

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: P869645

Luminaire Tested: **SMX14RLSFS010-1600LM-5000K**

Issue Date: 8/29/2024

Tested By:

Approved By:



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**Test Information**

Test Method: LM-79-08  
 Report Number: P869645  
 Test Lab:  
 Issue Date: 8/29/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: HALO  
 Catalog Number: SMX14RLSFS010-1600LM-5000K  
 Description: 14IN ROUND, 90CRI, DIMMING TO 10%, DAMP LOCATION  
 Light Source: SELECTABLE CCT 90CRI / 5000K CCT  
 Ballast/Driver: -

**Summary**

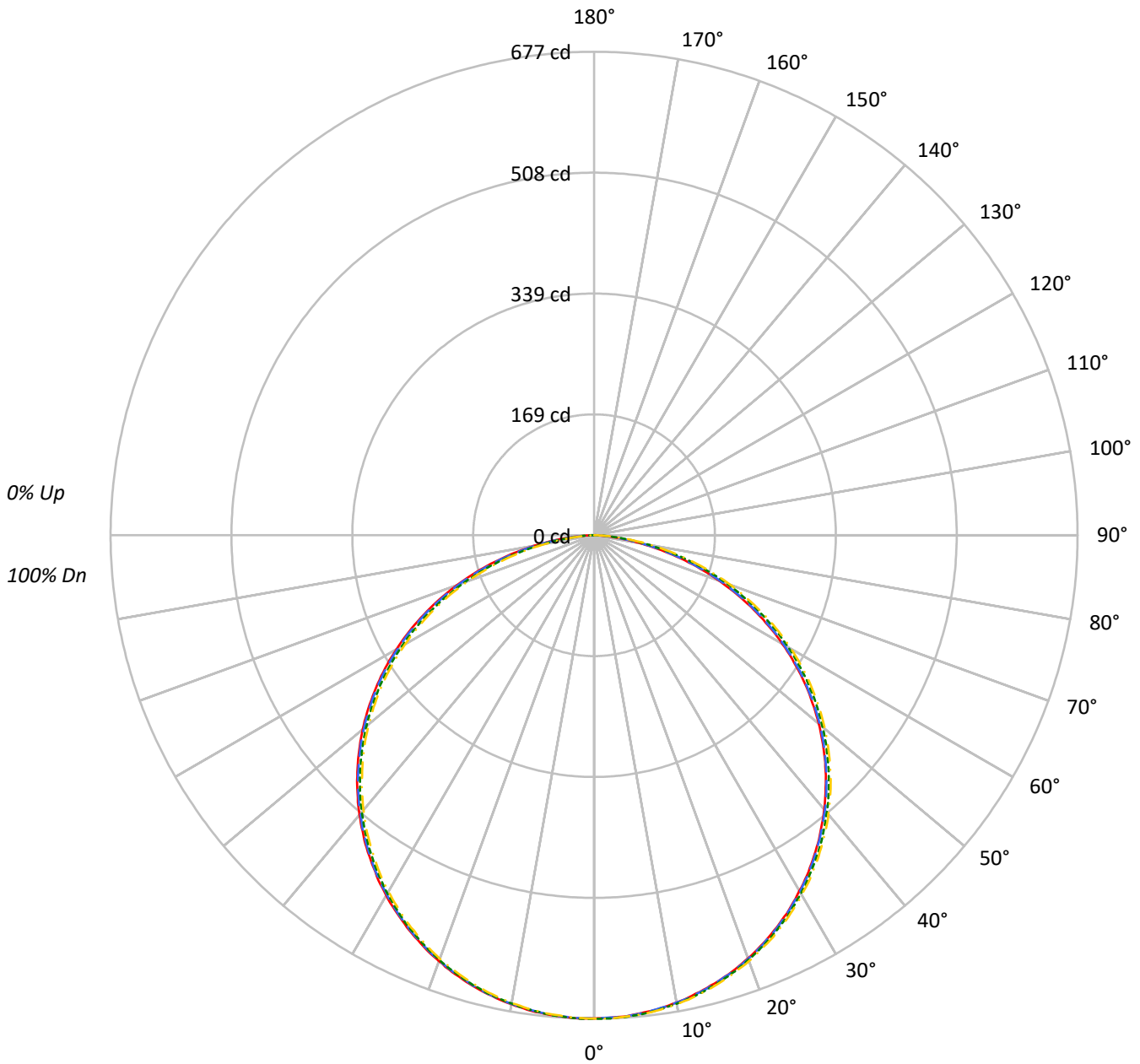
Lumens per Lamp: N/A  
 Luminaire Lumens: 1981.7 lumens  
 Efficiency: N/A  
 Efficacy: 96.2 lumens/watt  
 Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39  
 Luminous Opening: Circular (Dia: 1.17' x H: 0')  
 CIE Type: Direct

Input Watts (W): 20.6  
 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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84	84	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	79	75	72	69	69	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58	58	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	62	56	52	49	49	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	49	45	43	43	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37	37	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33	33	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29	29	29
9	56	42	34	29	55	42	34	29	41	33	28	40	33	28	39	33	28	26	26	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24	24	24

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

	0°	90°	180°	270°
0°	6811	6811	6811	6811
5°	6800	6818	6817	6817
10°	6790	6808	6813	6803
15°	6774	6795	6809	6796
20°	6752	6774	6799	6779
25°	6725	6757	6788	6758
30°	6682	6730	6765	6727
35°	6640	6700	6740	6690
40°	6588	6659	6712	6648
45°	6517	6611	6673	6586
50°	6427	6539	6624	6510
55°	6309	6453	6546	6411
60°	6129	6316	6432	6253
65°	5877	6122	6270	6029
70°	5490	5820	6011	5685
75°	4891	5346	5599	5144
80°	3929	4561	4926	4259
85°	2402	3268	3810	2852

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.1	3.2
10°-20°	184.0	9.3
20°-30°	280.4	14.1
30°-40°	340.8	17.2
40°-50°	357.4	18.0
50°-60°	327.1	16.5
60°-70°	252.0	12.7
70°-80°	142.5	7.2
80°-90°	33.3	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>528.5</b>	<b>26.7</b>
<b>0°-40°</b>	<b>869.3</b>	<b>43.9</b>
<b>0°-60°</b>	<b>1553.9</b>	<b>78.4</b>
<b>0°-90°</b>	<b>1981.7</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>1981.7</b>	<b>100.0</b>

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	677	677	677	677	677	
5°	673	675	675	675	673	64
15°	650	652	654	652	650	184
25°	606	608	611	609	606	279
35°	540	545	549	545	540	338
45°	458	464	469	463	458	353
55°	360	368	373	365	360	321
65°	247	257	263	253	247	244
75°	126	138	144	132	126	133
85°	21	28	33	25	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°	676.8	676.8	676.8	676.8	676.8	676.8	676.8	676.8	676.8	676.8	676.8
0.5°	676.5	676.3	676.4	677.1	677.2	677.5	677.0	676.7	676.5	676.4	676.5
1°	676.5	675.9	676.2	677.1	677.2	677.2	677.0	676.5	676.9	676.5	676.2
1.5°	676.3	676.1	676.0	676.5	677.1	677.1	677.0	676.8	677.1	676.1	676.3
2°	676.1	675.5	675.8	676.1	677.1	677.0	676.6	676.7	676.9	675.9	676.3
2.5°	675.5	675.4	675.9	676.4	676.6	676.7	676.5	676.5	676.6	675.9	676.0
3°	675.3	675.1	675.4	675.8	676.3	676.5	676.0	676.1	676.3	675.9	675.8
3.5°	675.2	674.8	675.3	675.4	676.3	676.3	675.9	675.9	675.8	675.6	675.4
4°	674.8	674.2	674.8	675.1	675.8	675.8	675.5	675.4	675.3	675.3	675.5
4.5°	674.0	673.6	674.2	674.3	675.2	675.3	675.1	675.2	674.9	674.9	674.6
5°	673.2	672.7	673.6	674.2	674.9	674.7	674.7	674.8	674.8	674.3	674.3
5.5°	672.5	672.1	673.0	673.1	674.1	674.2	674.0	674.0	674.1	674.0	673.8
6°	671.9	671.4	672.3	672.3	673.6	673.4	673.5	673.5	673.6	673.4	673.1
6.5°	671.4	670.8	671.8	671.8	672.7	672.8	673.1	673.0	672.9	672.9	672.4
7°	670.7	670.2	670.4	670.9	671.9	671.7	672.4	672.1	672.5	672.1	671.5
7.5°	670.0	669.3	669.5	670.1	671.0	670.9	671.4	671.3	671.9	671.3	670.6
8°	669.0	668.5	668.5	669.3	670.1	670.0	670.7	670.7	671.0	670.7	670.2
8.5°	667.9	667.4	668.0	668.5	669.3	669.1	669.5	669.5	669.6	669.6	669.1
9°	666.8	666.6	666.9	667.3	668.1	668.6	669.1	668.6	668.7	668.4	668.5
9.5°	665.5	665.4	665.7	666.4	667.2	667.2	667.7	667.6	668.0	667.7	667.2
10°	664.5	664.4	664.4	665.5	666.2	666.2	666.8	666.8	666.7	666.9	666.4
10.5°	663.2	663.3	663.6	664.2	665.1	665.2	665.4	665.7	665.9	665.7	665.2
11°	662.5	661.8	662.4	663.2	663.8	663.9	664.2	664.5	664.9	664.4	664.1
11.5°	660.7	660.5	661.6	661.6	662.6	662.6	663.4	663.3	663.7	663.0	662.8
12°	659.3	659.3	659.9	660.4	661.6	661.4	662.2	662.1	662.5	661.9	661.6
12.5°	657.6	658.1	658.5	659.0	659.9	660.4	660.5	661.1	660.6	661.0	660.4
13°	656.6	656.6	657.0	657.1	658.4	659.1	659.3	659.6	659.8	659.4	659.2
13.5°	654.9	654.9	655.6	656.1	657.1	657.6	657.9	658.2	658.4	657.6	657.7
14°	653.6	653.3	654.0	654.6	655.5	655.9	656.4	656.4	656.9	656.3	655.9
14.5°	651.4	651.6	652.2	653.3	653.8	654.2	655.0	655.3	655.3	655.2	654.5
15°	650.2	649.8	650.8	650.9	652.2	652.6	653.1	653.9	653.6	653.3	653.2
15.5°	648.4	648.1	648.7	649.4	650.4	650.8	651.5	652.0	652.2	651.7	651.2
16°	646.5	646.7	646.8	647.9	648.7	649.1	649.8	649.8	650.5	649.8	649.1
16.5°	644.8	645.0	645.0	646.0	646.7	647.2	648.0	648.0	648.6	648.3	647.5
17°	643.1	643.2	643.6	644.2	645.0	645.2	646.3	646.4	646.5	646.8	645.8
17.5°	641.0	641.1	641.7	642.7	642.9	643.8	644.6	644.6	645.0	644.5	644.2
18°	639.1	639.0	639.6	640.5	641.4	641.9	642.7	642.9	643.1	642.8	642.1
18.5°	636.9	636.7	637.6	638.1	639.1	639.9	640.4	640.8	640.9	641.0	640.3
19°	634.8	634.7	635.7	635.9	636.8	637.8	638.4	638.7	639.3	638.7	638.0
19.5°	632.5	632.6	633.4	634.2	634.9	635.4	636.7	636.7	636.6	637.0	635.9
20°	630.5	630.3	631.2	631.9	632.5	633.7	634.6	634.9	634.9	634.8	634.0
20.5°	628.3	627.9	628.8	629.9	630.4	631.4	632.3	632.8	632.5	632.6	631.9
21°	626.2	625.9	626.4	627.3	628.2	628.9	630.1	630.6	630.6	630.3	629.4
21.5°	623.7	623.3	624.3	625.1	626.1	626.9	627.8	628.4	628.5	627.9	627.3
22°	621.0	621.3	622.1	622.5	623.3	624.5	625.7	626.0	626.1	625.5	624.8

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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°	618.8	618.5	619.4	620.0	621.2	622.1	623.0	623.6	623.8	623.3	622.7
23°	616.2	616.0	616.5	617.9	618.8	619.5	620.8	621.5	621.0	621.0	620.0
23.5°	613.5	613.5	613.9	615.1	616.1	616.9	618.4	618.6	618.5	618.8	617.4
24°	610.9	610.9	611.7	612.5	613.7	614.8	616.0	616.2	616.1	616.3	615.0
24.5°	608.0	608.4	608.9	609.9	611.3	611.9	613.2	613.7	613.7	613.3	612.5
25°	605.7	605.4	606.4	607.1	608.5	609.3	610.7	611.1	611.3	611.1	609.7
25.5°	602.7	603.0	603.4	604.4	605.5	606.8	607.9	608.6	608.4	608.3	607.1
26°	599.9	600.3	600.5	601.7	603.0	604.3	605.0	605.7	605.4	605.7	604.5
26.5°	597.0	597.0	597.5	598.8	600.1	601.1	602.6	602.9	602.7	602.7	601.6
27°	594.4	594.2	594.9	595.6	597.7	598.2	599.7	600.4	599.9	600.0	598.5
27.5°	591.0	591.1	591.9	592.6	594.6	595.3	596.5	597.2	597.1	597.1	595.9
28°	587.9	588.1	589.0	589.8	591.3	592.7	593.9	594.4	594.2	594.2	592.9
28.5°	584.7	585.0	585.6	586.4	588.5	589.5	590.8	591.3	591.3	590.9	589.9
29°	581.6	582.2	582.6	583.6	585.3	586.4	588.0	588.5	588.5	587.9	587.0
29.5°	578.1	578.5	579.4	580.5	582.5	583.3	585.0	585.4	585.6	585.3	583.9
30°	575.0	575.3	576.1	577.5	579.2	580.3	581.9	582.3	582.2	582.2	580.6
30.5°	572.3	572.3	573.3	574.4	576.2	577.0	578.5	579.2	579.0	579.1	577.6
31°	568.9	569.5	569.6	570.8	573.3	573.7	575.3	576.5	575.8	575.9	574.6
31.5°	565.5	565.6	566.5	567.8	569.6	570.8	572.3	572.8	572.8	573.0	571.4
32°	562.3	562.5	563.3	564.5	566.3	567.5	569.4	569.7	569.8	569.8	568.0
32.5°	558.8	559.2	559.3	560.6	562.7	564.1	565.8	566.7	566.1	566.1	564.9
33°	555.1	555.9	555.9	557.3	559.5	560.4	562.3	563.1	562.3	562.7	561.5
33.5°	551.3	552.0	552.6	554.0	555.9	557.0	558.7	559.9	559.2	559.2	558.0
34°	547.9	548.5	548.8	550.5	552.7	553.7	555.3	556.4	555.7	555.8	554.4
34.5°	544.0	544.7	545.6	546.8	549.0	550.2	551.9	552.9	552.1	552.2	550.9
35°	540.5	541.1	541.9	543.0	545.4	546.5	548.4	549.0	548.6	548.6	547.5
35.5°	536.8	537.1	538.2	539.3	541.7	543.0	544.4	545.3	545.3	545.2	543.9
36°	533.1	533.4	534.1	535.5	538.1	539.4	541.2	541.8	541.8	541.4	540.2
36.5°	529.4	529.6	530.7	531.9	534.7	535.4	537.5	538.2	538.2	538.2	536.4
37°	525.6	525.7	526.6	528.0	530.7	531.9	533.6	534.7	534.3	534.3	533.0
37.5°	521.3	521.9	522.7	524.2	526.6	528.0	529.8	530.6	530.4	530.3	529.1
38°	517.2	518.1	518.9	520.2	522.8	524.5	526.3	526.8	526.4	526.2	525.4
38.5°	513.6	514.1	514.7	516.0	518.9	520.4	522.3	522.9	522.9	522.5	521.5
39°	509.6	509.7	510.8	512.2	514.7	516.3	518.4	519.3	519.0	518.7	517.3
39.5°	505.6	505.6	506.8	508.3	510.7	512.5	514.7	515.3	515.0	514.7	513.0
40°	501.5	502.1	502.8	504.4	506.9	508.7	510.2	511.3	510.9	510.8	509.0
40.5°	497.0	497.6	498.8	500.3	502.9	504.6	506.3	507.3	507.0	506.7	505.1
41°	493.0	493.8	494.6	496.3	498.9	500.7	502.2	503.3	503.2	502.7	501.2
41.5°	488.7	489.4	490.3	492.2	494.8	496.6	498.2	498.9	499.0	498.4	496.9
42°	484.4	485.1	485.8	487.9	490.5	492.3	493.9	494.7	494.6	494.2	492.9
42.5°	479.9	480.9	481.5	483.5	486.3	487.9	489.7	490.7	490.4	490.3	488.6
43°	475.5	476.4	477.1	479.1	482.0	483.8	485.6	486.7	486.1	485.8	484.4
43.5°	471.3	472.0	473.0	474.8	477.4	479.3	481.0	482.4	482.0	481.4	480.1
44°	467.2	467.4	468.4	470.2	473.1	475.1	477.0	477.8	477.6	477.1	475.9
44.5°	462.2	462.8	464.1	465.9	468.9	470.7	472.4	473.2	473.1	472.7	471.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	457.9	458.3	459.6	461.6	464.5	466.2	468.0	469.0	468.9	468.5	466.9
45.5°	453.6	453.6	455.0	457.0	459.9	461.6	463.6	464.2	464.5	463.9	462.3
46°	448.8	449.2	450.2	452.4	455.2	457.1	459.2	459.9	460.1	459.7	458.1
46.5°	444.3	444.5	445.6	447.5	450.6	452.6	454.7	455.3	455.3	455.0	453.4
47°	439.5	439.9	441.1	443.2	445.9	448.0	450.1	450.7	450.8	450.2	448.7
47.5°	434.9	435.1	436.6	438.5	441.5	443.4	445.4	446.2	446.1	445.8	444.3
48°	430.1	430.4	432.0	433.7	436.9	438.7	440.9	441.7	441.6	441.0	439.8
48.5°	425.3	425.6	427.1	429.0	432.2	434.1	436.1	437.1	437.1	436.4	435.1
49°	420.6	420.8	422.3	424.2	427.3	429.2	431.6	432.4	432.4	431.8	430.4
49.5°	415.7	416.0	417.4	419.5	422.5	424.5	426.7	427.3	427.8	427.2	425.6
50°	410.5	411.0	412.4	414.5	417.7	419.9	422.1	422.9	423.1	422.5	420.5
50.5°	405.6	406.0	407.6	409.8	412.8	415.1	417.2	418.0	418.0	417.5	415.8
51°	400.7	401.0	402.5	404.7	408.1	410.1	412.1	413.2	413.3	412.4	411.1
51.5°	395.6	396.1	397.5	399.8	403.0	405.3	407.3	408.3	408.4	407.6	406.0
52°	390.5	391.0	392.4	394.7	398.3	400.4	402.7	403.7	403.3	402.6	401.3
52.5°	385.3	386.0	387.5	389.6	393.2	395.3	397.5	398.6	398.2	397.6	396.0
53°	380.4	381.0	382.6	384.6	388.1	390.3	392.5	393.6	393.4	392.8	391.1
53.5°	375.2	375.4	377.3	379.3	383.2	385.4	387.2	388.4	388.2	387.7	386.1
54°	370.0	370.1	371.8	374.1	378.1	380.0	382.3	383.5	383.1	382.8	380.9
54.5°	364.9	365.4	366.8	368.9	372.7	375.1	377.3	378.1	378.1	377.5	375.6
55°	359.6	360.1	361.6	364.0	367.8	370.1	372.3	373.5	373.1	372.4	370.6
55.5°	354.3	354.6	356.4	358.5	362.6	365.0	367.0	368.3	368.0	367.2	365.6
56°	349.0	349.3	351.0	353.3	357.5	359.5	362.1	363.2	362.7	362.0	360.3
56.5°	343.3	343.9	345.8	347.8	352.0	354.2	356.5	357.5	357.6	356.4	355.2
57°	337.9	338.6	340.2	342.2	346.6	349.1	351.4	352.6	352.2	351.3	349.8
57.5°	332.4	333.0	334.7	336.9	341.2	343.5	345.9	346.9	346.9	346.1	344.4
58°	327.2	327.6	329.1	331.6	335.8	338.3	340.7	341.6	341.4	340.5	339.0
58.5°	321.5	321.8	323.8	326.1	330.4	332.9	335.1	336.3	336.4	335.1	333.6
59°	315.9	316.6	318.1	320.6	325.0	327.4	329.7	330.8	330.9	329.5	328.0
59.5°	310.1	310.9	312.5	314.9	319.4	322.0	324.2	325.4	325.1	324.3	322.6
60°	304.5	305.2	307.2	309.5	313.8	316.4	318.7	319.8	319.6	318.7	317.0
60.5°	299.2	299.6	301.1	303.8	308.0	311.0	313.2	314.3	314.1	313.2	311.4
61°	293.6	294.1	295.8	298.5	302.5	305.4	307.8	308.8	308.5	307.4	306.1
61.5°	287.7	288.3	290.1	292.7	296.9	299.8	301.9	303.1	303.2	302.0	300.4
62°	281.8	282.7	284.4	286.8	291.7	294.4	296.5	297.6	297.5	296.5	294.9
62.5°	275.8	276.8	278.3	280.9	285.9	288.7	291.1	292.0	291.9	290.8	289.1
63°	270.1	271.1	272.7	275.3	280.1	283.0	285.2	286.4	286.2	285.2	283.5
63.5°	264.4	265.3	267.0	269.5	274.3	277.2	279.7	280.6	280.6	279.5	277.7
64°	258.3	259.3	261.2	263.8	268.4	271.6	273.7	274.7	274.7	273.6	272.1
64.5°	252.8	253.6	255.3	258.0	262.8	265.5	268.0	268.9	268.9	267.9	266.0
65°	246.8	247.7	249.6	252.3	257.1	260.0	262.5	263.3	263.3	262.3	260.6
65.5°	240.9	241.9	243.6	246.5	251.4	254.1	256.5	257.5	257.6	256.6	254.5
66°	234.8	235.8	237.5	240.3	245.3	248.3	250.6	251.7	251.5	250.6	248.7
66.5°	228.9	230.0	231.5	234.2	239.4	242.2	244.5	245.7	245.5	244.4	242.7
67°	223.2	223.8	225.6	228.4	233.5	236.4	238.6	239.8	239.8	238.8	236.7



TEST NUMBER: P869645  
 CATALOG NUMBER: SMX14RLSFS010-1600LM-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	216.9	218.0	219.8	222.5	227.6	230.3	232.7	234.0	234.1	232.9	230.8
68°	211.0	211.8	213.8	216.5	221.6	224.6	227.2	228.0	228.1	226.9	225.1
68.5°	204.9	205.8	207.7	210.5	215.8	218.7	220.9	222.1	222.1	220.9	219.3
69°	198.7	199.6	201.6	204.4	209.8	212.7	215.2	216.2	216.2	215.0	213.5
69.5°	192.7	193.5	195.7	198.1	203.8	206.9	209.2	210.2	210.3	209.0	207.1
70°	186.6	187.5	189.5	192.2	197.8	200.7	203.2	204.2	204.3	203.1	201.0
70.5°	180.6	181.5	183.5	186.4	192.0	194.6	197.1	198.3	198.3	197.2	195.1
71°	174.5	175.2	177.4	180.0	185.9	188.9	191.4	192.4	192.4	191.2	189.2
71.5°	168.2	169.2	171.2	173.9	179.8	182.9	185.2	186.3	186.4	185.1	183.0
72°	162.3	163.1	165.1	167.8	173.5	176.8	179.3	180.2	180.3	179.1	176.9
72.5°	156.3	157.2	159.2	162.0	167.6	170.7	173.1	174.3	174.4	173.0	171.0
73°	150.1	151.1	153.2	155.7	161.5	164.6	167.1	168.0	168.2	166.9	164.7
73.5°	144.0	144.9	147.0	149.6	155.7	158.7	161.1	162.1	162.2	160.9	158.9
74°	137.9	138.9	140.9	143.6	149.6	152.7	155.2	156.1	156.3	154.9	152.9
74.5°	131.8	132.8	134.9	137.5	143.5	146.6	149.1	150.1	150.2	149.0	146.7
75°	125.8	126.7	128.9	131.5	137.5	140.5	142.9	144.0	144.0	142.8	140.8
75.5°	119.8	120.8	122.9	125.6	131.4	134.5	136.9	138.0	138.0	136.8	134.6
76°	113.8	114.7	116.9	119.5	125.4	128.4	130.7	131.9	132.1	130.7	128.6
76.5°	107.7	108.9	110.9	113.5	119.5	122.6	124.9	125.9	126.0	124.8	122.5
77°	101.8	102.8	105.0	107.7	113.5	116.5	118.9	120.0	119.8	118.8	116.8
77.5°	96.2	97.2	99.2	101.9	107.6	110.6	113.0	114.0	114.0	112.9	110.7
78°	90.3	91.3	93.4	95.8	101.7	104.8	107.2	108.0	108.1	106.8	104.9
78.5°	84.5	85.5	87.7	90.4	95.7	98.7	101.2	102.1	102.2	101.0	98.9
79°	78.9	79.9	82.0	84.6	90.2	92.9	95.2	96.3	96.3	95.2	93.2
79.5°	73.3	74.2	76.3	78.9	84.4	87.4	89.7	90.6	90.6	89.5	87.3
80°	67.8	68.6	70.8	73.3	78.7	81.7	83.9	84.9	85.0	83.8	81.9
80.5°	62.3	63.3	65.3	67.7	73.3	76.2	78.4	79.3	79.3	78.1	76.0
81°	57.1	58.0	59.9	62.4	67.7	70.5	72.7	73.8	73.8	72.7	70.6
81.5°	51.9	53.0	54.7	57.2	62.4	65.0	67.2	68.2	68.1	66.9	65.0
82°	46.8	47.7	49.6	51.8	56.9	59.7	61.7	62.7	62.8	61.6	59.7
82.5°	42.0	43.0	44.8	47.0	51.9	54.6	56.5	57.4	57.4	56.3	54.5
83°	37.3	38.2	39.9	42.0	46.9	49.5	51.5	52.6	52.4	51.4	49.4
83.5°	32.9	33.6	35.3	37.3	42.0	44.3	46.4	47.4	47.3	46.1	44.4
84°	28.4	29.4	31.0	32.9	37.0	39.7	41.4	42.4	42.4	41.2	39.5
84.5°	24.4	25.3	26.7	28.7	32.6	34.8	36.8	37.6	37.5	36.5	34.9
85°	20.8	21.5	23.0	24.5	28.3	30.5	32.3	33.1	33.0	32.0	30.6
85.5°	17.1	17.7	19.1	20.9	24.2	26.2	27.8	28.6	28.6	27.7	26.1
86°	13.9	14.3	15.7	17.2	20.7	22.3	23.7	24.5	24.4	23.5	22.2
86.5°	10.5	11.1	12.3	13.9	17.3	18.9	20.3	20.9	20.9	20.1	18.6
87°	7.6	8.0	9.0	10.6	14.0	15.6	16.9	17.6	17.5	16.8	15.4
87.5°	5.5	5.7	6.6	7.7	10.9	12.4	13.7	14.2	14.1	13.4	12.3
88°	3.4	3.8	4.4	5.5	8.1	9.4	10.6	11.1	11.1	10.4	9.4
88.5°	2.0	2.3	2.8	3.6	5.6	6.8	7.7	8.3	8.2	7.6	6.6
89°	1.3	1.4	1.7	2.1	3.5	4.6	5.4	5.8	5.7	5.2	4.5
89.5°	0.9	0.8	0.9	1.2	2.0	2.8	3.3	3.7	3.7	3.2	2.6

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



TEST NUMBER: P869645  
CATALOG NUMBER: SMX14RLSFS010-1600LM-5000K

**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: P869645  
 CATALOG NUMBER: SMX14RLSFS010-1600LM-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	676.8	676.8	676.8	676.8	676.8	676.8
0.5°	676.8	677.4	677.1	676.8	677.0	676.5
1°	676.8	677.4	677.0	676.6	676.8	676.5
1.5°	676.9	677.3	676.9	676.2	676.1	676.3
2°	676.5	677.0	676.5	676.3	676.1	676.1
2.5°	676.2	676.6	676.4	675.9	675.7	675.5
3°	675.9	676.0	676.2	675.7	675.8	675.3
3.5°	675.9	675.9	675.7	675.3	675.5	675.2
4°	675.5	675.4	675.1	674.4	674.2	674.8
4.5°	674.8	675.0	674.9	674.0	674.2	674.0
5°	674.2	674.8	674.2	673.5	673.1	673.2
5.5°	674.1	673.7	673.9	673.1	673.1	672.5
6°	673.3	673.1	673.0	672.3	672.5	671.9
6.5°	672.4	672.1	672.2	671.4	671.6	671.4
7°	671.6	671.5	671.4	670.8	670.9	670.7
7.5°	670.8	670.8	670.7	670.0	670.4	670.0
8°	669.9	669.7	669.7	669.1	669.6	669.0
8.5°	669.3	668.9	668.5	668.2	668.4	667.9
9°	668.5	668.2	667.9	666.9	667.2	666.8
9.5°	667.4	667.2	666.8	665.7	666.1	665.5
10°	666.2	665.8	665.6	665.1	665.0	664.5
10.5°	665.1	664.9	664.5	663.6	663.3	663.2
11°	664.0	663.6	663.3	662.6	662.0	662.5
11.5°	662.7	662.3	662.0	661.1	661.0	660.7
12°	661.4	661.1	660.6	659.9	659.9	659.3
12.5°	660.1	659.9	659.4	658.2	658.2	657.6
13°	658.5	658.7	657.9	657.1	656.9	656.6
13.5°	657.1	657.0	656.4	655.4	655.4	654.9
14°	655.8	655.3	655.2	653.8	653.5	653.6
14.5°	653.9	653.8	653.4	652.3	652.1	651.4
15°	652.5	652.3	651.7	650.6	650.2	650.2
15.5°	651.1	650.6	649.9	648.8	648.6	648.4
16°	649.1	648.9	648.0	646.9	646.8	646.5
16.5°	647.4	647.1	646.2	645.0	644.8	644.8
17°	645.7	645.1	644.2	643.3	643.1	643.1
17.5°	644.1	643.1	642.6	641.4	641.4	641.0
18°	641.9	641.3	640.0	639.3	639.0	639.1
18.5°	640.1	639.5	638.6	637.3	637.3	636.9
19°	638.0	637.3	636.5	635.4	634.9	634.8
19.5°	635.8	635.1	634.6	633.5	632.9	632.5
20°	633.8	633.0	632.1	631.1	630.8	630.5
20.5°	631.7	630.6	629.8	628.7	628.6	628.3
21°	629.2	628.5	627.5	626.5	625.8	626.2
21.5°	626.8	626.2	625.1	624.1	623.6	623.7
22°	624.5	623.8	622.7	621.6	620.7	621.0

TEST NUMBER: P869645  
 CATALOG NUMBER: SMX14RLSFS010-1600LM-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	621.9	621.1	620.3	618.9	618.6	618.8
23°	619.6	619.0	617.9	616.4	615.9	616.2
23.5°	617.0	616.5	615.6	613.9	613.6	613.5
24°	614.5	613.9	612.6	611.2	610.8	610.9
24.5°	612.2	611.1	610.2	608.4	608.0	608.0
25°	609.7	608.6	607.5	606.2	605.6	605.7
25.5°	606.9	606.1	604.5	603.3	602.9	602.7
26°	603.9	603.3	601.8	600.8	599.9	599.9
26.5°	600.9	600.1	598.9	597.6	597.1	597.0
27°	598.2	597.3	596.2	594.5	594.1	594.4
27.5°	595.8	594.2	593.0	591.7	591.1	591.0
28°	592.2	591.3	590.2	588.2	587.6	587.9
28.5°	589.4	588.4	587.1	585.3	584.4	584.7
29°	586.6	585.2	583.8	582.2	581.5	581.6
29.5°	583.5	582.1	580.7	578.9	578.3	578.1
30°	580.4	578.9	577.8	575.8	575.3	575.0
30.5°	577.0	575.9	574.6	572.8	572.0	572.3
31°	574.1	572.5	570.7	569.6	568.8	568.9
31.5°	570.9	568.7	567.7	566.3	565.5	565.5
32°	567.4	565.8	564.3	562.8	561.8	562.3
32.5°	564.2	562.3	561.1	559.3	558.5	558.8
33°	560.6	558.8	557.6	555.9	555.1	555.1
33.5°	557.1	555.2	553.8	552.3	551.4	551.3
34°	553.6	552.0	550.1	548.4	547.9	547.9
34.5°	550.3	548.1	546.6	544.9	543.9	544.0
35°	546.4	544.6	542.7	541.3	540.4	540.5
35.5°	543.0	541.0	539.6	537.7	536.7	536.8
36°	539.1	537.4	535.7	533.7	533.0	533.1
36.5°	535.7	533.3	531.6	529.8	529.0	529.4
37°	531.6	529.6	527.5	526.4	525.5	525.6
37.5°	528.4	526.1	524.3	522.7	521.6	521.3
38°	524.0	521.9	520.0	518.3	517.3	517.2
38.5°	520.2	517.9	515.9	514.2	513.6	513.6
39°	516.0	513.9	511.9	510.6	509.7	509.6
39.5°	512.4	509.7	508.1	506.3	505.6	505.6
40°	508.0	506.1	504.2	502.3	501.6	501.5
40.5°	504.4	502.0	499.9	498.2	497.6	497.0
41°	499.9	497.8	495.5	494.0	493.1	493.0
41.5°	496.2	493.5	491.3	489.6	488.6	488.7
42°	491.8	489.1	487.2	485.1	484.5	484.4
42.5°	487.4	484.9	482.9	481.0	480.1	479.9
43°	483.3	480.4	478.6	476.6	475.8	475.5
43.5°	478.9	476.1	474.5	472.2	471.5	471.3
44°	474.4	471.9	469.8	467.7	466.9	467.2
44.5°	470.2	467.3	465.4	463.3	462.3	462.2

TEST NUMBER: P869645  
 CATALOG NUMBER: SMX14RLSFS010-1600LM-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	465.7	462.8	460.8	458.9	458.0	457.9
45.5°	461.2	458.2	456.3	454.1	453.6	453.6
46°	456.6	454.0	451.6	449.8	448.8	448.8
46.5°	452.1	449.0	447.0	445.1	443.8	444.3
47°	447.6	444.6	442.2	440.5	439.2	439.5
47.5°	442.8	439.8	437.6	435.9	434.6	434.9
48°	438.1	435.1	433.0	431.2	430.0	430.1
48.5°	433.7	430.4	428.2	426.3	425.6	425.3
49°	429.0	425.8	423.4	421.4	420.6	420.6
49.5°	423.9	420.9	418.7	416.5	415.4	415.7
50°	419.2	415.8	413.6	411.8	410.7	410.5
50.5°	414.1	410.9	408.8	406.8	405.8	405.6
51°	409.3	406.1	403.8	401.7	401.0	400.7
51.5°	404.8	401.2	398.9	396.8	395.7	395.6
52°	399.6	396.2	394.0	391.9	390.6	390.5
52.5°	394.5	390.9	388.8	386.7	385.6	385.3
53°	389.4	385.9	383.8	381.5	380.3	380.4
53.5°	384.4	380.8	378.3	376.2	375.1	375.2
54°	379.1	375.4	373.3	371.2	369.9	370.0
54.5°	374.1	370.4	368.2	366.1	365.0	364.9
55°	369.0	365.4	362.8	360.8	359.8	359.6
55.5°	363.8	359.8	357.5	355.7	354.4	354.3
56°	358.6	354.5	352.4	350.1	348.9	349.0
56.5°	353.2	349.3	346.7	344.6	343.8	343.3
57°	347.8	343.9	341.5	339.2	338.0	337.9
57.5°	342.5	338.4	335.8	333.6	332.4	332.4
58°	337.0	333.0	330.4	328.2	327.1	327.2
58.5°	331.8	327.5	324.9	322.6	321.5	321.5
59°	326.3	321.9	319.2	317.0	315.9	315.9
59.5°	320.5	316.5	313.9	311.2	310.1	310.1
60°	315.0	310.7	308.0	305.6	304.6	304.5
60.5°	309.5	305.0	302.4	299.8	299.0	299.2
61°	303.8	299.4	296.8	294.7	293.4	293.6
61.5°	298.3	293.7	291.2	288.8	287.7	287.7
62°	292.8	288.0	285.5	283.0	281.9	281.8
62.5°	287.0	282.1	279.6	276.9	275.8	275.8
63°	281.3	276.4	273.7	271.3	270.3	270.1
63.5°	275.5	270.4	267.9	265.6	264.4	264.4
64°	269.7	264.8	262.1	259.9	258.7	258.3
64.5°	263.8	259.1	256.3	254.1	252.8	252.8
65°	258.2	253.2	250.3	248.1	246.8	246.8
65.5°	252.4	247.2	244.5	242.1	241.0	240.9
66°	246.3	241.4	238.5	235.8	234.8	234.8
66.5°	240.3	235.2	232.4	230.1	228.9	228.9
67°	234.5	229.5	226.6	224.3	222.9	223.2

TEST NUMBER: P869645  
 CATALOG NUMBER: SMX14RLSFS010-1600LM-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	228.9	223.4	220.4	218.4	216.8	216.9
68°	222.8	217.5	214.3	212.1	211.0	211.0
68.5°	216.8	211.4	208.3	205.9	204.8	204.9
69°	210.6	205.3	202.2	200.1	198.6	198.7
69.5°	204.8	199.2	196.3	193.8	192.5	192.7
70°	198.8	193.2	190.3	187.7	186.8	186.6
70.5°	192.7	187.1	184.2	181.9	180.7	180.6
71°	186.6	180.8	178.1	175.6	174.3	174.5
71.5°	180.7	174.7	171.9	169.5	168.0	168.2
72°	174.6	168.8	165.9	163.4	162.3	162.3
72.5°	168.5	162.7	159.9	157.5	156.3	156.3
73°	162.2	156.6	153.6	151.2	150.2	150.1
73.5°	156.3	150.5	147.7	145.2	143.8	144.0
74°	150.4	144.5	141.4	139.1	137.8	137.9
74.5°	144.3	138.4	135.5	132.9	131.7	131.8
75°	138.0	132.3	129.4	127.0	126.0	125.8
75.5°	132.1	126.2	123.4	120.9	119.5	119.8
76°	126.0	120.1	117.3	114.9	113.8	113.8
76.5°	120.1	114.1	111.2	108.9	107.8	107.7
77°	114.0	108.3	105.5	103.1	101.8	101.8
77.5°	108.1	102.5	99.6	97.4	96.2	96.2
78°	102.2	96.4	93.6	91.5	90.3	90.3
78.5°	96.3	90.7	88.1	85.7	84.7	84.5
79°	90.6	85.0	82.3	80.1	79.0	78.9
79.5°	84.8	79.2	76.6	74.3	73.3	73.3
80°	79.2	73.5	70.8	68.7	67.7	67.8
80.5°	73.6	68.2	65.5	63.2	62.2	62.3
81°	68.1	62.6	60.0	58.0	57.1	57.1
81.5°	62.6	57.5	55.0	52.9	51.8	51.9
82°	57.3	52.3	49.8	47.7	46.8	46.8
82.5°	52.3	47.4	44.9	43.1	42.0	42.0
83°	47.2	42.3	40.1	38.2	37.4	37.3
83.5°	42.1	37.6	35.4	33.6	32.8	32.9
84°	37.3	33.2	31.0	29.3	28.4	28.4
84.5°	32.9	28.9	26.9	25.3	24.4	24.4
85°	28.4	24.7	23.0	21.5	20.9	20.8
85.5°	24.3	21.1	19.2	17.9	17.2	17.1
86°	20.6	17.4	15.7	14.4	13.8	13.9
86.5°	17.3	14.0	12.3	11.0	10.5	10.5
87°	14.0	10.7	9.1	8.1	7.5	7.6
87.5°	10.8	7.7	6.6	5.8	5.4	5.5
88°	8.1	5.5	4.6	3.8	3.5	3.4
88.5°	5.5	3.6	2.9	2.5	2.1	2.0
89°	3.6	2.3	1.8	1.4	1.2	1.3
89.5°	1.9	1.4	1.0	0.9	1.1	0.9

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

  
NVLAP Lab Code: 200050-0



TEST NUMBER: P869645  
CATALOG NUMBER: SMX14RLSFS010-1600LM-5000K

**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)