

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: P123898

Luminaire Tested: **ELSG406927SN (50° BEAM - 35° TILT)**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P123898  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14002)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ELSG406927SN (50° BEAM - 35° TILT)  
Description: HALO 4 INCH RECESSED FIXTURE WITH SQUARE SATIN NICKEL TRIM,  
Light Source: (1)SURFACE MOUNT LED, 2700K CCT, 90CRI  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 620.0 lumens  
Efficiency: N/A  
Efficacy: 47.7 lumens/watt  
Spacing Criteria (0/90/45): 2.87 / 0.65 / 1.64  
Luminous Opening: Vertical Cylinder (Dia: 0.17' x H: 0.08')  
CIE Type: Direct

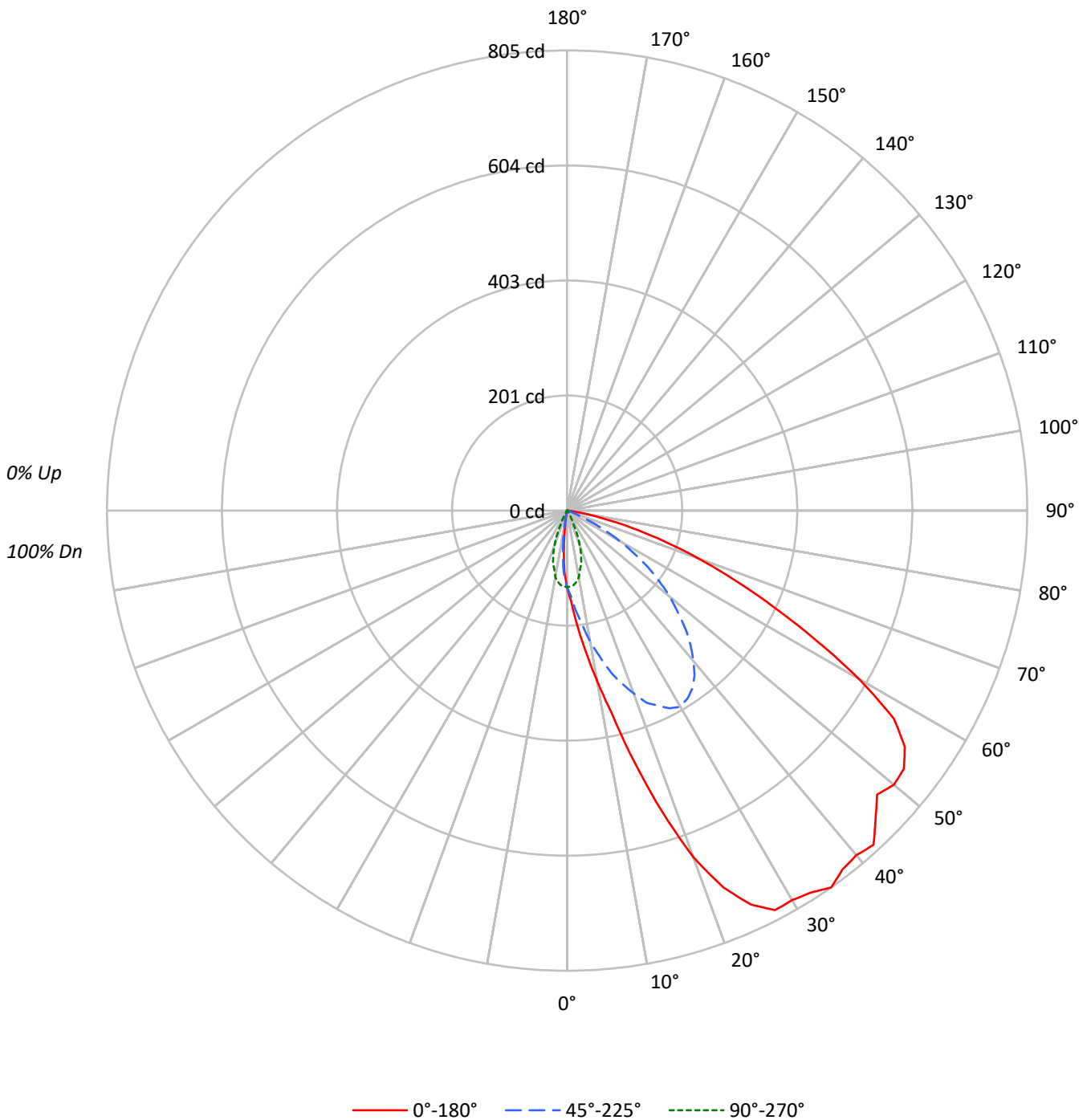
Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P123898

CATALOG NUMBER: ELSG406927SN (50° BEAM - 35° TILT)

### 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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38
7	65	51	43	36	63	51	42	36	49	42	36	48	41	36	46	40	36	34
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	29
9	56	42	34	28	55	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

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

	0°	90°	180°
0°	66310	66310	66310
5°	93968	61410	30494
10°	136345	53331	4009
15°	198889	41584	1178
20°	275116	27324	0
25°	319152	11586	0
30°	327855	3333	0
35°	335280	1500	0
40°	330388	0	0
45°	325250	0	0
50°	325584	0	0
55°	324891	0	0
60°	276977	0	0
65°	196002	0	0
70°	127511	0	0
75°	65841	0	0
80°	18118	0	0
85°	3625	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	12.5	2.0
10°-20°	44.6	7.2
20°-30°	94.4	15.2
30°-40°	130.4	21.0
40°-50°	137.7	22.2
50°-60°	116.2	18.7
60°-70°	63.5	10.2
70°-80°	19.0	3.1
80°-90°	1.6	0.3
90°-100°	0.1	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	151.5	24.4
0°-40°	282.0	45.5
0°-60°	535.8	86.4
0°-90°	619.9	100.0
90°-120°	0.1	0.0
90°-150°	0.1	0.0
90°-180°	0.0	0.0
0°-180°	620.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	134	134	134	134	134	
5°	200	175	131	84	65	22
15°	456	292	95	5	3	136
25°	760	377	28	0	0	347
35°	805	381	4	0	0	499
45°	763	293	0	0	0	591
55°	721	173	0	0	0	629
65°	397	44	0	0	0	400
75°	117	5	0	0	0	130
85°	5	2	0	0	0	9
90°	4	1	0	0	0	2
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P123898

CATALOG NUMBER: ELSG406927SN (50° BEAM - 35° TILT)

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4
2.5°	158.5	156.7	154.9	155.8	154.0	154.0	153.1	151.3	151.3	149.6	148.7
5°	200.3	195.0	195.0	192.3	190.5	187.8	186.1	182.5	179.8	175.4	172.7
7.5°	247.5	245.7	243.0	243.0	235.9	229.7	224.3	217.2	209.2	201.2	193.2
10°	302.7	302.7	298.2	293.8	286.7	279.5	270.6	258.2	246.6	233.2	219.0
12.5°	365.0	361.4	355.2	347.2	337.4	324.1	309.8	294.7	276.9	260.8	240.4
15°	455.8	448.7	439.8	426.4	407.7	384.6	362.3	338.3	315.2	292.0	267.1
17.5°	552.0	547.5	534.2	514.6	488.8	456.7	422.9	383.7	349.9	316.9	287.6
20°	645.4	639.2	625.0	603.6	568.0	527.9	483.4	432.7	383.7	340.1	302.7
22.5°	713.1	708.6	694.4	676.6	643.7	599.1	543.1	481.6	422.0	364.1	316.9
25°	760.3	753.2	741.6	719.3	691.7	649.9	588.5	520.8	444.2	376.6	320.5
27.5°	787.9	784.3	778.1	762.1	734.5	691.7	633.0	552.8	469.2	389.9	326.7
30°	787.0	787.0	787.9	787.0	769.2	722.9	664.1	576.0	484.3	396.2	327.6
32.5°	792.3	789.7	785.2	789.7	783.4	739.8	678.4	587.6	485.2	390.8	317.8
35°	804.8	799.4	791.4	788.8	788.8	747.8	686.4	590.2	480.7	381.0	307.1
37.5°	791.4	796.8	792.3	781.6	783.4	744.3	682.8	581.3	463.8	365.9	291.1
40°	787.0	789.7	780.8	771.9	771.9	733.6	669.5	556.4	438.0	343.6	269.7
42.5°	793.2	781.6	766.5	768.3	761.2	720.2	647.2	526.1	407.7	319.6	249.3
45°	762.9	753.2	754.0	764.7	746.0	698.9	607.2	484.3	374.8	292.9	225.2
47.5°	735.4	740.7	743.4	740.7	713.1	660.6	552.8	436.2	334.7	261.7	195.9
50°	746.0	742.5	738.9	722.0	689.9	613.4	500.3	389.0	302.7	234.1	174.5
52.5°	742.5	738.9	722.9	696.2	643.7	552.0	437.1	341.0	270.6	203.0	143.3
55°	721.1	714.0	692.6	651.7	575.1	478.1	377.5	296.5	231.5	172.7	113.1
57.5°	677.5	664.1	631.2	570.7	492.3	400.6	321.4	255.5	195.0	138.0	82.8
60°	590.2	576.9	541.3	481.6	408.6	336.5	274.2	215.4	160.2	105.1	54.3
62.5°	490.5	478.1	442.5	392.6	336.5	283.1	228.8	176.3	122.9	73.0	30.3
65°	397.1	385.5	358.8	321.4	280.4	235.0	187.0	138.0	88.1	44.5	12.5
67.5°	316.0	308.0	291.1	263.5	228.8	187.8	144.2	97.0	55.2	21.4	6.2
70°	243.0	239.5	227.9	208.3	178.1	141.6	101.5	63.2	27.6	8.0	4.5
72.5°	175.4	173.6	167.4	154.0	130.0	97.9	65.0	33.8	10.7	5.3	4.5
75°	116.6	115.7	112.2	100.6	82.8	61.4	35.6	11.6	3.6	5.3	4.5
77.5°	67.7	65.9	65.9	59.6	47.2	32.0	11.6	6.2	4.5	2.7	2.7
80°	29.4	29.4	29.4	26.7	18.7	9.8	5.3	1.8	0.9	0.9	0.9
82.5°	9.8	8.9	8.9	8.9	7.1	5.3	4.5	2.7	2.7	1.8	0.9
85°	5.3	5.3	5.3	5.3	4.5	3.6	3.6	2.7	1.8	1.8	0.9
87.5°	4.5	2.7	3.6	2.7	2.7	1.8	2.7	1.8	0.9	1.8	0.9
90°	3.6	1.8	1.8	2.7	1.8	1.8	0.9	1.8	0.0	0.9	0.9
92.5°	0.9	0.9	0.9	0.0	0.9	0.0	0.0	0.0	0.9	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P123898

CATALOG NUMBER: ELSG406927SN (50° BEAM - 35° TILT)

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P123898

CATALOG NUMBER: ELSG406927SN (50° BEAM - 35° TILT)

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4
2.5°	146.0	146.0	143.3	140.7	138.9	137.1	134.4	132.6	130.9	129.1	127.3
5°	167.4	162.9	158.5	152.2	147.8	142.4	138.9	130.9	124.6	119.3	114.8
7.5°	189.6	178.1	169.1	161.1	153.1	145.1	136.2	125.5	115.7	105.9	97.0
10°	207.4	193.2	180.7	167.4	157.6	145.1	132.6	118.4	105.1	91.7	80.1
12.5°	220.8	203.0	185.2	170.0	153.1	138.9	122.0	104.2	86.4	72.1	57.0
15°	242.1	218.1	196.7	173.6	156.7	138.0	116.6	95.3	74.8	56.1	40.1
17.5°	256.4	229.7	199.4	174.5	153.1	130.0	105.9	81.0	57.9	40.1	23.1
20°	268.0	232.4	200.3	170.9	147.8	122.0	91.7	64.1	41.0	23.1	10.7
22.5°	276.0	235.0	199.4	167.4	138.9	107.7	76.6	49.0	24.9	11.6	8.9
25°	273.3	229.7	189.6	154.9	123.7	88.1	57.0	27.6	8.0	2.7	0.9
27.5°	274.2	226.1	185.2	148.7	113.1	74.8	41.8	16.9	6.2	2.7	3.6
30°	272.4	220.8	176.3	136.2	96.1	59.6	27.6	8.0	4.5	6.2	2.7
32.5°	260.0	207.4	162.0	120.2	77.5	39.2	11.6	3.6	2.7	0.9	0.9
35°	247.5	194.1	148.7	102.4	59.6	24.0	7.1	3.6	0.9	2.7	0.9
37.5°	229.7	177.2	130.0	81.9	41.0	10.7	3.6	1.8	1.8	0.9	0.0
40°	209.2	156.7	106.8	60.5	22.3	3.6	1.8	0.0	0.0	0.0	0.0
42.5°	190.5	136.2	86.4	41.0	9.8	2.7	1.8	0.9	0.9	0.0	0.0
45°	167.4	112.2	63.2	22.3	5.3	1.8	0.9	0.0	0.0	0.0	1.8
47.5°	139.8	85.5	39.2	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	116.6	64.1	22.3	4.5	2.7	0.0	1.8	0.0	0.0	0.0	0.0
52.5°	87.2	39.2	8.0	3.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0
55°	61.4	20.5	5.3	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	36.5	8.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	16.9	4.5	1.8	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	7.1	3.6	1.8	1.8	0.9	0.9	0.0	0.0	0.0	0.0	0.0
65°	5.3	2.7	1.8	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.9
67.5°	3.6	2.7	1.8	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0
70°	1.8	1.8	0.9	0.9	0.0	0.9	0.0	0.0	0.0	0.0	0.0
72.5°	2.7	2.7	1.8	0.9	0.0	0.9	0.9	0.0	0.0	0.0	0.0
75°	1.8	0.9	1.8	0.0	0.9	0.0	0.9	0.0	0.0	0.0	0.0
77.5°	1.8	0.9	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	1.8	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.8	0.9	1.8	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
90°	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P123898

CATALOG NUMBER: ELSG406927SN (50° BEAM - 35° TILT)

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P123898

CATALOG NUMBER: ELSG406927SN (50° BEAM - 35° TILT)

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4
2.5°	124.6	122.0	122.0	119.3	117.5	116.6	115.7	112.2	111.3	110.4	110.4
5°	108.6	103.3	97.0	92.6	88.1	83.7	80.1	78.3	73.0	69.4	67.7
7.5°	88.1	79.2	71.2	64.1	55.2	51.6	43.6	40.1	35.6	32.9	29.4
10°	66.8	57.0	46.3	36.5	29.4	24.0	18.7	15.1	13.4	11.6	9.8
12.5°	41.8	28.5	21.4	14.2	7.1	5.3	5.3	2.7	1.8	1.8	0.9
15°	26.7	15.1	9.8	7.1	7.1	5.3	4.5	3.6	3.6	2.7	2.7
17.5°	12.5	8.0	6.2	3.6	3.6	3.6	2.7	3.6	5.3	2.7	1.8
20°	5.3	4.5	3.6	2.7	1.8	3.6	1.8	0.9	0.9	0.9	0.9
22.5°	5.3	4.5	3.6	4.5	7.1	0.9	2.7	0.9	0.9	0.0	0.9
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.5°	0.9	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	1.8	1.8	0.0	0.0	0.9	0.0	0.0	0.0	2.7	1.8	0.0
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	5.3	0.0	0.9	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.9	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P123898

CATALOG NUMBER: ELSG406927SN (50° BEAM - 35° TILT)

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P123898

CATALOG NUMBER: ELSG406927SN (50° BEAM - 35° TILT)

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	134.4	134.4	134.4	134.4
2.5°	109.5	108.6	109.5	107.7
5°	68.5	65.0	65.0	65.0
7.5°	28.5	26.7	25.8	26.7
10°	9.8	8.9	8.9	8.9
12.5°	1.8	0.9	0.9	0.9
15°	2.7	2.7	2.7	2.7
17.5°	1.8	0.9	1.8	0.9
20°	0.0	0.0	0.0	0.0
22.5°	0.9	0.9	0.0	0.0
25°	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0
30°	0.9	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0



TEST NUMBER: P123898

CATALOG NUMBER: ELSG406927SN (50° BEAM - 35° TILT)

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
112.5°	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0

(END OF REPORT)