

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: P123884

Luminaire Tested: **ELSG406935TBZ (50° BEAM - 35° TILT)**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123884
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: ELSG406935TBZ (50° BEAM - 35° TILT)
Description: HALO 4 INCH RECESSED FIXTURE WITH SQUARE TUSCAN BRONZE TRIM,
Light Source: (1)SURFACE MOUNT LED, 3500K CCT, 90CRI
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 750.0 lumens
Efficiency: N/A
Efficacy: 57.7 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

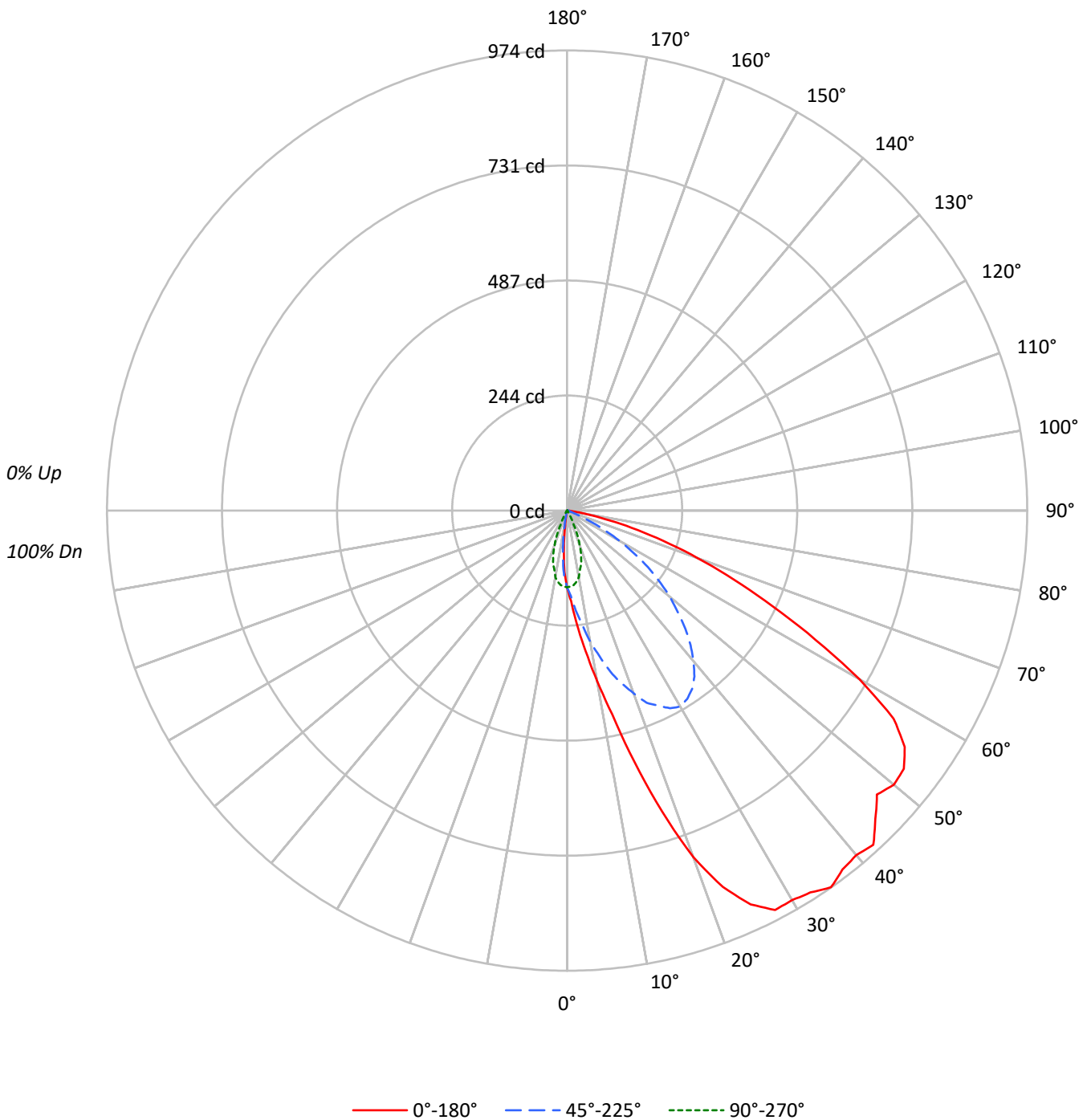
Input Watts (W): 13
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: ELSG406935TBZ (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					86			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73					73			
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61					61			
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52					52			
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45					45			
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38					38			
7	65	51	43	36	63	51	42	36	49	42	36	48	41	36	46	40	36	34					34			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	29					29			
9	56	42	34	28	55	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	80224	80224	80224
5°	113671	74264	36874
10°	164947	64501	4865
15°	240604	50268	1396
20°	332833	33036	0
25°	386064	14020	0
30°	396592	4041	0
35°	405560	1791	0
40°	399656	0	0
45°	393463	0	0
50°	393887	0	0
55°	393014	0	0
60°	335075	0	0
65°	237068	0	0
70°	154272	0	0
75°	79675	0	0
80°	21878	0	0
85°	4446	0	0



TEST NUMBER: P123884

CATALOG NUMBER: ELSG406935TBZ (50° BEAM - 35° TILT)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.1	2.0
10°-20°	54.0	7.2
20°-30°	114.2	15.2
30°-40°	157.8	21.0
40°-50°	166.5	22.2
50°-60°	140.6	18.7
60°-70°	76.8	10.2
70°-80°	23.0	3.1
80°-90°	1.9	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°	183.3	24.4
0°-40°	341.1	45.5
0°-60°	648.2	86.4
0°-90°	749.9	100.0
90°-120°	0.1	0.0
90°-150°	0.1	0.0
90°-180°	0.0	0.0
0°-180°	750.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	163	163	163	163	163	
5°	242	212	158	101	79	27
15°	551	353	115	6	3	165
25°	920	456	33	0	0	419
35°	974	461	4	0	0	603
45°	923	354	0	0	0	715
55°	872	209	0	0	0	761
65°	480	54	0	0	0	484
75°	141	6	0	0	0	158
85°	6	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: P123884

CATALOG NUMBER: ELSG406935TBZ (50° BEAM - 35° TILT)

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	162.6	162.6	162.6	162.6	162.6	162.6	162.6	162.6	162.6	162.6	162.6
2.5°	191.7	189.5	187.4	188.5	186.3	186.3	185.2	183.1	183.1	180.9	179.8
5°	242.3	235.8	235.8	232.6	230.5	227.2	225.1	220.8	217.5	212.2	208.9
7.5°	299.4	297.2	294.0	294.0	285.4	277.8	271.4	262.8	253.1	243.4	233.7
10°	366.2	366.2	360.8	355.4	346.8	338.2	327.4	312.3	298.3	282.2	264.9
12.5°	441.5	437.2	429.7	420.0	408.2	392.0	374.8	356.5	334.9	315.5	290.8
15°	551.4	542.8	532.0	515.8	493.2	465.2	438.3	409.2	381.2	353.2	323.1
17.5°	667.7	662.3	646.2	622.5	591.2	552.5	511.5	464.2	423.2	383.4	347.8
20°	780.8	773.2	756.0	730.2	687.1	638.6	584.8	523.4	464.2	411.4	366.2
22.5°	862.6	857.2	840.0	818.5	778.6	724.8	656.9	582.6	510.5	440.5	383.4
25°	919.7	911.1	897.1	870.2	836.8	786.2	711.8	630.0	537.4	455.5	387.7
27.5°	953.1	948.8	941.2	921.8	888.5	836.8	765.7	668.8	567.5	471.7	395.2
30°	952.0	952.0	953.1	952.0	930.5	874.5	803.4	696.8	585.8	479.2	396.3
32.5°	958.5	955.2	949.8	955.2	947.7	894.9	820.6	710.8	586.9	472.8	384.5
35°	973.5	967.1	957.4	954.2	954.2	904.6	830.3	714.0	581.5	460.9	371.5
37.5°	957.4	963.8	958.5	945.5	947.7	900.3	826.0	703.2	561.1	442.6	352.2
40°	952.0	955.2	944.5	933.7	933.7	887.4	809.8	673.1	529.8	415.7	326.3
42.5°	959.5	945.5	927.2	929.4	920.8	871.2	782.9	636.5	493.2	386.6	301.5
45°	922.9	911.1	912.2	925.1	902.5	845.4	734.5	585.8	453.4	354.3	272.5
47.5°	889.5	896.0	899.2	896.0	862.6	799.1	668.8	527.7	404.9	316.6	236.9
50°	902.5	898.2	893.8	873.4	834.6	742.0	605.2	470.6	366.2	283.2	211.1
52.5°	898.2	893.8	874.5	842.2	778.6	667.7	528.8	412.5	327.4	245.5	173.4
55°	872.3	863.7	837.8	788.3	695.7	578.3	456.6	358.6	280.0	208.9	136.8
57.5°	819.5	803.4	763.5	690.3	595.5	484.6	388.8	309.1	235.8	166.9	100.2
60°	714.0	697.8	654.8	582.6	494.3	407.1	331.7	260.6	193.8	127.1	65.7
62.5°	593.4	578.3	535.2	474.9	407.1	342.5	276.8	213.2	148.6	88.3	36.6
65°	480.3	466.3	434.0	388.8	339.2	284.3	226.2	166.9	106.6	53.8	15.1
67.5°	382.3	372.6	352.2	318.8	276.8	227.2	174.5	117.4	66.8	25.8	7.5
70°	294.0	289.7	275.7	252.0	215.4	171.2	122.8	76.5	33.4	9.7	5.4
72.5°	212.2	210.0	202.5	186.3	157.2	118.5	78.6	40.9	12.9	6.5	5.4
75°	141.1	140.0	135.7	121.7	100.2	74.3	43.1	14.0	4.3	6.5	5.4
77.5°	81.8	79.7	79.7	72.2	57.1	38.8	14.0	7.5	5.4	3.2	3.2
80°	35.5	35.5	35.5	32.3	22.6	11.8	6.5	2.2	1.1	1.1	1.1
82.5°	11.8	10.8	10.8	10.8	8.6	6.5	5.4	3.2	3.2	2.2	1.1
85°	6.5	6.5	6.5	6.5	5.4	4.3	4.3	3.2	2.2	2.2	1.1
87.5°	5.4	3.2	4.3	3.2	3.2	2.2	3.2	2.2	1.1	2.2	1.1
90°	4.3	2.2	2.2	3.2	2.2	2.2	1.1	2.2	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: P123884

CATALOG NUMBER: ELSG406935TBZ (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: P123884

CATALOG NUMBER: ELSG406935TBZ (50° BEAM - 35° TILT)

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	162.6	162.6	162.6	162.6	162.6	162.6	162.6	162.6	162.6	162.6	162.6
2.5°	176.6	176.6	173.4	170.2	168.0	165.8	162.6	160.5	158.3	156.2	154.0
5°	202.5	197.1	191.7	184.2	178.8	172.3	168.0	158.3	150.8	144.3	138.9
7.5°	229.4	215.4	204.6	194.9	185.2	175.5	164.8	151.8	140.0	128.2	117.4
10°	250.9	233.7	218.6	202.5	190.6	175.5	160.5	143.2	127.1	110.9	96.9
12.5°	267.1	245.5	224.0	205.7	185.2	168.0	147.5	126.0	104.5	87.2	68.9
15°	292.9	263.8	238.0	210.0	189.5	166.9	141.1	115.2	90.5	67.8	48.5
17.5°	310.2	277.8	241.2	211.1	185.2	157.2	128.2	98.0	70.0	48.5	28.0
20°	324.2	281.1	242.3	206.8	178.8	147.5	110.9	77.5	49.5	28.0	12.9
22.5°	333.8	284.3	241.2	202.5	168.0	130.3	92.6	59.2	30.2	14.0	10.8
25°	330.6	277.8	229.4	187.4	149.7	106.6	68.9	33.4	9.7	3.2	1.1
27.5°	331.7	273.5	224.0	179.8	136.8	90.5	50.6	20.5	7.5	3.2	4.3
30°	329.5	267.1	213.2	164.8	116.3	72.2	33.4	9.7	5.4	7.5	3.2
32.5°	314.5	250.9	196.0	145.4	93.7	47.4	14.0	4.3	3.2	1.1	1.1
35°	299.4	234.8	179.8	123.8	72.2	29.1	8.6	4.3	1.1	3.2	1.1
37.5°	277.8	214.3	157.2	99.1	49.5	12.9	4.3	2.2	2.2	1.1	0.0
40°	253.1	189.5	129.2	73.2	26.9	4.3	2.2	0.0	0.0	0.0	0.0
42.5°	230.5	164.8	104.5	49.5	11.8	3.2	2.2	1.1	1.1	0.0	0.0
45°	202.5	135.7	76.5	26.9	6.5	2.2	1.1	0.0	0.0	0.0	2.2
47.5°	169.1	103.4	47.4	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	141.1	77.5	26.9	5.4	3.2	0.0	2.2	0.0	0.0	0.0	0.0
52.5°	105.5	47.4	9.7	4.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0
55°	74.3	24.8	6.5	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	44.2	9.7	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	20.5	5.4	2.2	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	8.6	4.3	2.2	2.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0
65°	6.5	3.2	2.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0	1.1
67.5°	4.3	3.2	2.2	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0
70°	2.2	2.2	1.1	1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0
72.5°	3.2	3.2	2.2	1.1	0.0	1.1	1.1	0.0	0.0	0.0	0.0
75°	2.2	1.1	2.2	0.0	1.1	0.0	1.1	0.0	0.0	0.0	0.0
77.5°	2.2	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°	2.2	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.2	1.1	2.2	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: P123884

CATALOG NUMBER: ELSG406935TBZ (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: P123884

CATALOG NUMBER: ELSG406935TBZ (50° BEAM - 35° TILT)

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	162.6	162.6	162.6	162.6	162.6	162.6	162.6	162.6	162.6	162.6	162.6
2.5°	150.8	147.5	147.5	144.3	142.2	141.1	140.0	135.7	134.6	133.5	133.5
5°	131.4	124.9	117.4	112.0	106.6	101.2	96.9	94.8	88.3	84.0	81.8
7.5°	106.6	95.8	86.2	77.5	66.8	62.5	52.8	48.5	43.1	39.8	35.5
10°	80.8	68.9	56.0	44.2	35.5	29.1	22.6	18.3	16.2	14.0	11.8
12.5°	50.6	34.5	25.8	17.2	8.6	6.5	6.5	3.2	2.2	2.2	1.1
15°	32.3	18.3	11.8	8.6	8.6	6.5	5.4	4.3	4.3	3.2	3.2
17.5°	15.1	9.7	7.5	4.3	4.3	4.3	3.2	4.3	6.5	3.2	2.2
20°	6.5	5.4	4.3	3.2	2.2	4.3	2.2	1.1	1.1	1.1	1.1
22.5°	6.5	5.4	4.3	5.4	8.6	1.1	3.2	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°	2.2	2.2	0.0	0.0	1.1	0.0	0.0	0.0	3.2	2.2	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°	6.5	0.0	1.1	2.2	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: P123884

CATALOG NUMBER: ELSG406935TBZ (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: P123884

CATALOG NUMBER: ELSG406935TBZ (50° BEAM - 35° TILT)

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	162.6	162.6	162.6	162.6
2.5°	132.5	131.4	132.5	130.3
5°	82.9	78.6	78.6	78.6
7.5°	34.5	32.3	31.2	32.3
10°	11.8	10.8	10.8	10.8
12.5°	2.2	1.1	1.1	1.1
15°	3.2	3.2	3.2	3.2
17.5°	2.2	1.1	2.2	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: P123884

CATALOG NUMBER: ELSG406935TBZ (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)