

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO

Report Number: P938617

Luminaire Tested: SMX4RLSFSD2W-650LM-3000K

Issue Date: 1/9/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P938617  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2405915A001)  
Test Lab:  
Issue Date: 1/9/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: SMX4RLSFSD2W-650LM-3000K  
Description: 4IN ROUND, 90CRI, DIMMING TO 10%, DAMP LOCATION  
Light Source: SELECTABLE CCT 90CRI / 3000K CCT  
Ballast/Driver: -

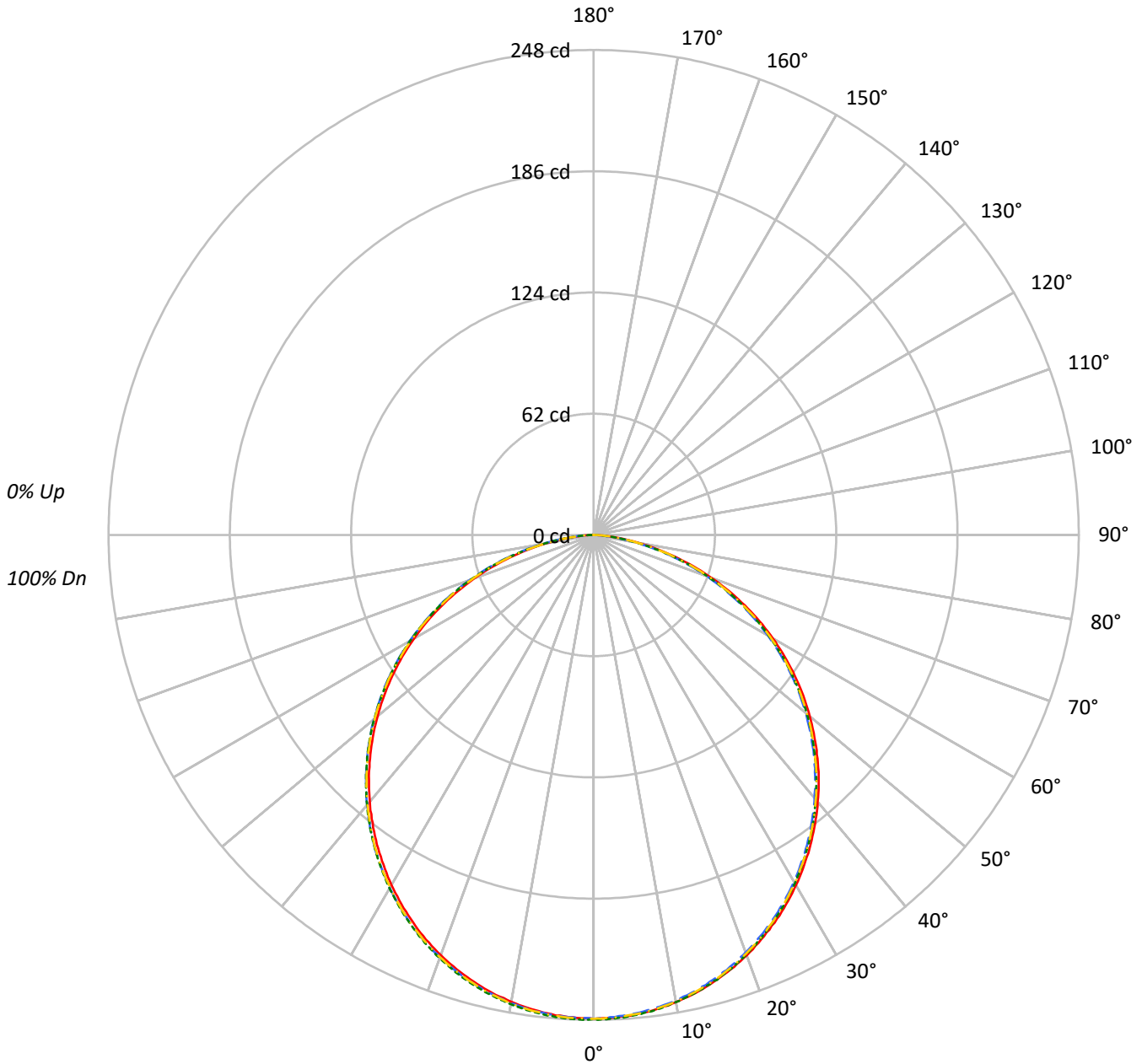
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 689.1 lumens  
Efficiency: N/A  
Efficacy: 99.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 6.9  
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: 24 FT

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CATALOG NUMBER: SMX4RLSFS2W-650LM-3000K

### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84								
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	70								
3	90	80	72	65	88	78	71	65	75	69	63	72	67	62	70	65	61	59								
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	50								
5	76	63	54	48	74	62	54	47	60	52	47	58	51	46	56	50	46	44								
6	70	57	48	41	68	56	47	41	54	47	41	52	46	41	51	45	40	38								
7	65	52	43	37	63	51	42	36	49	42	36	48	41	36	46	40	36	34								
8	61	47	38	33	59	46	38	33	45	38	32	44	37	32	43	36	32	30								
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27								
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	31	26	24								

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

	0°	90°	180°	270°
0°	31148	31148	31148	31148
5°	31090	31128	31077	31191
10°	31002	31002	30977	31143
15°	30839	30774	30826	31022
20°	30642	30562	30616	30830
25°	30383	30230	30341	30605
30°	30066	29892	30037	30314
35°	29682	29482	29682	29989
40°	29259	29013	29259	29604
45°	28815	28477	28779	29153
50°	28233	27841	28233	28663
55°	27536	27075	27536	28063
60°	26605	26101	26680	27259
65°	25401	24776	25550	26175
70°	23586	22850	23844	24580
75°	20860	20082	21346	22221
80°	16741	15727	17611	18553
85°	10541	9241	11696	12996

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 247.5°  
 Vertical Angle: 45°  
 Luminance: 29349 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.4	3.4
10°-20°	66.8	9.7
20°-30°	100.8	14.6
30°-40°	120.9	17.5
40°-50°	124.7	18.1
50°-60°	112.1	16.3
60°-70°	84.4	12.2
70°-80°	46.0	6.7
80°-90°	10.0	1.5
90°-100°	0.0	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°	191.0	27.7
0°-40°	311.8	45.2
0°-60°	548.7	79.6
0°-90°	689.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	689.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	248	248	248	248	248	
5°	246	246	246	247	246	23
15°	237	236	237	238	237	67
25°	219	218	218	220	219	101
35°	193	192	193	195	193	121
45°	162	160	162	164	162	125
55°	126	123	126	128	126	112
65°	85	83	86	88	85	84
75°	43	41	44	46	43	45
85°	7	6	8	9	7	10
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	247.5	247.5	247.5	247.5	247.5	247.5	247.5	247.5	247.5	247.5	247.5
0.5°	247.3	247.2	247.3	246.9	248.0	247.8	247.3	247.2	247.2	247.2	247.2
1°	247.2	247.2	246.9	247.0	247.8	247.6	247.4	247.4	247.2	247.5	247.1
1.5°	247.1	247.1	247.1	246.7	247.8	247.6	247.1	247.1	247.2	247.2	247.1
2°	247.1	247.1	246.7	246.7	247.6	247.5	247.1	247.2	247.1	247.1	247.2
2.5°	247.1	246.9	246.8	246.5	247.5	247.2	247.0	247.0	246.9	247.0	247.0
3°	246.8	246.8	246.4	246.4	247.2	247.2	246.9	247.1	246.9	246.9	246.9
3.5°	246.7	246.5	246.4	246.0	247.4	247.1	246.7	246.6	246.7	246.8	246.8
4°	246.6	246.4	246.0	245.9	246.9	246.8	246.4	246.6	246.4	246.7	246.7
4.5°	246.5	246.1	245.9	245.6	246.7	246.7	246.1	246.2	246.5	246.6	246.5
5°	246.1	245.9	245.6	245.4	246.4	246.2	246.0	246.2	246.0	246.4	246.2
5.5°	245.8	245.6	245.4	245.0	246.4	246.2	245.8	245.6	245.8	246.2	246.3
6°	245.6	245.3	245.1	244.8	245.8	245.6	245.4	245.6	245.6	245.6	245.8
6.5°	245.4	245.1	244.6	244.4	245.6	245.5	245.2	244.9	245.2	245.5	245.5
7°	245.1	244.7	244.5	244.0	245.4	245.0	244.7	245.1	244.9	245.1	245.4
7.5°	244.7	244.4	243.9	243.6	244.8	244.8	244.5	244.4	244.5	244.9	245.1
8°	244.2	244.0	243.6	243.2	244.5	244.2	244.0	244.2	244.2	244.3	244.6
8.5°	243.8	243.5	243.1	242.6	244.1	243.9	243.6	243.5	243.8	244.1	244.4
9°	243.6	243.1	242.7	242.3	243.5	243.4	243.2	243.4	243.4	243.6	243.9
9.5°	243.1	242.6	242.4	241.8	243.1	243.1	242.7	242.6	242.9	243.2	243.5
10°	242.6	242.2	241.7	241.4	242.6	242.5	242.4	242.5	242.4	242.8	243.1
10.5°	242.1	241.8	241.2	240.7	242.2	241.9	241.7	241.9	241.9	242.4	242.5
11°	241.5	241.1	240.6	240.5	241.5	241.4	241.2	241.4	241.3	241.9	242.1
11.5°	241.1	240.8	240.2	239.6	240.9	240.8	240.7	240.8	240.9	241.3	241.5
12°	240.5	240.1	239.5	239.1	240.4	240.3	240.0	240.3	240.5	240.8	241.2
12.5°	240.0	239.4	239.0	238.4	239.8	239.8	239.5	239.4	239.9	240.2	240.5
13°	239.4	239.0	238.2	237.8	239.2	239.1	238.8	239.1	239.2	239.6	240.0
13.5°	238.8	238.2	237.6	237.1	238.7	238.3	238.2	238.3	238.7	238.9	239.5
14°	238.1	237.6	237.2	236.5	237.8	237.9	237.5	237.8	237.9	238.3	238.8
14.5°	237.5	236.9	236.2	235.6	237.3	236.9	236.9	237.0	237.3	237.8	238.2
15°	236.7	236.2	235.6	235.0	236.2	236.5	236.1	236.5	236.6	237.0	237.5
15.5°	236.0	235.4	234.8	234.3	236.1	235.6	235.5	235.5	235.9	236.3	236.9
16°	235.3	234.8	234.2	233.4	234.9	234.9	234.7	234.9	235.2	235.7	236.1
16.5°	234.5	234.0	233.2	232.7	234.3	234.0	233.9	234.0	234.5	235.0	235.5
17°	233.8	233.3	232.7	231.8	233.4	233.4	233.1	233.4	233.6	234.1	234.6
17.5°	232.9	232.3	231.6	230.9	232.8	232.5	232.3	232.5	232.9	233.5	233.9
18°	232.3	231.7	230.8	230.2	231.8	231.7	231.5	231.9	232.0	232.5	233.2
18.5°	231.3	230.8	230.1	229.2	231.0	230.8	230.6	230.8	231.3	232.0	232.3
19°	230.6	229.9	228.9	228.3	230.0	229.8	229.8	230.0	230.4	231.0	231.5
19.5°	229.6	228.9	228.2	227.5	229.2	229.1	228.7	229.0	229.5	230.2	230.7
20°	228.8	228.0	227.2	226.6	228.2	228.0	227.9	228.3	228.6	229.3	229.9
20.5°	227.8	227.0	226.3	225.6	227.3	227.2	226.9	227.2	227.7	228.4	228.8
21°	227.0	226.3	225.3	224.6	226.1	226.2	226.0	226.4	226.8	227.4	228.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	223.9	223.2	222.3	221.6	223.3	223.3	223.0	223.3	224.0	224.6	225.2
23°	223.0	222.2	221.4	220.6	222.2	222.0	222.0	222.4	222.8	223.4	224.3
23.5°	221.7	221.1	220.2	219.6	221.2	221.2	220.9	221.2	221.9	222.5	223.2
24°	221.0	220.1	219.1	218.4	220.1	220.0	219.7	220.2	220.9	221.4	222.2
24.5°	219.6	219.0	217.9	217.3	219.0	218.8	218.7	219.0	219.7	220.3	221.0
25°	218.8	218.0	216.9	216.1	217.7	217.8	217.7	218.1	218.5	219.2	220.0
25.5°	217.5	216.7	215.8	215.0	216.7	216.6	216.4	216.7	217.4	218.2	219.0
26°	216.7	215.6	214.7	213.8	215.6	215.4	215.4	215.7	216.4	217.1	217.9
26.5°	215.3	214.4	213.4	212.7	214.3	214.3	214.1	214.6	215.1	215.9	216.7
27°	214.3	213.3	212.2	211.5	213.3	213.2	213.1	213.5	214.2	214.9	215.7
27.5°	213.0	212.0	211.1	210.3	212.0	211.9	211.7	212.2	212.8	213.5	214.4
28°	211.9	210.9	209.8	209.0	210.8	210.7	210.6	211.0	211.6	212.5	213.3
28.5°	210.6	209.6	208.6	207.7	209.5	209.4	209.3	209.7	210.3	211.2	212.1
29°	209.5	208.3	207.3	206.5	208.2	208.2	208.0	208.6	209.3	210.0	211.0
29.5°	208.0	207.1	206.0	205.1	207.0	206.8	206.8	207.2	207.9	208.8	209.6
30°	206.9	205.9	204.8	204.0	205.7	205.6	205.4	206.1	206.7	207.5	208.6
30.5°	205.6	204.5	203.4	202.5	204.4	204.4	204.3	204.6	205.4	206.2	207.1
31°	204.3	203.3	202.2	201.4	203.0	203.0	202.8	203.4	204.2	205.1	205.8
31.5°	203.0	201.8	200.8	200.0	201.8	201.7	201.5	202.1	202.6	203.6	204.5
32°	201.7	200.5	199.4	198.6	200.3	200.3	200.2	200.8	201.4	202.4	203.3
32.5°	200.3	199.2	198.0	197.2	198.9	198.9	198.8	199.3	200.0	201.0	202.0
33°	198.8	197.9	196.8	195.8	197.5	197.5	197.5	198.1	198.8	199.6	200.6
33.5°	197.5	196.3	195.3	194.3	196.2	196.1	196.2	196.5	197.2	198.3	199.4
34°	196.2	195.1	193.8	192.9	194.7	194.7	194.7	195.2	196.0	196.8	197.8
34.5°	194.7	193.5	192.5	191.5	193.4	193.4	193.2	193.7	194.4	195.6	196.6
35°	193.2	192.2	191.0	190.0	191.9	191.8	191.7	192.4	193.2	194.1	195.0
35.5°	191.9	190.7	189.6	188.7	190.5	190.4	190.4	190.8	191.5	192.6	193.8
36°	190.4	189.3	188.1	187.1	189.0	188.8	188.9	189.6	190.3	191.2	192.1
36.5°	188.9	187.8	186.7	185.6	187.5	187.4	187.4	187.8	188.7	189.9	190.9
37°	187.4	186.4	185.0	184.1	185.9	185.8	185.9	186.5	187.3	188.1	189.2
37.5°	185.9	184.6	183.6	182.6	184.6	184.4	184.4	184.9	185.6	186.9	187.9
38°	184.4	183.2	181.9	181.1	182.8	182.8	182.9	183.5	184.4	185.2	186.2
38.5°	183.1	181.6	180.5	179.4	181.5	181.2	181.4	181.8	182.6	183.8	184.9
39°	181.4	180.2	178.8	178.1	179.8	179.7	179.8	180.4	181.3	182.2	183.3
39.5°	179.9	178.5	177.3	176.3	178.2	178.2	178.2	178.6	179.6	180.8	181.8
40°	178.1	176.9	175.7	174.7	176.6	176.5	176.6	177.2	178.1	179.2	180.2
40.5°	176.7	175.3	174.0	173.1	175.1	174.9	175.1	175.6	176.4	177.6	178.7
41°	175.1	173.9	172.5	171.5	173.4	173.3	173.5	174.0	174.8	176.0	177.1
41.5°	173.5	172.1	170.9	169.9	171.8	171.7	171.9	172.4	173.3	174.4	175.4
42°	171.9	170.7	169.2	168.3	170.2	170.0	170.2	170.6	171.6	172.8	173.8
42.5°	170.2	168.9	167.6	166.6	168.5	168.4	168.6	169.1	170.0	171.2	172.3
43°	168.6	167.2	165.8	164.9	166.8	166.7	166.9	167.6	168.5	169.5	170.6
43.5°	167.0	165.6	164.5	163.3	165.0	165.1	165.3	165.8	166.8	167.8	169.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	161.9	160.5	159.1	158.1	160.0	160.0	160.2	160.7	161.7	163.0	164.0
45.5°	160.0	158.7	157.5	156.5	158.2	158.3	158.5	159.1	160.1	161.2	162.3
46°	158.5	157.1	155.7	154.7	156.5	156.6	156.6	157.3	158.3	159.4	160.6
46.5°	156.6	155.3	153.9	153.0	154.7	154.7	155.0	155.6	156.6	157.7	159.0
47°	154.9	153.6	152.1	151.1	153.0	153.0	153.1	153.8	154.8	156.1	157.2
47.5°	153.1	151.8	150.4	149.3	151.2	151.2	151.5	152.1	153.2	154.4	155.4
48°	151.4	150.1	148.7	147.6	149.5	149.5	149.7	150.4	151.4	152.4	153.8
48.5°	149.6	148.3	146.8	145.7	147.7	147.7	148.0	148.5	149.6	150.9	151.9
49°	147.8	146.5	145.0	143.9	145.8	145.8	146.1	146.7	147.8	149.0	150.3
49.5°	146.0	144.6	143.3	142.3	144.1	144.1	144.3	145.0	146.0	147.2	148.4
50°	144.2	142.9	141.4	140.2	142.2	142.1	142.4	143.1	144.2	145.4	146.7
50.5°	142.4	140.9	139.6	138.5	140.4	140.4	140.7	141.4	142.4	143.6	144.8
51°	140.5	139.2	137.7	136.7	138.6	138.5	138.8	139.5	140.5	141.8	143.0
51.5°	138.7	137.3	135.9	134.8	136.7	136.7	137.0	137.7	138.8	140.0	141.1
52°	136.8	135.5	134.0	132.8	134.9	134.8	135.1	135.8	136.8	138.2	139.3
52.5°	135.0	133.5	132.2	131.1	133.0	133.1	133.3	134.0	135.1	136.2	137.5
53°	133.1	131.7	130.2	129.2	131.1	131.1	131.4	132.1	133.1	134.4	135.7
53.5°	131.2	129.7	128.4	127.3	129.2	129.3	129.5	130.2	131.3	132.6	133.8
54°	129.3	127.9	126.4	125.4	127.2	127.2	127.7	128.2	129.4	130.7	132.0
54.5°	127.4	125.9	124.5	123.5	125.4	125.4	125.7	126.4	127.5	128.8	130.0
55°	125.5	124.1	122.6	121.5	123.4	123.5	123.8	124.5	125.5	126.9	128.1
55.5°	123.6	122.1	120.6	119.6	121.5	121.5	121.9	122.6	123.6	125.1	126.2
56°	121.6	120.2	118.8	117.6	119.5	119.5	119.9	120.6	121.7	123.0	124.4
56.5°	119.6	118.2	116.7	115.6	117.6	117.6	117.9	118.7	119.9	121.2	122.5
57°	117.8	116.2	114.8	113.8	115.7	115.6	116.1	116.7	117.9	119.2	120.4
57.5°	115.8	114.3	112.8	111.8	113.6	113.8	114.1	114.8	116.0	117.3	118.5
58°	113.8	112.3	110.9	109.8	111.6	111.8	112.1	112.8	113.9	115.3	116.6
58.5°	111.8	110.3	108.8	107.8	109.8	109.8	110.1	110.9	112.0	113.5	114.6
59°	109.8	108.3	106.9	105.7	107.7	107.8	108.1	108.8	110.0	111.3	112.7
59.5°	107.8	106.3	104.9	103.8	105.7	105.7	106.1	106.9	108.0	109.5	110.6
60°	105.7	104.3	102.8	101.7	103.7	103.7	104.2	104.9	106.0	107.4	108.7
60.5°	103.8	102.3	100.8	99.7	101.7	101.7	102.2	102.9	104.0	105.4	106.6
61°	101.7	100.2	98.7	97.7	99.6	99.7	100.1	100.9	102.0	103.4	104.7
61.5°	99.7	98.2	96.7	95.7	97.6	97.7	98.2	98.9	100.0	101.5	102.6
62°	97.7	96.2	94.6	93.6	95.5	95.7	96.0	96.9	98.0	99.4	100.6
62.5°	95.6	94.1	92.6	91.6	93.6	93.6	94.0	94.8	96.0	97.4	98.6
63°	93.6	92.0	90.6	89.5	91.4	91.5	91.9	92.7	94.0	95.3	96.6
63.5°	91.4	89.9	88.4	87.4	89.3	89.4	89.9	90.7	91.9	93.3	94.6
64°	89.4	87.8	86.4	85.4	87.3	87.4	87.8	88.6	89.9	91.3	92.5
64.5°	87.3	85.7	84.3	83.3	85.3	85.4	85.7	86.6	87.8	89.2	90.4
65°	85.3	83.7	82.3	81.2	83.2	83.3	83.7	84.6	85.8	87.1	88.4
65.5°	83.1	81.6	80.1	79.1	81.0	81.1	81.7	82.4	83.6	85.0	86.3
66°	81.0	79.4	78.1	77.0	79.0	79.1	79.5	80.4	81.6	83.0	84.3





TEST NUMBER: P938617  
 CATALOG NUMBER: SMX4RLSFS2W-650LM-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	74.7	73.1	71.7	70.7	72.7	72.8	73.3	74.1	75.3	76.7	78.0
68°	72.5	71.0	69.7	68.6	70.7	70.7	71.1	72.1	73.2	74.7	76.0
68.5°	70.4	68.9	67.5	66.5	68.4	68.6	69.1	69.9	71.1	72.5	73.8
69°	68.4	66.8	65.4	64.4	66.4	66.5	67.0	67.8	69.0	70.4	71.7
69.5°	66.2	64.7	63.3	62.3	64.2	64.4	64.9	65.8	66.9	68.3	69.5
70°	64.1	62.5	61.1	60.2	62.1	62.2	62.8	63.6	64.8	66.2	67.5
70.5°	61.9	60.4	59.1	58.1	60.0	60.2	60.7	61.6	62.8	64.2	65.4
71°	59.8	58.4	56.9	56.0	57.9	58.1	58.6	59.5	60.6	62.1	63.3
71.5°	57.7	56.1	54.9	53.9	55.8	56.0	56.5	57.3	58.5	59.9	61.2
72°	55.5	54.1	52.8	51.8	53.8	53.9	54.4	55.3	56.5	57.8	59.1
72.5°	53.5	51.9	50.6	49.6	51.7	51.8	52.3	53.2	54.3	55.7	57.0
73°	51.3	49.8	48.5	47.6	49.6	49.8	50.2	51.2	52.3	53.6	54.9
73.5°	49.2	47.7	46.5	45.5	47.5	47.7	48.2	49.0	50.2	51.6	52.8
74°	47.0	45.7	44.3	43.5	45.5	45.6	46.0	47.0	48.1	49.5	50.8
74.5°	45.0	43.6	42.3	41.5	43.4	43.5	44.0	44.9	46.0	47.5	48.7
75°	42.9	41.6	40.3	39.4	41.3	41.5	42.0	42.9	43.9	45.4	46.6
75.5°	40.9	39.4	38.2	37.3	39.2	39.4	40.0	40.9	41.9	43.3	44.5
76°	38.8	37.4	36.1	35.3	37.2	37.4	37.9	38.8	39.9	41.2	42.5
76.5°	36.7	35.4	34.1	33.3	35.2	35.4	35.9	36.7	37.9	39.2	40.4
77°	34.7	33.4	32.1	31.3	33.1	33.4	33.9	34.7	35.9	37.2	38.3
77.5°	32.7	31.4	30.2	29.4	31.2	31.4	32.0	32.8	33.9	35.2	36.4
78°	30.8	29.4	28.3	27.4	29.3	29.4	30.0	30.8	31.9	33.1	34.3
78.5°	28.8	27.5	26.4	25.6	27.3	27.5	28.0	28.9	30.0	31.2	32.3
79°	26.8	25.6	24.4	23.7	25.4	25.6	26.1	27.0	28.0	29.3	30.3
79.5°	25.0	23.7	22.6	21.8	23.6	23.7	24.3	25.1	26.1	27.3	28.4
80°	23.1	21.8	20.7	20.1	21.7	21.8	22.4	23.3	24.3	25.4	26.5
80.5°	21.3	20.1	19.0	18.4	19.9	20.1	20.6	21.4	22.4	23.6	24.7
81°	19.6	18.5	17.4	16.8	18.1	18.4	18.8	19.6	20.6	21.8	22.8
81.5°	18.0	16.8	15.8	15.1	16.4	16.7	17.1	17.9	18.8	20.0	21.0
82°	16.3	15.1	14.1	13.4	14.8	15.0	15.4	16.2	17.1	18.2	19.1
82.5°	14.5	13.5	12.5	11.9	13.2	13.4	13.8	14.6	15.5	16.5	17.4
83°	12.9	11.9	11.0	10.4	11.7	11.8	12.2	13.0	13.8	14.8	15.8
83.5°	11.4	10.4	9.5	8.9	10.2	10.4	10.8	11.5	12.3	13.3	14.2
84°	10.0	9.0	8.2	7.7	8.8	8.9	9.4	10.1	10.8	11.8	12.6
84.5°	8.6	7.7	6.9	6.5	7.5	7.7	8.1	8.7	9.4	10.3	11.1
85°	7.3	6.5	5.8	5.3	6.4	6.6	7.0	7.4	8.1	8.9	9.7
85.5°	6.1	5.4	4.7	4.2	5.4	5.6	5.9	6.4	7.1	7.7	8.3
86°	5.1	4.4	3.8	3.4	4.4	4.6	4.9	5.4	6.1	6.6	7.1
86.5°	4.1	3.4	2.9	2.5	3.4	3.5	3.8	4.4	5.1	5.6	6.1
87°	3.2	2.6	2.2	1.9	2.4	2.5	2.8	3.4	4.1	4.6	5.2
87.5°	2.5	2.0	1.8	1.4	1.8	1.8	2.1	2.4	3.1	3.6	4.2
88°	2.1	1.6	1.4	0.9	1.2	1.3	1.5	1.8	2.2	2.6	3.2
88.5°	1.8	1.4	1.0	0.8	0.9	0.9	1.1	1.4	1.6	1.9	2.3



TEST NUMBER: P938617  
CATALOG NUMBER: SMX4RLSFS2W-650LM-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P938617

CATALOG NUMBER: SMX4RLSFS2W-650LM-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	247.5	247.5	247.5	247.5	247.5	247.5
0.5°	246.9	247.9	247.9	247.5	247.2	247.3
1°	247.2	248.1	247.9	247.5	247.6	247.2
1.5°	246.9	247.9	247.8	247.3	247.1	247.1
2°	246.9	247.8	247.7	247.5	247.5	247.1
2.5°	247.1	247.8	247.8	247.2	247.0	247.1
3°	246.8	247.7	247.5	247.2	247.2	246.8
3.5°	246.6	247.6	247.6	247.0	246.8	246.7
4°	246.6	247.4	247.1	246.9	246.9	246.6
4.5°	246.5	247.4	247.1	246.6	246.4	246.5
5°	246.2	246.9	246.8	246.5	246.4	246.1
5.5°	246.0	246.9	246.8	246.3	245.9	245.8
6°	246.0	246.6	246.3	246.1	245.9	245.6
6.5°	245.5	246.2	246.2	245.7	245.4	245.4
7°	245.5	246.0	245.6	245.5	245.2	245.1
7.5°	244.8	245.6	245.6	245.2	244.8	244.7
8°	244.8	245.4	245.2	244.8	244.6	244.2
8.5°	244.3	245.0	244.8	244.5	244.0	243.8
9°	244.3	244.5	244.4	244.0	243.8	243.6
9.5°	243.4	244.3	244.2	243.8	243.3	243.1
10°	243.4	243.7	243.4	243.1	243.0	242.6
10.5°	242.6	243.3	243.2	242.8	242.4	242.1
11°	242.4	242.7	242.5	242.2	242.0	241.5
11.5°	241.9	242.3	242.1	241.8	241.3	241.1
12°	241.5	241.7	241.5	241.1	241.1	240.5
12.5°	240.8	241.2	241.1	240.8	240.2	240.0
13°	240.5	240.6	240.5	240.1	239.8	239.4
13.5°	239.6	240.1	239.8	239.6	239.1	238.8
14°	239.2	239.3	239.2	238.8	238.8	238.1
14.5°	238.5	238.8	238.6	238.2	237.8	237.5
15°	237.9	238.1	237.9	237.5	237.2	236.7
15.5°	236.9	237.5	237.5	236.8	236.4	236.0
16°	236.8	236.7	236.5	236.2	235.8	235.3
16.5°	235.6	236.1	236.0	235.3	235.0	234.5
17°	235.2	235.2	235.0	234.8	234.3	233.8
17.5°	234.2	234.5	234.5	233.8	233.4	232.9
18°	233.6	233.6	233.5	233.2	232.8	232.3
18.5°	232.6	232.9	232.9	232.3	231.7	231.3
19°	232.0	231.9	231.9	231.5	231.2	230.6
19.5°	230.9	231.2	231.3	230.6	230.0	229.6
20°	230.2	230.2	230.2	229.9	229.3	228.8
20.5°	229.3	229.5	229.5	228.9	228.2	227.8
21°	228.6	228.4	228.3	228.1	227.6	227.0



TEST NUMBER: P938617

CATALOG NUMBER: SMX4RLSFSD2W-650LM-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	225.7	225.7	225.6	225.1	224.5	223.9
23°	224.6	224.5	224.5	224.2	223.8	223.0
23.5°	223.6	223.7	223.5	223.0	222.4	221.7
24°	222.7	222.5	222.4	222.1	221.5	221.0
24.5°	221.4	221.5	221.4	221.0	220.2	219.6
25°	220.5	220.4	220.3	220.0	219.5	218.8
25.5°	219.4	219.3	219.4	218.8	218.0	217.5
26°	218.3	218.2	218.2	217.7	217.1	216.7
26.5°	217.3	217.1	217.0	216.6	215.9	215.3
27°	216.1	215.9	215.9	215.5	214.9	214.3
27.5°	215.0	214.8	214.9	214.2	213.4	213.0
28°	213.8	213.5	213.6	213.1	212.7	211.9
28.5°	212.6	212.3	212.4	211.8	211.1	210.6
29°	211.5	211.1	211.0	210.7	210.2	209.5
29.5°	210.1	210.0	210.0	209.4	208.7	208.0
30°	209.0	208.6	208.7	208.3	207.6	206.9
30.5°	207.6	207.4	207.5	206.8	206.1	205.6
31°	206.6	206.1	206.1	205.7	205.1	204.3
31.5°	205.1	204.8	204.8	204.2	203.6	203.0
32°	203.8	203.4	203.4	203.1	202.5	201.7
32.5°	202.5	202.2	202.3	201.7	201.0	200.3
33°	201.3	200.7	200.8	200.5	199.8	198.8
33.5°	199.8	199.5	199.4	198.9	198.3	197.5
34°	198.5	198.1	198.0	197.7	197.0	196.2
34.5°	197.1	196.7	196.8	196.1	195.4	194.7
35°	195.7	195.2	195.2	195.0	194.2	193.2
35.5°	194.2	193.8	194.0	193.4	192.4	191.9
36°	192.9	192.4	192.3	191.9	191.3	190.4
36.5°	191.4	190.8	191.0	190.4	189.7	188.9
37°	190.1	189.4	189.4	189.1	188.3	187.4
37.5°	188.5	187.9	188.1	187.5	186.7	185.9
38°	187.0	186.4	186.5	186.1	185.2	184.4
38.5°	185.5	184.9	184.9	184.5	183.6	183.1
39°	184.2	183.4	183.4	183.0	182.4	181.4
39.5°	182.5	181.8	181.9	181.4	180.5	179.9
40°	180.9	180.2	180.3	179.9	179.1	178.1
40.5°	179.5	178.7	178.7	178.3	177.4	176.7
41°	177.8	177.1	177.2	176.7	176.0	175.1
41.5°	176.3	175.5	175.6	175.1	174.3	173.5
42°	174.7	173.9	173.9	173.6	172.8	171.9
42.5°	173.1	172.2	172.3	171.9	171.0	170.2
43°	171.5	170.6	170.8	170.2	169.5	168.6
43.5°	169.8	169.0	169.0	168.6	167.8	167.0



TEST NUMBER: P938617

CATALOG NUMBER: SMX4RLSFS2W-650LM-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	164.9	163.8	164.0	163.6	162.9	161.9
45.5°	163.0	162.3	162.3	161.8	161.0	160.0
46°	161.5	160.6	160.6	160.3	159.4	158.5
46.5°	159.6	158.9	158.9	158.4	157.6	156.6
47°	158.1	157.1	157.2	156.6	155.9	154.9
47.5°	156.3	155.4	155.4	155.0	154.1	153.1
48°	154.6	153.6	153.6	153.3	152.5	151.4
48.5°	152.8	151.9	151.9	151.4	150.6	149.6
49°	151.0	150.1	150.0	149.7	148.8	147.8
49.5°	149.3	148.3	148.4	147.8	147.0	146.0
50°	147.5	146.4	146.4	146.1	145.2	144.2
50.5°	145.6	144.6	144.8	144.2	143.4	142.4
51°	143.9	142.8	142.8	142.4	141.5	140.5
51.5°	142.0	140.9	141.0	140.6	139.7	138.7
52°	140.3	139.1	139.2	138.8	138.0	136.8
52.5°	138.4	137.2	137.4	136.8	136.0	135.0
53°	136.4	135.4	135.4	135.1	134.1	133.1
53.5°	134.7	133.5	133.6	133.1	132.2	131.2
54°	132.8	131.6	131.7	131.2	130.4	129.3
54.5°	130.8	129.7	129.8	129.3	128.4	127.4
55°	129.1	127.9	127.9	127.5	126.6	125.5
55.5°	127.0	125.9	125.9	125.5	124.5	123.6
56°	125.3	124.1	124.1	123.6	122.7	121.6
56.5°	123.2	122.0	122.1	121.6	120.8	119.6
57°	121.4	120.1	120.2	119.8	118.8	117.8
57.5°	119.3	118.2	118.1	117.6	116.8	115.8
58°	117.5	116.2	116.2	115.8	114.9	113.8
58.5°	115.5	114.3	114.2	113.8	112.9	111.8
59°	113.5	112.2	112.3	111.8	110.8	109.8
59.5°	111.5	110.3	110.2	109.8	108.9	107.8
60°	109.6	108.3	108.3	107.8	106.9	105.7
60.5°	107.5	106.3	106.2	105.7	104.9	103.8
61°	105.6	104.2	104.2	103.7	102.9	101.7
61.5°	103.5	102.2	102.2	101.7	100.8	99.7
62°	101.6	100.2	100.2	99.8	98.8	97.7
62.5°	99.4	98.2	98.2	97.6	96.7	95.6
63°	97.5	96.1	96.0	95.6	94.7	93.6
63.5°	95.4	94.0	94.0	93.5	92.6	91.4
64°	93.4	92.0	91.9	91.6	90.6	89.4
64.5°	91.4	89.9	89.9	89.3	88.4	87.3
65°	89.3	87.9	87.8	87.3	86.4	85.3
65.5°	87.1	85.7	85.7	85.2	84.3	83.1
66°	85.1	83.7	83.6	83.2	82.2	81.0



TEST NUMBER: P938617  
 CATALOG NUMBER: SMX4RLSFS2W-650LM-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	78.8	77.4	77.3	76.8	75.8	74.7
68°	76.8	75.2	75.1	74.7	73.7	72.5
68.5°	74.7	73.2	73.1	72.6	71.7	70.4
69°	72.5	71.1	70.8	70.5	69.5	68.4
69.5°	70.4	68.9	68.8	68.3	67.4	66.2
70°	68.3	66.8	66.7	66.2	65.2	64.1
70.5°	66.4	64.6	64.5	64.1	63.1	61.9
71°	64.1	62.5	62.4	61.9	61.0	59.8
71.5°	62.0	60.5	60.3	59.8	58.9	57.7
72°	59.9	58.3	58.2	57.7	56.8	55.5
72.5°	57.8	56.2	56.1	55.6	54.6	53.5
73°	55.6	54.1	53.9	53.5	52.5	51.3
73.5°	53.6	52.0	51.8	51.3	50.4	49.2
74°	51.5	49.9	49.7	49.2	48.2	47.0
74.5°	49.4	47.8	47.6	47.1	46.2	45.0
75°	47.3	45.7	45.5	45.0	44.1	42.9
75.5°	45.2	43.6	43.5	43.0	42.0	40.9
76°	43.2	41.6	41.3	40.9	39.9	38.8
76.5°	41.1	39.4	39.3	38.8	37.9	36.7
77°	39.1	37.4	37.2	36.7	35.9	34.7
77.5°	37.0	35.4	35.3	34.8	33.9	32.7
78°	35.0	33.4	33.2	32.8	31.9	30.8
78.5°	33.0	31.4	31.2	30.7	29.9	28.8
79°	31.0	29.5	29.3	28.9	27.9	26.8
79.5°	29.1	27.5	27.3	26.8	26.0	25.0
80°	27.1	25.6	25.4	25.0	24.1	23.1
80.5°	25.3	23.7	23.6	23.1	22.3	21.3
81°	23.4	21.9	21.7	21.3	20.5	19.6
81.5°	21.6	20.2	20.0	19.6	18.8	18.0
82°	19.8	18.5	18.4	18.0	17.1	16.3
82.5°	18.0	16.8	16.7	16.3	15.4	14.5
83°	16.3	15.1	15.0	14.6	13.7	12.9
83.5°	14.7	13.4	13.3	12.9	12.2	11.4
84°	13.1	12.0	11.8	11.4	10.7	10.0
84.5°	11.6	10.4	10.3	10.0	9.4	8.6
85°	10.1	9.0	8.9	8.6	8.0	7.3
85.5°	8.8	7.7	7.6	7.3	6.8	6.1
86°	7.5	6.5	6.4	6.1	5.7	5.1
86.5°	6.5	5.4	5.2	5.1	4.6	4.1
87°	5.5	4.4	4.3	4.1	3.7	3.2
87.5°	4.5	3.4	3.4	3.2	2.9	2.5
88°	3.5	2.6	2.6	2.5	2.2	2.1
88.5°	2.5	2.0	1.9	2.2	1.9	1.8



TEST NUMBER: P938617  
CATALOG NUMBER: SMX4RLSFS2W-650LM-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.0	0.0

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9



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— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - · 135°-315°

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21.5°	225.8	225.2	224.5	223.6	225.4	225.2	225.0	225.3	225.9	226.6	227.0
22°	225.0	224.3	223.2	222.6	224.2	224.2	224.0	224.5	224.7	225.4	226.2



44°	165.2	163.9	162.5	161.4	163.5	163.5	163.6	164.1	165.0	166.2	167.3
44.5°	163.5	162.3	160.9	159.9	161.7	161.7	161.7	162.4	163.4	164.6	165.7



66.5°	78.8	77.3	75.8	75.0	76.9	77.0	77.5	78.3	79.5	80.8	82.1
67°	76.8	75.3	73.8	72.8	74.8	74.9	75.4	76.2	77.4	78.7	80.1



89°	1.4	1.0	0.6	0.6	0.6	0.6	0.8	1.0	1.2	1.5	1.7
89.5°	1.1	0.7	0.5	0.5	0.5	0.5	0.6	0.8	0.9	1.1	1.3



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21.5°	227.4	227.5	227.5	226.9	226.5	225.8
22°	226.6	226.5	226.5	226.1	225.6	225.0



44°	168.2	167.2	167.4	166.9	166.3	165.2
44.5°	166.5	165.7	165.7	165.3	164.3	163.5

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66.5°	83.0	81.5	81.6	81.0	80.1	78.8
67°	80.9	79.5	79.3	79.0	78.0	76.8



89°	1.9	1.7	1.6	1.8	1.5	1.4
89.5°	1.4	1.4	1.4	1.5	1.2	1.1

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(END OF REPORT)