

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: P938619

Luminaire Tested: SMX4RLSFSD2W-650LM-4000K

Issue Date: 1/9/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P938619  
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-4000K  
Description: 4IN ROUND, 90CRI, DIMMING TO 10%, DAMP LOCATION  
Light Source: SELECTABLE CCT 90CRI / 4000K CCT  
Ballast/Driver: -

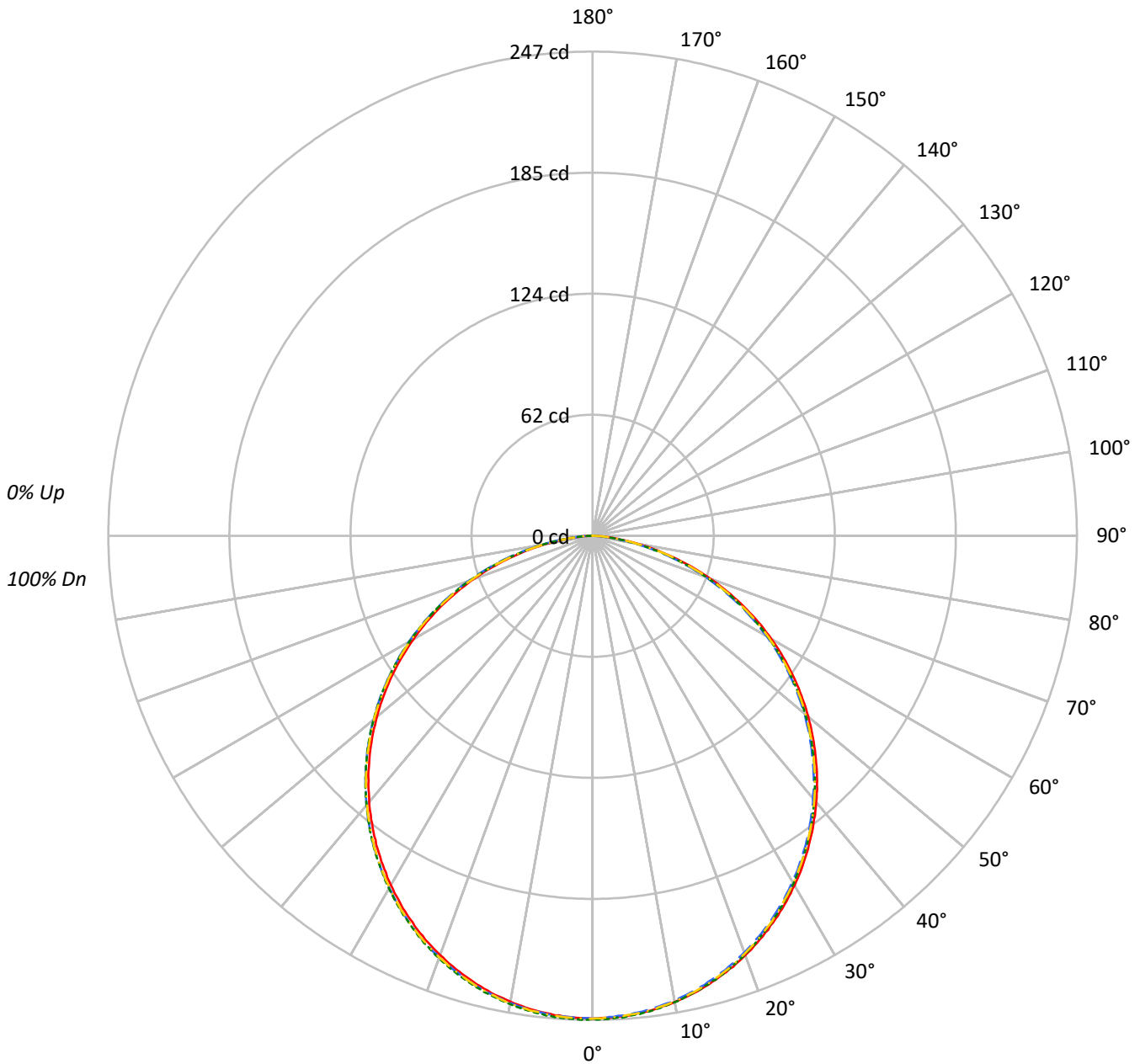
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 686.1 lumens  
Efficiency: N/A  
Efficacy: 99.4 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-4000K

### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
RC	80									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°	31009	31009	31009	31009
5°	30951	30989	30938	31065
10°	30862	30874	30836	31002
15°	30709	30644	30683	30892
20°	30508	30428	30482	30696
25°	30244	30105	30202	30466
30°	29936	29761	29907	30183
35°	29559	29344	29559	29851
40°	29128	28898	29128	29473
45°	28672	28352	28655	29028
50°	28115	27724	28115	28526
55°	27405	26966	27427	27931
60°	26504	25975	26554	27133
65°	25282	24657	25431	26056
70°	23476	22740	23733	24469
75°	20763	19985	21249	22124
80°	16669	15654	17539	18408
85°	10541	9241	11552	12996

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 247.5°  
 Vertical Angle: 45°  
 Luminance: 29224 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.3	3.4
10°-20°	66.5	9.7
20°-30°	100.3	14.6
30°-40°	120.3	17.5
40°-50°	124.2	18.1
50°-60°	111.6	16.3
60°-70°	84.0	12.2
70°-80°	45.8	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°	190.1	27.7
0°-40°	310.5	45.2
0°-60°	546.3	79.6
0°-90°	686.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	686.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	246	246	246	246	246	
5°	245	245	245	246	245	23
15°	236	235	236	237	236	66
25°	218	217	218	219	218	100
35°	192	191	192	194	192	120
45°	161	159	161	163	161	124
55°	125	123	125	127	125	112
65°	85	83	85	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°	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4
0.5°	246.2	246.1	246.2	245.8	246.9	246.7	246.2	246.1	246.1	246.1	246.1
1°	246.1	246.1	245.9	245.9	246.7	246.6	246.3	246.3	246.1	246.4	246.0
1.5°	246.0	246.0	246.0	245.6	246.7	246.6	246.0	246.0	246.1	246.1	246.0
2°	246.0	246.0	245.6	245.6	246.6	246.4	246.0	246.1	246.0	246.0	246.1
2.5°	246.0	245.8	245.7	245.4	246.4	246.1	245.9	245.9	245.9	245.9	245.9
3°	245.7	245.7	245.3	245.3	246.1	246.1	245.8	246.0	245.8	245.8	245.8
3.5°	245.6	245.4	245.3	244.9	246.3	246.0	245.6	245.5	245.6	245.7	245.7
4°	245.5	245.3	244.9	244.9	245.9	245.7	245.3	245.6	245.3	245.6	245.6
4.5°	245.4	245.0	244.8	244.6	245.6	245.6	245.0	245.1	245.4	245.5	245.4
5°	245.0	244.9	244.5	244.3	245.3	245.2	244.9	245.1	244.9	245.3	245.2
5.5°	244.7	244.6	244.3	243.9	245.3	245.1	244.7	244.5	244.7	245.1	245.2
6°	244.5	244.2	244.0	243.7	244.7	244.6	244.3	244.5	244.5	244.6	244.7
6.5°	244.3	244.0	243.6	243.3	244.5	244.4	244.1	243.9	244.2	244.4	244.4
7°	244.0	243.6	243.4	242.9	244.3	243.9	243.6	244.0	243.9	244.0	244.3
7.5°	243.6	243.3	242.9	242.5	243.7	243.7	243.5	243.3	243.5	243.9	244.0
8°	243.2	242.9	242.5	242.2	243.4	243.2	242.9	243.2	243.1	243.2	243.5
8.5°	242.7	242.5	242.0	241.6	243.0	242.9	242.5	242.5	242.7	243.0	243.3
9°	242.5	242.0	241.6	241.2	242.4	242.3	242.1	242.3	242.3	242.5	242.9
9.5°	242.0	241.5	241.3	240.7	242.0	242.0	241.6	241.6	241.9	242.2	242.5
10°	241.5	241.1	240.6	240.3	241.6	241.4	241.3	241.4	241.3	241.7	242.0
10.5°	241.0	240.8	240.2	239.6	241.2	240.8	240.6	240.8	240.9	241.3	241.5
11°	240.5	240.1	239.6	239.5	240.5	240.3	240.2	240.3	240.2	240.8	241.0
11.5°	240.0	239.7	239.2	238.5	239.9	239.7	239.6	239.7	239.8	240.3	240.5
12°	239.4	239.0	238.5	238.0	239.3	239.2	238.9	239.2	239.4	239.7	240.2
12.5°	238.9	238.4	237.9	237.4	238.8	238.7	238.5	238.4	238.9	239.2	239.4
13°	238.4	237.9	237.1	236.8	238.1	238.1	237.8	238.1	238.1	238.6	238.9
13.5°	237.7	237.2	236.6	236.1	237.6	237.2	237.2	237.3	237.6	237.9	238.4
14°	237.0	236.5	236.1	235.4	236.7	236.9	236.5	236.8	236.8	237.3	237.8
14.5°	236.5	235.8	235.1	234.6	236.2	235.9	235.9	235.9	236.3	236.8	237.2
15°	235.7	235.2	234.5	234.0	235.2	235.4	235.1	235.4	235.5	235.9	236.4
15.5°	235.0	234.4	233.8	233.3	235.0	234.5	234.4	234.4	234.8	235.3	235.8
16°	234.2	233.7	233.1	232.4	233.8	233.8	233.7	233.9	234.1	234.7	235.0
16.5°	233.4	233.0	232.2	231.7	233.3	233.0	232.8	233.0	233.4	234.0	234.4
17°	232.8	232.3	231.7	230.7	232.4	232.4	232.1	232.4	232.5	233.1	233.5
17.5°	231.8	231.3	230.6	229.9	231.7	231.4	231.3	231.4	231.9	232.4	232.9
18°	231.3	230.7	229.8	229.2	230.7	230.7	230.4	230.8	231.0	231.4	232.1
18.5°	230.3	229.7	229.1	228.2	230.0	229.7	229.6	229.7	230.3	231.0	231.3
19°	229.6	228.9	227.9	227.3	229.0	228.8	228.8	229.0	229.4	230.0	230.4
19.5°	228.6	227.9	227.2	226.5	228.2	228.1	227.7	228.0	228.4	229.1	229.7
20°	227.8	227.0	226.2	225.6	227.2	227.0	226.9	227.3	227.6	228.3	228.9
20.5°	226.8	226.0	225.3	224.6	226.3	226.2	225.9	226.2	226.7	227.4	227.8
21°	226.0	225.3	224.3	223.6	225.1	225.2	225.0	225.4	225.8	226.4	227.2



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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°	222.9	222.2	221.4	220.6	222.3	222.3	222.0	222.3	223.0	223.6	224.2
23°	222.0	221.2	220.4	219.6	221.2	221.1	221.0	221.5	221.8	222.4	223.3
23.5°	220.7	220.1	219.2	218.7	220.2	220.2	219.9	220.2	220.9	221.5	222.2
24°	220.1	219.1	218.1	217.4	219.1	219.0	218.8	219.2	219.9	220.5	221.2
24.5°	218.6	218.0	217.0	216.3	218.1	217.8	217.8	218.1	218.8	219.4	220.1
25°	217.8	217.0	216.0	215.1	216.8	216.8	216.8	217.1	217.5	218.2	219.0
25.5°	216.5	215.8	214.8	214.1	215.7	215.6	215.5	215.8	216.5	217.2	218.1
26°	215.7	214.6	213.7	212.9	214.7	214.4	214.4	214.8	215.4	216.2	216.9
26.5°	214.3	213.4	212.5	211.7	213.3	213.4	213.2	213.7	214.2	215.0	215.8
27°	213.4	212.4	211.3	210.6	212.3	212.3	212.1	212.6	213.3	213.9	214.7
27.5°	212.0	211.1	210.2	209.3	211.1	211.0	210.7	211.3	211.9	212.6	213.5
28°	210.9	210.0	208.9	208.1	209.9	209.7	209.6	210.1	210.6	211.6	212.4
28.5°	209.6	208.6	207.6	206.8	208.6	208.5	208.4	208.7	209.4	210.3	211.2
29°	208.6	207.4	206.4	205.6	207.3	207.3	207.1	207.7	208.4	209.0	210.0
29.5°	207.1	206.2	205.1	204.2	206.1	205.9	205.9	206.3	207.0	207.9	208.6
30°	206.0	205.0	203.9	203.1	204.8	204.7	204.5	205.2	205.8	206.6	207.6
30.5°	204.6	203.6	202.5	201.7	203.5	203.5	203.4	203.7	204.5	205.3	206.2
31°	203.4	202.4	201.3	200.5	202.1	202.1	201.9	202.5	203.3	204.2	204.9
31.5°	202.1	201.0	200.0	199.1	201.0	200.8	200.7	201.2	201.7	202.7	203.6
32°	200.8	199.7	198.5	197.7	199.4	199.4	199.3	199.9	200.5	201.5	202.4
32.5°	199.4	198.3	197.1	196.4	198.0	198.0	198.0	198.4	199.1	200.1	201.1
33°	198.0	197.0	195.9	194.9	196.7	196.6	196.6	197.2	197.9	198.7	199.7
33.5°	196.7	195.4	194.4	193.4	195.3	195.3	195.3	195.6	196.4	197.4	198.5
34°	195.3	194.2	193.0	192.0	193.9	193.9	193.9	194.3	195.1	196.0	197.0
34.5°	193.9	192.6	191.7	190.7	192.5	192.5	192.4	192.8	193.6	194.7	195.7
35°	192.4	191.4	190.2	189.2	191.0	190.9	190.9	191.6	192.4	193.2	194.2
35.5°	191.0	189.9	188.8	187.8	189.6	189.5	189.5	190.0	190.6	191.7	192.9
36°	189.5	188.5	187.2	186.2	188.2	187.9	188.1	188.8	189.5	190.4	191.2
36.5°	188.1	186.9	185.9	184.8	186.7	186.6	186.6	187.0	187.9	189.1	190.0
37°	186.6	185.5	184.2	183.3	185.1	184.9	185.1	185.7	186.5	187.3	188.4
37.5°	185.1	183.8	182.8	181.8	183.8	183.5	183.6	184.1	184.8	186.1	187.1
38°	183.5	182.4	181.1	180.3	182.0	182.0	182.1	182.7	183.5	184.4	185.4
38.5°	182.3	180.8	179.7	178.6	180.7	180.4	180.6	181.0	181.8	183.0	184.1
39°	180.6	179.4	178.0	177.3	179.0	178.9	179.0	179.6	180.5	181.4	182.5
39.5°	179.1	177.7	176.6	175.5	177.4	177.4	177.4	177.9	178.9	180.0	181.0
40°	177.3	176.2	174.9	173.9	175.9	175.7	175.8	176.4	177.3	178.4	179.4
40.5°	175.9	174.6	173.3	172.3	174.3	174.2	174.3	174.9	175.6	176.8	177.9
41°	174.3	173.1	171.8	170.8	172.6	172.6	172.8	173.3	174.0	175.2	176.3
41.5°	172.8	171.3	170.2	169.1	171.1	170.9	171.1	171.6	172.5	173.6	174.6
42°	171.1	169.9	168.5	167.6	169.4	169.3	169.4	169.9	170.9	172.0	173.0
42.5°	169.5	168.1	166.9	165.8	167.8	167.7	167.8	168.4	169.2	170.4	171.6
43°	167.8	166.5	165.1	164.2	166.1	166.0	166.1	166.8	167.8	168.7	169.9
43.5°	166.2	164.8	163.7	162.6	164.3	164.4	164.5	165.1	166.1	167.1	168.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	161.1	159.8	158.4	157.4	159.3	159.3	159.5	160.0	161.0	162.3	163.3
45.5°	159.3	158.0	156.8	155.8	157.5	157.6	157.8	158.4	159.4	160.5	161.6
46°	157.8	156.4	155.1	154.0	155.8	155.9	155.9	156.6	157.6	158.7	159.9
46.5°	155.9	154.6	153.2	152.3	154.1	154.1	154.3	154.9	155.9	157.0	158.3
47°	154.2	152.9	151.5	150.5	152.4	152.3	152.5	153.1	154.1	155.5	156.5
47.5°	152.4	151.1	149.8	148.7	150.5	150.5	150.8	151.4	152.5	153.7	154.8
48°	150.7	149.4	148.0	146.9	148.8	148.8	149.0	149.7	150.7	151.8	153.1
48.5°	148.9	147.6	146.2	145.1	147.1	147.1	147.3	147.8	149.0	150.2	151.2
49°	147.2	145.8	144.3	143.3	145.2	145.2	145.4	146.1	147.1	148.4	149.6
49.5°	145.3	144.0	142.7	141.6	143.5	143.4	143.7	144.3	145.4	146.6	147.7
50°	143.6	142.3	140.8	139.6	141.6	141.5	141.8	142.5	143.6	144.7	146.0
50.5°	141.7	140.3	139.0	137.9	139.8	139.8	140.0	140.7	141.8	143.0	144.1
51°	139.9	138.6	137.1	136.1	138.0	137.9	138.2	138.9	139.9	141.2	142.4
51.5°	138.1	136.7	135.3	134.2	136.1	136.1	136.4	137.1	138.2	139.4	140.5
52°	136.2	134.9	133.4	132.2	134.3	134.2	134.5	135.2	136.2	137.6	138.7
52.5°	134.4	133.0	131.6	130.5	132.4	132.5	132.7	133.4	134.5	135.6	136.9
53°	132.5	131.1	129.7	128.6	130.5	130.5	130.8	131.5	132.5	133.8	135.1
53.5°	130.7	129.1	127.8	126.7	128.7	128.7	128.9	129.6	130.7	132.0	133.2
54°	128.7	127.3	125.9	124.8	126.7	126.6	127.1	127.7	128.8	130.1	131.4
54.5°	126.8	125.4	123.9	123.0	124.9	124.9	125.1	125.8	127.0	128.2	129.4
55°	124.9	123.6	122.1	121.0	122.9	122.9	123.3	123.9	125.0	126.3	127.5
55.5°	123.0	121.5	120.1	119.1	121.0	121.0	121.3	122.0	123.1	124.6	125.7
56°	121.1	119.6	118.3	117.1	119.0	119.0	119.4	120.1	121.2	122.5	123.8
56.5°	119.1	117.7	116.2	115.1	117.1	117.1	117.4	118.2	119.4	120.7	121.9
57°	117.2	115.7	114.3	113.3	115.2	115.1	115.5	116.2	117.4	118.6	119.9
57.5°	115.2	113.8	112.3	111.3	113.1	113.3	113.5	114.3	115.5	116.8	117.9
58°	113.3	111.8	110.4	109.3	111.1	111.3	111.6	112.3	113.4	114.8	116.1
58.5°	111.3	109.8	108.3	107.3	109.3	109.3	109.6	110.4	111.5	113.0	114.1
59°	109.3	107.8	106.4	105.2	107.2	107.3	107.6	108.3	109.6	110.9	112.2
59.5°	107.3	105.8	104.4	103.3	105.2	105.3	105.6	106.4	107.5	109.0	110.1
60°	105.3	103.8	102.4	101.3	103.2	103.2	103.7	104.4	105.5	106.9	108.2
60.5°	103.3	101.8	100.4	99.3	101.2	101.2	101.7	102.5	103.6	104.9	106.2
61°	101.2	99.8	98.2	97.3	99.2	99.2	99.7	100.4	101.6	102.9	104.2
61.5°	99.2	97.8	96.3	95.3	97.2	97.3	97.7	98.5	99.5	101.1	102.2
62°	97.3	95.7	94.2	93.2	95.1	95.3	95.6	96.4	97.5	99.0	100.2
62.5°	95.1	93.7	92.2	91.2	93.1	93.1	93.6	94.4	95.6	97.0	98.2
63°	93.2	91.6	90.2	89.1	91.0	91.1	91.5	92.3	93.6	94.8	96.1
63.5°	91.0	89.5	88.0	87.1	88.9	89.0	89.5	90.3	91.4	92.9	94.1
64°	89.0	87.5	86.1	85.0	86.9	87.0	87.5	88.2	89.5	90.9	92.1
64.5°	86.9	85.4	83.9	82.9	84.9	85.0	85.4	86.2	87.4	88.8	90.0
65°	84.9	83.4	82.0	80.8	82.8	82.9	83.4	84.2	85.4	86.8	88.0
65.5°	82.7	81.2	79.8	78.7	80.7	80.8	81.3	82.1	83.2	84.6	85.9
66°	80.7	79.1	77.7	76.7	78.6	78.7	79.1	80.0	81.2	82.6	83.9





TEST NUMBER: P938619

CATALOG NUMBER: SMX4RLSFS2W-650LM-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	74.3	72.8	71.4	70.4	72.4	72.5	73.0	73.8	75.0	76.4	77.6
68°	72.2	70.7	69.3	68.3	70.3	70.3	70.8	71.8	72.9	74.3	75.6
68.5°	70.1	68.6	67.2	66.2	68.1	68.3	68.8	69.6	70.8	72.2	73.5
69°	68.1	66.5	65.1	64.1	66.1	66.2	66.7	67.5	68.7	70.1	71.4
69.5°	65.9	64.4	63.0	62.0	64.0	64.1	64.6	65.5	66.6	68.0	69.2
70°	63.8	62.3	60.8	59.9	61.8	62.0	62.5	63.4	64.5	65.9	67.2
70.5°	61.7	60.1	58.8	57.8	59.7	59.9	60.4	61.3	62.5	63.9	65.1
71°	59.6	58.1	56.7	55.7	57.6	57.9	58.4	59.2	60.4	61.8	63.0
71.5°	57.4	55.9	54.6	53.6	55.6	55.7	56.3	57.1	58.3	59.7	60.9
72°	55.3	53.9	52.5	51.6	53.5	53.6	54.2	55.1	56.2	57.6	58.8
72.5°	53.2	51.7	50.4	49.4	51.5	51.6	52.1	53.0	54.1	55.5	56.7
73°	51.1	49.6	48.3	47.4	49.4	49.5	50.0	50.9	52.1	53.4	54.6
73.5°	49.0	47.5	46.3	45.3	47.3	47.5	48.0	48.8	49.9	51.4	52.6
74°	46.8	45.5	44.1	43.3	45.3	45.4	45.8	46.8	47.9	49.3	50.5
74.5°	44.8	43.4	42.1	41.3	43.2	43.3	43.8	44.7	45.8	47.2	48.5
75°	42.7	41.4	40.1	39.2	41.1	41.3	41.8	42.7	43.7	45.2	46.4
75.5°	40.7	39.2	38.0	37.2	39.0	39.3	39.8	40.7	41.7	43.1	44.3
76°	38.6	37.3	35.9	35.1	37.0	37.2	37.8	38.6	39.7	41.0	42.3
76.5°	36.6	35.2	33.9	33.1	35.0	35.2	35.7	36.6	37.7	39.0	40.2
77°	34.6	33.2	32.0	31.2	33.0	33.2	33.8	34.6	35.7	37.0	38.2
77.5°	32.6	31.3	30.1	29.3	31.1	31.3	31.8	32.7	33.7	35.0	36.2
78°	30.7	29.3	28.1	27.3	29.1	29.3	29.8	30.7	31.8	33.0	34.2
78.5°	28.7	27.4	26.3	25.4	27.1	27.4	27.8	28.7	29.8	31.1	32.2
79°	26.7	25.5	24.3	23.6	25.3	25.5	26.0	26.8	27.9	29.1	30.2
79.5°	24.9	23.6	22.5	21.7	23.4	23.6	24.2	25.0	26.0	27.2	28.3
80°	23.0	21.7	20.6	20.0	21.6	21.7	22.3	23.2	24.2	25.3	26.4
80.5°	21.2	20.0	18.9	18.3	19.8	20.0	20.5	21.3	22.3	23.5	24.6
81°	19.5	18.4	17.3	16.7	18.1	18.3	18.8	19.5	20.5	21.7	22.7
81.5°	17.9	16.7	15.7	15.0	16.4	16.6	17.1	17.8	18.8	19.9	20.9
82°	16.2	15.1	14.1	13.3	14.7	14.9	15.4	16.1	17.1	18.1	19.1
82.5°	14.5	13.4	12.4	11.8	13.1	13.3	13.8	14.5	15.4	16.5	17.4
83°	12.8	11.8	10.9	10.3	11.6	11.8	12.2	13.0	13.8	14.8	15.7
83.5°	11.3	10.4	9.5	8.9	10.1	10.3	10.8	11.4	12.3	13.2	14.1
84°	10.0	9.0	8.1	7.6	8.7	8.9	9.3	10.0	10.8	11.7	12.5
84.5°	8.6	7.7	6.9	6.4	7.4	7.6	8.0	8.7	9.4	10.3	11.0
85°	7.3	6.4	5.7	5.3	6.4	6.6	7.0	7.3	8.0	8.9	9.6
85.5°	6.1	5.3	4.7	4.2	5.4	5.6	5.9	6.4	7.0	7.6	8.3
86°	5.0	4.3	3.8	3.3	4.4	4.6	4.9	5.4	6.1	6.6	7.0
86.5°	4.0	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	1.3	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	1.3	1.0	0.8	0.9	0.9	1.1	1.3	1.6	1.9	2.3



TEST NUMBER: P938619  
CATALOG NUMBER: SMX4RLSFSD2W-650LM-4000K

**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: P938619

CATALOG NUMBER: SMX4RLSFS2W-650LM-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	246.4	246.4	246.4	246.4	246.4	246.4
0.5°	245.9	246.8	246.8	246.4	246.1	246.2
1°	246.1	247.0	246.8	246.4	246.5	246.1
1.5°	245.9	246.9	246.7	246.2	246.0	246.0
2°	245.9	246.7	246.6	246.4	246.4	246.0
2.5°	246.0	246.7	246.7	246.1	245.9	246.0
3°	245.7	246.6	246.4	246.1	246.1	245.7
3.5°	245.6	246.5	246.5	245.9	245.7	245.6
4°	245.6	246.3	246.0	245.8	245.9	245.5
4.5°	245.4	246.3	246.0	245.5	245.3	245.4
5°	245.2	245.9	245.7	245.4	245.3	245.0
5.5°	244.9	245.9	245.7	245.2	244.8	244.7
6°	244.9	245.5	245.2	245.0	244.9	244.5
6.5°	244.4	245.2	245.1	244.6	244.3	244.3
7°	244.4	244.9	244.5	244.4	244.1	244.0
7.5°	243.7	244.6	244.5	244.2	243.7	243.6
8°	243.7	244.3	244.2	243.7	243.5	243.2
8.5°	243.2	243.9	243.7	243.5	242.9	242.7
9°	243.2	243.5	243.3	242.9	242.7	242.5
9.5°	242.3	243.2	243.1	242.7	242.2	242.0
10°	242.3	242.6	242.3	242.0	241.9	241.5
10.5°	241.5	242.2	242.2	241.8	241.3	241.0
11°	241.3	241.6	241.5	241.2	240.9	240.5
11.5°	240.8	241.2	241.0	240.8	240.2	240.0
12°	240.5	240.6	240.5	240.0	240.0	239.4
12.5°	239.8	240.2	240.0	239.8	239.1	238.9
13°	239.4	239.5	239.4	239.0	238.8	238.4
13.5°	238.5	239.1	238.7	238.5	238.0	237.7
14°	238.1	238.2	238.1	237.8	237.7	237.0
14.5°	237.4	237.8	237.6	237.2	236.8	236.5
15°	236.8	237.1	236.9	236.5	236.2	235.7
15.5°	235.9	236.4	236.4	235.8	235.4	235.0
16°	235.7	235.7	235.4	235.1	234.7	234.2
16.5°	234.5	235.0	235.0	234.3	234.0	233.4
17°	234.1	234.2	234.0	233.7	233.3	232.8
17.5°	233.1	233.4	233.5	232.8	232.4	231.8
18°	232.5	232.6	232.4	232.2	231.7	231.3
18.5°	231.6	231.9	231.9	231.3	230.7	230.3
19°	231.0	230.9	230.8	230.4	230.1	229.6
19.5°	229.9	230.2	230.3	229.6	229.0	228.6
20°	229.2	229.2	229.1	228.9	228.3	227.8
20.5°	228.3	228.4	228.5	227.9	227.2	226.8
21°	227.6	227.4	227.3	227.1	226.6	226.0



TEST NUMBER: P938619  
 CATALOG NUMBER: SMX4RLSFS2W-650LM-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	224.7	224.8	224.6	224.1	223.5	222.9
23°	223.6	223.5	223.5	223.2	222.8	222.0
23.5°	222.6	222.7	222.5	222.1	221.4	220.7
24°	221.7	221.5	221.5	221.1	220.5	220.1
24.5°	220.5	220.5	220.5	220.1	219.2	218.6
25°	219.5	219.4	219.3	219.0	218.5	217.8
25.5°	218.5	218.3	218.4	217.8	217.1	216.5
26°	217.4	217.2	217.2	216.8	216.1	215.7
26.5°	216.3	216.2	216.1	215.7	214.9	214.3
27°	215.1	214.9	214.9	214.6	213.9	213.4
27.5°	214.1	213.8	213.9	213.3	212.4	212.0
28°	212.9	212.6	212.7	212.1	211.7	210.9
28.5°	211.6	211.4	211.4	210.9	210.2	209.6
29°	210.6	210.2	210.1	209.8	209.3	208.6
29.5°	209.2	209.0	209.0	208.5	207.8	207.1
30°	208.1	207.7	207.8	207.3	206.7	206.0
30.5°	206.7	206.5	206.6	205.9	205.2	204.6
31°	205.6	205.2	205.2	204.8	204.2	203.4
31.5°	204.2	203.9	203.9	203.3	202.7	202.1
32°	202.9	202.5	202.5	202.2	201.6	200.8
32.5°	201.7	201.3	201.4	200.8	200.1	199.4
33°	200.4	199.8	200.0	199.7	198.9	198.0
33.5°	199.0	198.6	198.5	198.0	197.4	196.7
34°	197.6	197.3	197.1	196.8	196.1	195.3
34.5°	196.3	195.8	195.9	195.3	194.6	193.9
35°	194.9	194.3	194.3	194.1	193.4	192.4
35.5°	193.3	192.9	193.1	192.5	191.6	191.0
36°	192.0	191.6	191.5	191.1	190.5	189.5
36.5°	190.5	190.0	190.2	189.6	188.8	188.1
37°	189.3	188.6	188.5	188.3	187.5	186.6
37.5°	187.6	187.1	187.2	186.6	185.9	185.1
38°	186.2	185.5	185.7	185.2	184.4	183.5
38.5°	184.7	184.1	184.1	183.7	182.8	182.3
39°	183.4	182.5	182.6	182.2	181.5	180.6
39.5°	181.7	181.0	181.1	180.6	179.7	179.1
40°	180.1	179.4	179.5	179.1	178.3	177.3
40.5°	178.7	177.9	177.9	177.6	176.6	175.9
41°	177.0	176.3	176.4	175.9	175.2	174.3
41.5°	175.5	174.7	174.8	174.3	173.6	172.8
42°	173.9	173.2	173.2	172.8	172.0	171.1
42.5°	172.3	171.5	171.6	171.1	170.2	169.5
43°	170.7	169.9	170.0	169.5	168.7	167.8
43.5°	169.1	168.2	168.2	167.9	167.1	166.2



TEST NUMBER: P938619

CATALOG NUMBER: SMX4RLSFS2W-650LM-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	164.2	163.1	163.3	162.8	162.1	161.1
45.5°	162.3	161.6	161.6	161.1	160.3	159.3
46°	160.8	159.9	159.9	159.6	158.7	157.8
46.5°	158.9	158.2	158.2	157.7	156.9	155.9
47°	157.4	156.4	156.5	155.9	155.2	154.2
47.5°	155.6	154.8	154.8	154.3	153.5	152.4
48°	153.9	152.9	152.9	152.6	151.8	150.7
48.5°	152.1	151.2	151.2	150.7	150.0	148.9
49°	150.4	149.5	149.4	149.0	148.2	147.2
49.5°	148.7	147.6	147.7	147.2	146.3	145.3
50°	146.8	145.7	145.8	145.5	144.6	143.6
50.5°	145.0	144.0	144.1	143.6	142.7	141.7
51°	143.3	142.2	142.2	141.8	140.9	139.9
51.5°	141.4	140.3	140.4	140.0	139.0	138.1
52°	139.6	138.5	138.6	138.2	137.4	136.2
52.5°	137.8	136.6	136.8	136.2	135.4	134.4
53°	135.8	134.8	134.8	134.5	133.5	132.5
53.5°	134.1	133.0	133.0	132.5	131.7	130.7
54°	132.2	131.0	131.1	130.7	129.8	128.7
54.5°	130.2	129.1	129.2	128.7	127.9	126.8
55°	128.5	127.3	127.4	127.0	126.0	124.9
55.5°	126.4	125.3	125.3	124.9	124.0	123.0
56°	124.7	123.5	123.5	123.1	122.2	121.1
56.5°	122.7	121.5	121.6	121.1	120.3	119.1
57°	120.9	119.6	119.6	119.2	118.3	117.2
57.5°	118.8	117.7	117.6	117.1	116.2	115.2
58°	116.9	115.7	115.7	115.2	114.4	113.3
58.5°	115.0	113.8	113.7	113.3	112.4	111.3
59°	113.0	111.7	111.8	111.3	110.3	109.3
59.5°	111.0	109.8	109.7	109.3	108.4	107.3
60°	109.1	107.8	107.8	107.3	106.5	105.3
60.5°	107.0	105.8	105.8	105.3	104.4	103.3
61°	105.2	103.8	103.8	103.3	102.4	101.2
61.5°	103.1	101.8	101.8	101.2	100.4	99.2
62°	101.1	99.8	99.8	99.4	98.4	97.3
62.5°	99.0	97.7	97.7	97.2	96.3	95.1
63°	97.1	95.7	95.6	95.2	94.3	93.2
63.5°	95.0	93.6	93.6	93.1	92.2	91.0
64°	93.0	91.6	91.5	91.2	90.2	89.0
64.5°	91.0	89.5	89.5	88.9	88.0	86.9
65°	88.9	87.5	87.4	86.9	86.0	84.9
65.5°	86.8	85.4	85.3	84.8	83.9	82.7
66°	84.7	83.3	83.2	82.8	81.8	80.7



TEST NUMBER: P938619

CATALOG NUMBER: SMX4RLSFS2W-650LM-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	78.4	77.0	77.0	76.5	75.5	74.3
68°	76.4	74.9	74.8	74.4	73.4	72.2
68.5°	74.3	72.9	72.7	72.3	71.3	70.1
69°	72.2	70.8	70.5	70.2	69.2	68.1
69.5°	70.1	68.6	68.5	68.0	67.1	65.9
70°	68.0	66.5	66.4	65.9	65.0	63.8
70.5°	66.1	64.3	64.2	63.8	62.8	61.7
71°	63.8	62.3	62.1	61.7	60.7	59.6
71.5°	61.7	60.2	60.0	59.6	58.6	57.4
72°	59.7	58.0	57.9	57.4	56.5	55.3
72.5°	57.6	55.9	55.9	55.3	54.4	53.2
73°	55.4	53.9	53.7	53.2	52.3	51.1
73.5°	53.3	51.8	51.6	51.1	50.2	49.0
74°	51.3	49.7	49.5	49.0	48.0	46.8
74.5°	49.2	47.6	47.4	46.9	46.0	44.8
75°	47.1	45.5	45.3	44.8	43.9	42.7
75.5°	45.0	43.4	43.3	42.8	41.9	40.7
76°	43.0	41.4	41.2	40.7	39.7	38.6
76.5°	40.9	39.3	39.1	38.6	37.7	36.6
77°	38.9	37.3	37.0	36.6	35.7	34.6
77.5°	36.9	35.2	35.1	34.6	33.7	32.6
78°	34.8	33.2	33.1	32.7	31.7	30.7
78.5°	32.8	31.2	31.1	30.6	29.7	28.7
79°	30.9	29.4	29.1	28.7	27.8	26.7
79.5°	29.0	27.4	27.2	26.7	25.9	24.9
80°	27.0	25.4	25.3	24.9	24.0	23.0
80.5°	25.1	23.6	23.4	23.0	22.2	21.2
81°	23.3	21.8	21.6	21.2	20.5	19.5
81.5°	21.5	20.1	19.9	19.5	18.8	17.9
82°	19.7	18.5	18.3	17.9	17.1	16.2
82.5°	17.9	16.8	16.6	16.2	15.4	14.5
83°	16.2	15.1	14.9	14.5	13.7	12.8
83.5°	14.7	13.4	13.2	12.8	12.1	11.3
84°	13.1	11.9	11.7	11.4	10.7	10.0
84.5°	11.5	10.4	10.3	9.9	9.3	8.6
85°	10.1	9.0	8.9	8.6	8.0	7.3
85.5°	8.7	7.7	7.6	7.3	6.7	6.1
86°	7.4	6.5	6.4	6.1	5.6	5.0
86.5°	6.4	5.3	5.2	5.0	4.6	4.0
87°	5.5	4.3	4.3	4.0	3.6	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: P938619  
CATALOG NUMBER: SMX4RLSFSD2W-650LM-4000K

**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°	224.8	224.2	223.5	222.6	224.4	224.2	224.0	224.3	224.9	225.6	226.0
22°	224.0	223.3	222.2	221.6	223.2	223.2	223.0	223.5	223.8	224.4	225.2



44°	164.5	163.2	161.8	160.7	162.7	162.7	162.8	163.4	164.3	165.5	166.6
44.5°	162.7	161.6	160.2	159.2	161.0	161.0	161.0	161.7	162.7	163.8	165.0



66.5°	78.5	77.0	75.5	74.6	76.6	76.7	77.1	78.0	79.1	80.5	81.8
67°	76.5	75.0	73.5	72.5	74.5	74.6	75.0	75.9	77.0	78.4	79.8



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°	226.4	226.5	226.5	225.9	225.5	224.8
22°	225.6	225.5	225.5	225.1	224.6	224.0



44°	167.4	166.5	166.7	166.1	165.5	164.5
44.5°	165.7	165.0	165.0	164.5	163.6	162.7



66.5°	82.7	81.2	81.2	80.6	79.8	78.5
67°	80.5	79.1	79.0	78.6	77.6	76.5



89°	1.9	1.7	1.6	1.8	1.5	1.4
89.5°	1.4	1.3	1.3	1.5	1.2	1.1

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(END OF REPORT)