

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: P316052

Luminaire Tested: **ShSe-BOX-2-L40-80-UNV-STD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P316052  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1811-037-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: ShSe-BOX-2-L40-80-UNV-STD  
Description: SHAPER SENSE SQUARE  
LIGHT LEVEL 2  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

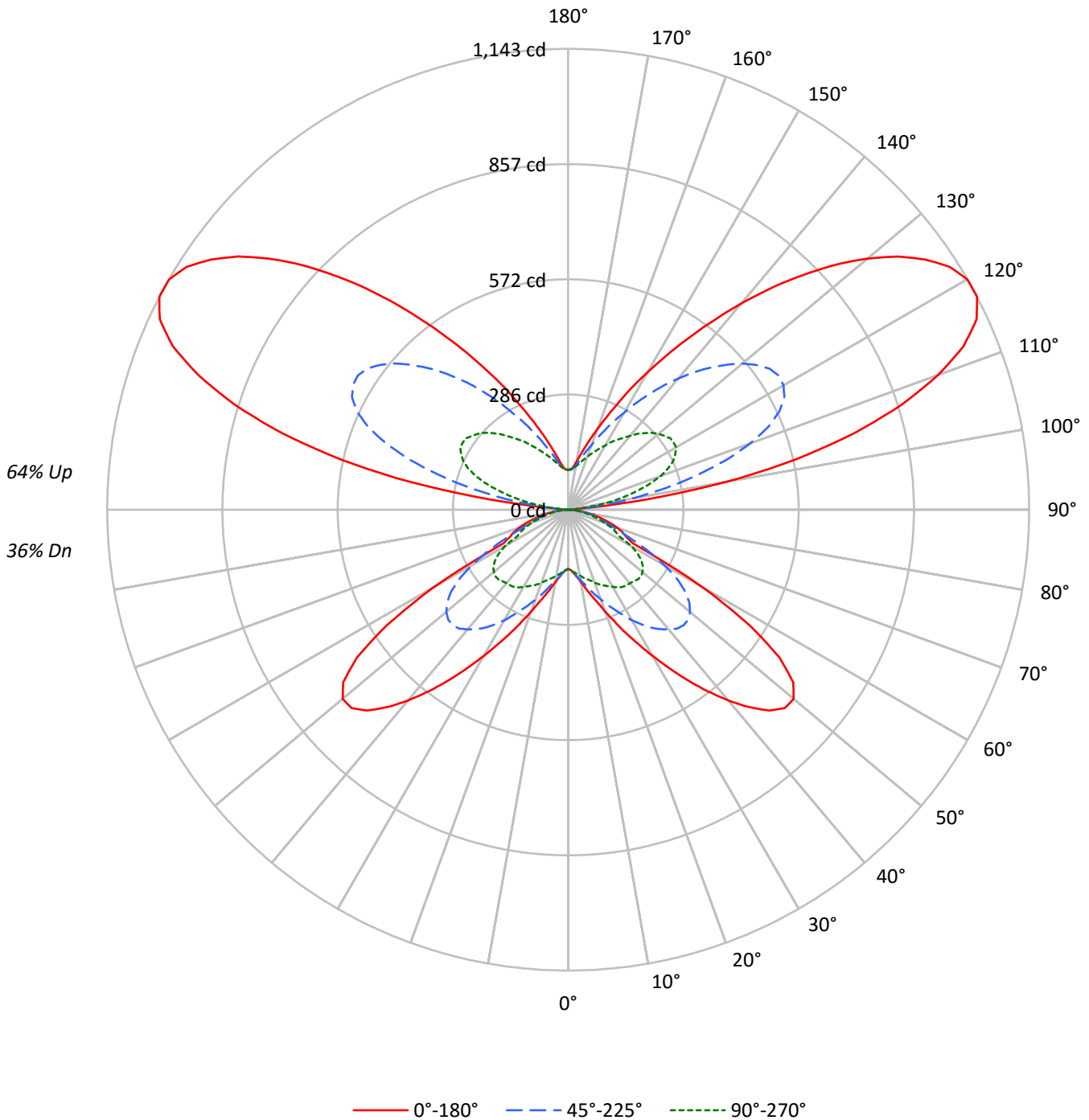
Lumens per Lamp: N/A  
Luminaire Lumens: 3873.5 lumens  
Efficiency: N/A  
Efficacy: 99.8 lumens/watt  
Spacing Criteria (0/90/45): 3.21 / 2.21 / 2.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Semi-Indirect

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: P316052  
CATALOG NUMBER: ShSe-BOX-2-L40-80-UNV-STD

### Luminous Intensity Polar Plot





TEST NUMBER: P316052

CATALOG NUMBER: ShSe-BOX-2-L40-80-UNV-STD

**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	104	104	104	104	94	94	94	94	75	75	75	59	59	59	43	43	43	36
1	94	90	86	83	85	82	78	75	66	63	61	51	50	48	38	37	36	30
2	86	78	72	67	77	71	65	61	57	53	50	44	42	40	33	31	29	24
3	78	68	61	55	70	62	55	50	50	45	41	39	35	33	28	26	24	20
4	70	60	52	45	63	54	47	42	43	38	34	34	30	27	25	22	20	16
5	64	52	44	38	58	48	40	35	38	33	29	30	26	23	22	19	17	13
6	59	47	38	32	53	42	35	30	34	29	25	26	22	19	19	17	14	11
7	54	42	33	28	48	38	31	26	30	25	21	24	20	17	17	14	12	9
8	50	37	29	24	45	34	27	22	27	22	18	21	17	14	16	13	11	8
9	46	34	26	21	41	31	24	19	25	20	16	19	15	13	14	11	9	7
10	43	31	23	18	38	28	21	17	23	17	14	18	14	11	13	10	8	6

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	396	396	396
5°	426	422	419
10°	497	486	453
15°	611	570	495
20°	769	678	551
25°	1000	814	615
30°	1300	984	685
35°	1695	1172	768
40°	2169	1362	836
45°	2681	1541	931
50°	3055	1651	1007
55°	2997	1662	1041
60°	2086	1482	971
65°	1012	1115	826
70°	1009	841	768
75°	918	778	667
80°	787	683	580
85°	577	494	454



TEST NUMBER: P316052

CATALOG NUMBER: ShSe-BOX-2-L40-80-UNV-STD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	15.5	0.4
10°-20°	58.4	1.5
20°-30°	129.0	3.3
30°-40°	232.3	6.0
40°-50°	338.9	8.7
50°-60°	342.8	8.8
60°-70°	169.1	4.4
70°-80°	81.1	2.1
80°-90°	19.8	0.5
90°-100°	66.2	1.7
100°-110°	420.3	10.9
110°-120°	630.7	16.3
120°-130°	580.3	15.0
130°-140°	405.4	10.5
140°-150°	227.2	5.9
150°-160°	105.7	2.7
160°-170°	40.8	1.1
170°-180°	10.1	0.3
0°-30°	202.9	5.2
0°-40°	435.2	11.2
0°-60°	1116.8	28.8
0°-90°	1386.7	35.8
90°-120°	1117.2	28.8
90°-150°	2330.1	60.2
90°-180°	2487.0	64.2
0°-180°	3873.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	147	147	147	147	147	
5°	158	158	156	155	155	16
15°	219	218	204	187	178	64
25°	337	325	274	229	207	159
35°	516	472	357	269	234	327
45°	704	600	405	282	245	538
55°	639	536	354	250	222	543
65°	159	148	175	134	130	183
75°	88	84	75	70	64	94
85°	19	17	16	15	15	22
90°	0	0	0	1	1	2
95°	17	20	25	21	17	112
105°	735	619	330	211	174	757
115°	1117	953	578	357	287	1086
125°	1081	926	610	380	309	964
135°	823	715	498	330	269	640
145°	519	464	349	247	211	332
155°	290	267	221	176	160	139
165°	159	151	138	124	123	47
175°	102	100	100	100	102	10
180°	99	99	99	99	99	



TEST NUMBER: P316052

CATALOG NUMBER: ShSe-BOX-2-L40-80-UNV-STD

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1
2.5°	149.7	151.1	149.7	149.7	149.7	149.7	149.7	149.7	149.7	148.3	149.7
5°	157.8	159.0	157.8	157.8	157.8	157.8	157.8	157.8	159.0	157.8	156.4
7.5°	168.5	169.7	168.5	168.5	169.7	169.7	168.5	168.5	168.5	167.1	167.1
10°	181.8	183.1	181.8	181.8	183.1	183.1	181.8	180.4	180.4	177.8	177.8
12.5°	199.2	200.5	199.2	199.2	199.2	199.2	197.8	196.5	195.2	191.1	189.8
15°	219.2	220.6	219.2	219.2	219.2	217.9	216.6	213.8	211.2	207.2	204.5
17.5°	240.6	243.3	243.3	241.9	240.6	239.3	238.0	233.9	229.9	224.5	220.6
20°	268.7	270.0	270.0	267.3	266.0	264.7	262.0	256.6	251.3	243.3	236.6
22.5°	299.4	300.7	300.7	296.8	294.0	292.8	288.7	280.7	274.0	264.7	255.3
25°	336.8	338.2	336.8	332.8	328.8	324.8	320.8	310.1	298.1	286.1	274.0
27.5°	374.2	378.3	375.6	370.2	364.9	359.5	354.2	339.5	326.1	310.1	294.0
30°	418.4	421.1	418.4	411.7	403.7	395.6	389.0	368.9	352.8	334.2	316.8
32.5°	465.2	469.2	465.2	455.8	442.5	433.1	423.7	401.0	379.6	358.2	336.8
35°	515.9	518.7	514.6	502.6	485.2	471.8	459.8	433.1	407.7	380.9	356.9
37.5°	566.8	569.4	564.1	549.4	525.3	510.6	495.9	462.5	433.1	402.3	373.0
40°	617.5	621.5	614.9	593.5	565.4	545.4	529.4	490.6	455.8	421.1	387.6
42.5°	664.3	668.4	660.3	632.2	598.9	576.1	558.7	514.6	474.5	435.8	399.7
45°	704.4	707.1	697.7	664.3	625.6	600.1	580.1	532.0	486.6	443.8	405.0
47.5°	728.5	729.8	720.5	681.7	640.3	613.5	590.8	540.1	491.9	446.4	403.7
50°	729.8	731.2	720.5	679.1	636.3	609.6	588.2	536.0	485.2	438.4	394.3
52.5°	703.1	703.1	692.4	652.3	612.2	585.4	564.1	515.9	467.8	422.4	378.3
55°	638.9	640.3	629.6	593.5	561.4	536.0	519.9	477.2	433.1	393.0	354.2
57.5°	533.3	537.3	529.4	508.0	482.5	465.2	453.2	419.7	386.3	354.2	320.8
60°	387.6	391.6	393.0	382.3	378.3	370.2	363.5	346.2	326.1	302.1	275.4
62.5°	180.4	189.8	208.5	228.6	250.0	256.6	258.0	260.7	254.0	243.3	225.9
65°	159.0	157.8	156.4	153.7	151.1	148.3	149.7	172.4	184.5	184.5	175.1
67.5°	145.7	145.7	144.3	141.7	140.4	137.6	136.4	132.3	128.3	135.0	132.3
70°	128.3	128.3	126.9	124.3	123.0	121.6	120.3	117.6	113.6	110.9	106.9
72.5°	108.3	108.3	106.9	105.6	104.3	102.9	101.6	100.2	96.2	94.9	90.9
75°	88.3	88.3	86.9	86.9	85.5	84.2	82.9	81.6	80.2	77.6	74.8
77.5°	69.5	69.5	68.1	66.9	66.9	65.5	65.5	64.2	62.8	61.5	58.8
80°	50.8	50.8	49.5	49.5	48.1	48.1	48.1	46.8	45.5	45.5	44.1
82.5°	34.8	33.4	33.4	32.1	32.1	32.1	32.1	32.1	30.7	30.7	29.4
85°	18.7	18.7	17.4	18.7	17.4	17.4	17.4	17.4	17.4	16.0	16.0
87.5°	5.3	5.3	5.3	5.3	5.3	5.3	4.0	5.3	5.3	5.3	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	8.0	9.3	9.3	9.3	9.3	9.3	9.3	9.3	8.0	9.3	9.3
95°	17.4	18.7	18.7	18.7	18.7	20.0	20.0	22.7	22.7	25.4	25.4
97.5°	192.5	199.2	197.8	169.7	156.4	152.4	143.0	124.3	110.9	99.0	85.5
100°	399.7	417.0	410.4	359.5	334.2	322.1	302.1	256.6	224.5	193.8	163.1
102.5°	578.7	593.5	584.1	528.0	494.6	477.2	449.1	393.0	343.5	294.0	245.9
105°	735.1	748.5	733.8	676.3	641.6	618.9	590.8	518.7	454.5	393.0	330.2
107.5°	867.5	880.8	860.8	806.0	768.6	743.2	704.4	628.2	556.1	482.5	410.4
110°	975.8	985.1	966.4	911.6	870.1	842.1	803.4	720.5	638.9	557.4	479.9



TEST NUMBER: P316052

CATALOG NUMBER: ShSe-BOX-2-L40-80-UNV-STD

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	1061.3	1062.6	1042.6	989.1	945.0	911.6	874.1	790.0	701.7	617.5	537.3
115°	1117.4	1110.7	1089.3	1038.6	990.5	953.1	914.3	835.4	745.8	660.3	577.5
117.5°	1142.8	1132.1	1108.1	1060.0	1011.9	973.1	933.0	855.5	771.3	687.0	604.2
120°	1142.8	1126.8	1101.4	1056.0	1009.1	970.4	931.7	855.5	780.6	699.1	616.2
122.5°	1121.4	1104.1	1078.6	1034.6	991.8	954.4	918.3	846.1	775.3	697.7	618.9
125°	1081.4	1064.0	1040.0	999.8	961.0	926.3	894.3	826.0	756.5	683.0	609.6
127.5°	1031.9	1014.5	991.8	954.4	918.3	886.2	855.5	793.9	729.8	658.9	589.4
130°	969.1	951.7	931.7	898.2	866.2	835.4	808.7	752.5	693.7	626.9	564.1
132.5°	899.6	884.8	866.2	835.4	806.0	777.9	755.2	704.4	652.3	592.2	532.0
135°	823.4	808.7	793.9	767.2	740.5	715.1	696.4	651.0	605.5	550.7	498.5
137.5°	745.8	736.5	719.1	696.4	673.7	651.0	634.9	594.8	556.1	508.0	462.5
140°	667.0	656.3	645.6	625.6	605.5	586.8	573.4	540.1	505.3	465.2	425.1
142.5°	590.8	581.5	573.4	556.1	540.1	522.7	512.0	483.9	457.1	422.4	387.6
145°	518.7	513.3	503.9	491.9	478.5	463.8	454.5	430.4	407.7	378.3	348.9
147.5°	453.2	447.8	441.1	430.4	421.1	409.0	399.7	382.3	362.3	338.2	314.2
150°	393.0	389.0	383.7	375.6	367.6	356.9	351.6	336.8	320.8	299.4	278.0
152.5°	340.9	336.8	332.8	326.1	319.5	311.4	304.7	291.4	279.4	264.7	248.6
155°	290.0	286.1	283.3	278.0	274.0	267.3	263.3	254.0	244.6	233.9	220.6
157.5°	248.6	245.9	244.6	240.6	236.6	231.2	228.6	221.9	215.2	205.9	195.2
160°	213.8	212.5	211.2	207.2	204.5	200.5	197.8	192.5	188.5	181.8	172.4
162.5°	184.5	183.1	181.8	179.1	177.8	173.8	172.4	168.5	164.4	160.4	153.7
165°	159.0	157.8	156.4	155.0	153.7	151.1	149.7	147.1	145.7	141.7	137.6
167.5°	139.0	137.6	136.4	136.4	135.0	132.3	132.3	129.7	129.7	126.9	123.0
170°	121.6	121.6	120.3	120.3	120.3	117.6	117.6	116.3	116.3	115.0	112.3
172.5°	109.6	109.6	108.3	108.3	108.3	106.9	106.9	106.9	106.9	105.6	104.3
175°	101.6	101.6	101.6	101.6	101.6	100.2	101.6	101.6	101.6	101.6	100.2
177.5°	99.0	97.6	97.6	97.6	99.0	97.6	99.0	99.0	99.0	99.0	99.0
180°	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0



TEST NUMBER: P316052

CATALOG NUMBER: ShSe-BOX-2-L40-80-UNV-STD

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1
2.5°	149.7	149.7	149.7	149.7	149.7	149.7	149.7	149.7	149.7	151.1
5°	156.4	156.4	155.0	155.0	155.0	153.7	155.0	153.7	153.7	155.0
7.5°	165.7	164.4	163.1	161.7	161.7	160.4	160.4	159.0	159.0	160.4
10°	175.1	173.8	172.4	169.7	168.5	168.5	167.1	164.4	164.4	165.7
12.5°	187.1	184.5	181.8	179.1	177.8	176.4	175.1	171.1	171.1	172.4
15°	200.5	196.5	193.8	188.5	187.1	185.8	183.1	179.1	177.8	177.8
17.5°	213.8	208.5	204.5	199.2	197.8	195.2	192.5	187.1	184.5	184.5
20°	229.9	223.2	216.6	209.9	207.2	205.9	201.8	195.2	192.5	192.5
22.5°	245.9	238.0	229.9	221.9	217.9	215.2	209.9	204.5	200.5	200.5
25°	263.3	252.6	243.3	232.6	228.6	225.9	219.2	212.5	207.2	207.2
27.5°	279.4	267.3	255.3	244.6	239.3	235.2	228.6	220.6	215.2	213.8
30°	296.8	282.1	268.7	255.3	250.0	245.9	238.0	228.6	223.2	220.6
32.5°	315.4	295.4	280.7	266.0	259.3	255.3	245.9	236.6	229.9	228.6
35°	332.8	312.8	291.4	275.4	268.7	263.3	254.0	243.3	236.6	233.9
37.5°	346.2	323.5	302.1	283.3	276.7	270.0	259.3	247.3	239.3	236.6
40°	358.2	332.8	310.1	287.4	279.4	272.6	260.7	248.6	240.6	238.0
42.5°	364.9	336.8	312.8	288.7	280.7	274.0	263.3	252.6	244.6	240.6
45°	366.3	336.8	312.8	290.0	282.1	276.7	266.0	255.3	247.3	244.6
47.5°	363.5	334.2	311.4	288.7	280.7	275.4	264.7	255.3	247.3	244.6
50°	355.6	327.5	302.1	283.3	275.4	270.0	259.3	251.3	244.6	240.6
52.5°	340.9	315.4	290.0	272.6	264.7	260.7	251.3	243.3	238.0	233.9
55°	319.5	292.8	272.6	256.6	250.0	245.9	238.0	231.2	225.9	221.9
57.5°	288.7	266.0	248.6	235.2	229.9	225.9	219.2	213.8	208.5	204.5
60°	251.3	233.9	217.9	207.2	203.2	200.5	193.8	188.5	184.5	180.4
62.5°	209.9	196.5	184.5	175.1	171.1	167.1	159.0	149.7	147.1	141.7
65°	165.7	156.4	147.1	137.6	133.7	133.7	133.7	132.3	131.0	129.7
67.5°	126.9	121.6	121.6	123.0	121.6	123.0	120.3	119.0	117.6	115.0
70°	105.6	105.6	105.6	104.3	104.3	104.3	101.6	100.2	99.0	97.6
72.5°	89.5	88.3	88.3	86.9	85.5	85.5	84.2	82.9	81.6	80.2
75°	72.2	72.2	70.9	69.5	69.5	68.1	66.9	65.5	65.5	64.2
77.5°	56.2	56.2	54.8	53.5	53.5	53.5	52.1	52.1	50.8	50.8
80°	41.4	41.4	40.1	40.1	38.8	38.8	38.8	37.4	37.4	37.4
82.5°	28.1	28.1	26.7	26.7	26.7	26.7	25.4	25.4	25.4	25.4
85°	16.0	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
87.5°	4.0	4.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
90°	0.0	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
92.5°	9.3	9.3	9.3	10.7	10.7	10.7	9.3	9.3	9.3	9.3
95°	25.4	22.7	22.7	21.4	21.4	20.0	20.0	18.7	18.7	17.4
97.5°	81.6	72.2	66.9	62.8	61.5	58.8	56.2	54.8	53.5	50.8
100°	152.4	136.4	123.0	115.0	113.6	109.6	101.6	99.0	97.6	94.9
102.5°	225.9	199.2	179.1	165.7	163.1	157.8	144.3	140.4	137.6	135.0
105°	300.7	264.7	235.2	219.2	211.2	205.9	187.1	180.4	177.8	173.8
107.5°	371.6	326.1	287.4	264.7	256.6	250.0	227.3	217.9	213.8	211.2
110°	430.4	378.3	336.8	308.8	298.1	287.4	262.0	251.3	245.9	243.3





TEST NUMBER: P316052

CATALOG NUMBER: ShSe-BOX-2-L40-80-UNV-STD

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	479.9	422.4	378.3	346.2	332.8	320.8	292.8	279.4	271.4	268.7
115°	515.9	454.5	409.0	371.6	356.9	344.9	318.1	299.4	291.4	287.4
117.5°	540.1	477.2	427.7	389.0	373.0	359.5	332.8	316.8	306.1	299.4
120°	550.7	487.9	438.4	397.0	380.9	366.3	339.5	323.5	312.8	308.8
122.5°	553.4	491.9	442.5	401.0	383.7	368.9	342.1	326.1	315.4	310.1
125°	546.7	486.6	438.4	398.3	379.6	364.9	339.5	323.5	311.4	308.8
127.5°	533.3	477.2	430.4	390.3	373.0	358.2	332.8	316.8	304.7	300.7
130°	512.0	459.8	417.0	379.6	362.3	347.5	323.5	306.1	295.4	292.8
132.5°	485.2	438.4	398.3	363.5	348.9	335.5	311.4	294.0	283.3	282.1
135°	455.8	413.0	375.6	344.9	330.2	318.1	294.0	280.7	271.4	268.7
137.5°	425.1	386.3	352.8	323.5	310.1	298.1	276.7	264.7	256.6	255.3
140°	393.0	358.2	327.5	300.7	287.4	278.0	259.3	248.6	240.6	239.3
142.5°	359.5	330.2	300.7	278.0	267.3	258.0	241.9	232.6	225.9	224.5
145°	326.1	298.1	275.4	256.6	247.3	240.6	225.9	217.9	211.2	211.2
147.5°	292.8	271.4	252.6	236.6	228.6	221.9	209.9	203.2	199.2	199.2
150°	263.3	245.9	229.9	216.6	209.9	204.5	195.2	188.5	185.8	184.5
152.5°	235.2	221.9	208.5	197.8	192.5	187.1	179.1	175.1	172.4	172.4
155°	209.9	199.2	188.5	180.4	176.4	171.1	165.7	163.1	160.4	160.4
157.5°	188.5	179.1	171.1	164.4	160.4	157.8	152.4	151.1	149.7	149.7
160°	168.5	161.7	155.0	149.7	147.1	145.7	141.7	140.4	139.0	140.4
162.5°	149.7	145.7	140.4	136.4	135.0	133.7	132.3	131.0	131.0	131.0
165°	135.0	132.3	128.3	125.7	124.3	124.3	123.0	123.0	123.0	123.0
167.5°	121.6	120.3	117.6	116.3	116.3	116.3	115.0	116.3	115.0	115.0
170°	112.3	110.9	109.6	109.6	109.6	109.6	108.3	109.6	109.6	109.6
172.5°	104.3	104.3	104.3	104.3	104.3	104.3	104.3	105.6	104.3	104.3
175°	100.2	100.2	100.2	100.2	100.2	101.6	101.6	101.6	101.6	101.6
177.5°	99.0	99.0	99.0	99.0	99.0	100.2	100.2	100.2	100.2	100.2
180°	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0

(END OF REPORT)