

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: P316063

Luminaire Tested: **ShSe-TRAP-2-L35-80-UNV-STD**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P316063
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-2-L35-80-UNV-STD
Description: SHAPER SENSE SQUARE
LIGHT LEVEL 2
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3955.5 lumens
Efficiency: N/A
Efficacy: 101.9 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

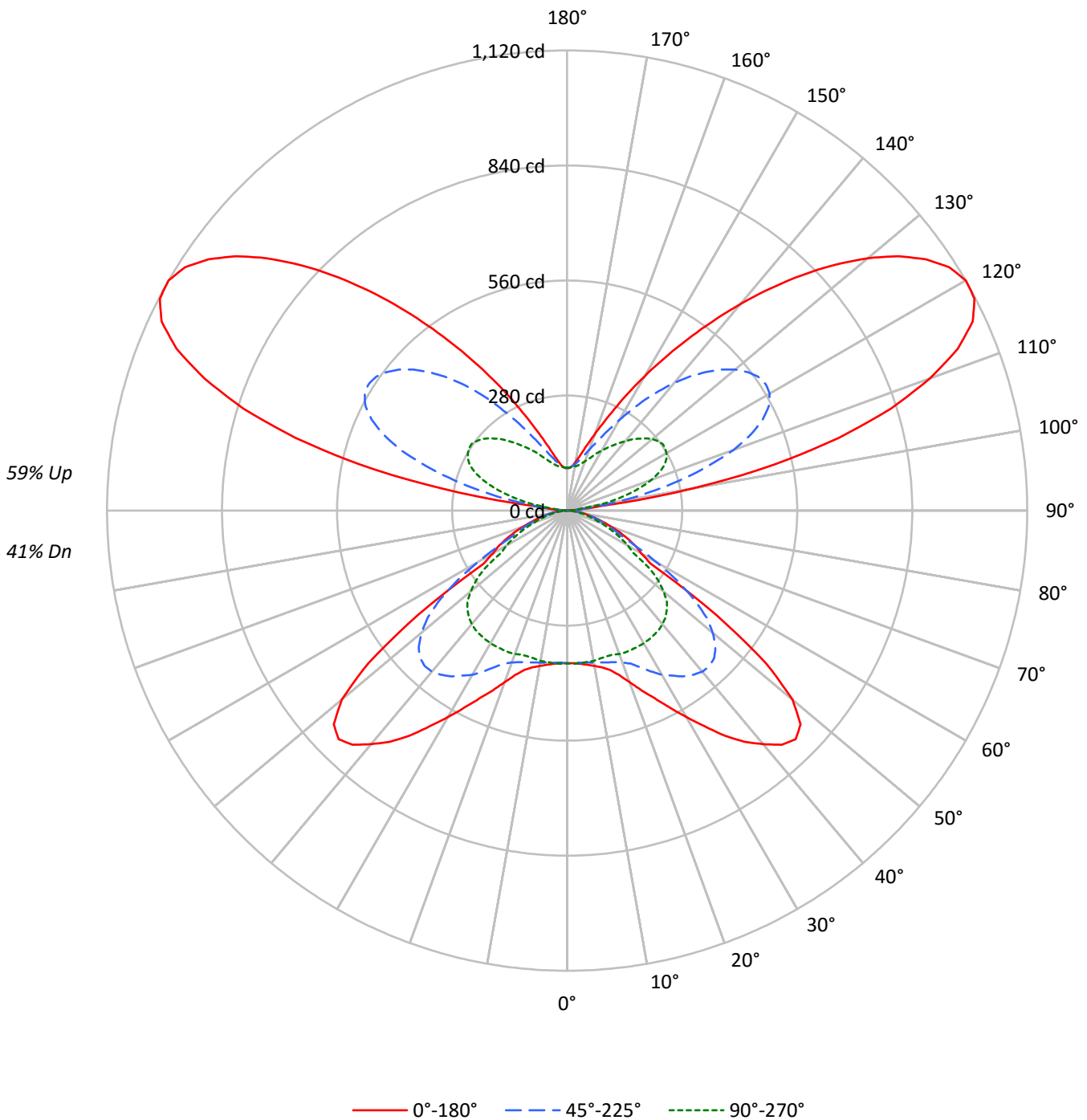
Input Watts (W): 38.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P316063

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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°	470	470	470
5°	475	472	474
10°	493	483	477
15°	526	501	482
20°	598	530	500
25°	703	587	521
30°	847	674	545
35°	1032	761	570
40°	1225	845	596
45°	1408	906	614
50°	1409	911	603
55°	979	832	540
60°	527	634	434
65°	489	432	383
70°	423	383	322
75°	353	333	266
80°	307	297	228
85°	298	315	177



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.7	0.9
10°-20°	109.6	2.8
20°-30°	200.7	5.1
30°-40°	317.0	8.0
40°-50°	412.1	10.4
50°-60°	322.7	8.2
60°-70°	148.2	3.7
70°-80°	71.8	1.8
80°-90°	22.0	0.6
90°-100°	44.9	1.1
100°-110°	372.2	9.4
110°-120°	592.0	15.0
120°-130°	555.8	14.1
130°-140°	389.6	9.9
140°-150°	214.9	5.4
150°-160°	97.2	2.5
160°-170°	38.7	1.0
170°-180°	10.4	0.3
0°-30°	346.0	8.7
0°-40°	662.9	16.8
0°-60°	1397.7	35.3
0°-90°	1639.7	41.5
90°-120°	1009.2	25.5
90°-150°	2169.5	54.8
90°-180°	2316.0	58.6
0°-180°	3955.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	372	372	372	372	372	
5°	374	373	372	370	373	36
15°	402	395	382	370	368	116
25°	504	476	421	382	373	237
35°	668	614	493	388	369	420
45°	787	730	506	373	343	592
55°	444	497	377	272	245	389
65°	163	161	144	136	128	161
75°	72	72	68	60	54	78
85°	20	24	22	15	12	22
90°	0	1	1	1	3	2
95°	15	19	19	19	19	70
105°	685	547	283	182	154	699
115°	1089	908	525	320	261	1057
125°	1066	913	568	347	283	949
135°	811	706	476	295	248	630
145°	506	449	328	223	193	324
155°	272	249	197	158	146	131
165°	150	144	132	118	116	45
175°	106	106	106	105	106	11
180°	104	104	104	104	104	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	371.6	371.6	371.6	371.6	371.6	371.6	371.6	371.6	371.6	371.6	371.6
2.5°	371.6	370.2	371.6	373.0	371.6	370.2	370.2	373.0	368.9	373.0	370.2
5°	374.3	373.0	374.3	374.3	374.3	373.0	373.0	374.3	370.2	374.3	371.6
7.5°	378.4	377.1	378.4	378.4	377.1	375.7	375.7	377.1	373.0	375.7	373.0
10°	383.8	382.5	382.5	382.5	382.5	379.8	379.8	381.2	377.1	378.4	375.7
12.5°	390.7	389.3	389.3	390.7	387.9	386.6	385.2	386.6	381.2	382.5	378.4
15°	401.5	400.2	400.2	398.8	397.4	394.8	393.4	393.4	386.6	387.9	382.5
17.5°	419.3	416.5	416.5	413.8	411.1	405.7	404.3	401.5	394.8	393.4	386.6
20°	443.8	441.0	439.6	438.4	432.9	427.4	423.4	417.9	405.7	401.5	393.4
22.5°	473.7	469.6	466.9	464.2	457.4	450.6	446.5	439.6	423.4	416.5	402.9
25°	503.7	500.9	498.2	494.2	484.6	476.4	471.0	461.5	443.8	434.2	420.6
27.5°	540.4	536.3	533.6	528.2	515.9	506.4	500.9	487.3	466.9	457.4	441.0
30°	579.9	577.2	571.7	566.2	551.3	541.8	532.3	517.3	495.5	481.8	461.5
32.5°	622.1	619.4	612.6	605.7	586.7	575.8	566.2	550.0	525.4	506.4	476.4
35°	668.4	662.9	657.5	647.9	626.2	613.9	601.7	585.3	556.7	525.4	492.8
37.5°	709.2	702.4	697.0	687.5	664.3	650.6	639.8	619.4	577.2	541.8	503.7
40°	741.9	736.4	729.7	717.3	695.6	682.0	672.5	646.6	594.8	554.0	511.8
42.5°	773.1	767.7	760.9	747.3	722.8	709.2	697.0	657.5	603.1	559.5	513.2
45°	786.7	781.4	774.5	762.3	743.3	729.7	711.9	658.9	598.9	554.0	506.4
47.5°	770.5	766.4	762.3	755.5	743.3	729.7	703.7	647.9	586.7	537.7	490.1
50°	716.0	709.2	710.6	713.3	710.6	688.8	664.3	615.3	559.5	510.4	462.8
52.5°	609.8	607.1	616.7	627.5	630.3	612.6	594.8	558.1	510.4	469.6	427.4
55°	443.8	453.3	469.6	495.5	503.7	496.8	488.7	469.6	441.0	411.1	377.1
57.5°	241.0	247.7	265.4	300.8	337.6	352.6	358.0	364.8	355.2	340.3	317.1
60°	208.3	206.9	206.9	205.5	201.5	202.8	212.4	245.0	260.0	260.0	250.5
62.5°	189.2	187.9	187.9	187.9	186.5	183.8	181.0	175.6	175.6	190.5	189.2
65°	163.3	163.3	163.3	164.7	163.3	160.6	160.6	156.6	151.1	145.7	144.3
67.5°	138.8	137.5	138.8	140.2	138.8	137.5	136.1	134.7	129.3	126.6	123.9
70°	114.4	113.0	114.4	114.4	114.4	113.0	113.0	111.6	108.9	106.1	103.5
72.5°	91.2	91.2	92.5	93.9	92.5	91.2	91.2	91.2	88.5	88.5	85.8
75°	72.2	72.2	72.2	73.5	72.2	72.2	72.2	73.5	70.8	70.8	68.1
77.5°	54.4	54.4	55.8	57.2	55.8	55.8	55.8	57.2	55.8	54.4	53.1
80°	42.2	42.2	42.2	43.6	43.6	43.6	43.6	43.6	42.2	40.8	40.8
82.5°	34.1	34.1	34.1	35.4	35.4	34.1	34.1	34.1	32.7	31.3	30.0
85°	20.5	21.7	23.1	23.1	24.5	24.5	24.5	24.5	23.1	23.1	21.7
87.5°	10.9	10.9	12.2	13.6	15.0	15.0	15.0	15.0	15.0	15.0	13.6
90°	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
92.5°	2.7	2.7	4.1	2.7	4.1	4.1	2.7	2.7	4.1	4.1	4.1
95°	15.0	16.3	17.7	17.7	17.7	19.1	19.1	17.7	17.7	17.7	19.1
97.5°	84.4	92.5	89.9	81.7	83.0	84.4	78.9	70.8	70.8	65.3	57.2
100°	311.8	321.3	313.1	265.4	249.1	239.6	227.4	194.7	174.2	149.7	128.0
102.5°	515.9	528.2	511.8	457.4	416.5	400.2	379.8	328.0	288.6	243.6	204.2
105°	684.7	697.0	686.1	608.4	564.9	547.2	517.3	450.6	397.4	337.6	283.2
107.5°	826.3	838.5	820.8	748.7	692.8	671.1	639.8	563.6	494.2	424.7	359.3
110°	939.3	951.5	935.2	872.5	804.5	775.9	739.2	656.1	578.5	498.2	430.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	1029.1	1037.3	1016.8	961.0	887.5	853.5	814.1	726.9	642.5	558.1	484.6
115°	1089.0	1091.7	1068.5	1019.6	946.1	908.0	864.4	774.5	686.1	603.1	525.4
117.5°	1117.6	1116.2	1091.7	1045.4	977.4	937.9	893.0	801.7	714.7	631.6	554.0
120°	1120.3	1116.2	1089.0	1046.8	984.1	947.4	902.5	812.7	728.3	646.6	569.0
122.5°	1102.6	1097.1	1069.9	1029.1	971.9	939.3	897.1	811.3	728.3	649.3	573.1
125°	1065.8	1060.4	1033.2	996.4	941.9	913.4	876.6	797.7	717.3	639.8	567.6
127.5°	1016.8	1012.7	986.9	952.9	902.5	875.3	843.9	771.9	697.0	623.4	554.0
130°	955.6	950.2	925.7	897.1	849.4	824.9	797.7	735.0	664.3	596.2	533.6
132.5°	886.1	882.1	863.0	833.1	790.9	769.1	743.3	690.1	627.5	564.9	507.8
135°	811.3	807.2	792.2	766.4	725.5	706.5	683.3	637.0	582.6	526.8	476.4
137.5°	733.7	730.9	717.3	694.2	658.9	641.1	620.7	579.9	533.6	487.3	442.4
140°	656.1	652.0	641.1	620.7	590.8	574.5	558.1	521.4	481.8	442.4	405.7
142.5°	578.5	575.8	567.6	551.3	524.0	510.4	495.5	465.6	431.5	398.8	366.2
145°	506.4	503.7	498.2	483.2	460.1	449.2	437.0	411.1	381.2	355.2	328.0
147.5°	438.4	437.0	431.5	420.6	400.2	392.0	382.5	359.3	334.9	313.1	288.6
150°	377.1	377.1	373.0	363.5	347.1	340.3	332.1	311.8	289.9	272.2	254.6
152.5°	322.6	321.3	318.5	310.4	295.4	289.9	284.5	269.6	253.2	238.2	223.2
155°	272.2	272.2	269.6	264.1	253.2	249.1	245.0	232.7	219.1	208.3	197.4
157.5°	231.4	232.7	230.0	226.0	216.4	215.1	211.0	202.8	193.3	183.8	175.6
160°	198.8	197.4	196.0	194.7	187.9	185.2	182.4	176.9	170.2	164.7	157.9
162.5°	171.5	170.2	170.2	168.8	163.3	163.3	160.6	156.6	152.5	148.3	143.0
165°	149.7	149.7	149.7	148.3	145.7	144.3	143.0	140.2	137.5	134.7	132.1
167.5°	133.4	133.4	133.4	133.4	130.7	130.7	130.7	128.0	126.6	123.9	122.5
170°	121.1	121.1	121.1	121.1	119.8	119.8	119.8	118.4	117.1	117.1	115.7
172.5°	111.6	113.0	113.0	113.0	111.6	111.6	111.6	111.6	110.3	110.3	110.3
175°	106.1	106.1	106.1	107.5	106.1	106.1	106.1	106.1	106.1	106.1	106.1
177.5°	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	104.8	104.8
180°	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	371.6	371.6	371.6	371.6	371.6	371.6	371.6	371.6	371.6	371.6
2.5°	371.6	371.6	370.2	371.6	370.2	371.6	373.0	373.0	371.6	373.0
5°	371.6	373.0	370.2	371.6	370.2	371.6	373.0	373.0	371.6	373.0
7.5°	373.0	373.0	371.6	371.6	370.2	371.6	371.6	371.6	370.2	371.6
10°	375.7	374.3	371.6	373.0	370.2	371.6	371.6	371.6	370.2	371.6
12.5°	378.4	375.7	373.0	373.0	370.2	370.2	370.2	370.2	367.6	368.9
15°	381.2	378.4	373.0	373.0	370.2	370.2	368.9	368.9	366.2	367.6
17.5°	383.8	379.8	374.3	373.0	368.9	370.2	370.2	368.9	367.6	367.6
20°	387.9	383.8	379.8	378.4	374.3	375.7	374.3	373.0	370.2	371.6
22.5°	396.2	392.0	385.2	383.8	379.8	379.8	377.1	375.7	373.0	373.0
25°	409.8	401.5	392.0	387.9	382.5	381.2	378.4	375.7	373.0	373.0
27.5°	426.0	409.8	396.2	390.7	385.2	383.8	378.4	375.7	371.6	373.0
30°	441.0	420.6	401.5	392.0	386.6	385.2	379.8	377.1	371.6	373.0
32.5°	452.0	430.1	407.0	393.4	386.6	383.8	378.4	375.7	370.2	371.6
35°	464.2	438.4	412.4	396.2	387.9	385.2	378.4	374.3	368.9	368.9
37.5°	472.3	443.8	416.5	397.4	386.6	382.5	375.7	371.6	366.2	366.2
40°	475.1	445.1	416.5	397.4	385.2	379.8	371.6	366.2	360.7	360.7
42.5°	475.1	441.0	412.4	393.4	381.2	374.3	364.8	359.3	354.0	354.0
45°	466.9	431.5	402.9	383.8	373.0	364.8	354.0	348.5	343.0	343.0
47.5°	450.6	416.5	387.9	370.2	359.3	352.6	340.3	334.9	329.4	329.4
50°	426.0	393.4	366.2	348.5	339.0	333.5	319.9	314.4	306.3	306.3
52.5°	390.7	360.7	336.2	319.9	310.4	304.9	292.7	284.5	279.1	279.1
55°	345.7	319.9	295.4	280.4	272.2	268.2	257.3	250.5	246.4	245.0
57.5°	289.9	268.2	249.1	238.2	231.4	227.4	211.0	197.4	189.2	187.9
60°	232.7	213.7	198.8	179.7	174.2	175.6	174.2	172.9	171.5	171.5
62.5°	176.9	160.6	159.3	160.6	157.9	157.9	155.2	152.5	151.1	149.7
65°	141.6	140.2	138.8	137.5	136.1	136.1	133.4	130.7	128.0	128.0
67.5°	121.1	119.8	117.1	117.1	114.4	113.0	111.6	108.9	106.1	106.1
70°	102.1	99.4	96.6	95.3	92.5	92.5	91.2	89.9	87.1	87.1
72.5°	84.4	81.7	78.9	77.6	76.3	74.9	73.5	72.2	70.8	69.4
75°	66.7	65.3	62.7	61.3	59.9	59.9	58.6	57.2	55.8	54.4
77.5°	51.7	50.3	49.0	47.7	46.3	46.3	44.9	43.6	43.6	42.2
80°	39.5	38.1	36.7	35.4	34.1	34.1	32.7	32.7	31.3	31.3
82.5°	28.6	27.2	25.9	25.9	24.5	24.5	23.1	21.7	21.7	20.5
85°	20.5	19.1	17.7	16.3	15.0	15.0	13.6	13.6	12.2	12.2
87.5°	12.2	10.9	10.9	9.5	9.5	9.5	9.5	8.1	8.1	8.1
90°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.7	2.7	2.7
92.5°	4.1	5.5	4.1	5.5	5.5	4.1	5.5	5.5	5.5	4.1
95°	17.7	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1
97.5°	51.7	49.0	43.6	40.8	40.8	38.1	36.7	35.4	35.4	32.7
100°	118.4	107.5	95.3	91.2	89.9	85.8	80.3	78.9	78.9	74.9
102.5°	189.2	168.8	149.7	140.2	137.5	132.1	123.9	121.1	122.5	117.1
105°	257.3	228.7	200.1	187.9	182.4	174.2	163.3	160.6	159.3	153.8
107.5°	325.4	284.5	249.1	232.7	224.6	215.1	201.5	196.0	193.3	187.9
110°	383.8	336.2	295.4	272.2	262.7	251.8	235.5	227.4	224.6	217.8



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CATALOG NUMBER: ShSe-TRAP-2-L35-80-UNV-STD

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	431.5	378.4	333.5	306.3	294.0	281.8	264.1	253.2	247.7	242.3
115°	466.9	411.1	364.8	333.5	319.9	306.3	285.8	273.6	265.4	261.3
117.5°	491.4	432.9	385.2	352.6	337.6	324.0	300.8	285.8	277.7	272.2
120°	505.0	446.5	398.8	363.5	347.1	333.5	309.0	294.0	284.5	279.1
122.5°	509.1	450.6	404.3	367.6	349.8	336.2	313.1	296.8	288.6	283.2
125°	505.0	447.9	401.5	364.8	347.1	332.1	309.0	295.4	287.2	283.2
127.5°	494.2	439.6	394.8	358.0	340.3	326.7	302.2	289.9	281.8	277.7
130°	475.1	424.7	381.2	345.7	328.0	314.4	292.7	280.4	273.6	270.9
132.5°	454.6	405.7	364.8	332.1	314.4	299.4	281.8	269.6	262.7	260.0
135°	427.4	382.5	344.4	311.8	295.4	284.5	268.2	257.3	250.5	247.7
137.5°	397.4	356.6	322.6	291.3	277.7	268.2	253.2	242.3	236.9	235.5
140°	366.2	329.4	295.4	270.9	258.6	250.5	238.2	227.4	221.9	220.5
142.5°	333.5	298.1	272.2	250.5	241.0	232.7	221.9	212.4	208.3	206.9
145°	298.1	270.9	249.1	231.4	223.2	216.4	206.9	198.8	194.7	193.3
147.5°	265.4	243.6	227.4	213.7	205.5	200.1	193.3	186.5	182.4	181.0
150°	236.9	219.1	206.9	194.7	189.2	185.2	178.3	172.9	170.2	168.8
152.5°	209.6	196.0	186.5	176.9	171.5	168.8	164.7	159.3	156.6	157.9
155°	187.9	176.9	168.8	162.0	157.9	155.2	151.1	147.0	145.7	145.7
157.5°	168.8	159.3	153.8	148.3	144.3	143.0	140.2	136.1	136.1	136.1
160°	152.5	145.7	141.6	136.1	134.7	132.1	130.7	128.0	126.6	128.0
162.5°	140.2	134.7	132.1	128.0	125.2	123.9	122.5	119.8	119.8	121.1
165°	129.3	125.2	123.9	119.8	118.4	118.4	117.1	114.4	114.4	115.7
167.5°	121.1	118.4	117.1	114.4	113.0	113.0	111.6	111.6	111.6	111.6
170°	114.4	111.6	111.6	110.3	108.9	108.9	108.9	107.5	108.9	108.9
172.5°	108.9	107.5	107.5	107.5	106.1	106.1	106.1	106.1	106.1	107.5
175°	106.1	104.8	106.1	104.8	104.8	104.8	104.8	104.8	104.8	106.1
177.5°	104.8	103.5	104.8	103.5	103.5	104.8	104.8	103.5	103.5	104.8
180°	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5

(END OF REPORT)