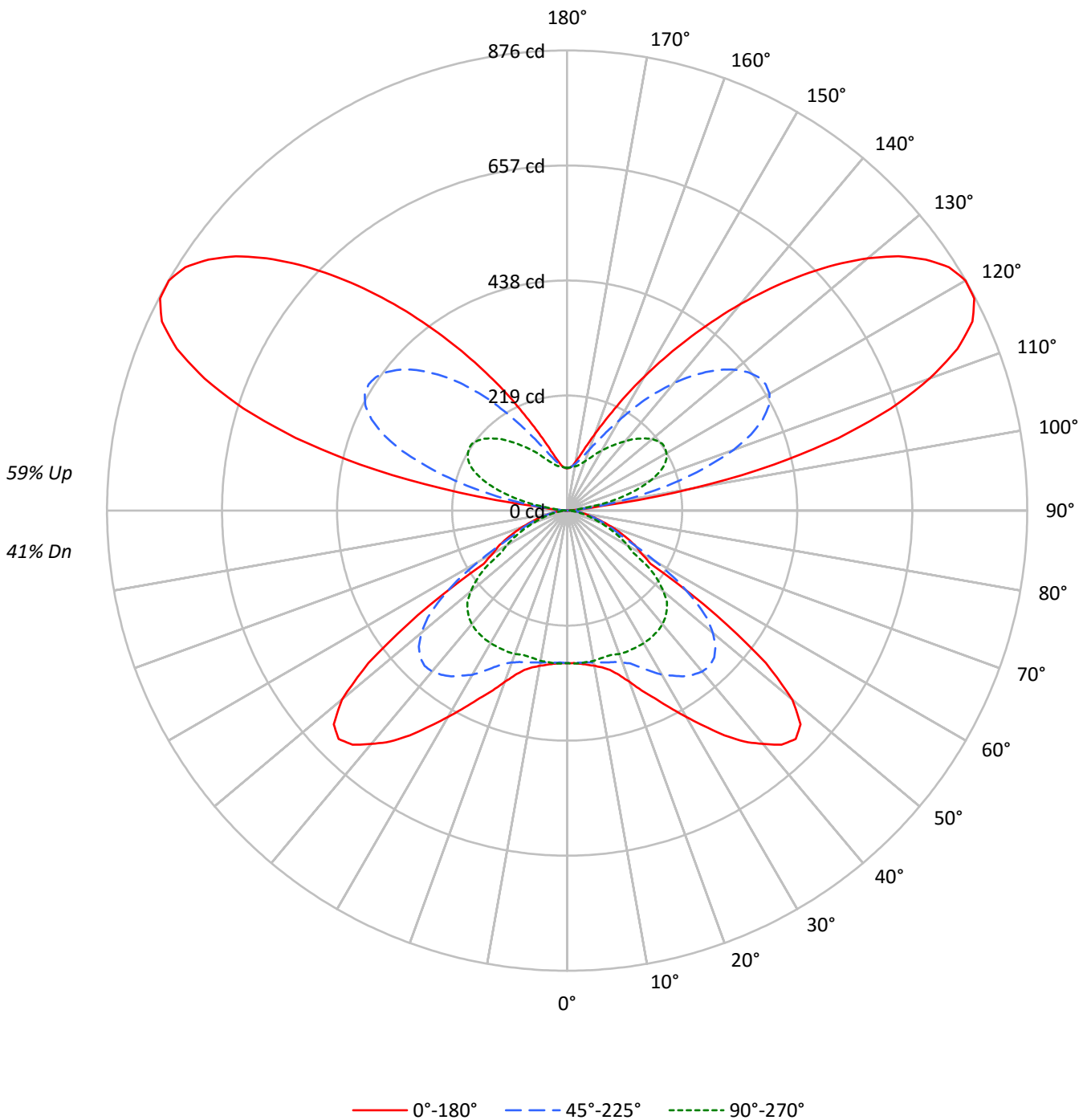
Input Watts (W): 29.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P316060

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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°	368	368	368
5°	372	369	370
10°	386	377	373
15°	411	392	376
20°	467	414	391
25°	550	459	407
30°	662	527	426
35°	807	595	446
40°	958	661	466
45°	1101	708	480
50°	1102	712	471
55°	765	650	423
60°	412	496	339
65°	382	338	300
70°	331	299	252
75°	276	260	208
80°	240	232	179
85°	232	247	139



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.9	0.9
10°-20°	85.7	2.8
20°-30°	156.9	5.1
30°-40°	247.8	8.0
40°-50°	322.2	10.4
50°-60°	252.3	8.2
60°-70°	115.9	3.7
70°-80°	56.2	1.8
80°-90°	17.2	0.6
90°-100°	35.1	1.1
100°-110°	291.0	9.4
110°-120°	462.9	15.0
120°-130°	434.6	14.1
130°-140°	304.6	9.9
140°-150°	168.1	5.4
150°-160°	76.0	2.5
160°-170°	30.2	1.0
170°-180°	8.1	0.3
0°-30°	270.5	8.7
0°-40°	518.3	16.8
0°-60°	1092.8	35.3
0°-90°	1282.1	41.5
90°-120°	789.0	25.5
90°-150°	1696.3	54.8
90°-180°	1811.0	58.6
0°-180°	3092.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	290	290	290	290	290	
5°	293	292	290	290	292	28
15°	314	309	299	290	287	91
25°	394	372	329	299	292	185
35°	523	480	385	303	288	328
45°	615	570	396	292	268	463
55°	347	388	295	213	192	304
65°	128	126	113	106	100	126
75°	56	56	53	47	42	61
85°	16	19	17	12	10	17
90°	0	1	1	1	2	1
95°	12	15	15	15	15	54
105°	535	428	221	143	120	547
115°	852	710	411	250	204	827
125°	833	714	444	271	221	742
135°	634	552	372	231	194	493
145°	396	351	256	174	151	253
155°	213	195	154	123	114	103
165°	117	113	103	93	90	35
175°	83	83	83	82	83	8
180°	81	81	81	81	81	



TEST NUMBER: P316060

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5
2.5°	290.5	289.5	290.5	291.6	290.5	289.5	289.5	291.6	288.5	291.6	289.5
5°	292.7	291.6	292.7	292.7	292.7	291.6	291.6	292.7	289.5	292.7	290.5
7.5°	295.9	294.8	295.9	295.9	294.8	293.8	293.8	294.8	291.6	293.8	291.6
10°	300.1	299.1	299.1	299.1	299.1	296.9	296.9	298.0	294.8	295.9	293.8
12.5°	305.4	304.4	304.4	305.4	303.4	302.3	301.2	302.3	298.0	299.1	295.9
15°	314.0	313.0	313.0	311.8	310.8	308.7	307.6	307.6	302.3	303.4	299.1
17.5°	327.8	325.7	325.7	323.6	321.4	317.1	316.1	314.0	308.7	307.6	302.3
20°	346.9	344.9	343.8	342.7	338.5	334.2	331.0	326.7	317.1	314.0	307.6
22.5°	370.4	367.2	365.1	362.9	357.6	352.3	349.1	343.8	331.0	325.7	315.0
25°	393.8	391.7	389.6	386.3	378.9	372.5	368.3	360.8	346.9	339.5	328.9
27.5°	422.5	419.4	417.2	412.9	403.3	395.9	391.7	381.0	365.1	357.6	344.9
30°	453.4	451.3	447.0	442.7	431.1	423.6	416.2	404.5	387.4	376.8	360.8
32.5°	486.4	484.2	478.9	473.6	458.7	450.2	442.7	430.0	410.8	395.9	372.5
35°	522.6	518.3	514.1	506.6	489.6	480.0	470.5	457.7	435.3	410.8	385.3
37.5°	554.5	549.2	544.9	537.5	519.4	508.7	500.2	484.2	451.3	423.6	393.8
40°	580.0	575.8	570.5	560.9	543.9	533.2	525.8	505.6	465.2	433.2	400.2
42.5°	604.5	600.3	594.9	584.3	565.1	554.5	544.9	514.1	471.5	437.4	401.3
45°	615.2	610.9	605.6	596.0	581.1	570.5	556.7	515.1	468.3	433.2	395.9
47.5°	602.5	599.2	596.0	590.7	581.1	570.5	550.2	506.6	458.7	420.4	383.1
50°	559.8	554.5	555.5	557.7	555.5	538.5	519.4	481.1	437.4	399.2	361.8
52.5°	476.8	474.7	482.1	490.7	492.8	478.9	465.2	436.4	399.2	367.2	334.2
55°	346.9	354.4	367.2	387.4	393.8	388.5	382.1	367.2	344.9	321.4	294.8
57.5°	188.4	193.7	207.6	235.2	264.0	275.6	279.9	285.2	277.8	266.0	248.0
60°	162.8	161.8	161.8	160.7	157.5	158.6	166.1	191.6	203.3	203.3	195.9
62.5°	147.9	146.9	146.9	146.9	145.8	143.7	141.6	137.3	137.3	149.0	147.9
65°	127.7	127.7	127.7	128.7	127.7	125.6	125.6	122.4	118.1	113.8	112.8
67.5°	108.5	107.5	108.5	109.7	108.5	107.5	106.4	105.4	101.1	99.0	96.8
70°	89.4	88.3	89.4	89.4	89.4	88.3	88.3	87.3	85.2	83.0	80.9
72.5°	71.3	71.3	72.3	73.4	72.3	71.3	71.3	71.3	69.2	69.2	67.0
75°	56.4	56.4	56.4	57.4	56.4	56.4	56.4	57.4	55.4	55.4	53.2
77.5°	42.5	42.5	43.7	44.7	43.7	43.7	43.7	44.7	43.7	42.5	41.5
80°	33.0	33.0	33.0	34.1	34.1	34.1	34.1	34.1	33.0	31.9	31.9
82.5°	26.6	26.6	26.6	27.6	27.6	26.6	26.6	26.6	25.5	24.5	23.5
85°	16.0	17.0	18.1	18.1	19.2	19.2	19.2	19.2	18.1	18.1	17.0
87.5°	8.5	8.5	9.6	10.6	11.7	11.7	11.7	11.7	11.7	11.7	10.6
90°	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
92.5°	2.1	2.1	3.2	2.1	3.2	3.2	2.1	2.1	3.2	3.2	3.2
95°	11.7	12.8	13.9	13.9	13.9	14.9	14.9	13.9	13.9	13.9	14.9
97.5°	66.0	72.3	70.3	63.9	64.9	66.0	61.7	55.4	55.4	51.1	44.7
100°	243.7	251.2	244.8	207.6	194.7	187.3	177.7	152.2	136.3	117.1	100.1
102.5°	403.3	412.9	400.2	357.6	325.7	313.0	296.9	256.5	225.6	190.5	159.6
105°	535.3	544.9	536.5	475.8	441.7	427.8	404.5	352.3	310.8	264.0	221.4
107.5°	646.0	655.6	641.8	585.4	541.8	524.7	500.2	440.7	386.3	332.0	281.0
110°	734.4	743.9	731.2	682.2	629.0	606.6	578.0	513.0	452.3	389.6	336.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	804.6	811.1	795.1	751.4	694.0	667.3	636.4	568.4	502.4	436.4	378.9
115°	851.5	853.6	835.5	797.2	739.7	709.9	675.8	605.6	536.5	471.5	410.8
117.5°	873.8	872.8	853.6	817.4	764.2	733.3	698.2	626.8	558.8	493.8	433.2
120°	875.9	872.8	851.5	818.5	769.5	740.8	705.7	635.4	569.4	505.6	444.9
122.5°	862.1	857.9	836.6	804.6	760.0	734.4	701.4	634.4	569.4	507.7	448.1
125°	833.4	829.1	807.8	779.1	736.5	714.2	685.4	623.7	560.9	500.2	443.8
127.5°	795.1	791.9	771.6	745.1	705.7	684.4	659.9	603.5	544.9	487.5	433.2
130°	747.2	742.9	723.7	701.4	664.2	645.0	623.7	574.7	519.4	466.2	417.2
132.5°	692.8	689.7	674.8	651.3	618.4	601.3	581.1	539.6	490.7	441.7	397.0
135°	634.4	631.1	619.4	599.2	567.3	552.4	534.3	498.1	455.6	411.9	372.5
137.5°	573.7	571.6	560.9	542.8	515.1	501.3	485.4	453.4	417.2	381.0	345.9
140°	513.0	509.8	501.3	485.4	461.9	449.1	436.4	407.6	376.8	345.9	317.1
142.5°	452.3	450.2	443.8	431.1	409.8	399.2	387.4	364.0	337.4	311.8	286.3
145°	395.9	393.8	389.6	377.8	359.8	351.2	341.6	321.4	298.0	277.8	256.5
147.5°	342.7	341.6	337.4	328.9	313.0	306.5	299.1	281.0	261.9	244.8	225.6
150°	294.8	294.8	291.6	284.2	271.4	266.0	259.7	243.7	226.7	212.9	199.0
152.5°	252.3	251.2	249.1	242.7	230.9	226.7	222.5	210.7	198.0	186.3	174.5
155°	212.9	212.9	210.7	206.5	198.0	194.7	191.6	182.0	171.4	162.8	154.3
157.5°	181.0	182.0	179.8	176.7	169.2	168.2	165.0	158.6	151.2	143.7	137.3
160°	155.4	154.3	153.2	152.2	146.9	144.7	142.6	138.3	133.0	128.7	123.4
162.5°	134.1	133.0	133.0	132.0	127.7	127.7	125.6	122.4	119.2	116.0	111.8
165°	117.1	117.1	117.1	116.0	113.8	112.8	111.8	109.7	107.5	105.4	103.2
167.5°	104.3	104.3	104.3	104.3	102.2	102.2	102.2	100.1	99.0	96.8	95.8
170°	94.8	94.8	94.8	94.8	93.6	93.6	93.6	92.6	91.5	91.5	90.5
172.5°	87.3	88.3	88.3	88.3	87.3	87.3	87.3	87.3	86.2	86.2	86.2
175°	83.0	83.0	83.0	84.1	83.0	83.0	83.0	83.0	83.0	83.0	83.0
177.5°	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	81.9	81.9
180°	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5
2.5°	290.5	290.5	289.5	290.5	289.5	290.5	291.6	291.6	290.5	291.6
5°	290.5	291.6	289.5	290.5	289.5	290.5	291.6	291.6	290.5	291.6
7.5°	291.6	291.6	290.5	290.5	289.5	290.5	290.5	290.5	289.5	290.5
10°	293.8	292.7	290.5	291.6	289.5	290.5	290.5	290.5	289.5	290.5
12.5°	295.9	293.8	291.6	291.6	289.5	289.5	289.5	289.5	287.4	288.5
15°	298.0	295.9	291.6	291.6	289.5	289.5	288.5	288.5	286.3	287.4
17.5°	300.1	296.9	292.7	291.6	288.5	289.5	289.5	288.5	287.4	287.4
20°	303.4	300.1	296.9	295.9	292.7	293.8	292.7	291.6	289.5	290.5
22.5°	309.7	306.5	301.2	300.1	296.9	296.9	294.8	293.8	291.6	291.6
25°	320.4	314.0	306.5	303.4	299.1	298.0	295.9	293.8	291.6	291.6
27.5°	333.2	320.4	309.7	305.4	301.2	300.1	295.9	293.8	290.5	291.6
30°	344.9	328.9	314.0	306.5	302.3	301.2	296.9	294.8	290.5	291.6
32.5°	353.4	336.3	318.3	307.6	302.3	300.1	295.9	293.8	289.5	290.5
35°	362.9	342.7	322.5	309.7	303.4	301.2	295.9	292.7	288.5	288.5
37.5°	369.4	346.9	325.7	310.8	302.3	299.1	293.8	290.5	286.3	286.3
40°	371.4	348.0	325.7	310.8	301.2	296.9	290.5	286.3	282.1	282.1
42.5°	371.4	344.9	322.5	307.6	298.0	292.7	285.2	281.0	276.7	276.7
45°	365.1	337.4	315.0	300.1	291.6	285.2	276.7	272.5	268.2	268.2
47.5°	352.3	325.7	303.4	289.5	281.0	275.6	266.0	261.9	257.6	257.6
50°	333.2	307.6	286.3	272.5	265.0	260.7	250.1	245.8	239.5	239.5
52.5°	305.4	282.1	262.9	250.1	242.7	238.4	228.8	222.5	218.2	218.2
55°	270.3	250.1	230.9	219.2	212.9	209.6	201.2	195.9	192.7	191.6
57.5°	226.7	209.6	194.7	186.3	181.0	177.7	165.0	154.3	147.9	146.9
60°	182.0	167.1	155.4	140.5	136.3	137.3	136.3	135.2	134.1	134.1
62.5°	138.3	125.6	124.5	125.6	123.4	123.4	121.3	119.2	118.1	117.1
65°	110.7	109.7	108.5	107.5	106.4	106.4	104.3	102.2	100.1	100.1
67.5°	94.8	93.6	91.5	91.5	89.4	88.3	87.3	85.2	83.0	83.0
70°	79.9	77.7	75.6	74.5	72.3	72.3	71.3	70.3	68.1	68.1
72.5°	66.0	63.9	61.7	60.7	59.6	58.6	57.4	56.4	55.4	54.3
75°	52.1	51.1	49.0	47.9	46.8	46.8	45.8	44.7	43.7	42.5
77.5°	40.4	39.4	38.3	37.2	36.2	36.2	35.1	34.1	34.1	33.0
80°	30.9	29.8	28.8	27.6	26.6	26.6	25.5	25.5	24.5	24.5
82.5°	22.3	21.3	20.2	20.2	19.2	19.2	18.1	17.0	17.0	16.0
85°	16.0	14.9	13.9	12.8	11.7	11.7	10.6	10.6	9.6	9.6
87.5°	9.6	8.5	8.5	7.4	7.4	7.4	7.4	6.4	6.4	6.4
90°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.1	2.1	2.1
92.5°	3.2	4.3	3.2	4.3	4.3	3.2	4.3	4.3	4.3	3.2
95°	13.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9
97.5°	40.4	38.3	34.1	31.9	31.9	29.8	28.8	27.6	27.6	25.5
100°	92.6	84.1	74.5	71.3	70.3	67.0	62.8	61.7	61.7	58.6
102.5°	147.9	132.0	117.1	109.7	107.5	103.2	96.8	94.8	95.8	91.5
105°	201.2	178.8	156.5	146.9	142.6	136.3	127.7	125.6	124.5	120.3
107.5°	254.4	222.5	194.7	182.0	175.7	168.2	157.5	153.2	151.2	146.9
110°	300.1	262.9	230.9	212.9	205.4	196.9	184.1	177.7	175.7	170.3



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CATALOG NUMBER: ShSe-TRAP-1-L35-80-UNV-STD

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	337.4	295.9	260.7	239.5	229.9	220.3	206.5	198.0	193.7	189.4
115°	365.1	321.4	285.2	260.7	250.1	239.5	223.5	213.9	207.6	204.3
117.5°	384.3	338.5	301.2	275.6	264.0	253.3	235.2	223.5	217.1	212.9
120°	394.9	349.1	311.8	284.2	271.4	260.7	241.6	229.9	222.5	218.2
122.5°	398.0	352.3	316.1	287.4	273.5	262.9	244.8	232.1	225.6	221.4
125°	394.9	350.2	314.0	285.2	271.4	259.7	241.6	230.9	224.6	221.4
127.5°	386.3	343.8	308.7	279.9	266.0	255.4	236.3	226.7	220.3	217.1
130°	371.4	332.0	298.0	270.3	256.5	245.8	228.8	219.2	213.9	211.8
132.5°	355.5	317.1	285.2	259.7	245.8	234.1	220.3	210.7	205.4	203.3
135°	334.2	299.1	269.3	243.7	230.9	222.5	209.6	201.2	195.9	193.7
137.5°	310.8	278.9	252.3	227.8	217.1	209.6	198.0	189.4	185.2	184.1
140°	286.3	257.6	230.9	211.8	202.2	195.9	186.3	177.7	173.5	172.4
142.5°	260.7	233.1	212.9	195.9	188.4	182.0	173.5	166.1	162.8	161.8
145°	233.1	211.8	194.7	181.0	174.5	169.2	161.8	155.4	152.2	151.2
147.5°	207.6	190.5	177.7	167.1	160.7	156.5	151.2	145.8	142.6	141.6
150°	185.2	171.4	161.8	152.2	147.9	144.7	139.4	135.2	133.0	132.0
152.5°	163.9	153.2	145.8	138.3	134.1	132.0	128.7	124.5	122.4	123.4
155°	146.9	138.3	132.0	126.7	123.4	121.3	118.1	115.0	113.8	113.8
157.5°	132.0	124.5	120.3	116.0	112.8	111.8	109.7	106.4	106.4	106.4
160°	119.2	113.8	110.7	106.4	105.4	103.2	102.2	100.1	99.0	100.1
162.5°	109.7	105.4	103.2	100.1	97.9	96.8	95.8	93.6	93.6	94.8
165°	101.1	97.9	96.8	93.6	92.6	92.6	91.5	89.4	89.4	90.5
167.5°	94.8	92.6	91.5	89.4	88.3	88.3	87.3	87.3	87.3	87.3
170°	89.4	87.3	87.3	86.2	85.2	85.2	85.2	84.1	85.2	85.2
172.5°	85.2	84.1	84.1	84.1	83.0	83.0	83.0	83.0	83.0	84.1
175°	83.0	81.9	83.0	81.9	81.9	81.9	81.9	81.9	81.9	83.0
177.5°	81.9	80.9	81.9	80.9	80.9	81.9	81.9	80.9	80.9	81.9
180°	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9

(END OF REPORT)