

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: P123885

Luminaire Tested: **ELSG406940TBZ (50° BEAM - 35° TILT)**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123885
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: ELSG406940TBZ (50° 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: 790.0 lumens
Efficiency: N/A
Efficacy: 60.8 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

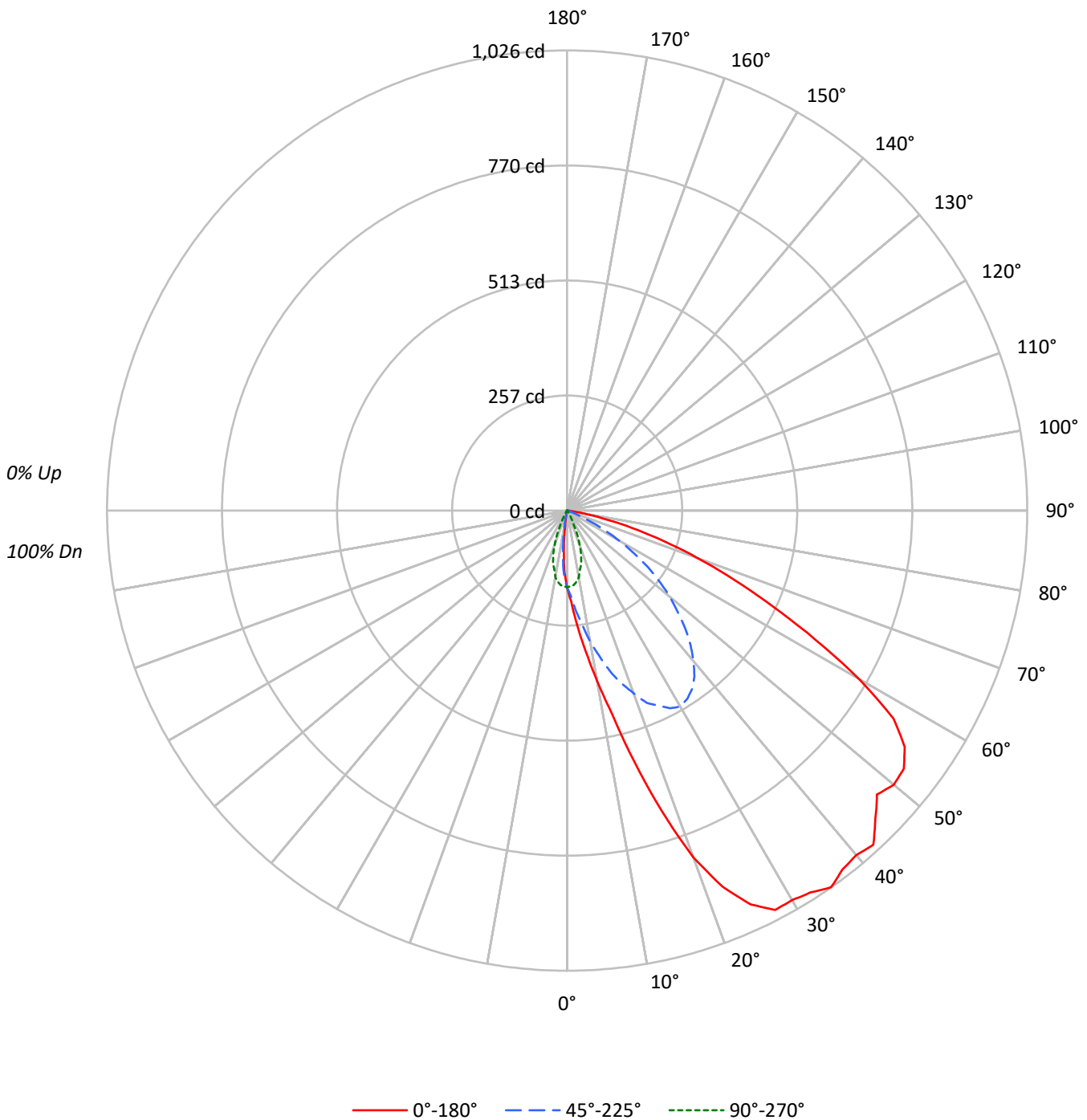
Input Watts (W): 13
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P123885

CATALOG NUMBER: ELSG406940TBZ (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	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	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°	84516	84516	84516
5°	119723	78252	38844
10°	173730	67970	5090
15°	253433	52973	1484
20°	350566	34826	0
25°	406632	14776	0
30°	417755	4249	0
35°	427223	1875	0
40°	420982	0	0
45°	414439	0	0
50°	414880	0	0
55°	413965	0	0
60°	352955	0	0
65°	249704	0	0
70°	162511	0	0
75°	83911	0	0
80°	23048	0	0
85°	4651	0	0



TEST NUMBER: P123885

CATALOG NUMBER: ELSG406940TBZ (50° BEAM - 35° TILT)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.9	2.0
10°-20°	56.8	7.2
20°-30°	120.3	15.2
30°-40°	166.2	21.0
40°-50°	175.4	22.2
50°-60°	148.0	18.7
60°-70°	80.9	10.2
70°-80°	24.2	3.1
80°-90°	2.0	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°	193.1	24.4
0°-40°	359.3	45.5
0°-60°	682.7	86.4
0°-90°	789.8	100.0
90°-120°	0.1	0.0
90°-150°	0.1	0.0
90°-180°	0.0	0.0
0°-180°	790.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	171	171	171	171	171	
5°	255	224	167	107	83	28
15°	581	372	121	7	3	173
25°	969	480	35	0	0	442
35°	1026	486	4	0	0	635
45°	972	373	0	0	0	753
55°	919	220	0	0	0	801
65°	506	57	0	0	0	510
75°	149	7	0	0	0	166
85°	7	2	0	0	0	11
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: P123885

CATALOG NUMBER: ELSG406940TBZ (50° BEAM - 35° TILT)

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	171.3	171.3	171.3	171.3	171.3	171.3	171.3	171.3	171.3	171.3	171.3
2.5°	201.9	199.6	197.4	198.5	196.2	196.2	195.1	192.8	192.8	190.6	189.4
5°	255.2	248.4	248.4	245.0	242.8	239.3	237.1	232.5	229.1	223.5	220.1
7.5°	315.4	313.1	309.7	309.7	300.6	292.7	285.9	276.8	266.6	256.4	246.2
10°	385.7	385.7	380.0	374.3	365.3	356.2	344.8	329.0	314.2	297.2	279.1
12.5°	465.1	460.5	452.6	442.4	429.9	412.9	394.8	375.5	352.8	332.4	306.3
15°	580.8	571.7	560.4	543.4	519.5	490.0	461.7	431.1	401.6	372.1	340.3
17.5°	703.3	697.6	680.6	655.7	622.8	581.9	538.8	488.9	445.8	403.8	366.4
20°	822.4	814.5	796.3	769.1	723.7	672.7	616.0	551.3	488.9	433.3	385.7
22.5°	908.6	902.9	884.8	862.1	820.1	763.4	692.0	613.7	537.7	464.0	403.8
25°	968.7	959.7	944.9	916.6	881.4	828.1	749.8	663.6	566.0	479.8	408.4
27.5°	1003.9	999.4	991.4	971.0	935.8	881.4	806.5	704.4	597.8	496.8	416.3
30°	1002.8	1002.8	1003.9	1002.8	980.1	921.1	846.2	733.9	617.1	504.8	417.4
32.5°	1009.6	1006.2	1000.5	1006.2	998.2	942.7	864.4	748.7	618.2	498.0	405.0
35°	1025.5	1018.7	1008.4	1005.0	1005.0	952.9	874.6	752.1	612.6	485.5	391.4
37.5°	1008.4	1015.2	1009.6	996.0	998.2	948.3	870.1	740.7	591.0	466.2	370.9
40°	1002.8	1006.2	994.8	983.5	983.5	934.7	853.0	709.0	558.1	437.9	343.7
42.5°	1010.7	996.0	976.7	979.0	969.9	917.7	824.7	670.4	519.5	407.2	317.6
45°	972.1	959.7	960.8	974.4	950.6	890.5	773.6	617.1	477.6	373.2	287.0
47.5°	937.0	943.8	947.2	943.8	908.6	841.7	704.4	555.8	426.5	333.5	249.6
50°	950.6	946.1	941.5	920.0	879.1	781.6	637.5	495.7	385.7	298.3	222.3
52.5°	946.1	941.5	921.1	887.1	820.1	703.3	557.0	434.5	344.8	258.6	182.6
55°	918.8	909.8	882.5	830.3	732.8	609.1	481.0	377.7	294.9	220.1	144.1
57.5°	863.2	846.2	804.3	727.1	627.3	510.5	409.5	325.6	248.4	175.8	105.5
60°	752.1	735.1	689.7	613.7	520.7	428.8	349.4	274.5	204.2	133.9	69.2
62.5°	625.0	609.1	563.8	500.3	428.8	360.7	291.5	224.6	156.5	93.0	38.6
65°	505.9	491.2	457.1	409.5	357.3	299.5	238.2	175.8	112.3	56.7	15.9
67.5°	402.7	392.5	370.9	335.8	291.5	239.3	183.8	123.6	70.3	27.2	7.9
70°	309.7	305.1	290.4	265.4	226.9	180.4	129.3	80.5	35.2	10.2	5.7
72.5°	223.5	221.2	213.3	196.2	165.6	124.8	82.8	43.1	13.6	6.8	5.7
75°	148.6	147.5	142.9	128.2	105.5	78.3	45.4	14.7	4.5	6.8	5.7
77.5°	86.2	83.9	83.9	76.0	60.1	40.8	14.7	7.9	5.7	3.4	3.4
80°	37.4	37.4	37.4	34.0	23.8	12.5	6.8	2.3	1.1	1.1	1.1
82.5°	12.5	11.3	11.3	11.3	9.1	6.8	5.7	3.4	3.4	2.3	1.1
85°	6.8	6.8	6.8	6.8	5.7	4.5	4.5	3.4	2.3	2.3	1.1
87.5°	5.7	3.4	4.5	3.4	3.4	2.3	3.4	2.3	1.1	2.3	1.1
90°	4.5	2.3	2.3	3.4	2.3	2.3	1.1	2.3	0.0	1.1	1.1
92.5°	1.1	1.1	1.1	0.0	1.1	0.0	0.0	0.0	1.1	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: P123885

CATALOG NUMBER: ELSG406940TBZ (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: P123885

CATALOG NUMBER: ELSG406940TBZ (50° BEAM - 35° TILT)

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	171.3	171.3	171.3	171.3	171.3	171.3	171.3	171.3	171.3	171.3	171.3
2.5°	186.0	186.0	182.6	179.2	177.0	174.7	171.3	169.0	166.8	164.5	162.2
5°	213.3	207.6	201.9	194.0	188.3	181.5	177.0	166.8	158.8	152.0	146.3
7.5°	241.6	226.9	215.5	205.3	195.1	184.9	173.6	159.9	147.5	135.0	123.6
10°	264.3	246.2	230.3	213.3	200.8	184.9	169.0	150.9	133.9	116.8	102.1
12.5°	281.3	258.6	235.9	216.7	195.1	177.0	155.4	132.7	110.0	91.9	72.6
15°	308.5	277.9	250.7	221.2	199.6	175.8	148.6	121.4	95.3	71.5	51.0
17.5°	326.7	292.7	254.1	222.3	195.1	165.6	135.0	103.2	73.7	51.0	29.5
20°	341.4	296.1	255.2	217.8	188.3	155.4	116.8	81.7	52.2	29.5	13.6
22.5°	351.7	299.5	254.1	213.3	177.0	137.3	97.6	62.4	31.8	14.7	11.3
25°	348.2	292.7	241.6	197.4	157.7	112.3	72.6	35.2	10.2	3.4	1.1
27.5°	349.4	288.1	235.9	189.4	144.1	95.3	53.3	21.6	7.9	3.4	4.5
30°	347.1	281.3	224.6	173.6	122.5	76.0	35.2	10.2	5.7	7.9	3.4
32.5°	331.2	264.3	206.5	153.1	98.7	49.9	14.7	4.5	3.4	1.1	1.1
35°	315.4	247.3	189.4	130.5	76.0	30.6	9.1	4.5	1.1	3.4	1.1
37.5°	292.7	225.7	165.6	104.4	52.2	13.6	4.5	2.3	2.3	1.1	0.0
40°	266.6	199.6	136.1	77.1	28.4	4.5	2.3	0.0	0.0	0.0	0.0
42.5°	242.8	173.6	110.0	52.2	12.5	3.4	2.3	1.1	1.1	0.0	0.0
45°	213.3	142.9	80.5	28.4	6.8	2.3	1.1	0.0	0.0	0.0	2.3
47.5°	178.1	108.9	49.9	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	148.6	81.7	28.4	5.7	3.4	0.0	2.3	0.0	0.0	0.0	0.0
52.5°	111.2	49.9	10.2	4.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0
55°	78.3	26.1	6.8	2.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	46.5	10.2	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	21.6	5.7	2.3	2.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	9.1	4.5	2.3	2.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0
65°	6.8	3.4	2.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0	1.1
67.5°	4.5	3.4	2.3	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0
70°	2.3	2.3	1.1	1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0
72.5°	3.4	3.4	2.3	1.1	0.0	1.1	1.1	0.0	0.0	0.0	0.0
75°	2.3	1.1	2.3	0.0	1.1	0.0	1.1	0.0	0.0	0.0	0.0
77.5°	2.3	1.1	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	1.1	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	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.3	1.1	2.3	1.1	1.1	0.0	0.0	0.0	0.0	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	1.1
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°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.1	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	1.1
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: P123885

CATALOG NUMBER: ELSG406940TBZ (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: P123885

CATALOG NUMBER: ELSG406940TBZ (50° BEAM - 35° TILT)

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	171.3	171.3	171.3	171.3	171.3	171.3	171.3	171.3	171.3	171.3	171.3
2.5°	158.8	155.4	155.4	152.0	149.7	148.6	147.5	142.9	141.8	140.7	140.7
5°	138.4	131.6	123.6	118.0	112.3	106.6	102.1	99.8	93.0	88.5	86.2
7.5°	112.3	101.0	90.7	81.7	70.3	65.8	55.6	51.0	45.4	42.0	37.4
10°	85.1	72.6	59.0	46.5	37.4	30.6	23.8	19.3	17.0	14.7	12.5
12.5°	53.3	36.3	27.2	18.1	9.1	6.8	6.8	3.4	2.3	2.3	1.1
15°	34.0	19.3	12.5	9.1	9.1	6.8	5.7	4.5	4.5	3.4	3.4
17.5°	15.9	10.2	7.9	4.5	4.5	4.5	3.4	4.5	6.8	3.4	2.3
20°	6.8	5.7	4.5	3.4	2.3	4.5	2.3	1.1	1.1	1.1	1.1
22.5°	6.8	5.7	4.5	5.7	9.1	1.1	3.4	1.1	1.1	0.0	1.1
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°	1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	2.3	2.3	0.0	0.0	1.1	0.0	0.0	0.0	3.4	2.3	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°	6.8	0.0	1.1	2.3	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°	1.1	0.0	0.0	0.0	1.1	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	1.1	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: P123885

CATALOG NUMBER: ELSG406940TBZ (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: P123885

CATALOG NUMBER: ELSG406940TBZ (50° BEAM - 35° TILT)

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	171.3	171.3	171.3	171.3
2.5°	139.5	138.4	139.5	137.3
5°	87.3	82.8	82.8	82.8
7.5°	36.3	34.0	32.9	34.0
10°	12.5	11.3	11.3	11.3
12.5°	2.3	1.1	1.1	1.1
15°	3.4	3.4	3.4	3.4
17.5°	2.3	1.1	2.3	1.1
20°	0.0	0.0	0.0	0.0
22.5°	1.1	1.1	0.0	0.0
25°	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0
30°	1.1	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: P123885

CATALOG NUMBER: ELSG406940TBZ (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)