

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: HALO

Report Number: P588663

Luminaire Tested: **SWL0540B**

Issue Date: 12/1/2021



**Test Information**

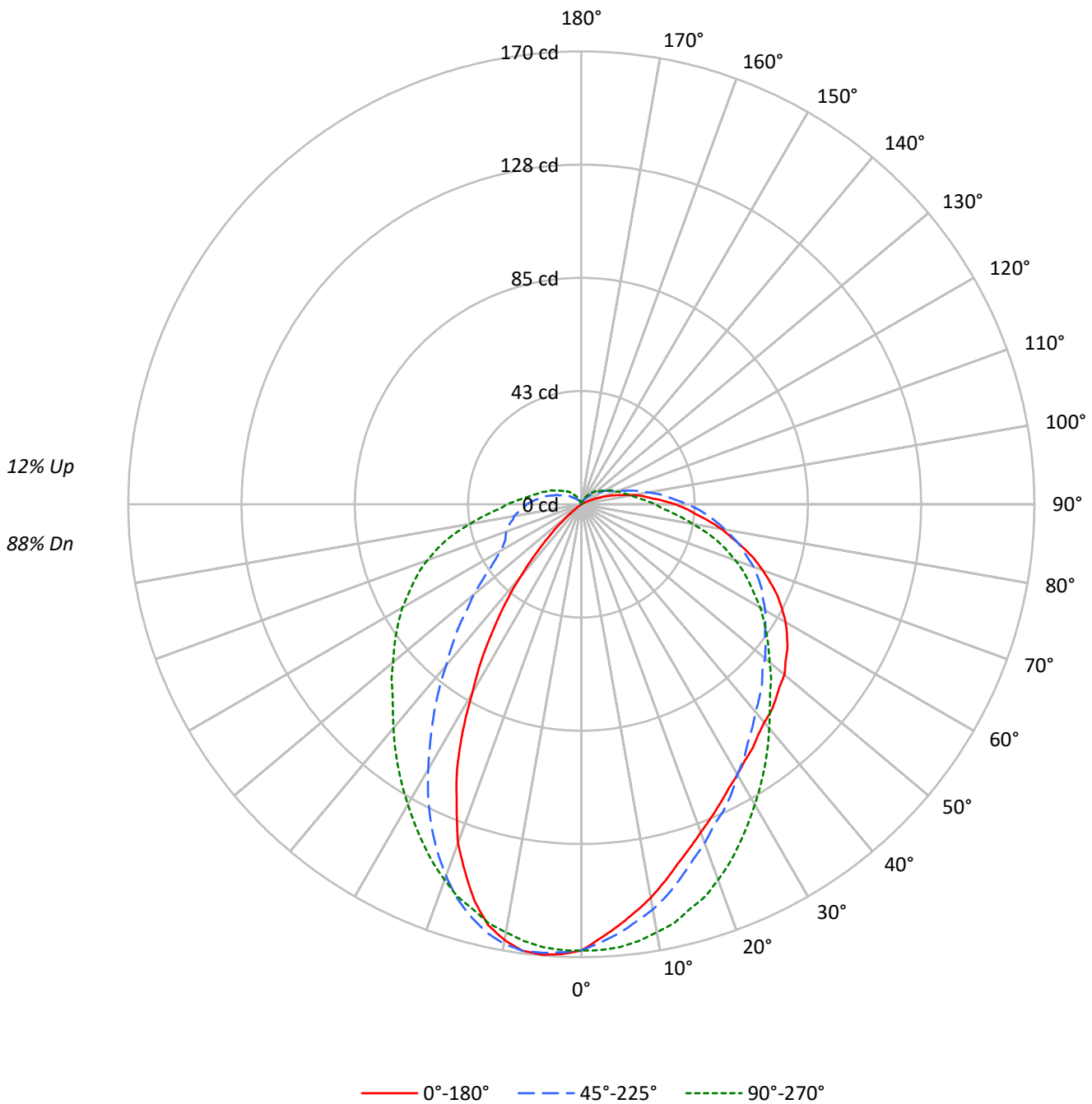
Test Method: LM-79-08  
Report Number: P588663  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2109-371-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 12/1/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: SWL0540B  
Description:  
Light Source: (1) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 500.0 lumens  
Efficiency: N/A  
Efficacy: 500.0 lumens/watt  
Spacing Criteria (0/90/45): 0.96 / 1.16 / 1.2  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 0.21' x H: 0.33')  
CIE Type: Semi-Direct  
  
Input Watts (W): 1  
Input Voltage (V): 120  
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: 24 FT

TEST NUMBER: P588663  
CATALOG NUMBER: SWL0540B

### 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	0
RCR																		
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	91	91	91	88
1	104	98	93	88	99	94	90	85	88	84	80	82	79	76	76	74	72	69
2	93	84	77	70	90	81	74	68	76	70	65	71	66	62	66	62	59	56
3	85	74	65	58	81	71	63	57	66	60	54	62	56	52	58	53	49	47
4	78	65	56	49	75	63	55	48	59	52	46	55	49	44	52	47	42	40
5	72	58	49	42	69	56	48	41	53	46	40	50	43	38	47	41	37	34
6	66	53	43	37	64	51	42	36	48	41	35	45	39	34	43	37	33	30
7	61	48	39	33	59	46	38	32	44	36	31	41	35	30	39	33	29	27
8	57	44	35	29	55	43	34	29	40	33	28	38	32	27	36	30	26	24
9	54	40	32	26	52	39	31	26	37	30	25	35	29	25	33	28	24	22
10	50	37	29	24	49	36	29	24	34	28	23	33	27	22	31	26	22	20

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

	0°	90°	180°
0°	20773	20773	20773
5°	17344	19408	18535
10°	14737	18002	16318
15°	12558	16634	13880
20°	10930	15335	11289
25°	9691	14006	8664
30°	8721	12758	6100
35°	7994	11648	4129
40°	7385	10630	2476
45°	6966	9767	1188
50°	6609	9111	339
55°	6218	8572	0
60°	5825	8062	0
65°	5382	7514	0
70°	4869	6977	0
75°	4327	6340	0
80°	3789	5473	0
85°	3190	4731	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	15.6	3.1
10°-20°	42.8	8.6
20°-30°	59.3	11.9
30°-40°	64.3	12.9
40°-50°	62.5	12.5
50°-60°	58.9	11.8
60°-70°	54.8	11.0
70°-80°	47.2	9.4
80°-90°	36.2	7.2
90°-100°	24.7	4.9
100°-110°	15.2	3.0
110°-120°	8.7	1.7
120°-130°	5.1	1.0
130°-140°	2.9	0.6
140°-150°	1.4	0.3
150°-160°	0.5	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	117.8	23.6
0°-40°	182.1	36.4
0°-60°	303.4	60.7
0°-90°	441.6	88.3
90°-120°	48.6	9.7
90°-150°	57.9	11.6
90°-180°	58.0	11.6
0°-180°	500.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	168	168	168	168	168	
5°	159	162	167	169	170	15
15°	140	145	157	160	154	39
25°	124	127	140	133	110	57
35°	112	109	120	97	58	70
45°	103	96	100	65	18	80
55°	94	84	85	42	0	84
65°	81	75	70	32	0	80
75°	63	62	53	28	0	66
85°	43	48	34	23	0	38
90°	35	40	28	20	0	19
95°	26	32	23	18	0	20
105°	13	20	16	12	0	14
115°	3	12	12	8	0	3
125°	0	8	9	5	0	0
135°	0	5	7	3	0	0
145°	0	3	4	2	0	0
155°	0	2	2	1	0	0
165°	0	0	1	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5
2.5°	163.1	163.1	163.9	163.9	164.6	164.6	165.3	166.1	166.1	166.8	167.5
5°	158.8	159.5	159.5	160.2	161.0	161.7	162.4	163.1	164.6	166.1	166.8
7.5°	154.4	154.4	155.1	155.8	156.6	158.0	159.5	161.0	162.4	164.6	165.3
10°	150.0	150.0	150.7	151.4	152.9	154.4	155.8	158.0	160.2	162.4	163.1
12.5°	144.9	145.6	145.6	146.3	147.8	150.0	152.2	154.4	157.3	160.2	161.0
15°	139.7	139.7	140.5	141.2	143.4	144.9	147.1	150.0	152.9	156.6	157.3
17.5°	135.3	135.3	136.1	136.8	138.3	139.7	142.7	145.6	149.2	152.9	154.4
20°	131.0	131.0	131.7	132.4	133.2	135.3	137.5	140.5	144.1	148.5	150.0
22.5°	127.3	127.3	128.0	128.0	129.5	130.2	133.2	136.1	139.7	144.1	145.6
25°	123.6	123.6	123.6	124.4	125.1	126.6	128.0	131.0	134.6	139.0	140.5
27.5°	120.0	120.7	120.7	120.7	121.4	122.2	122.9	125.8	129.5	133.2	135.3
30°	117.1	117.1	117.1	117.1	117.1	117.1	118.5	120.0	123.6	128.0	130.2
32.5°	114.1	114.1	114.1	114.1	114.1	113.4	114.1	115.6	118.5	122.9	125.1
35°	111.9	111.9	111.9	111.2	109.7	109.0	109.0	110.5	113.4	117.8	120.0
37.5°	109.0	109.7	109.0	108.3	106.8	105.4	104.6	105.4	108.3	112.7	114.9
40°	106.8	106.8	106.8	106.1	103.9	101.7	100.2	101.0	103.2	107.5	109.7
42.5°	105.4	105.4	104.6	103.2	101.0	98.8	96.6	95.8	98.0	102.4	104.6
45°	103.2	103.2	103.2	101.0	98.8	95.8	92.9	91.5	93.6	98.0	100.2
47.5°	101.0	101.0	101.0	98.8	95.8	92.2	89.3	87.1	88.5	93.6	96.6
50°	99.5	99.5	98.8	97.3	93.6	90.0	85.6	83.4	84.1	89.3	92.2
52.5°	96.6	96.6	96.6	95.1	91.5	87.1	82.7	79.7	80.5	84.9	88.5
55°	94.4	94.4	94.4	92.2	89.3	84.1	79.7	76.1	76.1	80.5	84.9
57.5°	91.5	91.5	91.5	90.0	87.1	81.9	76.8	73.2	72.4	76.8	81.2
60°	88.5	88.5	88.5	87.1	84.1	79.7	73.9	69.5	68.8	73.2	77.5
62.5°	84.9	84.9	85.6	84.1	81.2	76.8	71.7	66.6	65.1	68.8	73.2
65°	81.2	81.2	81.9	81.2	78.3	74.6	68.8	63.6	61.5	65.1	69.5
67.5°	76.8	76.8	77.5	77.5	75.4	71.7	66.6	60.7	57.8	61.5	65.8
70°	72.4	72.4	73.2	73.2	71.7	68.8	63.6	58.5	54.1	57.1	61.5
72.5°	68.0	68.0	68.8	68.8	68.0	65.1	61.5	55.6	50.5	52.7	57.1
75°	62.9	62.9	64.4	64.4	64.4	62.2	58.5	52.7	47.6	48.3	52.7
77.5°	57.8	58.5	60.0	60.7	60.0	58.5	55.6	49.7	44.6	44.6	47.6
80°	53.4	53.4	54.9	55.6	56.3	54.9	51.9	46.8	41.0	39.5	42.4
82.5°	48.3	49.0	50.5	51.2	51.9	51.2	49.0	43.9	38.0	35.8	38.0
85°	43.2	44.6	46.1	46.8	47.6	47.6	45.4	41.0	35.1	32.2	33.7
87.5°	39.5	39.5	41.7	42.4	43.9	43.9	42.4	38.0	32.2	28.5	30.0
90°	35.1	35.1	37.3	38.8	39.5	39.5	38.8	35.1	29.3	26.3	27.8
92.5°	30.7	31.5	32.9	34.4	35.8	35.8	35.1	32.2	26.3	23.4	24.9
95°	26.3	27.1	29.3	30.7	32.2	32.2	32.2	28.5	24.1	21.9	22.7
97.5°	23.4	23.4	25.6	27.1	28.5	29.3	28.5	26.3	22.7	20.5	20.5
100°	19.8	20.5	21.9	23.4	24.9	25.6	25.6	23.4	21.2	19.0	19.0
102.5°	16.1	16.8	18.3	20.5	21.2	22.7	22.7	21.9	19.8	17.6	17.6
105°	13.2	13.2	15.4	16.8	19.0	19.8	20.5	19.8	18.3	16.1	16.1
107.5°	10.2	10.2	12.4	13.9	15.4	16.8	18.3	18.3	16.8	15.4	15.4
110°	7.3	8.0	9.5	11.7	13.2	15.4	16.8	16.8	16.1	14.6	13.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	5.1	5.1	7.3	8.8	11.0	13.2	15.4	16.1	14.6	13.2	13.2
115°	2.9	3.7	5.1	7.3	9.5	11.7	13.9	14.6	13.9	12.4	12.4
117.5°	1.5	1.5	3.7	5.9	8.0	11.0	13.2	13.9	13.2	11.7	11.0
120°	0.7	0.7	2.2	5.1	7.3	10.2	11.7	12.4	11.7	11.0	10.2
122.5°	0.0	0.0	2.2	4.4	6.6	8.8	11.0	11.7	11.0	10.2	9.5
125°	0.0	0.0	1.5	3.7	5.9	8.0	9.5	10.2	10.2	9.5	8.8
127.5°	0.0	0.0	1.5	3.7	5.1	7.3	8.8	9.5	9.5	8.8	8.0
130°	0.0	0.0	1.5	2.9	5.1	6.6	8.0	8.8	8.8	8.0	7.3
132.5°	0.0	0.0	0.7	2.9	4.4	5.9	7.3	8.0	7.3	7.3	7.3
135°	0.0	0.0	0.7	2.2	3.7	5.1	5.9	6.6	6.6	6.6	6.6
137.5°	0.0	0.0	0.7	2.2	3.7	4.4	5.9	5.9	5.9	5.9	5.9
140°	0.0	0.0	0.7	1.5	2.9	3.7	5.1	5.1	5.1	5.1	5.1
142.5°	0.0	0.0	0.0	1.5	2.2	3.7	4.4	4.4	5.1	4.4	4.4
145°	0.0	0.0	0.0	0.7	2.2	2.9	3.7	4.4	4.4	4.4	4.4
147.5°	0.0	0.0	0.0	0.7	1.5	2.2	2.9	3.7	3.7	3.7	3.7
150°	0.0	0.0	0.0	0.7	1.5	2.2	2.2	2.9	2.9	2.9	2.9
152.5°	0.0	0.0	0.0	0.0	0.7	1.5	2.2	2.2	2.2	2.2	2.2
155°	0.0	0.0	0.0	0.0	0.7	1.5	1.5	2.2	2.2	2.2	2.2
157.5°	0.0	0.0	0.0	0.0	0.7	0.7	1.5	1.5	1.5	1.5	1.5
160°	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7	1.5	1.5
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7
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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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5
2.5°	167.5	167.5	168.3	168.3	168.3	169.0	169.0	169.0	169.0	169.0
5°	166.8	167.5	168.3	168.3	169.0	169.7	169.7	169.7	169.7	169.7
7.5°	166.1	166.8	167.5	168.3	169.0	169.0	169.0	169.0	169.0	169.0
10°	164.6	166.1	166.8	167.5	167.5	167.5	166.8	166.1	166.8	166.1
12.5°	162.4	163.9	164.6	165.3	164.6	163.9	163.1	161.7	161.7	161.7
15°	158.8	160.2	161.7	161.0	160.2	158.8	156.6	155.1	153.6	154.4
17.5°	155.1	157.3	157.3	156.6	155.1	152.2	149.2	147.1	145.6	144.9
20°	151.4	152.9	152.9	151.4	148.5	144.1	139.7	136.8	134.6	135.3
22.5°	147.1	148.5	147.8	144.9	141.2	135.3	130.2	125.8	122.2	122.2
25°	141.9	143.4	142.7	138.3	133.2	126.6	119.3	113.4	110.5	110.5
27.5°	137.5	138.3	136.8	131.7	124.4	115.6	106.8	100.2	96.6	96.6
30°	131.7	133.2	130.2	123.6	114.9	104.6	95.1	87.1	82.7	81.9
32.5°	126.6	127.3	123.6	116.3	105.4	93.6	82.7	74.6	70.2	70.2
35°	121.4	122.2	117.8	109.0	96.6	83.4	71.7	62.9	58.5	57.8
37.5°	116.3	117.1	112.7	102.4	87.8	73.2	60.7	51.9	46.8	46.8
40°	111.9	111.9	107.5	95.1	79.0	64.4	50.5	41.7	36.6	35.8
42.5°	106.8	108.3	101.7	88.5	71.7	55.6	41.7	32.9	27.1	25.6
45°	103.2	103.9	98.0	82.7	65.1	47.6	33.7	23.4	18.3	17.6
47.5°	98.8	101.0	93.6	77.5	57.8	40.2	25.6	16.1	11.0	11.0
50°	95.1	98.0	90.0	73.2	52.7	33.7	19.0	10.2	5.9	5.1
52.5°	92.2	95.1	87.1	68.8	46.8	27.8	13.9	5.9	1.5	1.5
55°	88.5	92.2	84.9	65.1	41.7	23.4	10.2	3.7	0.0	0.0
57.5°	84.9	90.0	81.9	61.5	38.0	19.8	8.8	2.9	0.0	0.0
60°	81.9	87.8	79.0	57.8	35.1	18.3	8.0	2.9	0.0	0.0
62.5°	79.0	84.9	76.1	54.9	32.9	17.6	8.0	2.2	0.0	0.0
65°	75.4	81.9	73.2	51.9	31.5	16.8	8.0	2.2	0.0	0.0
67.5°	71.0	78.3	70.2	49.7	30.7	16.1	7.3	2.2	0.0	0.0
70°	66.6	74.6	67.3	48.3	30.0	15.4	6.6	2.2	0.0	0.0
72.5°	62.2	70.2	63.6	46.8	28.5	15.4	6.6	1.5	0.0	0.0
75°	57.1	65.1	61.5	45.4	27.8	14.6	6.6	1.5	0.0	0.0
77.5°	52.7	60.7	57.8	43.2	26.3	13.9	5.9	1.5	0.0	0.0
80°	47.6	56.3	54.9	41.0	25.6	13.2	5.9	1.5	0.0	0.0
82.5°	42.4	51.9	51.2	38.8	24.1	12.4	5.9	1.5	0.0	0.0
85°	38.0	47.6	47.6	36.6	22.7	11.7	5.1	1.5	0.0	0.0
87.5°	34.4	43.2	43.9	33.7	21.2	11.7	5.1	1.5	0.0	0.0
90°	30.7	38.8	40.2	31.5	20.5	11.0	5.1	1.5	0.0	0.0
92.5°	27.8	34.4	35.8	29.3	19.0	10.2	4.4	0.7	0.0	0.0
95°	24.9	30.7	32.2	26.3	17.6	9.5	4.4	0.7	0.0	0.0
97.5°	22.7	27.1	28.5	24.1	16.1	8.8	4.4	0.7	0.0	0.0
100°	20.5	24.1	25.6	21.9	14.6	8.8	3.7	0.7	0.0	0.0
102.5°	18.3	21.2	22.7	19.8	13.9	8.0	3.7	0.7	0.0	0.0
105°	16.8	19.0	19.8	17.6	12.4	7.3	3.7	0.7	0.0	0.0
107.5°	15.4	16.8	17.6	15.4	11.0	6.6	3.7	0.7	0.0	0.0
110°	13.9	14.6	15.4	13.2	10.2	6.6	2.9	0.7	0.0	0.0





TEST NUMBER: P588663  
 CATALOG NUMBER: SWL0540B

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	13.2	13.2	13.2	11.7	8.8	5.9	2.9	0.7	0.0	0.0
115°	11.7	11.7	11.7	10.2	8.0	5.1	2.9	0.7	0.0	0.0
117.5°	11.0	11.0	10.2	9.5	7.3	4.4	2.2	0.7	0.0	0.0
120°	10.2	9.5	9.5	8.0	6.6	4.4	2.2	0.7	0.0	0.0
122.5°	9.5	8.8	8.0	7.3	5.9	3.7	2.2	0.7	0.0	0.0
125°	8.8	8.0	7.3	6.6	5.1	2.9	1.5	0.0	0.0	0.0
127.5°	8.0	7.3	6.6	5.9	4.4	2.9	1.5	0.0	0.0	0.0
130°	7.3	6.6	5.9	5.1	3.7	2.9	1.5	0.0	0.0	0.0
132.5°	6.6	6.6	5.1	4.4	3.7	2.2	1.5	0.0	0.0	0.0
135°	5.9	5.9	5.1	4.4	2.9	2.2	0.7	0.0	0.0	0.0
137.5°	5.9	5.1	4.4	3.7	2.9	2.2	0.7	0.0	0.0	0.0
140°	5.1	4.4	3.7	2.9	2.2	1.5	0.7	0.0	0.0	0.0
142.5°	4.4	4.4	3.7	2.9	2.2	1.5	0.7	0.0	0.0	0.0
145°	3.7	3.7	2.9	2.2	2.2	1.5	0.7	0.0	0.0	0.0
147.5°	3.7	2.9	2.9	2.2	1.5	0.7	0.7	0.0	0.0	0.0
150°	2.9	2.9	2.2	1.5	1.5	0.7	0.0	0.0	0.0	0.0
152.5°	2.2	2.2	1.5	1.5	0.7	0.7	0.0	0.0	0.0	0.0
155°	2.2	1.5	1.5	1.5	0.7	0.7	0.0	0.0	0.0	0.0
157.5°	1.5	1.5	1.5	0.7	0.7	0.0	0.0	0.0	0.0	0.0
160°	1.5	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0
162.5°	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.7	0.7	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
170°	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
175°	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
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)