

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: P123835

Luminaire Tested: **ELSG406930TBZ (25° BEAM - 35° TILT)**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123835
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: ELSG406930TBZ (25° BEAM - 35° TILT)
Description: HALO 4 INCH RECESSED FIXTURE WITH SQUARE TUSCAN BRONZE TRIM,
Light Source: (1)SURFACE MOUNT LED, 3000K CCT, 90CRI
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 740.0 lumens
Efficiency: N/A
Efficacy: 56.9 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

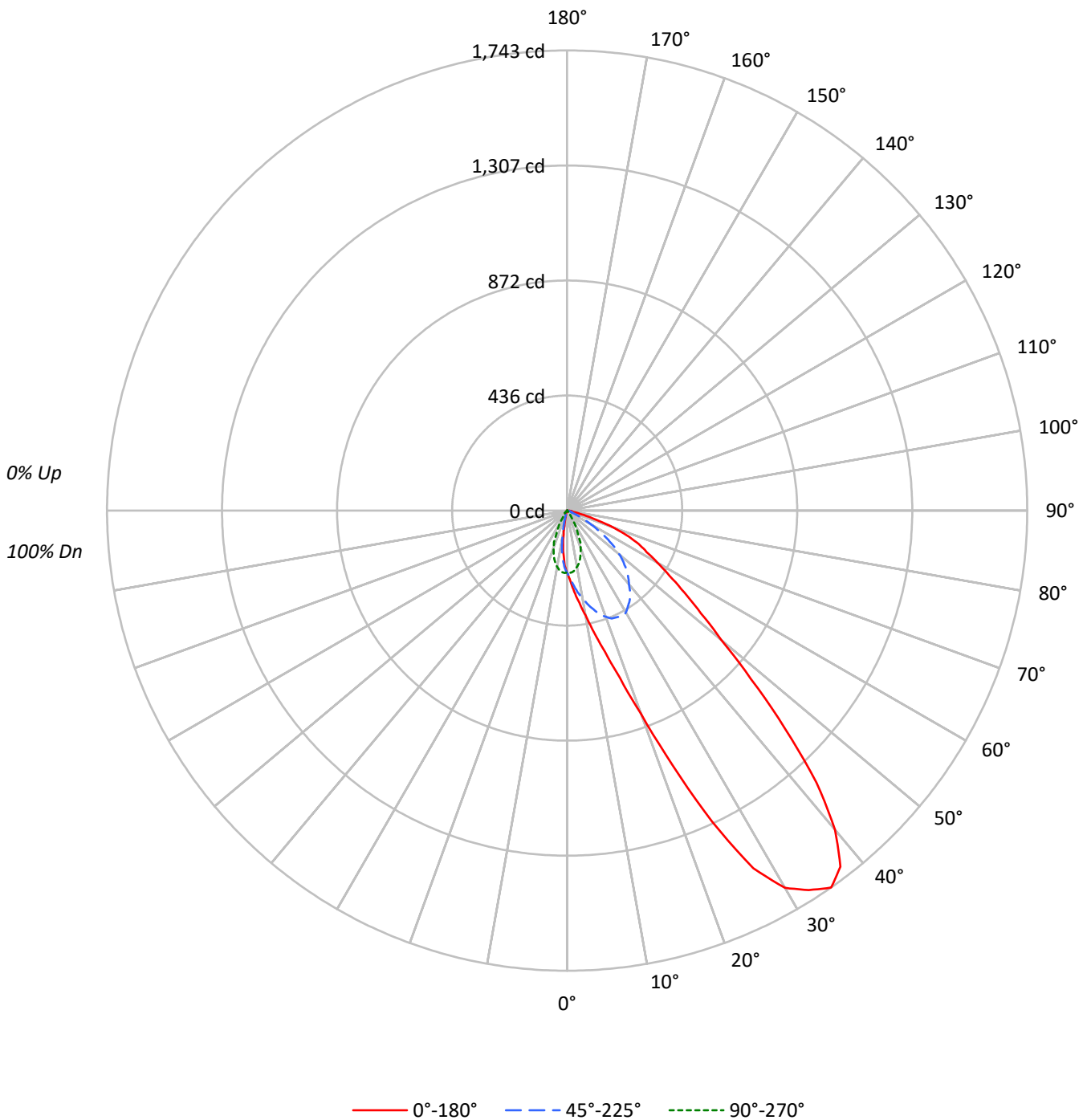
Input Watts (W): 13
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P123835

CATALOG NUMBER: ELSG406930TBZ (25° BEAM - 35° TILT)

Luminous Intensity Polar Plot





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CATALOG NUMBER: ELSG406930TBZ (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	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°	115747	115747	115747
5°	144634	109543	75906
10°	182244	97338	27206
15°	241782	82252	7156
20°	349288	63728	4817
25°	546038	40424	0
30°	687413	21329	0
35°	726259	8124	0
40°	662623	6003	0
45°	497361	4349	0
50°	332567	2662	0
55°	244108	901	0
60°	185558	0	0
65°	147631	494	0
70°	94610	0	525
75°	37043	0	0
80°	10107	0	0
85°	9781	0	0



TEST NUMBER: P123835

CATALOG NUMBER: ELSG406930TBZ (25° BEAM - 35° TILT)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.9	3.0
10°-20°	65.2	8.8
20°-30°	135.1	18.3
30°-40°	193.0	26.1
40°-50°	159.0	21.5
50°-60°	97.7	13.2
60°-70°	51.8	7.0
70°-80°	13.4	1.8
80°-90°	2.6	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°	222.2	30.0
0°-40°	415.2	56.1
0°-60°	671.8	90.8
0°-90°	739.7	100.0
90°-120°	0.3	0.0
90°-150°	0.3	0.0
90°-180°	0.0	0.0
0°-180°	740.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	235	235	235	235	235	
5°	308	285	234	183	162	32
15°	554	388	188	33	16	169
25°	1301	446	96	6	0	603
35°	1743	414	20	0	0	1061
45°	1167	316	10	0	0	897
55°	542	183	2	0	0	495
65°	299	38	1	0	0	289
75°	66	13	0	0	0	81
85°	14	3	0	0	0	12
90°	7	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: P123835

CATALOG NUMBER: ELSG406930TBZ (25° BEAM - 35° TILT)

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	234.6	234.6	234.6	234.6	234.6	234.6	234.6	234.6	234.6	234.6	234.6
2.5°	264.3	261.2	262.2	261.2	260.2	259.1	259.1	258.1	257.1	257.1	253.0
5°	308.3	308.3	307.3	305.2	302.2	299.1	299.1	292.9	289.9	284.7	281.7
7.5°	351.3	347.2	346.2	344.1	341.1	337.0	331.9	325.7	319.6	313.4	305.2
10°	404.6	401.5	398.4	392.3	386.1	376.9	366.7	356.4	346.2	336.0	325.7
12.5°	472.2	467.1	461.9	453.7	442.5	428.1	412.8	396.4	380.0	364.6	345.2
15°	554.1	551.0	539.8	525.4	506.0	485.5	461.9	436.3	411.7	388.2	361.6
17.5°	664.7	654.5	639.1	613.5	581.8	550.0	513.1	477.3	443.5	412.8	377.9
20°	819.4	802.0	770.2	725.2	671.9	618.6	566.4	517.2	471.2	428.1	389.2
22.5°	1042.7	1017.1	959.7	874.7	781.5	697.5	619.7	554.1	495.7	442.5	396.4
25°	1300.8	1264.9	1178.9	1049.9	904.4	770.2	662.7	577.7	508.0	445.5	394.3
27.5°	1527.2	1488.2	1390.9	1225.0	1028.3	846.0	704.7	600.2	519.3	451.7	394.3
30°	1650.1	1618.3	1531.3	1350.0	1115.4	894.2	725.2	606.4	519.3	445.5	385.1
32.5°	1704.4	1667.5	1589.6	1409.4	1148.2	902.4	718.0	596.1	505.0	429.2	367.7
35°	1743.3	1686.9	1591.7	1403.2	1130.8	877.8	696.5	579.7	486.5	413.8	354.4
37.5°	1700.3	1643.9	1535.3	1320.3	1052.9	818.4	657.6	549.0	463.0	391.3	336.0
40°	1578.4	1533.3	1401.2	1187.1	945.4	744.6	613.5	511.1	433.3	364.6	313.4
42.5°	1398.1	1346.9	1216.8	1020.2	823.5	672.9	566.4	473.2	400.5	342.1	294.0
45°	1166.6	1122.6	1010.9	855.2	717.0	606.4	511.1	433.3	366.7	316.5	266.3
47.5°	944.4	907.5	825.5	722.1	626.8	539.8	458.9	390.2	336.0	289.9	235.6
50°	762.0	738.5	690.3	623.8	549.0	477.3	410.7	353.4	311.4	259.1	201.8
52.5°	639.1	622.7	588.9	534.7	478.3	419.9	364.6	318.5	274.5	224.3	165.9
55°	541.8	529.5	502.9	463.0	416.9	369.8	328.8	287.8	238.7	183.3	128.0
57.5°	459.9	449.6	431.2	399.5	361.6	330.8	291.9	249.9	199.7	142.4	91.2
60°	395.4	387.2	368.7	347.2	323.7	294.0	254.0	206.9	155.7	106.5	59.4
62.5°	339.0	334.9	323.7	306.3	282.7	249.9	206.9	159.8	112.7	67.6	30.7
65°	299.1	295.0	285.8	266.3	238.7	202.8	161.8	117.8	75.8	37.9	18.4
67.5°	243.8	239.7	231.5	215.1	186.4	151.6	114.7	76.8	42.0	20.5	16.4
70°	180.3	176.2	170.0	156.7	134.2	102.4	73.7	44.0	21.5	17.4	16.4
72.5°	115.7	114.7	109.6	101.4	85.0	65.6	39.9	20.5	17.4	14.3	13.3
75°	65.6	66.6	65.6	60.4	50.2	31.8	18.4	16.4	15.4	13.3	6.1
77.5°	28.7	28.7	29.7	27.7	22.5	17.4	17.4	15.4	13.3	10.2	5.1
80°	16.4	15.4	15.4	16.4	15.4	15.4	14.3	11.3	8.2	4.1	2.0
82.5°	15.4	14.3	14.3	14.3	13.3	13.3	12.3	8.2	5.1	3.1	2.0
85°	14.3	13.3	13.3	13.3	13.3	11.3	8.2	6.1	3.1	3.1	2.0
87.5°	9.2	8.2	8.2	9.2	7.2	6.1	3.1	2.0	1.0	1.0	1.0
90°	7.2	6.1	7.2	5.1	4.1	3.1	2.0	2.0	2.0	0.0	0.0
92.5°	3.1	3.1	2.0	2.0	2.0	0.0	0.0	1.0	1.0	1.0	0.0
95°	1.0	0.0	0.0	1.0	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: P123835

CATALOG NUMBER: ELSG406930TBZ (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: P123835

CATALOG NUMBER: ELSG406930TBZ (25° BEAM - 35° TILT)

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	234.6	234.6	234.6	234.6	234.6	234.6	234.6	234.6	234.6	234.6	234.6
2.5°	252.0	248.9	247.9	244.8	242.7	239.7	238.7	236.6	233.5	231.5	228.4
5°	274.5	270.4	265.3	259.1	250.9	245.8	238.7	233.5	228.4	219.2	215.1
7.5°	297.0	289.9	280.6	269.4	259.1	249.9	236.6	227.4	216.1	207.9	196.7
10°	313.4	301.1	288.8	274.5	261.2	245.8	231.5	216.1	201.8	189.5	176.2
12.5°	330.8	313.4	297.0	279.6	261.2	242.7	227.4	204.8	185.4	170.0	152.6
15°	341.1	322.6	301.1	279.6	258.1	234.6	211.0	188.5	169.0	146.5	126.0
17.5°	349.3	324.7	306.3	275.5	249.9	222.3	195.6	170.0	146.5	121.9	97.3
20°	355.4	327.8	300.1	270.4	239.7	208.9	178.2	149.5	120.9	93.2	68.6
22.5°	356.4	325.7	295.0	261.2	226.4	192.6	162.9	130.1	96.3	67.6	45.1
25°	348.2	315.5	281.7	243.8	206.9	171.0	133.2	96.3	63.5	38.9	19.5
27.5°	347.2	311.4	274.5	233.5	191.5	151.6	112.7	74.8	44.0	23.6	17.4
30°	341.1	300.1	261.2	213.0	172.1	128.0	86.0	51.2	25.6	17.4	18.4
32.5°	323.7	282.7	236.6	188.5	143.4	98.3	57.4	27.7	15.4	12.3	12.3
35°	310.3	264.3	216.1	169.0	118.8	75.8	36.9	19.5	14.3	14.3	13.3
37.5°	289.9	241.7	190.5	141.3	91.2	48.1	20.5	15.4	15.4	11.3	7.2
40°	268.4	213.0	162.9	110.6	63.5	27.7	14.3	14.3	10.2	5.1	3.1
42.5°	239.7	186.4	135.2	81.9	39.9	17.4	14.3	12.3	9.2	4.1	2.0
45°	211.0	157.7	103.4	58.4	23.6	15.4	13.3	10.2	6.1	3.1	4.1
47.5°	180.3	126.0	71.7	31.8	15.4	15.4	12.3	5.1	3.1	2.0	0.0
50°	146.5	91.2	45.1	18.4	15.4	14.3	8.2	6.1	2.0	1.0	0.0
52.5°	108.6	61.5	23.6	13.3	14.3	10.2	2.0	0.0	0.0	0.0	0.0
55°	76.8	34.8	16.4	14.3	11.3	6.1	3.1	2.0	0.0	0.0	0.0
57.5°	45.1	19.5	15.4	13.3	7.2	3.1	0.0	0.0	0.0	0.0	1.0
60°	25.6	16.4	15.4	11.3	5.1	2.0	1.0	0.0	0.0	0.0	0.0
62.5°	16.4	14.3	12.3	7.2	3.1	1.0	0.0	0.0	0.0	0.0	0.0
65°	15.4	13.3	9.2	5.1	2.0	1.0	0.0	1.0	1.0	0.0	0.0
67.5°	14.3	11.3	5.1	3.1	1.0	1.0	0.0	0.0	0.0	0.0	0.0
70°	14.3	8.2	4.1	4.1	0.0	1.0	1.0	0.0	0.0	0.0	1.0
72.5°	8.2	3.1	2.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	6.1	3.1	0.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	3.1	2.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
80°	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	2.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.0	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0
87.5°	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	1.0	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	0.0	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: P123835

CATALOG NUMBER: ELSG406930TBZ (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: P123835

CATALOG NUMBER: ELSG406930TBZ (25° BEAM - 35° TILT)

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	234.6	234.6	234.6	234.6	234.6	234.6	234.6	234.6	234.6	234.6	234.6
2.5°	227.4	225.3	223.3	220.2	218.2	217.1	216.1	214.1	213.0	211.0	210.0
5°	206.9	203.8	196.7	191.5	186.4	183.3	177.2	177.2	174.1	169.0	164.9
7.5°	189.5	178.2	169.0	160.8	152.6	149.5	138.3	132.1	128.0	120.9	117.8
10°	162.9	150.6	138.3	125.0	113.7	105.5	94.2	85.0	78.9	73.7	68.6
12.5°	139.3	118.8	103.4	91.2	75.8	64.5	56.3	47.1	39.9	35.8	29.7
15°	105.5	86.0	68.6	53.3	42.0	32.8	25.6	21.5	19.5	19.5	16.4
17.5°	74.8	56.3	39.9	26.6	22.5	17.4	15.4	14.3	16.4	15.4	14.3
20°	47.1	30.7	20.5	16.4	14.3	14.3	14.3	14.3	12.3	12.3	12.3
22.5°	25.6	19.5	15.4	14.3	13.3	14.3	14.3	16.4	11.3	11.3	8.2
25°	13.3	10.2	11.3	9.2	9.2	6.1	3.1	2.0	1.0	1.0	0.0
27.5°	15.4	14.3	13.3	11.3	9.2	6.1	4.1	3.1	2.0	2.0	3.1
30°	14.3	13.3	9.2	6.1	6.1	4.1	1.0	2.0	1.0	1.0	0.0
32.5°	9.2	6.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	8.2	6.1	3.1	1.0	1.0	0.0	1.0	3.1	0.0	2.0	0.0
37.5°	4.1	3.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	1.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	1.0	1.0	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	1.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0
50°	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	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	1.0	0.0	1.0	0.0	0.0	0.0	1.0	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°	1.0	1.0	0.0	1.0	0.0	0.0	0.0	1.0	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	1.0	1.0	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	1.0	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	1.0	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: P123835

CATALOG NUMBER: ELSG406930TBZ (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: P123835

CATALOG NUMBER: ELSG406930TBZ (25° BEAM - 35° TILT)

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	234.6	234.6	234.6	234.6
2.5°	211.0	210.0	208.9	208.9
5°	163.9	162.9	160.8	161.8
7.5°	116.8	113.7	110.6	112.7
10°	65.6	61.5	60.4	60.4
12.5°	29.7	25.6	26.6	27.7
15°	17.4	16.4	16.4	16.4
17.5°	14.3	13.3	14.3	14.3
20°	12.3	11.3	11.3	11.3
22.5°	9.2	7.2	6.1	7.2
25°	0.0	0.0	0.0	0.0
27.5°	2.0	1.0	1.0	2.0
30°	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0
35°	0.0	2.0	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	1.0
72.5°	0.0	0.0	0.0	0.0
75°	1.0	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: P123835

CATALOG NUMBER: ELSG406930TBZ (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)