

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: P123837

Luminaire Tested: **ELSG406940TBZ (25° BEAM - 35° TILT)**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P123837  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13998)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ELSG406940TBZ (25° BEAM - 35° TILT)  
Description: HALO 4 INCH RECESSED FIXTURE WITH SQUARE TUSCAN BRONZE TRIM,  
Light Source: (1)SURFACE MOUNT LED, 4000K CCT, 90CRI  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 820.0 lumens  
Efficiency: N/A  
Efficacy: 63.1 lumens/watt  
Spacing Criteria (0/90/45): 2.3 / 0.76 / 1.39  
Luminous Opening: Vertical Cylinder (Dia: 0.17' x H: 0.08')  
CIE Type: Direct

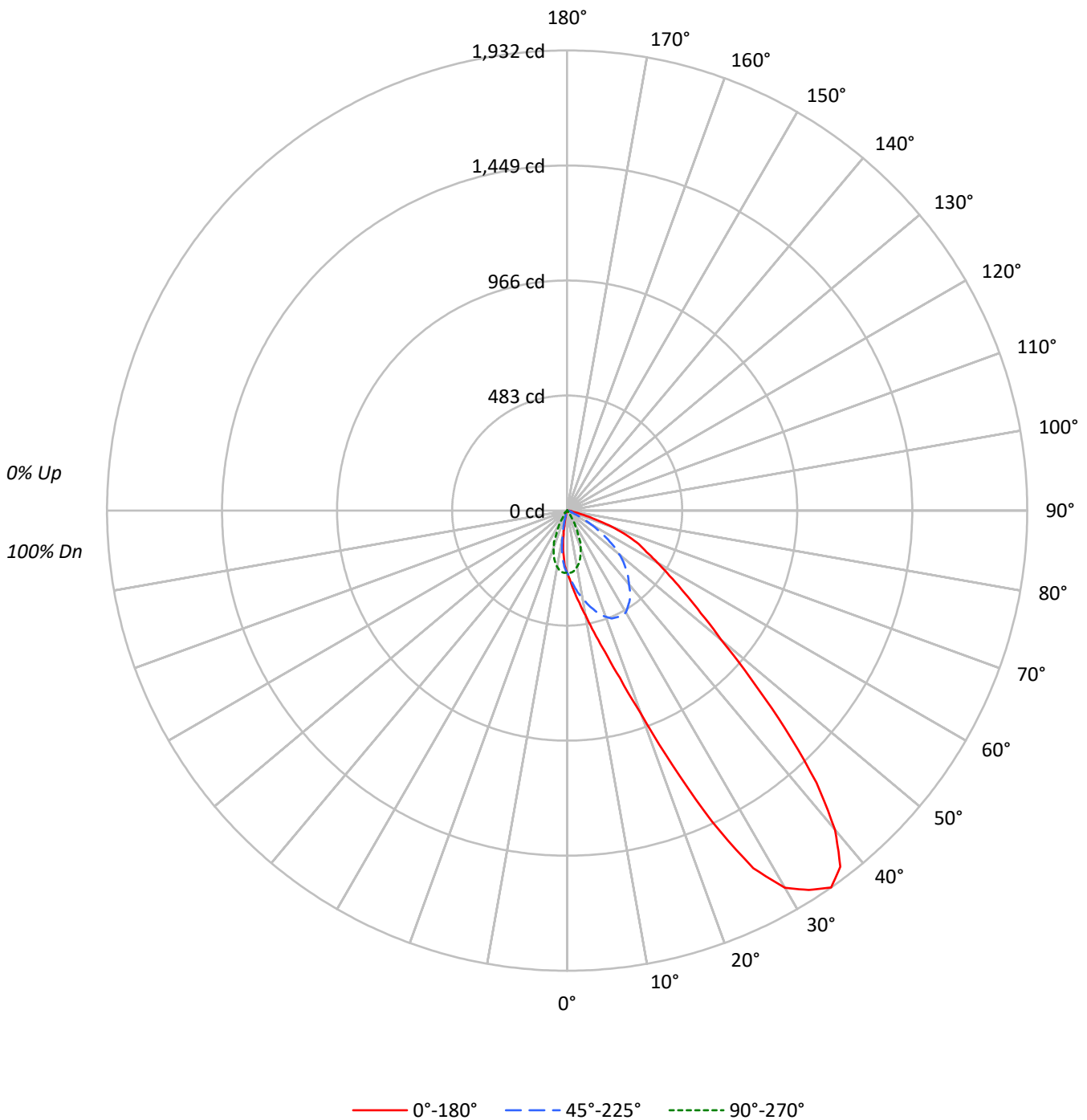
Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P123837

CATALOG NUMBER: ELSG406940TBZ (25° BEAM - 35° TILT)

### Luminous Intensity Polar Plot





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CATALOG NUMBER: ELSG406940TBZ (25° BEAM - 35° TILT)

**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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	107	103	100	108	105	101	98	100	98	95	97	94	93	93	91	90				88	
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78				76	
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68				66	
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59				57	
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52				50	
6	74	61	53	47	72	60	53	47	59	52	46	57	51	46	55	50	46				44	
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41				39	
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36				34	
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33				31	
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	29				28	

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

	0°	90°	180°
0°	128229	128229	128229
5°	160256	121412	84116
10°	201927	107878	30179
15°	267920	91110	7942
20°	387055	70633	5328
25°	605058	44790	0
30°	761732	23621	0
35°	804747	8999	0
40°	734242	6675	0
45°	551121	4818	0
50°	368530	2968	0
55°	270510	1036	0
60°	205597	0	0
65°	163573	543	0
70°	104842	0	577
75°	40995	0	0
80°	11216	0	0
85°	10875	0	0



TEST NUMBER: P123837

CATALOG NUMBER: ELSG406940TBZ (25° BEAM - 35° TILT)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	24.3	3.0
10°-20°	72.2	8.8
20°-30°	149.7	18.3
30°-40°	213.8	26.1
40°-50°	176.2	21.5
50°-60°	108.2	13.2
60°-70°	57.4	7.0
70°-80°	14.9	1.8
80°-90°	2.9	0.4
90°-100°	0.3	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°	246.2	30.0
0°-40°	460.1	56.1
0°-60°	744.5	90.8
0°-90°	819.7	100.0
90°-120°	0.3	0.0
90°-150°	0.3	0.0
90°-180°	0.0	0.0
0°-180°	820.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	260	260	260	260	260	
5°	342	316	259	203	179	36
15°	614	430	209	36	18	187
25°	1441	494	107	7	0	668
35°	1932	458	22	0	0	1176
45°	1293	351	11	0	0	994
55°	600	203	2	0	0	548
65°	331	42	1	0	0	320
75°	73	15	0	0	0	90
85°	16	3	0	0	0	13
90°	8	0	0	0	0	4
95°	1	0	0	0	0	1
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: P123837

CATALOG NUMBER: ELSG406940TBZ (25° BEAM - 35° TILT)

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	259.9	259.9	259.9	259.9	259.9	259.9	259.9	259.9	259.9	259.9	259.9
2.5°	292.8	289.4	290.6	289.4	288.3	287.1	287.1	286.0	284.9	284.9	280.3
5°	341.6	341.6	340.5	338.2	334.8	331.4	331.4	324.6	321.2	315.5	312.1
7.5°	389.3	384.8	383.6	381.4	377.9	373.4	367.7	360.9	354.1	347.3	338.2
10°	448.3	444.9	441.5	434.7	427.9	417.7	406.3	395.0	383.6	372.3	360.9
12.5°	523.2	517.6	511.9	502.8	490.3	474.4	457.4	439.2	421.1	404.1	382.5
15°	614.0	610.6	598.1	582.2	560.7	538.0	511.9	483.5	456.3	430.2	400.6
17.5°	736.6	725.3	708.2	679.9	644.7	609.5	568.6	528.9	491.4	457.4	418.8
20°	908.0	888.7	853.5	803.6	744.5	685.5	627.6	573.2	522.1	474.4	431.3
22.5°	1155.4	1127.0	1063.5	969.3	866.0	772.9	686.7	614.0	549.3	490.3	439.2
25°	1441.4	1401.7	1306.4	1163.4	1002.2	853.5	734.3	640.1	562.9	493.7	437.0
27.5°	1692.3	1649.1	1541.3	1357.4	1139.5	937.5	780.9	665.1	575.4	500.5	437.0
30°	1828.5	1793.3	1696.8	1495.9	1236.0	990.8	803.6	671.9	575.4	493.7	426.8
32.5°	1888.6	1847.7	1761.5	1561.7	1272.3	999.9	795.6	660.6	559.5	475.6	407.5
35°	1931.7	1869.3	1763.8	1554.9	1253.0	972.7	771.8	642.4	539.1	458.5	392.7
37.5°	1884.1	1821.6	1701.3	1463.0	1166.8	906.8	728.7	608.3	513.0	433.6	372.3
40°	1749.0	1699.1	1552.7	1315.4	1047.6	825.1	679.9	566.4	480.1	404.1	347.3
42.5°	1549.2	1492.5	1348.4	1130.4	912.5	745.7	627.6	524.4	443.8	379.1	325.7
45°	1292.7	1243.9	1120.2	947.7	794.5	671.9	566.4	480.1	406.3	350.7	295.1
47.5°	1046.5	1005.6	914.8	800.2	694.6	598.1	508.5	432.4	372.3	321.2	261.0
50°	844.4	818.3	765.0	691.2	608.3	528.9	455.1	391.6	345.0	287.1	223.6
52.5°	708.2	690.1	652.6	592.5	530.0	465.3	404.1	353.0	304.2	248.6	183.9
55°	600.4	586.8	557.3	513.0	461.9	409.7	364.3	318.9	264.5	203.2	141.9
57.5°	509.6	498.3	477.8	442.6	400.6	366.6	323.5	276.9	221.3	157.8	101.0
60°	438.1	429.0	408.6	384.8	358.7	325.7	281.5	229.3	172.5	118.0	65.8
62.5°	375.7	371.1	358.7	339.4	313.3	276.9	229.3	177.1	124.8	74.9	34.0
65°	331.4	326.9	316.7	295.1	264.5	224.7	179.3	130.5	84.0	42.0	20.4
67.5°	270.1	265.6	256.5	238.3	206.6	168.0	127.1	85.1	46.5	22.7	18.2
70°	199.8	195.2	188.4	173.7	148.7	113.5	81.7	48.8	23.8	19.3	18.2
72.5°	128.3	127.1	121.4	112.4	94.2	72.6	44.3	22.7	19.3	15.9	14.8
75°	72.6	73.8	72.6	67.0	55.6	35.2	20.4	18.2	17.0	14.8	6.8
77.5°	31.8	31.8	32.9	30.6	25.0	19.3	19.3	17.0	14.8	11.3	5.7
80°	18.2	17.0	17.0	18.2	17.0	17.0	15.9	12.5	9.1	4.5	2.3
82.5°	17.0	15.9	15.9	15.9	14.8	14.8	13.6	9.1	5.7	3.4	2.3
85°	15.9	14.8	14.8	14.8	14.8	12.5	9.1	6.8	3.4	3.4	2.3
87.5°	10.2	9.1	9.1	10.2	7.9	6.8	3.4	2.3	1.1	1.1	1.1
90°	7.9	6.8	7.9	5.7	4.5	3.4	2.3	2.3	2.3	0.0	0.0
92.5°	3.4	3.4	2.3	2.3	2.3	0.0	0.0	1.1	1.1	1.1	0.0
95°	1.1	0.0	0.0	1.1	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: P123837

CATALOG NUMBER: ELSG406940TBZ (25° 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: P123837

CATALOG NUMBER: ELSG406940TBZ (25° BEAM - 35° TILT)

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	259.9	259.9	259.9	259.9	259.9	259.9	259.9	259.9	259.9	259.9	259.9
2.5°	279.2	275.8	274.7	271.3	269.0	265.6	264.5	262.2	258.8	256.5	253.1
5°	304.2	299.6	294.0	287.1	278.1	272.4	264.5	258.8	253.1	242.9	238.3
7.5°	329.1	321.2	311.0	298.5	287.1	276.9	262.2	252.0	239.5	230.4	217.9
10°	347.3	333.7	320.1	304.2	289.4	272.4	256.5	239.5	223.6	210.0	195.2
12.5°	366.6	347.3	329.1	309.8	289.4	269.0	252.0	227.0	205.4	188.4	169.1
15°	377.9	357.5	333.7	309.8	286.0	259.9	233.8	208.8	187.3	162.3	139.6
17.5°	387.0	359.8	339.4	305.3	276.9	246.3	216.8	188.4	162.3	135.1	107.8
20°	393.8	363.2	332.5	299.6	265.6	231.5	197.5	165.7	133.9	103.3	76.0
22.5°	395.0	360.9	326.9	289.4	250.8	213.4	180.5	144.1	106.7	74.9	49.9
25°	385.9	349.6	312.1	270.1	229.3	189.5	147.5	106.7	70.4	43.1	21.6
27.5°	384.8	345.0	304.2	258.8	212.2	168.0	124.8	82.9	48.8	26.1	19.3
30°	377.9	332.5	289.4	236.1	190.7	141.9	95.3	56.7	28.4	19.3	20.4
32.5°	358.7	313.3	262.2	208.8	158.9	109.0	63.6	30.6	17.0	13.6	13.6
35°	343.9	292.8	239.5	187.3	131.7	84.0	40.9	21.6	15.9	15.9	14.8
37.5°	321.2	267.9	211.1	156.6	101.0	53.3	22.7	17.0	17.0	12.5	7.9
40°	297.4	236.1	180.5	122.6	70.4	30.6	15.9	15.9	11.3	5.7	3.4
42.5°	265.6	206.6	149.8	90.8	44.3	19.3	15.9	13.6	10.2	4.5	2.3
45°	233.8	174.8	114.6	64.7	26.1	17.0	14.8	11.3	6.8	3.4	4.5
47.5°	199.8	139.6	79.4	35.2	17.0	17.0	13.6	5.7	3.4	2.3	0.0
50°	162.3	101.0	49.9	20.4	17.0	15.9	9.1	6.8	2.3	1.1	0.0
52.5°	120.3	68.1	26.1	14.8	15.9	11.3	2.3	0.0	0.0	0.0	0.0
55°	85.1	38.6	18.2	15.9	12.5	6.8	3.4	2.3	0.0	0.0	0.0
57.5°	49.9	21.6	17.0	14.8	7.9	3.4	0.0	0.0	0.0	0.0	1.1
60°	28.4	18.2	17.0	12.5	5.7	2.3	1.1	0.0	0.0	0.0	0.0
62.5°	18.2	15.9	13.6	7.9	3.4	1.1	0.0	0.0	0.0	0.0	0.0
65°	17.0	14.8	10.2	5.7	2.3	1.1	0.0	1.1	1.1	0.0	0.0
67.5°	15.9	12.5	5.7	3.4	1.1	1.1	0.0	0.0	0.0	0.0	0.0
70°	15.9	9.1	4.5	4.5	0.0	1.1	1.1	0.0	0.0	0.0	1.1
72.5°	9.1	3.4	2.3	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	6.8	3.4	0.0	1.1	2.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	3.4	2.3	1.1	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0
80°	2.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	2.3	1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.1	0.0	1.1	0.0	1.1	1.1	0.0	0.0	1.1	0.0	0.0
87.5°	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	1.1	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	0.0	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: P123837

CATALOG NUMBER: ELSG406940TBZ (25° 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: P123837

CATALOG NUMBER: ELSG406940TBZ (25° BEAM - 35° TILT)

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	259.9	259.9	259.9	259.9	259.9	259.9	259.9	259.9	259.9	259.9	259.9
2.5°	252.0	249.7	247.4	244.0	241.8	240.6	239.5	237.2	236.1	233.8	232.7
5°	229.3	225.9	217.9	212.2	206.6	203.2	196.4	196.4	192.9	187.3	182.7
7.5°	210.0	197.5	187.3	178.2	169.1	165.7	153.2	146.4	141.9	133.9	130.5
10°	180.5	166.8	153.2	138.5	126.0	116.9	104.4	94.2	87.4	81.7	76.0
12.5°	154.4	131.7	114.6	101.0	84.0	71.5	62.4	52.2	44.3	39.7	32.9
15°	116.9	95.3	76.0	59.0	46.5	36.3	28.4	23.8	21.6	21.6	18.2
17.5°	82.9	62.4	44.3	29.5	25.0	19.3	17.0	15.9	18.2	17.0	15.9
20°	52.2	34.0	22.7	18.2	15.9	15.9	15.9	15.9	13.6	13.6	13.6
22.5°	28.4	21.6	17.0	15.9	14.8	15.9	15.9	18.2	12.5	12.5	9.1
25°	14.8	11.3	12.5	10.2	10.2	6.8	3.4	2.3	1.1	1.1	0.0
27.5°	17.0	15.9	14.8	12.5	10.2	6.8	4.5	3.4	2.3	2.3	3.4
30°	15.9	14.8	10.2	6.8	6.8	4.5	1.1	2.3	1.1	1.1	0.0
32.5°	10.2	6.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	9.1	6.8	3.4	1.1	1.1	0.0	1.1	3.4	0.0	2.3	0.0
37.5°	4.5	3.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	1.1	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	1.1	0.0	1.1	0.0	0.0	0.0	1.1	0.0
50°	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.1	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	1.1	0.0	1.1	0.0	0.0	0.0	1.1	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°	1.1	1.1	0.0	1.1	0.0	0.0	0.0	1.1	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	1.1	1.1	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	1.1	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	1.1	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	0.0	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: P123837

CATALOG NUMBER: ELSG406940TBZ (25° 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: P123837

CATALOG NUMBER: ELSG406940TBZ (25° BEAM - 35° TILT)

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	259.9	259.9	259.9	259.9
2.5°	233.8	232.7	231.5	231.5
5°	181.6	180.5	178.2	179.3
7.5°	129.4	126.0	122.6	124.8
10°	72.6	68.1	67.0	67.0
12.5°	32.9	28.4	29.5	30.6
15°	19.3	18.2	18.2	18.2
17.5°	15.9	14.8	15.9	15.9
20°	13.6	12.5	12.5	12.5
22.5°	10.2	7.9	6.8	7.9
25°	0.0	0.0	0.0	0.0
27.5°	2.3	1.1	1.1	2.3
30°	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0
35°	0.0	2.3	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	1.1
72.5°	0.0	0.0	0.0	0.0
75°	1.1	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: P123837

CATALOG NUMBER: ELSG406940TBZ (25° 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)