

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: P869659

Luminaire Tested: **SMX14RLSFSD2W-1600LM-4000K**

Issue Date: 8/29/2024

Tested By:

Approved By:



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**Test Information**

Test Method: LM-79-08  
 Report Number: P869659  
 Test Lab:  
 Issue Date: 8/29/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: HALO  
 Catalog Number: SMX14RLSFSD2W-1600LM-4000K  
 Description: 14IN ROUND, 90CRI, DIMMING TO 10%, DAMP LOCATION  
 Light Source: SELECTABLE CCT 90CRI / 4000K CCT  
 Ballast/Driver: -

**Summary**

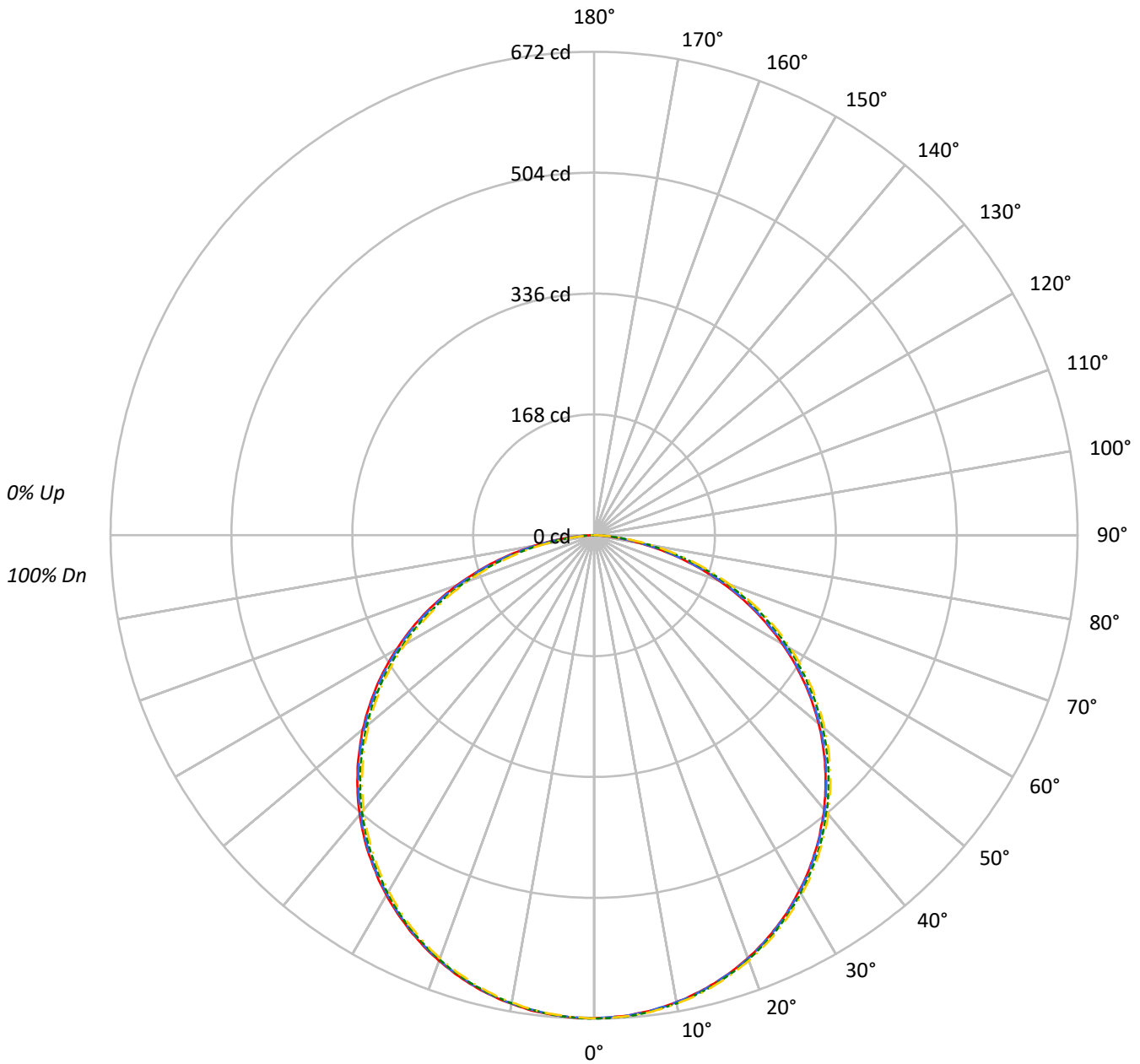
Lumens per Lamp: N/A  
 Luminaire Lumens: 1965.3 lumens  
 Efficiency: N/A  
 Efficacy: 94.0 lumens/watt  
 Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39  
 Luminous Opening: Circular (Dia: 1.17' x H: 0')  
 CIE Type: Direct

Input Watts (W): 20.9  
 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: 25 FT

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	GONIO 1 IN0055	4/22/2021	10/22/2021
Power Meter	XITRON 2801 IN0197	12/1/2020	12/1/2021
AC Power Source	CHROMA 61505 IN0196	12/1/2020	12/1/2021
DC Power Supply	AGILENT E3634A IN0198	11/30/2020	11/30/2021
Room Thermometer	ONSET IN0143	12/1/2020	12/1/2021

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### Luminous Intensity Polar Plot



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

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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	100	100	100	100	100		
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84	84	84	84	84	84	84		
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	79	75	72	69	69	69	69	69	69	69		
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58	58	58	58	58	58	58		
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	62	56	52	49	49	49	49	49	49	49		
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	49	45	43	43	43	43	43	43	43		
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37	37	37	37	37	37	37		
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33	33	33	33	33	33	33		
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29	29	29	29	29	29	29		
9	56	42	34	29	55	42	34	29	41	33	28	40	33	28	39	33	28	26	26	26	26	26	26	26		
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24	24	24	24	24	24	24		

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

	0°	90°	180°	270°
0°	6754	6754	6754	6754
5°	6745	6761	6760	6760
10°	6734	6751	6756	6747
15°	6719	6739	6753	6740
20°	6696	6718	6744	6723
25°	6670	6701	6732	6702
30°	6627	6675	6709	6671
35°	6586	6645	6684	6635
40°	6533	6604	6656	6593
45°	6463	6556	6618	6532
50°	6373	6486	6569	6455
55°	6256	6400	6492	6358
60°	6078	6263	6378	6201
65°	5829	6072	6220	5979
70°	5443	5773	5964	5637
75°	4852	5303	5552	5101
80°	3900	4526	4885	4225
85°	2379	3233	3776	2829

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.6	3.2
10°-20°	182.5	9.3
20°-30°	278.1	14.1
30°-40°	338.0	17.2
40°-50°	354.5	18.0
50°-60°	324.4	16.5
60°-70°	249.9	12.7
70°-80°	141.3	7.2
80°-90°	33.0	1.7
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
<b>0°-30°</b>	<b>524.1</b>	<b>26.7</b>
<b>0°-40°</b>	<b>862.1</b>	<b>43.9</b>
<b>0°-60°</b>	<b>1541.0</b>	<b>78.4</b>
<b>0°-90°</b>	<b>1965.3</b>	<b>100.0</b>
90°-120°	0.0	0.0
90°-150°	0.0	0.0
<b>90°-180°</b>	<b>0.0</b>	<b>0.0</b>
<b>0°-180°</b>	<b>1965.3</b>	<b>100.0</b>

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	671	671	671	671	671	
5°	668	669	669	669	668	63
15°	645	647	648	647	645	182
25°	601	604	606	604	601	277
35°	536	541	544	540	536	335
45°	454	461	465	459	454	350
55°	357	365	370	362	357	318
65°	245	255	261	251	245	242
75°	125	136	143	131	125	132
85°	21	28	33	24	21	27
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°	671.2	671.2	671.2	671.2	671.2	671.2	671.2	671.2	671.2	671.2	671.2
0.5°	670.9	670.7	670.8	671.5	671.6	671.9	671.4	671.1	670.9	670.8	670.9
1°	670.9	670.4	670.6	671.5	671.6	671.6	671.4	670.9	671.3	670.9	670.6
1.5°	670.7	670.5	670.4	670.9	671.5	671.5	671.4	671.2	671.5	670.5	670.7
2°	670.5	669.9	670.2	670.5	671.5	671.4	671.0	671.1	671.3	670.4	670.7
2.5°	669.9	669.9	670.3	670.8	671.0	671.1	670.9	670.9	671.0	670.4	670.4
3°	669.7	669.5	669.9	670.2	670.7	670.9	670.4	670.5	670.7	670.4	670.2
3.5°	669.6	669.2	669.7	669.9	670.7	670.7	670.4	670.4	670.2	670.0	669.9
4°	669.2	668.7	669.2	669.5	670.2	670.2	669.9	669.9	669.7	669.8	669.9
4.5°	668.4	668.0	668.6	668.8	669.6	669.8	669.5	669.6	669.3	669.3	669.0
5°	667.7	667.2	668.0	668.7	669.3	669.1	669.1	669.2	669.2	668.8	668.8
5.5°	666.9	666.6	667.4	667.5	668.5	668.6	668.4	668.4	668.5	668.4	668.2
6°	666.4	665.9	666.7	666.7	668.0	667.8	667.9	667.9	668.0	667.8	667.5
6.5°	665.9	665.3	666.2	666.2	667.2	667.2	667.6	667.4	667.3	667.3	666.8
7°	665.1	664.6	664.9	665.4	666.4	666.1	666.8	666.6	666.9	666.6	666.0
7.5°	664.4	663.8	663.9	664.5	665.5	665.4	665.9	665.7	666.4	665.8	665.0
8°	663.4	663.0	662.9	663.8	664.5	664.4	665.1	665.1	665.5	665.1	664.7
8.5°	662.3	661.9	662.5	662.9	663.8	663.5	663.9	663.9	664.1	664.1	663.6
9°	661.2	661.1	661.4	661.7	662.6	663.1	663.5	663.1	663.2	662.8	662.9
9.5°	660.0	659.9	660.2	660.9	661.7	661.7	662.2	662.1	662.5	662.2	661.7
10°	659.0	658.9	658.9	660.0	660.7	660.7	661.2	661.2	661.2	661.4	660.9
10.5°	657.7	657.9	658.1	658.7	659.6	659.7	659.9	660.2	660.4	660.2	659.7
11°	657.0	656.3	656.9	657.7	658.3	658.5	658.7	659.0	659.4	658.9	658.6
11.5°	655.2	655.0	656.1	656.2	657.1	657.1	658.0	657.9	658.2	657.5	657.3
12°	653.9	653.8	654.5	654.9	656.1	655.9	656.7	656.6	657.0	656.4	656.1
12.5°	652.2	652.6	653.1	653.6	654.4	654.9	655.0	655.6	655.2	655.5	654.9
13°	651.2	651.2	651.5	651.7	653.0	653.6	653.9	654.2	654.3	654.0	653.7
13.5°	649.5	649.5	650.2	650.7	651.6	652.1	652.5	652.7	653.0	652.2	652.3
14°	648.2	647.9	648.6	649.2	650.1	650.5	650.9	650.9	651.5	650.9	650.5
14.5°	646.0	646.2	646.8	647.9	648.4	648.8	649.6	649.8	649.9	649.8	649.1
15°	644.9	644.4	645.5	645.5	646.8	647.2	647.7	648.5	648.2	647.9	647.8
15.5°	643.0	642.8	643.3	644.0	645.0	645.5	646.1	646.6	646.8	646.3	645.8
16°	641.2	641.3	641.5	642.5	643.3	643.8	644.4	644.4	645.1	644.4	643.8
16.5°	639.5	639.6	639.6	640.6	641.3	641.8	642.7	642.7	643.3	642.9	642.2
17°	637.8	637.9	638.3	638.9	639.6	639.9	641.0	641.1	641.2	641.4	640.5
17.5°	635.8	635.8	636.4	637.4	637.6	638.5	639.3	639.3	639.6	639.1	638.9
18°	633.8	633.7	634.3	635.2	636.1	636.6	637.4	637.6	637.8	637.5	636.8
18.5°	631.6	631.4	632.4	632.8	633.8	634.6	635.1	635.5	635.6	635.7	635.0
19°	629.6	629.4	630.4	630.7	631.5	632.5	633.1	633.4	634.0	633.4	632.7
19.5°	627.3	627.4	628.2	629.0	629.7	630.2	631.4	631.4	631.4	631.7	630.7
20°	625.3	625.1	626.0	626.6	627.3	628.5	629.3	629.7	629.7	629.5	628.7
20.5°	623.1	622.8	623.6	624.7	625.2	626.2	627.1	627.6	627.3	627.4	626.7
21°	621.0	620.7	621.2	622.1	623.0	623.7	624.9	625.4	625.4	625.1	624.2
21.5°	618.5	618.2	619.1	620.0	620.9	621.7	622.6	623.2	623.3	622.8	622.1
22°	615.8	616.2	616.9	617.4	618.2	619.4	620.6	620.8	620.9	620.3	619.6

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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°	613.6	613.4	614.3	614.9	616.1	616.9	617.9	618.4	618.6	618.1	617.5
23°	611.1	610.9	611.4	612.8	613.6	614.4	615.7	616.3	615.8	615.8	614.9
23.5°	608.4	608.4	608.8	610.0	611.0	611.8	613.3	613.5	613.4	613.6	612.3
24°	605.9	605.9	606.6	607.4	608.7	609.7	610.9	611.1	611.0	611.2	609.9
24.5°	603.0	603.3	603.8	604.9	606.2	606.8	608.2	608.7	608.7	608.2	607.5
25°	600.7	600.4	601.4	602.1	603.5	604.3	605.6	606.0	606.3	606.0	604.7
25.5°	597.7	598.0	598.4	599.4	600.5	601.7	602.9	603.6	603.3	603.3	602.1
26°	594.9	595.3	595.6	596.8	598.0	599.3	600.0	600.7	600.4	600.7	599.5
26.5°	592.0	592.0	592.5	593.9	595.2	596.2	597.6	597.9	597.7	597.7	596.6
27°	589.5	589.3	590.0	590.7	592.8	593.2	594.7	595.4	594.9	595.1	593.5
27.5°	586.1	586.2	587.0	587.7	589.7	590.4	591.6	592.3	592.2	592.2	590.9
28°	583.0	583.3	584.1	584.9	586.4	587.8	589.0	589.5	589.3	589.2	588.0
28.5°	579.9	580.1	580.8	581.6	583.6	584.6	586.0	586.4	586.4	586.0	585.0
29°	576.8	577.3	577.8	578.8	580.5	581.6	583.2	583.6	583.6	583.1	582.2
29.5°	573.3	573.7	574.6	575.7	577.7	578.4	580.1	580.5	580.7	580.5	579.1
30°	570.3	570.6	571.3	572.7	574.4	575.5	577.1	577.5	577.4	577.3	575.8
30.5°	567.6	567.6	568.6	569.7	571.4	572.3	573.7	574.4	574.2	574.3	572.9
31°	564.2	564.8	564.8	566.1	568.6	569.0	570.5	571.7	571.0	571.2	569.8
31.5°	560.8	561.0	561.8	563.1	564.9	566.1	567.6	568.1	568.1	568.2	566.7
32°	557.7	557.8	558.6	559.8	561.6	562.8	564.7	565.0	565.1	565.1	563.3
32.5°	554.2	554.6	554.7	556.0	558.0	559.4	561.1	562.1	561.4	561.4	560.2
33°	550.5	551.3	551.3	552.7	554.9	555.7	557.7	558.4	557.7	558.1	556.8
33.5°	546.7	547.5	548.1	549.4	551.3	552.4	554.0	555.2	554.6	554.6	553.4
34°	543.4	544.0	544.3	545.9	548.1	549.2	550.7	551.8	551.1	551.2	549.8
34.5°	539.5	540.2	541.0	542.3	544.5	545.7	547.3	548.3	547.5	547.6	546.4
35°	536.1	536.7	537.4	538.5	540.9	542.0	543.8	544.4	544.1	544.1	543.0
35.5°	532.4	532.7	533.7	534.8	537.2	538.5	539.9	540.8	540.8	540.7	539.4
36°	528.7	529.0	529.7	531.1	533.6	535.0	536.7	537.3	537.3	536.9	535.7
36.5°	525.0	525.2	526.3	527.5	530.2	531.0	533.0	533.7	533.7	533.8	531.9
37°	521.2	521.4	522.2	523.7	526.3	527.5	529.2	530.2	529.9	529.9	528.6
37.5°	517.0	517.6	518.3	519.9	522.2	523.7	525.4	526.2	526.0	525.9	524.8
38°	512.9	513.8	514.6	515.9	518.5	520.2	522.0	522.5	522.1	521.9	521.0
38.5°	509.3	509.8	510.5	511.8	514.6	516.1	518.0	518.6	518.6	518.2	517.2
39°	505.3	505.5	506.6	508.0	510.5	512.0	514.1	515.0	514.7	514.4	513.0
39.5°	501.5	501.5	502.6	504.1	506.4	508.3	510.4	511.0	510.7	510.5	508.8
40°	497.3	497.9	498.7	500.2	502.7	504.5	506.0	507.1	506.7	506.6	504.8
40.5°	492.9	493.5	494.7	496.1	498.8	500.4	502.1	503.1	502.8	502.6	501.0
41°	488.9	489.7	490.5	492.2	494.8	496.6	498.1	499.1	499.0	498.5	497.1
41.5°	484.7	485.3	486.3	488.1	490.7	492.5	494.1	494.8	494.9	494.3	492.8
42°	480.4	481.1	481.8	483.8	486.4	488.2	489.8	490.7	490.5	490.1	488.8
42.5°	476.0	476.9	477.5	479.5	482.3	483.8	485.7	486.6	486.4	486.3	484.6
43°	471.6	472.4	473.2	475.1	478.0	479.8	481.6	482.6	482.1	481.8	480.4
43.5°	467.4	468.1	469.0	470.9	473.4	475.4	477.1	478.4	478.0	477.4	476.1
44°	463.3	463.6	464.5	466.3	469.2	471.2	473.0	473.9	473.6	473.2	471.9
44.5°	458.4	459.0	460.3	462.0	465.0	466.9	468.5	469.3	469.2	468.8	467.4

TEST NUMBER: P869659  
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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	454.1	454.5	455.8	457.7	460.7	462.4	464.2	465.1	465.0	464.7	463.1
45.5°	449.8	449.9	451.2	453.2	456.1	457.8	459.8	460.4	460.7	460.1	458.5
46°	445.1	445.5	446.5	448.7	451.4	453.3	455.4	456.1	456.3	455.9	454.3
46.5°	440.6	440.9	441.9	443.8	446.8	448.9	450.9	451.5	451.6	451.2	449.6
47°	435.9	436.3	437.5	439.5	442.2	444.3	446.3	447.0	447.1	446.5	445.0
47.5°	431.3	431.5	433.0	434.9	437.8	439.8	441.7	442.5	442.5	442.1	440.6
48°	426.5	426.8	428.4	430.1	433.3	435.1	437.2	438.1	438.0	437.4	436.2
48.5°	421.8	422.1	423.6	425.4	428.6	430.5	432.5	433.5	433.5	432.8	431.5
49°	417.1	417.3	418.8	420.7	423.8	425.7	428.0	428.9	428.8	428.2	426.8
49.5°	412.2	412.6	413.9	416.0	419.0	421.0	423.1	423.8	424.2	423.6	422.1
50°	407.1	407.6	409.0	411.1	414.3	416.5	418.7	419.4	419.6	419.0	417.1
50.5°	402.3	402.6	404.2	406.4	409.4	411.7	413.8	414.5	414.5	414.0	412.3
51°	397.4	397.7	399.2	401.4	404.7	406.8	408.7	409.8	409.9	409.0	407.7
51.5°	392.3	392.8	394.3	396.5	399.7	401.9	404.0	404.9	405.0	404.2	402.6
52°	387.3	387.8	389.1	391.5	395.0	397.0	399.3	400.3	400.0	399.2	398.0
52.5°	382.1	382.8	384.3	386.4	390.0	392.0	394.3	395.3	394.9	394.3	392.7
53°	377.2	377.8	379.4	381.4	384.9	387.1	389.3	390.4	390.1	389.5	387.8
53.5°	372.1	372.3	374.2	376.2	380.0	382.2	384.0	385.2	385.0	384.5	383.0
54°	366.9	367.0	368.8	371.0	374.9	376.9	379.2	380.3	379.9	379.7	377.7
54.5°	361.9	362.4	363.8	365.8	369.6	372.0	374.2	375.0	374.9	374.4	372.5
55°	356.6	357.1	358.6	361.0	364.8	367.0	369.2	370.4	370.0	369.4	367.5
55.5°	351.4	351.6	353.5	355.5	359.6	361.9	364.0	365.2	365.0	364.1	362.6
56°	346.1	346.4	348.1	350.4	354.5	356.5	359.1	360.2	359.7	359.0	357.3
56.5°	340.5	341.1	342.9	344.9	349.1	351.3	353.6	354.6	354.7	353.5	352.2
57°	335.1	335.8	337.4	339.4	343.7	346.2	348.5	349.7	349.3	348.4	346.9
57.5°	329.7	330.2	331.9	334.1	338.4	340.7	343.0	344.0	344.0	343.2	341.5
58°	324.5	324.9	326.4	328.8	333.1	335.5	337.9	338.8	338.6	337.7	336.2
58.5°	318.9	319.1	321.1	323.4	327.7	330.1	332.3	333.5	333.6	332.3	330.9
59°	313.3	314.0	315.5	318.0	322.3	324.7	327.0	328.1	328.2	326.7	325.3
59.5°	307.6	308.3	309.9	312.3	316.8	319.3	321.5	322.7	322.4	321.6	319.9
60°	302.0	302.7	304.6	307.0	311.2	313.8	316.1	317.2	316.9	316.0	314.3
60.5°	296.7	297.1	298.6	301.2	305.5	308.4	310.6	311.7	311.5	310.6	308.8
61°	291.2	291.7	293.3	296.0	300.0	302.9	305.2	306.2	306.0	304.9	303.6
61.5°	285.3	285.9	287.7	290.3	294.4	297.3	299.4	300.6	300.7	299.5	298.0
62°	279.5	280.3	282.1	284.5	289.3	292.0	294.1	295.2	295.1	294.1	292.5
62.5°	273.6	274.5	276.0	278.6	283.5	286.3	288.7	289.6	289.5	288.4	286.7
63°	267.9	268.8	270.4	273.1	277.8	280.7	282.8	284.0	283.9	282.8	281.2
63.5°	262.2	263.1	264.8	267.2	272.0	274.9	277.4	278.3	278.3	277.2	275.4
64°	256.2	257.2	259.0	261.6	266.2	269.3	271.5	272.4	272.5	271.4	269.8
64.5°	250.7	251.5	253.2	255.8	260.6	263.3	265.8	266.7	266.7	265.7	263.8
65°	244.8	245.6	247.6	250.2	255.0	257.9	260.3	261.2	261.2	260.1	258.5
65.5°	238.9	239.9	241.6	244.4	249.3	252.0	254.4	255.4	255.5	254.5	252.4
66°	232.9	233.8	235.6	238.3	243.3	246.2	248.5	249.6	249.4	248.6	246.6
66.5°	227.1	228.1	229.6	232.3	237.4	240.2	242.5	243.7	243.5	242.4	240.7
67°	221.4	222.0	223.8	226.5	231.5	234.4	236.7	237.9	237.8	236.8	234.7



TEST NUMBER: P869659  
 CATALOG NUMBER: SMX14RLSFS2W-1600LM-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	215.2	216.2	218.0	220.6	225.7	228.4	230.8	232.0	232.1	230.9	228.9
68°	209.2	210.0	212.0	214.7	219.8	222.7	225.3	226.1	226.2	225.0	223.3
68.5°	203.2	204.1	206.0	208.7	214.1	216.9	219.1	220.3	220.3	219.1	217.5
69°	197.1	197.9	200.0	202.7	208.1	210.9	213.4	214.4	214.4	213.2	211.7
69.5°	191.1	191.9	194.1	196.5	202.2	205.2	207.5	208.5	208.6	207.3	205.4
70°	185.0	185.9	188.0	190.6	196.2	199.0	201.5	202.5	202.7	201.4	199.4
70.5°	179.1	180.0	182.0	184.9	190.4	193.0	195.5	196.7	196.7	195.6	193.5
71°	173.0	173.7	175.9	178.5	184.3	187.4	189.8	190.8	190.8	189.6	187.6
71.5°	166.8	167.8	169.7	172.4	178.3	181.4	183.7	184.8	184.9	183.6	181.5
72°	161.0	161.7	163.7	166.5	172.1	175.3	177.8	178.7	178.9	177.6	175.5
72.5°	155.1	155.9	157.9	160.6	166.2	169.3	171.7	172.9	172.9	171.6	169.6
73°	148.9	149.8	151.9	154.4	160.1	163.2	165.7	166.6	166.8	165.5	163.3
73.5°	142.8	143.7	145.8	148.4	154.4	157.4	159.8	160.8	160.9	159.6	157.6
74°	136.7	137.8	139.8	142.4	148.4	151.4	154.0	154.8	155.0	153.6	151.7
74.5°	130.7	131.7	133.8	136.3	142.3	145.4	147.9	148.9	149.0	147.8	145.5
75°	124.8	125.7	127.8	130.4	136.4	139.4	141.7	142.8	142.8	141.6	139.6
75.5°	118.8	119.8	121.9	124.6	130.3	133.4	135.7	136.9	136.8	135.6	133.5
76°	112.9	113.8	115.9	118.5	124.3	127.4	129.6	130.8	131.0	129.6	127.5
76.5°	106.9	108.0	110.0	112.5	118.5	121.6	123.8	124.8	124.9	123.7	121.5
77°	101.0	102.0	104.2	106.8	112.5	115.6	117.9	119.0	118.8	117.8	115.8
77.5°	95.4	96.4	98.4	101.0	106.7	109.7	112.1	113.0	113.1	111.9	109.8
78°	89.6	90.6	92.6	95.0	100.9	103.9	106.3	107.1	107.2	105.9	104.0
78.5°	83.8	84.8	86.9	89.6	95.0	97.9	100.4	101.3	101.4	100.2	98.1
79°	78.2	79.3	81.4	83.9	89.5	92.2	94.5	95.5	95.5	94.4	92.4
79.5°	72.7	73.6	75.7	78.2	83.7	86.7	89.0	89.9	89.9	88.8	86.6
80°	67.3	68.0	70.2	72.7	78.1	81.0	83.2	84.2	84.3	83.1	81.2
80.5°	61.8	62.8	64.7	67.2	72.7	75.5	77.7	78.7	78.7	77.5	75.4
81°	56.6	57.6	59.4	61.9	67.2	69.9	72.1	73.2	73.2	72.1	70.1
81.5°	51.5	52.6	54.3	56.7	61.9	64.5	66.6	67.6	67.5	66.3	64.5
82°	46.4	47.4	49.2	51.4	56.5	59.3	61.2	62.2	62.3	61.1	59.2
82.5°	41.7	42.6	44.4	46.6	51.5	54.1	56.0	57.0	57.0	55.9	54.0
83°	37.0	37.9	39.6	41.6	46.5	49.1	51.1	52.2	52.0	51.0	49.0
83.5°	32.6	33.3	35.0	37.0	41.6	44.0	46.0	47.0	46.9	45.7	44.1
84°	28.2	29.1	30.7	32.6	36.7	39.3	41.1	42.0	42.0	40.9	39.2
84.5°	24.2	25.1	26.5	28.4	32.3	34.5	36.5	37.3	37.2	36.2	34.6
85°	20.6	21.4	22.8	24.3	28.0	30.2	32.0	32.8	32.7	31.7	30.3
85.5°	17.0	17.6	19.0	20.7	24.0	26.0	27.6	28.4	28.4	27.4	25.9
86°	13.8	14.2	15.5	17.1	20.5	22.1	23.5	24.3	24.2	23.3	22.0
86.5°	10.4	11.0	12.2	13.8	17.1	18.7	20.1	20.8	20.8	19.9	18.5
87°	7.5	7.9	8.9	10.5	13.8	15.4	16.8	17.5	17.4	16.6	15.3
87.5°	5.5	5.7	6.5	7.6	10.8	12.3	13.6	14.1	14.0	13.3	12.2
88°	3.4	3.8	4.4	5.5	8.0	9.3	10.5	11.1	11.0	10.3	9.3
88.5°	2.0	2.3	2.8	3.5	5.6	6.8	7.7	8.2	8.1	7.5	6.6
89°	1.3	1.4	1.7	2.1	3.5	4.6	5.3	5.7	5.7	5.1	4.5
89.5°	0.8	0.8	0.9	1.2	1.9	2.8	3.3	3.6	3.6	3.2	2.5

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



TEST NUMBER: P869659  
CATALOG NUMBER: SMX14RLSFSD2W-1600LM-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: P869659  
 CATALOG NUMBER: SMX14RLSFS2W-1600LM-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	671.2	671.2	671.2	671.2	671.2	671.2
0.5°	671.2	671.8	671.5	671.2	671.4	670.9
1°	671.2	671.8	671.4	671.0	671.2	670.9
1.5°	671.3	671.7	671.3	670.6	670.5	670.7
2°	670.9	671.4	670.9	670.7	670.5	670.5
2.5°	670.6	671.0	670.8	670.4	670.1	669.9
3°	670.4	670.4	670.6	670.1	670.2	669.7
3.5°	670.3	670.3	670.1	669.8	669.9	669.6
4°	669.9	669.9	669.5	668.8	668.7	669.2
4.5°	669.3	669.4	669.3	668.4	668.6	668.4
5°	668.7	669.2	668.6	667.9	667.6	667.7
5.5°	668.5	668.2	668.3	667.5	667.5	666.9
6°	667.7	667.6	667.4	666.7	666.9	666.4
6.5°	666.8	666.6	666.6	665.9	666.1	665.9
7°	666.1	666.0	665.9	665.3	665.4	665.1
7.5°	665.3	665.3	665.1	664.4	664.9	664.4
8°	664.4	664.2	664.2	663.6	664.1	663.4
8.5°	663.8	663.4	663.0	662.7	662.8	662.3
9°	663.0	662.7	662.4	661.4	661.7	661.2
9.5°	661.9	661.7	661.3	660.2	660.6	660.0
10°	660.7	660.3	660.1	659.6	659.5	659.0
10.5°	659.6	659.4	659.0	658.1	657.8	657.7
11°	658.5	658.1	657.8	657.1	656.5	657.0
11.5°	657.2	656.9	656.5	655.7	655.5	655.2
12°	655.9	655.6	655.2	654.5	654.4	653.9
12.5°	654.7	654.4	654.0	652.8	652.7	652.2
13°	653.1	653.2	652.5	651.6	651.5	651.2
13.5°	651.6	651.5	650.9	650.0	650.0	649.5
14°	650.4	649.9	649.8	648.4	648.1	648.2
14.5°	648.5	648.4	648.0	646.9	646.7	646.0
15°	647.1	646.9	646.3	645.2	644.9	644.9
15.5°	645.7	645.2	644.5	643.4	643.3	643.0
16°	643.8	643.5	642.7	641.6	641.5	641.2
16.5°	642.1	641.7	640.8	639.6	639.5	639.5
17°	640.4	639.8	638.9	638.0	637.8	637.8
17.5°	638.8	637.8	637.3	636.1	636.1	635.8
18°	636.6	636.0	634.7	634.1	633.7	633.8
18.5°	634.8	634.2	633.3	632.0	632.0	631.6
19°	632.7	632.0	631.2	630.2	629.7	629.6
19.5°	630.5	629.8	629.3	628.2	627.6	627.3
20°	628.6	627.8	626.9	625.9	625.6	625.3
20.5°	626.5	625.4	624.6	623.5	623.4	623.1
21°	624.0	623.3	622.3	621.3	620.6	621.0
21.5°	621.6	621.0	620.0	619.0	618.4	618.5
22°	619.3	618.6	617.5	616.4	615.6	615.8

TEST NUMBER: P869659  
 CATALOG NUMBER: SMX14RLSFSD2W-1600LM-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	616.8	616.0	615.2	613.8	613.5	613.6
23°	614.5	613.9	612.8	611.3	610.9	611.1
23.5°	611.9	611.4	610.5	608.8	608.5	608.4
24°	609.4	608.8	607.6	606.1	605.7	605.9
24.5°	607.1	606.0	605.1	603.3	603.0	603.0
25°	604.7	603.6	602.5	601.2	600.6	600.7
25.5°	601.9	601.1	599.5	598.3	597.9	597.7
26°	599.0	598.4	596.8	595.8	595.0	594.9
26.5°	595.9	595.2	594.0	592.6	592.2	592.0
27°	593.3	592.4	591.3	589.6	589.2	589.5
27.5°	590.8	589.2	588.1	586.8	586.2	586.1
28°	587.3	586.4	585.4	583.3	582.7	583.0
28.5°	584.5	583.5	582.2	580.5	579.5	579.9
29°	581.7	580.4	578.9	577.4	576.7	576.8
29.5°	578.7	577.3	575.9	574.1	573.5	573.3
30°	575.6	574.1	573.0	571.0	570.6	570.3
30.5°	572.3	571.1	569.8	568.1	567.3	567.6
31°	569.3	567.7	566.0	564.8	564.1	564.2
31.5°	566.2	564.0	563.0	561.6	560.8	560.8
32°	562.7	561.1	559.6	558.2	557.2	557.7
32.5°	559.5	557.7	556.5	554.6	553.9	554.2
33°	556.0	554.2	552.9	551.3	550.5	550.5
33.5°	552.5	550.6	549.2	547.7	546.9	546.7
34°	549.0	547.5	545.5	543.9	543.3	543.4
34.5°	545.8	543.6	542.1	540.4	539.4	539.5
35°	541.9	540.1	538.2	536.8	536.0	536.1
35.5°	538.5	536.6	535.1	533.3	532.3	532.4
36°	534.6	532.9	531.3	529.3	528.6	528.7
36.5°	531.3	528.9	527.2	525.4	524.7	525.0
37°	527.2	525.3	523.2	522.1	521.1	521.2
37.5°	524.0	521.7	519.9	518.3	517.2	517.0
38°	519.7	517.6	515.7	514.0	513.0	512.9
38.5°	515.9	513.6	511.7	510.0	509.3	509.3
39°	511.8	509.6	507.6	506.4	505.5	505.3
39.5°	508.1	505.5	503.9	502.1	501.4	501.5
40°	503.8	501.9	500.0	498.2	497.4	497.3
40.5°	500.2	497.8	495.7	494.1	493.4	492.9
41°	495.8	493.7	491.4	489.9	489.1	488.9
41.5°	492.1	489.4	487.3	485.6	484.6	484.7
42°	487.7	485.1	483.1	481.1	480.5	480.4
42.5°	483.4	480.9	478.9	477.0	476.1	476.0
43°	479.3	476.4	474.6	472.7	471.8	471.6
43.5°	475.0	472.2	470.6	468.3	467.6	467.4
44°	470.5	468.0	465.9	463.8	463.1	463.3
44.5°	466.3	463.5	461.5	459.5	458.5	458.4

TEST NUMBER: P869659  
 CATALOG NUMBER: SMX14RLSFSD2W-1600LM-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	461.9	459.0	457.0	455.1	454.2	454.1
45.5°	457.4	454.4	452.5	450.3	449.9	449.8
46°	452.8	450.2	447.9	446.1	445.1	445.1
46.5°	448.4	445.2	443.3	441.4	440.2	440.6
47°	443.9	440.9	438.6	436.9	435.5	435.9
47.5°	439.2	436.2	433.9	432.3	431.0	431.3
48°	434.5	431.5	429.4	427.6	426.4	426.5
48.5°	430.1	426.8	424.7	422.8	422.0	421.8
49°	425.4	422.3	419.9	417.9	417.1	417.1
49.5°	420.4	417.4	415.2	413.1	412.0	412.2
50°	415.7	412.3	410.1	408.4	407.3	407.1
50.5°	410.7	407.5	405.4	403.5	402.5	402.3
51°	405.9	402.8	400.4	398.4	397.6	397.4
51.5°	401.4	397.9	395.6	393.5	392.4	392.3
52°	396.3	392.9	390.7	388.7	387.3	387.3
52.5°	391.2	387.7	385.6	383.5	382.4	382.1
53°	386.2	382.7	380.6	378.4	377.1	377.2
53.5°	381.2	377.6	375.2	373.1	372.0	372.1
54°	375.9	372.3	370.2	368.1	366.8	366.9
54.5°	371.1	367.3	365.1	363.0	362.0	361.9
55°	365.9	362.4	359.8	357.8	356.8	356.6
55.5°	360.8	356.9	354.5	352.7	351.5	351.4
56°	355.6	351.6	349.4	347.2	346.0	346.1
56.5°	350.3	346.4	343.9	341.8	340.9	340.5
57°	345.0	341.1	338.6	336.4	335.2	335.1
57.5°	339.7	335.6	333.1	330.9	329.7	329.7
58°	334.3	330.2	327.7	325.5	324.4	324.5
58.5°	329.0	324.8	322.2	319.9	318.8	318.9
59°	323.6	319.2	316.5	314.3	313.3	313.3
59.5°	317.9	313.9	311.3	308.6	307.5	307.6
60°	312.4	308.1	305.5	303.1	302.1	302.0
60.5°	306.9	302.5	299.9	297.4	296.5	296.7
61°	301.2	296.9	294.3	292.2	291.0	291.2
61.5°	295.8	291.3	288.8	286.4	285.3	285.3
62°	290.4	285.6	283.1	280.7	279.6	279.5
62.5°	284.6	279.8	277.3	274.7	273.6	273.6
63°	279.0	274.2	271.5	269.1	268.1	267.9
63.5°	273.2	268.2	265.7	263.4	262.3	262.2
64°	267.5	262.6	260.0	257.8	256.6	256.2
64.5°	261.7	256.9	254.1	252.0	250.7	250.7
65°	256.1	251.1	248.2	246.0	244.8	244.8
65.5°	250.4	245.1	242.5	240.1	239.0	238.9
66°	244.3	239.4	236.5	233.9	232.9	232.9
66.5°	238.3	233.3	230.5	228.2	227.1	227.1
67°	232.5	227.6	224.7	222.4	221.1	221.4

TEST NUMBER: P869659  
 CATALOG NUMBER: SMX14RLSFSD2W-1600LM-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	227.1	221.6	218.6	216.6	215.0	215.2
68°	221.0	215.7	212.5	210.3	209.2	209.2
68.5°	215.0	209.7	206.6	204.2	203.1	203.2
69°	208.9	203.6	200.6	198.4	196.9	197.1
69.5°	203.1	197.6	194.6	192.2	190.9	191.1
70°	197.2	191.6	188.7	186.1	185.3	185.0
70.5°	191.1	185.5	182.7	180.4	179.2	179.1
71°	185.1	179.3	176.6	174.1	172.9	173.0
71.5°	179.2	173.3	170.5	168.1	166.6	166.8
72°	173.1	167.4	164.5	162.1	161.0	161.0
72.5°	167.1	161.4	158.6	156.2	155.0	155.1
73°	160.9	155.3	152.4	149.9	149.0	148.9
73.5°	155.1	149.2	146.4	144.0	142.6	142.8
74°	149.1	143.3	140.2	137.9	136.7	136.7
74.5°	143.1	137.2	134.4	131.8	130.6	130.7
75°	136.9	131.2	128.3	125.9	124.9	124.8
75.5°	131.0	125.2	122.4	119.9	118.5	118.8
76°	124.9	119.1	116.3	113.9	112.9	112.9
76.5°	119.1	113.2	110.2	108.0	106.9	106.9
77°	113.1	107.4	104.6	102.2	101.0	101.0
77.5°	107.2	101.6	98.8	96.6	95.4	95.4
78°	101.4	95.6	92.8	90.7	89.6	89.6
78.5°	95.5	90.0	87.4	85.0	84.0	83.8
79°	89.8	84.3	81.6	79.4	78.3	78.2
79.5°	84.1	78.6	76.0	73.7	72.7	72.7
80°	78.6	72.9	70.2	68.1	67.1	67.3
80.5°	73.0	67.6	65.0	62.7	61.7	61.8
81°	67.5	62.1	59.5	57.6	56.6	56.6
81.5°	62.0	57.1	54.5	52.4	51.4	51.5
82°	56.8	51.9	49.4	47.4	46.4	46.4
82.5°	51.8	47.0	44.6	42.7	41.7	41.7
83°	46.8	42.0	39.8	37.9	37.1	37.0
83.5°	41.8	37.3	35.1	33.3	32.5	32.6
84°	37.0	32.9	30.7	29.0	28.2	28.2
84.5°	32.6	28.6	26.7	25.1	24.2	24.2
85°	28.2	24.5	22.8	21.4	20.7	20.6
85.5°	24.1	20.9	19.1	17.7	17.1	17.0
86°	20.4	17.3	15.6	14.3	13.7	13.8
86.5°	17.1	13.9	12.2	10.9	10.4	10.4
87°	13.8	10.6	9.0	8.0	7.4	7.5
87.5°	10.7	7.7	6.6	5.7	5.4	5.5
88°	8.0	5.5	4.6	3.8	3.5	3.4
88.5°	5.5	3.5	2.9	2.4	2.1	2.0
89°	3.5	2.3	1.8	1.4	1.2	1.3
89.5°	1.9	1.4	1.0	0.8	1.1	0.8

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

  
NVLAP Lab Code: 200050-0



TEST NUMBER: P869659  
CATALOG NUMBER: SMX14RLSFSD2W-1600LM-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

(END OF REPORT)