

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: P123834

Luminaire Tested: **ELSG406927TBZ (25° BEAM - 35° TILT)**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123834
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: ELSG406927TBZ (25° BEAM - 35° TILT)
Description: HALO 4 INCH RECESSED FIXTURE WITH SQUARE TUSCAN BRONZE TRIM,
Light Source: (1)SURFACE MOUNT LED, 2700K CCT, 90CRI
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 650.0 lumens
Efficiency: N/A
Efficacy: 50.0 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

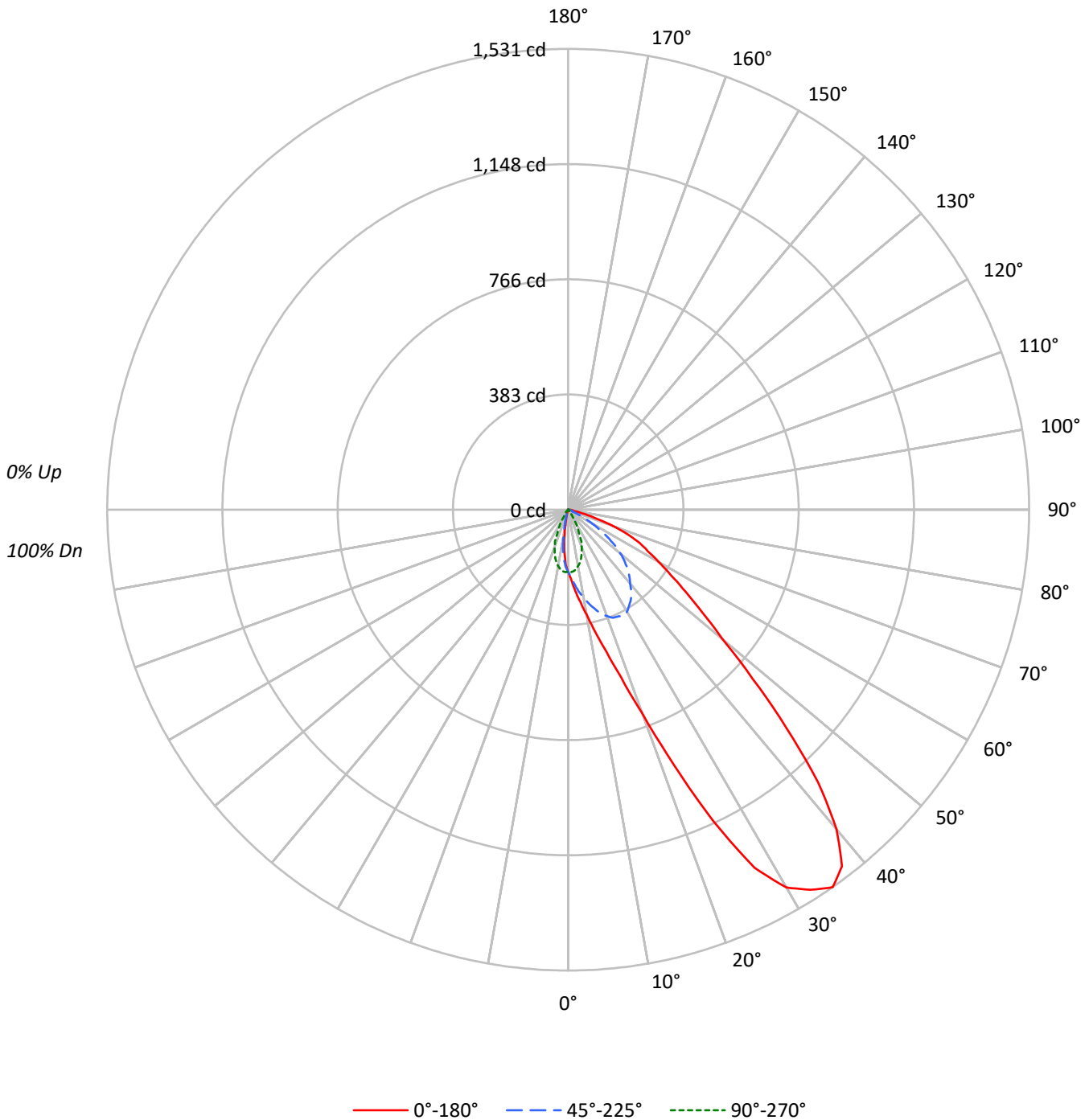
Input Watts (W): 13
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: ELSG406927TBZ (25° 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	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°	101636	101636	101636
5°	127042	96220	66664
10°	160082	85491	23918
15°	212372	72216	6283
20°	306788	56012	4220
25°	479631	35513	0
30°	603803	18746	0
35°	637940	7124	0
40°	582020	5290	0
45°	436864	3837	0
50°	292153	2357	0
55°	214417	811	0
60°	162985	0	0
65°	129664	444	0
70°	83066	0	472
75°	32525	0	0
80°	8874	0	0
85°	8618	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.3	3.0
10°-20°	57.2	8.8
20°-30°	118.7	18.3
30°-40°	169.5	26.1
40°-50°	139.6	21.5
50°-60°	85.8	13.2
60°-70°	45.5	7.0
70°-80°	11.8	1.8
80°-90°	2.3	0.4
90°-100°	0.2	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°	195.2	30.0
0°-40°	364.7	56.1
0°-60°	590.1	90.8
0°-90°	649.8	100.0
90°-120°	0.2	0.0
90°-150°	0.2	0.0
90°-180°	0.0	0.0
0°-180°	650.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	206	206	206	206	206	
5°	271	250	205	161	142	28
15°	487	341	166	29	14	148
25°	1143	391	85	5	0	529
35°	1531	364	17	0	0	932
45°	1025	278	9	0	0	788
55°	476	161	2	0	0	435
65°	263	33	1	0	0	254
75°	58	12	0	0	0	71
85°	13	3	0	0	0	10
90°	6	0	0	0	0	3
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: P123834

CATALOG NUMBER: ELSG406927TBZ (25° BEAM - 35° TILT)

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	206.0	206.0	206.0	206.0	206.0	206.0	206.0	206.0	206.0	206.0	206.0
2.5°	232.1	229.4	230.3	229.4	228.5	227.6	227.6	226.7	225.8	225.8	222.2
5°	270.8	270.8	269.9	268.1	265.4	262.7	262.7	257.3	254.6	250.1	247.4
7.5°	308.6	305.0	304.1	302.3	299.6	296.0	291.5	286.1	280.7	275.3	268.1
10°	355.4	352.7	350.0	344.6	339.2	331.1	322.1	313.1	304.1	295.1	286.1
12.5°	414.8	410.3	405.8	398.6	388.7	376.1	362.6	348.2	333.8	320.3	303.2
15°	486.7	484.0	474.1	461.5	444.4	426.4	405.8	383.3	361.7	341.0	317.6
17.5°	583.9	574.9	561.4	538.9	511.0	483.1	450.7	419.3	389.6	362.6	332.0
20°	719.7	704.4	676.6	637.0	590.2	543.4	497.5	454.3	413.9	376.1	341.9
22.5°	915.9	893.4	843.0	768.3	686.5	612.7	544.3	486.7	435.4	388.7	348.2
25°	1142.6	1111.1	1035.5	922.2	794.4	676.6	582.1	507.4	446.2	391.4	346.4
27.5°	1341.4	1307.2	1221.8	1076.0	903.3	743.1	619.0	527.2	456.1	396.8	346.4
30°	1449.4	1421.5	1345.0	1185.8	979.7	785.4	637.0	532.6	456.1	391.4	338.3
32.5°	1497.1	1464.7	1396.3	1238.0	1008.5	792.6	630.7	523.6	443.5	377.0	323.0
35°	1531.3	1481.8	1398.1	1232.6	993.2	771.0	611.8	509.2	427.3	363.5	311.3
37.5°	1493.5	1444.0	1348.6	1159.7	924.9	718.8	577.6	482.2	406.7	343.7	295.1
40°	1386.4	1346.8	1230.8	1042.7	830.4	654.1	538.9	448.9	380.6	320.3	275.3
42.5°	1228.1	1183.1	1068.8	896.1	723.3	591.1	497.5	415.7	351.8	300.5	258.2
45°	1024.7	986.0	888.0	751.2	629.8	532.6	448.9	380.6	322.1	278.0	233.9
47.5°	829.5	797.1	725.1	634.3	550.6	474.1	403.1	342.8	295.1	254.6	206.9
50°	669.4	648.7	606.4	547.9	482.2	419.3	360.8	310.4	273.5	227.6	177.2
52.5°	561.4	547.0	517.3	469.6	420.1	368.9	320.3	279.8	241.1	197.0	145.7
55°	475.9	465.1	441.7	406.7	366.2	324.8	288.8	252.8	209.6	161.0	112.5
57.5°	404.0	395.0	378.8	350.9	317.6	290.6	256.4	219.5	175.4	125.1	80.1
60°	347.3	340.1	323.9	305.0	284.3	258.2	223.1	181.7	136.8	93.6	52.2
62.5°	297.8	294.2	284.3	269.0	248.3	219.5	181.7	140.3	99.0	59.4	27.0
65°	262.7	259.1	251.0	233.9	209.6	178.1	142.1	103.5	66.6	33.3	16.2
67.5°	214.1	210.5	203.3	188.9	163.7	133.2	100.8	67.5	36.9	18.0	14.4
70°	158.3	154.7	149.3	137.7	117.9	90.0	64.8	38.7	18.9	15.3	14.4
72.5°	101.7	100.8	96.3	89.1	74.7	57.6	35.1	18.0	15.3	12.6	11.7
75°	57.6	58.5	57.6	53.1	44.1	27.9	16.2	14.4	13.5	11.7	5.4
77.5°	25.2	25.2	26.1	24.3	19.8	15.3	15.3	13.5	11.7	9.0	4.5
80°	14.4	13.5	13.5	14.4	13.5	13.5	12.6	9.9	7.2	3.6	1.8
82.5°	13.5	12.6	12.6	12.6	11.7	11.7	10.8	7.2	4.5	2.7	1.8
85°	12.6	11.7	11.7	11.7	11.7	9.9	7.2	5.4	2.7	2.7	1.8
87.5°	8.1	7.2	7.2	8.1	6.3	5.4	2.7	1.8	0.9	0.9	0.9
90°	6.3	5.4	6.3	4.5	3.6	2.7	1.8	1.8	1.8	0.0	0.0
92.5°	2.7	2.7	1.8	1.8	1.8	0.0	0.0	0.9	0.9	0.9	0.0
95°	0.9	0.0	0.0	0.9	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: P123834

CATALOG NUMBER: ELSG406927TBZ (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



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CATALOG NUMBER: ELSG406927TBZ (25° BEAM - 35° TILT)

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	206.0	206.0	206.0	206.0	206.0	206.0	206.0	206.0	206.0	206.0	206.0
2.5°	221.3	218.6	217.7	215.0	213.2	210.5	209.6	207.8	205.1	203.3	200.6
5°	241.1	237.5	233.0	227.6	220.4	215.9	209.6	205.1	200.6	192.5	188.9
7.5°	260.9	254.6	246.5	236.6	227.6	219.5	207.8	199.7	189.8	182.6	172.7
10°	275.3	264.5	253.7	241.1	229.4	215.9	203.3	189.8	177.2	166.4	154.7
12.5°	290.6	275.3	260.9	245.6	229.4	213.2	199.7	179.9	162.8	149.3	134.1
15°	299.6	283.4	264.5	245.6	226.7	206.0	185.3	165.5	148.4	128.7	110.7
17.5°	306.8	285.2	269.0	242.0	219.5	195.2	171.8	149.3	128.7	107.1	85.5
20°	312.2	287.9	263.6	237.5	210.5	183.5	156.5	131.4	106.2	81.9	60.3
22.5°	313.1	286.1	259.1	229.4	198.8	169.1	143.0	114.3	84.6	59.4	39.6
25°	305.9	277.1	247.4	214.1	181.7	150.2	117.0	84.6	55.8	34.2	17.1
27.5°	305.0	273.5	241.1	205.1	168.2	133.2	99.0	65.7	38.7	20.7	15.3
30°	299.6	263.6	229.4	187.1	151.1	112.5	75.6	45.0	22.5	15.3	16.2
32.5°	284.3	248.3	207.8	165.5	126.0	86.4	50.4	24.3	13.5	10.8	10.8
35°	272.6	232.1	189.8	148.4	104.4	66.6	32.4	17.1	12.6	12.6	11.7
37.5°	254.6	212.3	167.3	124.2	80.1	42.3	18.0	13.5	13.5	9.9	6.3
40°	235.7	187.1	143.0	97.2	55.8	24.3	12.6	12.6	9.0	4.5	2.7
42.5°	210.5	163.7	118.8	72.0	35.1	15.3	12.6	10.8	8.1	3.6	1.8
45°	185.3	138.6	90.9	51.3	20.7	13.5	11.7	9.0	5.4	2.7	3.6
47.5°	158.3	110.7	63.0	27.9	13.5	13.5	10.8	4.5	2.7	1.8	0.0
50°	128.7	80.1	39.6	16.2	13.5	12.6	7.2	5.4	1.8	0.9	0.0
52.5°	95.4	54.0	20.7	11.7	12.6	9.0	1.8	0.0	0.0	0.0	0.0
55°	67.5	30.6	14.4	12.6	9.9	5.4	2.7	1.8	0.0	0.0	0.0
57.5°	39.6	17.1	13.5	11.7	6.3	2.7	0.0	0.0	0.0	0.0	0.9
60°	22.5	14.4	13.5	9.9	4.5	1.8	0.9	0.0	0.0	0.0	0.0
62.5°	14.4	12.6	10.8	6.3	2.7	0.9	0.0	0.0	0.0	0.0	0.0
65°	13.5	11.7	8.1	4.5	1.8	0.9	0.0	0.9	0.9	0.0	0.0
67.5°	12.6	9.9	4.5	2.7	0.9	0.9	0.0	0.0	0.0	0.0	0.0
70°	12.6	7.2	3.6	3.6	0.0	0.9	0.9	0.0	0.0	0.0	0.9
72.5°	7.2	2.7	1.8	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	5.4	2.7	0.0	0.9	1.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	2.7	1.8	0.9	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0
80°	1.8	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	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.9	0.0	0.9	0.0	0.9	0.9	0.0	0.0	0.9	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	0.0
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°	0.9	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: P123834

CATALOG NUMBER: ELSG406927TBZ (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: P123834

CATALOG NUMBER: ELSG406927TBZ (25° BEAM - 35° TILT)

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	206.0	206.0	206.0	206.0	206.0	206.0	206.0	206.0	206.0	206.0	206.0
2.5°	199.7	197.9	196.1	193.4	191.6	190.7	189.8	188.0	187.1	185.3	184.4
5°	181.7	179.0	172.7	168.2	163.7	161.0	155.6	155.6	152.9	148.4	144.8
7.5°	166.4	156.5	148.4	141.2	134.1	131.4	121.5	116.1	112.5	106.2	103.5
10°	143.0	132.3	121.5	109.8	99.9	92.7	82.8	74.7	69.3	64.8	60.3
12.5°	122.4	104.4	90.9	80.1	66.6	56.7	49.5	41.4	35.1	31.5	26.1
15°	92.7	75.6	60.3	46.8	36.9	28.8	22.5	18.9	17.1	17.1	14.4
17.5°	65.7	49.5	35.1	23.4	19.8	15.3	13.5	12.6	14.4	13.5	12.6
20°	41.4	27.0	18.0	14.4	12.6	12.6	12.6	12.6	10.8	10.8	10.8
22.5°	22.5	17.1	13.5	12.6	11.7	12.6	12.6	14.4	9.9	9.9	7.2
25°	11.7	9.0	9.9	8.1	8.1	5.4	2.7	1.8	0.9	0.9	0.0
27.5°	13.5	12.6	11.7	9.9	8.1	5.4	3.6	2.7	1.8	1.8	2.7
30°	12.6	11.7	8.1	5.4	5.4	3.6	0.9	1.8	0.9	0.9	0.0
32.5°	8.1	5.4	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	7.2	5.4	2.7	0.9	0.9	0.0	0.9	2.7	0.0	1.8	0.0
37.5°	3.6	2.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.9	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	0.9	0.9	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	0.9	0.0	0.9	0.0	0.0	0.0	0.9	0.0
50°	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.9	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	0.9	0.0	0.9	0.0	0.0	0.0	0.9	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°	0.9	0.9	0.0	0.9	0.0	0.0	0.0	0.9	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	0.9	0.9	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	0.9	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	0.9	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: P123834

CATALOG NUMBER: ELSG406927TBZ (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: P123834

CATALOG NUMBER: ELSG406927TBZ (25° BEAM - 35° TILT)

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	206.0	206.0	206.0	206.0
2.5°	185.3	184.4	183.5	183.5
5°	143.9	143.0	141.2	142.1
7.5°	102.6	99.9	97.2	99.0
10°	57.6	54.0	53.1	53.1
12.5°	26.1	22.5	23.4	24.3
15°	15.3	14.4	14.4	14.4
17.5°	12.6	11.7	12.6	12.6
20°	10.8	9.9	9.9	9.9
22.5°	8.1	6.3	5.4	6.3
25°	0.0	0.0	0.0	0.0
27.5°	1.8	0.9	0.9	1.8
30°	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0
35°	0.0	1.8	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	0.9
72.5°	0.0	0.0	0.0	0.0
75°	0.9	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: P123834

CATALOG NUMBER: ELSG406927TBZ (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)