

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: P869710

Luminaire Tested: **SMX18RLSFS010-2500LM-5000K**

Issue Date: 8/29/2024

Tested By:

Approved By:



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**Test Information**

Test Method: LM-79-08  
 Report Number: P869710  
 Test Lab:  
 Issue Date: 8/29/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: HALO  
 Catalog Number: SMX18RLSFS010-2500LM-5000K  
 Description: 18IN ROUND, 90CRI, DIMMING TO 10%, DAMP LOCATION  
 Light Source: SELECTABLE CCT 90CRI / 5000K CCT  
 Ballast/Driver: -

**Summary**

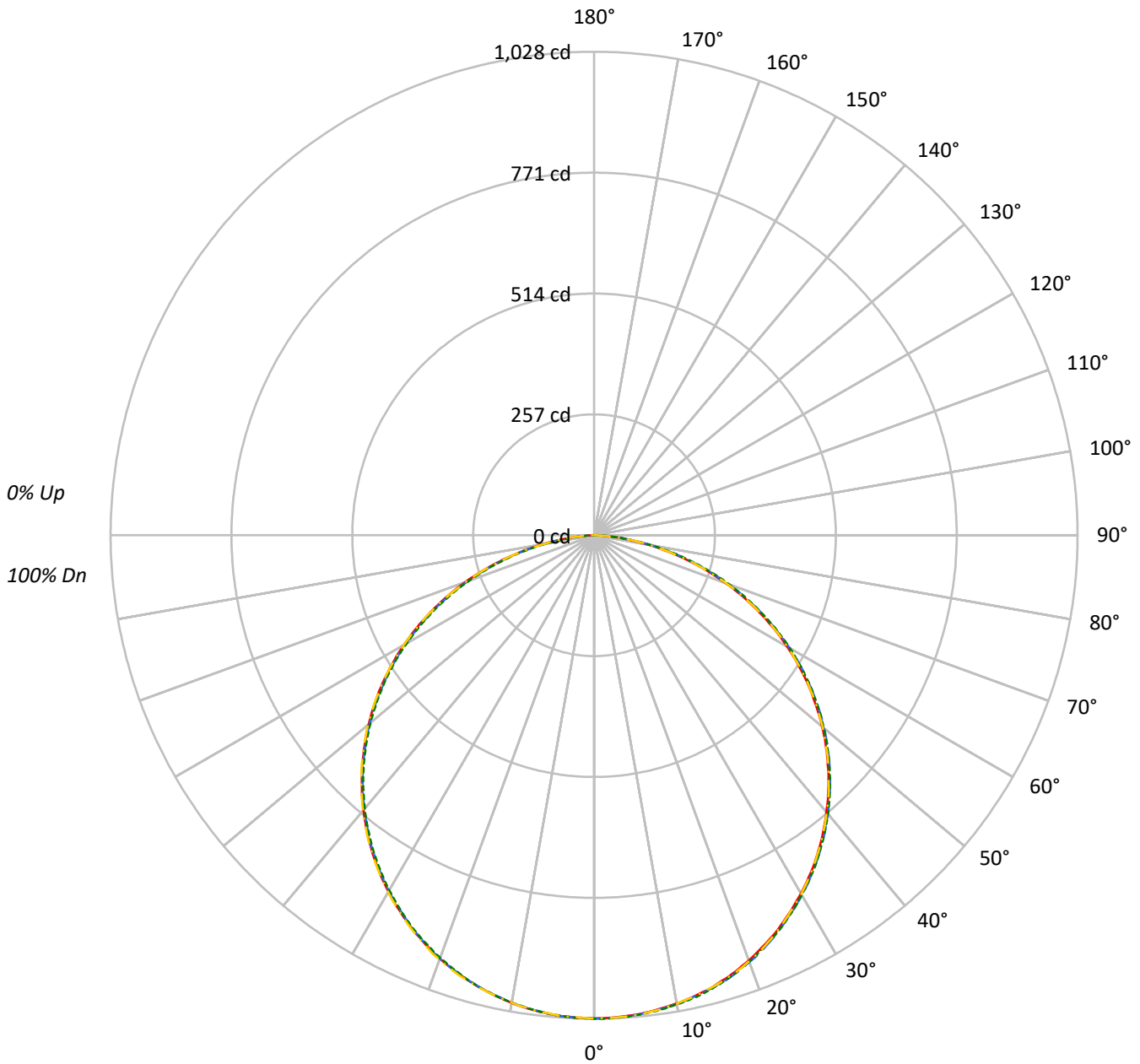
Lumens per Lamp: N/A  
 Luminaire Lumens: 3000.0 lumens  
 Efficiency: N/A  
 Efficacy: 102.4 lumens/watt  
 Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39  
 Luminous Opening: Circular (Dia: 1.5' x H: 0')  
 CIE Type: Direct

Input Watts (W): 29.3  
 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	80	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	58	52	62	56	52	50	50	50
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	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	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	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	43	34	29	55	42	34	29	41	34	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	26	24	24	24

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

	0°	90°	180°	270°
0°	6260	6260	6260	6260
5°	6259	6262	6253	6255
10°	6253	6267	6246	6241
15°	6250	6268	6228	6229
20°	6235	6252	6211	6197
25°	6216	6234	6184	6172
30°	6187	6212	6153	6130
35°	6153	6184	6115	6085
40°	6110	6148	6067	6030
45°	6064	6104	6007	5964
50°	5998	6043	5932	5876
55°	5902	5966	5831	5764
60°	5776	5852	5695	5604
65°	5592	5690	5493	5385
70°	5305	5443	5186	5040
75°	4857	5053	4712	4516
80°	4146	4413	3939	3673
85°	2991	3418	2656	2306

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.3	3.2
10°-20°	279.5	9.3
20°-30°	425.6	14.2
30°-40°	516.8	17.2
40°-50°	540.9	18.0
50°-60°	494.1	16.5
60°-70°	380.1	12.7
70°-80°	215.0	7.2
80°-90°	50.7	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>802.4</b>	<b>26.7</b>
<b>0°-40°</b>	<b>1319.2</b>	<b>44.0</b>
<b>0°-60°</b>	<b>2354.2</b>	<b>78.5</b>
<b>0°-90°</b>	<b>3000.0</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>3000.0</b>	<b>100.0</b>

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1028	1028	1028	1028	1028	
5°	1024	1024	1023	1023	1024	97
15°	991	994	988	988	991	280
25°	925	928	920	918	925	426
35°	828	832	822	818	828	518
45°	704	709	697	692	704	543
55°	556	562	549	543	556	497
65°	388	395	381	374	388	383
75°	206	215	200	192	206	218
85°	43	49	38	33	43	53
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°	1027.8	1027.8	1027.8	1027.8	1027.8	1027.8	1027.8	1027.8	1027.8	1027.8	1027.8
0.5°	1026.9	1027.7	1027.6	1027.7	1028.3	1029.0	1027.7	1028.0	1026.7	1027.6	1027.8
1°	1026.9	1027.8	1027.5	1028.0	1028.5	1028.6	1026.9	1027.5	1026.9	1027.4	1027.5
1.5°	1026.9	1028.2	1027.4	1027.4	1028.1	1028.1	1027.5	1027.0	1026.5	1027.4	1027.3
2°	1026.6	1027.7	1027.1	1026.9	1027.7	1028.1	1027.3	1026.8	1026.3	1026.7	1026.4
2.5°	1026.0	1027.5	1026.9	1026.8	1027.7	1027.6	1026.7	1026.0	1026.2	1026.6	1026.4
3°	1025.3	1026.9	1026.9	1026.2	1026.9	1026.5	1026.3	1025.5	1025.1	1026.8	1025.5
3.5°	1024.9	1026.2	1026.5	1026.2	1026.3	1025.9	1026.2	1025.3	1025.3	1026.1	1025.3
4°	1024.6	1025.6	1025.6	1025.4	1026.3	1025.6	1025.3	1024.9	1024.9	1024.8	1024.7
4.5°	1024.0	1024.5	1024.7	1025.2	1025.0	1025.4	1024.9	1024.2	1023.9	1024.0	1023.9
5°	1023.7	1023.6	1023.7	1024.4	1024.2	1024.6	1024.1	1022.9	1022.7	1023.2	1023.3
5.5°	1022.3	1023.4	1023.4	1023.9	1023.7	1024.1	1023.5	1022.3	1021.9	1022.0	1022.1
6°	1021.1	1022.4	1021.7	1022.7	1023.0	1023.1	1022.1	1021.7	1020.6	1020.8	1020.1
6.5°	1020.3	1021.2	1020.9	1021.6	1021.7	1022.2	1020.8	1020.8	1020.2	1019.3	1019.0
7°	1019.1	1019.9	1020.0	1020.2	1020.4	1021.0	1019.5	1019.1	1018.7	1018.7	1018.2
7.5°	1017.8	1018.6	1018.8	1019.4	1020.1	1019.5	1019.0	1017.5	1017.5	1017.4	1017.0
8°	1016.5	1017.4	1017.3	1017.8	1018.7	1018.6	1017.9	1016.7	1016.0	1015.7	1015.6
8.5°	1015.2	1016.4	1016.3	1016.5	1017.3	1017.5	1015.8	1015.2	1014.8	1014.4	1014.3
9°	1013.8	1015.1	1014.6	1015.3	1015.7	1016.1	1014.4	1013.8	1013.0	1012.8	1012.6
9.5°	1012.1	1013.7	1013.5	1014.1	1014.4	1014.8	1013.3	1012.2	1011.6	1010.9	1010.8
10°	1010.9	1012.0	1011.8	1012.2	1013.3	1013.1	1011.5	1010.2	1009.9	1008.9	1008.7
10.5°	1009.8	1010.3	1010.2	1011.3	1011.9	1011.5	1009.4	1008.8	1007.5	1007.2	1006.9
11°	1007.9	1008.5	1008.6	1009.6	1010.1	1009.7	1007.8	1007.0	1005.7	1005.9	1004.7
11.5°	1005.8	1006.8	1006.8	1007.9	1008.7	1008.2	1006.1	1004.5	1003.8	1004.3	1002.9
12°	1004.2	1005.2	1004.9	1006.3	1006.7	1006.2	1004.5	1002.7	1002.0	1001.5	1001.0
12.5°	1002.0	1003.0	1002.6	1004.3	1005.4	1004.3	1002.7	1000.4	999.4	999.3	999.1
13°	1000.1	1001.4	1000.9	1002.8	1003.4	1002.6	1000.4	998.2	997.4	997.0	996.8
13.5°	997.9	999.0	999.3	1000.4	1001.1	1000.4	998.3	996.6	995.0	994.4	994.9
14°	996.7	997.0	997.2	998.9	998.9	998.3	995.7	994.3	992.6	992.4	992.6
14.5°	994.1	994.4	995.2	996.8	996.8	996.2	994.0	991.5	990.6	989.4	989.6
15°	991.1	992.0	993.0	993.6	993.9	993.6	991.9	989.3	987.7	987.3	987.3
15.5°	988.5	989.9	990.6	991.5	992.1	991.3	989.3	986.3	985.1	984.8	985.0
16°	985.6	988.0	988.6	989.1	988.8	989.1	987.0	983.6	982.6	982.3	982.4
16.5°	983.6	985.3	986.6	986.4	986.3	986.3	983.9	981.6	979.8	979.5	979.4
17°	980.6	982.3	983.9	983.7	983.8	983.5	981.4	978.8	976.7	976.4	976.1
17.5°	977.4	979.5	981.1	981.1	980.7	980.6	979.2	975.7	974.5	973.3	973.5
18°	974.8	976.6	978.3	977.5	977.7	977.5	976.9	972.8	971.3	970.3	970.7
18.5°	971.5	973.3	975.7	974.6	974.0	974.4	973.5	969.3	967.8	967.3	967.4
19°	968.0	970.5	972.6	971.4	971.0	970.9	970.9	966.5	964.9	963.7	964.7
19.5°	965.1	967.3	969.2	968.0	968.3	968.0	967.1	963.5	961.4	960.2	961.6
20°	961.9	964.4	966.1	964.2	964.5	964.7	964.0	959.9	958.2	957.3	958.1
20.5°	958.6	960.4	963.1	961.2	961.1	960.6	960.3	956.5	955.3	953.9	954.6
21°	955.2	956.7	959.8	957.7	958.0	956.8	957.7	953.0	951.8	950.3	951.2
21.5°	951.1	953.1	956.2	954.5	954.0	953.9	953.8	949.8	947.7	946.5	947.8
22°	947.4	949.6	952.7	950.7	950.7	950.0	950.3	946.5	943.6	942.6	944.1

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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°	944.0	946.0	948.8	946.9	946.9	946.2	946.5	942.7	940.0	938.5	939.7
23°	940.7	942.7	944.5	943.6	943.1	942.8	942.1	938.5	936.2	935.1	935.5
23.5°	936.5	939.3	941.1	939.9	939.5	939.3	938.5	934.9	932.1	931.8	931.1
24°	932.7	935.3	936.9	935.9	935.6	934.7	934.6	931.3	928.6	927.0	927.1
24.5°	929.0	931.5	932.4	931.8	932.1	930.2	930.2	927.3	924.4	922.9	923.4
25°	924.9	927.2	928.3	928.0	927.6	926.8	926.0	923.5	920.1	918.7	918.4
25.5°	920.0	922.8	924.1	924.2	923.8	923.3	921.7	919.7	916.0	914.6	914.0
26°	916.1	919.0	919.7	919.9	919.5	918.5	917.3	915.3	911.5	910.5	910.3
26.5°	911.2	914.6	915.4	915.3	915.4	914.2	912.7	911.0	907.4	906.1	905.4
27°	907.1	910.5	910.8	911.2	910.4	910.2	908.2	906.5	902.7	902.1	900.9
27.5°	902.7	906.4	906.6	907.5	906.5	905.3	903.4	902.3	898.2	897.9	896.6
28°	898.3	901.5	902.4	902.9	902.3	901.2	898.7	897.5	894.2	893.4	892.0
28.5°	893.3	897.5	897.2	898.1	897.6	896.8	894.8	893.3	889.6	888.5	887.6
29°	888.5	893.2	892.5	893.4	893.2	892.1	889.9	888.8	884.8	883.6	882.6
29.5°	884.3	888.4	888.4	889.1	888.0	887.2	885.3	884.3	879.9	878.8	878.0
30°	879.6	883.6	883.8	884.5	883.2	882.4	880.9	879.2	874.8	874.1	872.6
30.5°	874.8	879.1	878.9	879.6	878.4	877.7	876.2	874.6	869.9	869.3	868.1
31°	869.7	874.2	874.1	874.5	874.0	872.9	870.8	869.6	864.9	863.8	863.1
31.5°	865.2	868.7	868.9	869.8	868.7	867.5	866.0	864.2	860.0	858.6	857.9
32°	859.8	863.3	864.0	865.2	863.4	862.3	860.8	859.2	854.8	854.1	852.4
32.5°	854.5	858.4	858.5	860.1	858.3	857.8	855.4	854.2	849.5	849.0	847.5
33°	849.6	853.3	853.1	854.8	853.5	852.4	850.4	848.6	844.1	843.9	842.0
33.5°	844.4	848.1	848.2	849.3	848.7	847.4	844.8	843.3	838.7	838.5	836.5
34°	838.8	843.1	843.1	844.0	843.1	842.0	839.1	838.6	833.7	832.9	830.7
34.5°	833.2	837.5	837.4	838.6	837.3	836.7	834.1	833.1	828.4	827.3	825.4
35°	827.5	832.1	831.6	833.3	831.6	831.3	828.3	827.0	822.4	821.7	819.8
35.5°	821.5	826.4	826.3	827.9	826.2	825.7	822.8	821.5	816.8	816.4	814.2
36°	816.5	821.1	820.5	822.3	820.4	820.0	817.1	815.7	811.1	810.5	808.4
36.5°	810.8	815.3	815.0	816.4	814.5	814.2	811.4	810.1	805.4	805.2	802.9
37°	805.2	809.7	809.5	810.3	809.3	808.8	805.7	804.4	799.5	799.0	796.5
37.5°	799.4	803.5	803.5	804.9	803.8	802.9	800.0	798.8	793.6	792.4	790.5
38°	792.6	797.5	797.5	799.0	797.6	796.8	793.9	793.0	787.6	786.5	784.6
38.5°	786.9	791.4	791.7	793.3	791.6	790.7	788.0	787.2	781.4	779.9	778.7
39°	781.1	785.8	785.7	787.2	785.7	785.1	781.6	780.8	775.5	774.3	772.7
39.5°	775.1	779.0	779.6	781.0	779.6	778.7	775.7	774.7	769.2	768.3	766.7
40°	768.4	772.8	773.5	774.4	773.2	772.7	769.8	768.3	763.0	761.7	760.1
40.5°	762.3	766.6	767.2	768.4	767.1	766.8	764.1	761.5	756.8	755.0	754.1
41°	756.5	760.4	760.9	762.1	760.7	760.4	757.4	754.8	750.5	749.0	747.4
41.5°	750.3	753.8	754.8	755.6	754.6	753.7	751.3	748.7	744.4	742.3	741.3
42°	743.5	747.2	748.6	749.3	748.2	747.5	744.7	742.0	737.7	735.7	734.5
42.5°	737.1	740.9	742.3	742.7	741.6	741.0	738.5	735.1	731.1	729.5	727.9
43°	730.5	734.1	735.6	735.9	735.0	734.4	731.5	728.8	724.2	723.0	721.5
43.5°	723.8	727.7	728.7	729.6	728.5	727.6	724.5	722.1	717.6	716.5	714.9
44°	717.6	721.3	722.5	722.7	722.0	721.5	718.0	715.6	710.8	709.9	708.0
44.5°	711.2	714.7	715.9	716.3	715.4	714.5	711.3	708.5	704.3	703.1	701.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	704.0	707.3	709.4	709.7	708.6	707.8	704.7	701.7	697.3	696.0	694.3
45.5°	696.7	700.8	702.4	702.7	701.5	701.0	698.0	695.0	690.6	688.5	687.6
46°	690.5	694.0	695.3	695.6	694.6	694.1	691.1	688.2	683.5	681.7	680.5
46.5°	683.3	687.0	688.9	688.4	687.8	687.2	684.4	680.9	676.0	674.6	673.8
47°	676.6	680.0	681.6	681.8	680.8	680.2	677.2	674.3	669.4	667.8	666.7
47.5°	669.0	672.8	674.8	675.0	674.0	673.1	669.8	667.6	662.2	660.6	659.1
48°	662.1	666.0	667.3	667.6	666.7	666.4	663.1	660.1	655.3	653.3	651.8
48.5°	655.2	658.9	660.4	660.2	659.3	658.9	655.9	652.3	647.6	646.0	644.9
49°	647.6	651.4	652.9	653.2	652.2	651.7	648.3	645.1	640.9	638.7	637.2
49.5°	640.3	643.9	645.6	646.0	644.9	644.6	641.2	637.8	633.7	631.4	630.2
50°	633.0	636.9	638.1	638.4	637.7	637.2	633.9	630.7	626.0	624.3	622.7
50.5°	625.6	629.7	631.0	631.2	630.6	629.6	626.4	623.2	618.4	616.4	615.2
51°	617.8	622.1	623.4	623.5	623.2	622.1	618.8	615.9	610.7	608.7	607.4
51.5°	610.5	614.7	616.0	616.2	615.4	614.7	610.9	608.3	603.5	601.5	599.9
52°	602.9	607.0	608.5	608.7	608.0	607.0	603.6	600.8	596.2	593.5	592.5
52.5°	594.8	599.2	600.5	600.7	600.1	599.7	596.2	593.3	588.3	586.0	584.5
53°	586.7	591.4	592.9	592.9	592.2	591.9	588.6	585.2	580.4	578.1	576.8
53.5°	579.5	583.7	585.3	585.5	584.9	584.2	580.8	577.6	572.5	570.4	569.2
54°	571.9	575.7	577.3	577.5	577.2	576.2	572.9	569.5	565.2	562.3	561.1
54.5°	564.3	567.8	569.7	569.5	569.6	568.7	565.2	561.9	557.3	554.2	553.0
55°	555.8	560.2	561.8	561.6	561.8	560.5	557.4	554.0	549.1	546.6	545.5
55.5°	548.1	552.1	554.0	553.5	553.7	552.8	549.5	546.6	541.1	539.2	537.1
56°	540.3	544.1	545.9	545.7	546.0	544.6	541.3	538.1	533.0	530.8	528.9
56.5°	532.2	535.9	537.8	537.7	538.1	536.5	533.0	530.4	524.9	522.4	520.7
57°	523.7	527.8	529.8	529.6	530.0	528.5	525.2	522.1	517.2	514.3	512.3
57.5°	515.7	519.7	521.7	521.3	521.9	520.2	516.7	513.8	508.7	505.9	504.4
58°	507.6	511.7	513.5	513.3	513.4	512.1	508.7	505.5	500.5	497.7	496.1
58.5°	499.5	503.8	505.5	505.0	505.3	504.0	500.5	497.4	492.5	489.6	487.9
59°	490.9	495.2	497.0	496.6	497.3	495.4	492.2	488.7	484.1	481.6	479.7
59.5°	482.6	486.7	488.6	488.3	489.0	487.1	483.7	480.4	475.7	472.4	471.0
60°	474.1	478.2	480.0	479.7	480.4	478.7	475.0	471.8	467.5	464.2	462.6
60.5°	465.8	469.6	471.6	471.4	472.1	470.5	467.0	463.6	458.9	455.9	454.3
61°	457.6	461.4	463.2	462.9	463.9	461.8	458.4	455.3	450.4	447.4	445.9
61.5°	448.8	452.7	454.7	454.6	455.5	453.2	449.9	446.8	442.0	438.7	437.2
62°	440.1	444.1	446.4	446.3	447.0	445.0	441.3	438.1	433.6	430.1	428.2
62.5°	431.5	435.7	437.5	437.5	438.3	436.3	432.6	429.3	424.6	421.6	419.7
63°	422.9	427.1	428.6	428.8	429.6	427.7	423.9	420.6	416.0	412.8	411.0
63.5°	414.1	418.0	419.9	420.1	421.2	419.2	415.5	412.1	407.2	403.9	402.2
64°	405.6	409.6	411.2	411.2	412.3	410.1	406.7	403.2	398.6	395.2	393.5
64.5°	396.8	401.0	402.5	402.9	403.8	401.6	398.0	394.3	389.8	386.4	384.4
65°	388.0	392.0	393.7	394.1	394.8	392.8	389.0	385.4	381.1	377.6	375.8
65.5°	379.1	383.1	384.8	385.0	385.8	384.0	380.3	376.6	372.5	368.8	367.1
66°	370.5	374.3	375.9	376.0	377.1	375.0	371.2	367.5	363.2	360.1	358.5
66.5°	361.3	365.4	367.1	367.2	368.5	366.0	362.6	358.7	354.5	351.0	349.3
67°	352.4	356.5	358.2	358.4	359.6	357.5	353.7	349.7	345.5	342.0	340.1



TEST NUMBER: P869710  
 CATALOG NUMBER: SMX18RLSFS010-2500LM-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	343.5	347.4	349.0	349.3	350.8	348.3	344.9	340.8	336.6	332.9	331.2
68°	334.3	338.1	339.8	340.0	341.6	339.1	335.8	331.7	327.6	324.2	322.1
68.5°	325.4	329.4	330.9	331.5	333.1	330.2	326.8	322.6	318.8	315.4	313.3
69°	316.5	320.4	321.7	322.6	324.1	321.3	317.3	313.7	309.6	306.1	304.3
69.5°	306.9	311.2	312.8	312.9	314.7	312.3	308.5	304.9	300.7	296.9	294.9
70°	297.9	302.1	303.6	303.8	305.6	303.2	299.3	295.4	291.2	288.0	285.9
70.5°	289.0	292.7	294.3	294.9	296.8	294.1	290.3	286.4	282.5	278.8	276.8
71°	279.7	284.0	285.2	285.8	287.8	285.3	281.5	277.2	273.3	269.8	267.9
71.5°	270.4	274.7	276.1	276.7	278.6	276.0	272.2	268.0	264.1	260.6	258.7
72°	261.5	265.5	266.9	267.4	269.6	267.1	263.0	259.0	254.9	251.1	249.3
72.5°	252.3	256.1	257.7	258.1	260.5	257.9	254.1	249.5	245.5	242.1	240.3
73°	243.1	246.8	248.4	248.9	251.0	248.4	244.5	240.3	236.6	233.0	231.1
73.5°	234.1	237.7	239.4	239.6	242.2	239.4	235.5	231.1	227.6	223.8	222.1
74°	225.0	228.7	230.2	230.6	233.0	230.4	226.5	222.1	218.4	214.7	212.9
74.5°	215.8	219.7	221.3	221.4	223.8	221.4	217.4	212.8	209.3	205.6	203.7
75°	206.4	210.3	211.9	212.1	214.7	212.2	208.3	203.6	200.2	196.4	194.6
75.5°	197.7	201.2	203.0	202.9	205.8	203.0	199.1	195.0	191.2	187.7	185.8
76°	188.6	192.3	194.1	194.0	196.5	194.1	190.1	185.9	182.3	178.7	176.7
76.5°	179.6	183.2	184.9	184.7	187.6	184.9	180.9	177.1	173.1	169.3	167.6
77°	170.6	174.3	176.1	175.9	178.5	176.0	172.1	168.2	164.1	160.6	158.7
77.5°	161.6	165.3	167.0	167.0	169.7	167.1	163.3	159.1	155.5	151.8	150.1
78°	152.9	156.6	158.0	158.3	160.7	158.3	154.4	150.4	146.3	143.3	141.3
78.5°	144.0	147.6	149.4	149.6	152.0	149.3	145.5	141.3	137.7	134.2	132.6
79°	135.5	139.1	140.9	141.0	143.2	140.6	137.0	132.8	129.1	125.7	124.3
79.5°	126.7	130.2	132.1	132.3	134.4	132.1	128.3	124.1	120.6	117.4	115.6
80°	118.2	121.6	123.4	123.6	125.8	123.8	119.6	115.6	112.3	109.4	107.5
80.5°	110.1	113.4	115.0	115.4	117.5	115.3	111.7	107.7	104.1	101.1	99.4
81°	101.8	105.1	106.7	107.2	109.6	107.4	103.4	99.4	96.1	93.0	91.6
81.5°	93.8	96.9	98.6	98.8	100.9	99.0	95.4	91.4	88.0	85.2	83.9
82°	85.5	88.9	90.3	90.3	92.8	90.9	87.7	83.7	80.0	77.3	75.9
82.5°	77.8	81.0	82.5	82.6	85.1	83.1	79.8	75.9	72.5	69.7	68.5
83°	70.5	73.5	74.9	75.0	77.6	75.5	72.2	68.5	65.2	62.5	61.4
83.5°	63.1	66.1	67.5	67.7	69.9	67.9	64.8	61.0	57.9	55.5	54.2
84°	56.1	59.0	60.2	60.4	62.4	60.7	57.6	54.1	50.8	48.8	47.4
84.5°	49.3	52.1	53.2	53.5	55.5	53.9	50.6	47.4	44.3	42.1	41.0
85°	42.8	45.5	46.6	46.6	48.9	47.1	44.1	40.8	38.0	35.7	34.8
85.5°	36.7	39.2	40.2	40.2	42.1	40.4	37.5	34.5	32.0	30.0	29.0
86°	31.1	33.4	34.2	34.3	35.9	34.2	31.5	28.9	26.7	24.7	23.8
86.5°	26.1	28.1	29.0	29.0	29.8	28.5	26.2	23.5	21.5	20.1	19.4
87°	21.0	23.2	23.8	23.8	24.9	23.4	21.3	19.1	17.2	15.7	15.1
87.5°	16.7	18.6	19.2	19.2	20.0	19.1	17.2	14.9	13.1	11.9	11.3
88°	12.6	14.2	14.9	14.8	15.9	14.7	13.0	10.9	9.4	8.3	8.0
88.5°	8.5	10.0	10.6	10.6	11.8	10.9	9.3	7.6	6.2	5.5	4.9
89°	5.8	7.0	7.4	7.2	8.4	7.5	6.1	4.7	3.6	3.0	2.8
89.5°	3.8	4.6	4.9	4.7	5.4	4.6	3.5	2.5	1.7	1.3	1.1

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



TEST NUMBER: P869710  
CATALOG NUMBER: SMX18RLSFS010-2500LM-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: P869710  
 CATALOG NUMBER: SMX18RLSFS010-2500LM-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1027.8	1027.8	1027.8	1027.8	1027.8	1027.8
0.5°	1027.6	1027.5	1028.5	1027.3	1027.3	1026.9
1°	1026.7	1026.8	1027.9	1026.5	1027.0	1026.9
1.5°	1026.6	1027.3	1027.7	1026.4	1026.9	1026.9
2°	1026.2	1027.3	1027.0	1026.1	1026.9	1026.6
2.5°	1026.0	1026.4	1026.8	1026.0	1026.6	1026.0
3°	1025.2	1025.5	1026.8	1025.0	1026.5	1025.3
3.5°	1024.8	1024.8	1026.0	1024.8	1025.6	1024.9
4°	1024.8	1023.7	1025.0	1024.7	1024.7	1024.6
4.5°	1023.6	1023.4	1024.1	1023.4	1023.5	1024.0
5°	1023.0	1023.0	1023.6	1022.2	1022.4	1023.7
5.5°	1021.0	1021.4	1022.3	1020.9	1021.8	1022.3
6°	1020.0	1020.3	1021.0	1020.7	1021.4	1021.1
6.5°	1019.1	1019.1	1020.2	1019.9	1020.2	1020.3
7°	1018.3	1017.8	1019.0	1018.5	1019.4	1019.1
7.5°	1016.2	1016.7	1017.2	1017.3	1018.2	1017.8
8°	1015.1	1014.9	1015.9	1015.7	1016.5	1016.5
8.5°	1013.7	1013.6	1014.8	1014.0	1015.1	1015.2
9°	1011.8	1011.8	1013.5	1012.9	1013.4	1013.8
9.5°	1010.6	1010.3	1010.9	1011.2	1011.8	1012.1
10°	1009.1	1009.0	1009.2	1008.8	1010.3	1010.9
10.5°	1007.1	1007.4	1007.3	1006.7	1008.7	1009.8
11°	1004.9	1005.2	1005.6	1005.4	1007.3	1007.9
11.5°	1003.3	1003.3	1004.0	1003.5	1005.9	1005.8
12°	1001.2	1001.1	1002.6	1001.4	1003.8	1004.2
12.5°	998.9	999.0	999.7	999.4	1001.7	1002.0
13°	996.8	997.1	998.1	997.9	999.7	1000.1
13.5°	994.9	995.2	995.7	995.4	997.9	997.9
14°	992.2	992.6	993.7	993.5	995.9	996.7
14.5°	990.1	990.2	991.3	991.2	993.9	994.1
15°	987.8	987.8	988.7	988.4	991.3	991.1
15.5°	985.6	984.8	986.2	986.3	988.3	988.5
16°	983.2	982.0	983.8	983.4	985.6	985.6
16.5°	980.2	979.0	980.7	981.3	982.7	983.6
17°	977.5	975.7	977.5	979.2	980.1	980.6
17.5°	974.0	972.4	974.7	976.1	977.2	977.4
18°	971.0	969.5	971.1	973.1	974.0	974.8
18.5°	967.2	966.3	967.2	970.0	970.7	971.5
19°	963.7	963.1	963.9	967.4	967.4	968.0
19.5°	960.4	959.2	960.7	963.7	964.3	965.1
20°	957.1	956.0	958.1	960.3	961.4	961.9
20.5°	953.4	952.8	954.4	957.4	957.5	958.6
21°	950.0	949.2	951.0	954.2	954.0	955.2
21.5°	946.4	945.1	947.2	950.2	950.0	951.1
22°	942.8	941.2	942.9	946.2	946.3	947.4

TEST NUMBER: P869710  
 CATALOG NUMBER: SMX18RLSFS010-2500LM-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	938.9	937.6	939.6	942.5	943.1	944.0
23°	935.3	933.9	936.1	938.6	939.9	940.7
23.5°	930.9	930.2	931.6	934.6	935.5	936.5
24°	927.1	926.2	927.4	930.1	931.0	932.7
24.5°	922.6	922.1	923.2	925.9	927.5	929.0
25°	918.7	918.3	920.1	921.9	923.8	924.9
25.5°	914.5	913.5	915.8	917.6	919.5	920.0
26°	910.0	909.3	911.6	913.2	915.5	916.1
26.5°	905.3	904.2	907.2	908.7	911.0	911.2
27°	901.1	899.9	902.7	904.4	906.4	907.1
27.5°	896.5	895.0	898.1	899.9	902.0	902.7
28°	892.1	890.7	893.9	895.4	897.9	898.3
28.5°	887.2	886.0	888.8	890.3	893.4	893.3
29°	882.8	881.0	883.9	885.8	888.5	888.5
29.5°	877.5	876.0	878.8	880.8	883.5	884.3
30°	872.6	871.5	874.2	876.1	878.8	879.6
30.5°	868.1	866.3	868.9	870.6	874.1	874.8
31°	862.8	861.3	864.0	865.8	869.5	869.7
31.5°	857.4	856.0	858.7	860.8	864.0	865.2
32°	852.2	850.6	854.1	856.0	859.2	859.8
32.5°	847.1	845.3	849.0	850.7	853.9	854.5
33°	841.9	840.5	843.8	845.5	849.2	849.6
33.5°	836.5	834.7	838.0	840.0	844.1	844.4
34°	831.4	829.0	832.7	834.7	838.7	838.8
34.5°	825.1	823.6	827.0	829.3	833.2	833.2
35°	819.5	818.3	821.6	823.3	827.5	827.5
35.5°	814.0	812.5	815.3	817.6	821.6	821.5
36°	808.3	806.9	810.0	812.4	816.4	816.5
36.5°	803.1	800.9	804.2	806.9	811.0	810.8
37°	797.4	795.0	798.3	800.9	805.0	805.2
37.5°	791.4	789.4	792.0	795.2	799.2	799.4
38°	784.6	783.3	786.0	788.9	793.0	792.6
38.5°	779.2	777.0	779.9	782.8	786.9	786.9
39°	773.1	771.1	773.8	777.0	780.8	781.1
39.5°	766.6	765.0	767.2	770.4	774.3	775.1
40°	760.4	758.4	761.6	764.4	768.0	768.4
40.5°	753.8	752.1	754.9	758.2	762.1	762.3
41°	747.2	745.9	748.4	751.3	754.8	756.5
41.5°	741.2	739.1	741.9	745.3	748.7	750.3
42°	734.5	732.6	735.7	738.8	741.9	743.5
42.5°	727.7	726.3	728.7	731.9	735.5	737.1
43°	721.7	719.9	722.4	725.4	728.9	730.5
43.5°	715.0	713.3	715.5	719.2	722.8	723.8
44°	707.7	706.2	708.8	712.5	716.4	717.6
44.5°	701.1	699.4	702.1	705.4	709.5	711.2

TEST NUMBER: P869710  
 CATALOG NUMBER: SMX18RLSFS010-2500LM-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	694.4	692.3	695.2	699.0	702.4	704.0
45.5°	687.8	685.4	688.6	692.2	695.1	696.7
46°	680.2	678.2	681.6	684.8	688.2	690.5
46.5°	673.2	671.4	674.4	678.0	681.4	683.3
47°	666.3	663.9	666.9	670.6	674.4	676.6
47.5°	658.7	656.9	660.1	663.8	667.2	669.0
48°	651.5	649.4	652.4	656.4	659.9	662.1
48.5°	644.3	642.2	645.3	649.3	653.2	655.2
49°	636.9	635.5	638.1	641.8	646.1	647.6
49.5°	629.5	627.9	630.7	634.7	638.5	640.3
50°	622.1	620.1	622.9	627.1	631.2	633.0
50.5°	614.5	612.7	615.5	619.9	623.7	625.6
51°	607.0	605.3	607.9	612.4	616.3	617.8
51.5°	599.6	597.6	600.1	604.6	608.6	610.5
52°	591.6	589.7	592.7	596.7	600.8	602.9
52.5°	583.7	582.3	585.2	589.1	592.9	594.8
53°	576.5	574.3	577.3	581.3	585.6	586.7
53.5°	568.4	566.4	569.5	573.7	577.6	579.5
54°	560.4	558.5	561.5	565.5	569.5	571.9
54.5°	552.5	550.5	553.5	557.7	561.7	564.3
55°	545.1	542.8	545.9	549.9	553.5	555.8
55.5°	536.8	534.9	538.1	541.8	546.2	548.1
56°	528.5	526.9	529.7	534.2	538.2	540.3
56.5°	520.4	518.7	521.7	526.0	529.9	532.2
57°	512.7	510.3	513.4	517.8	521.5	523.7
57.5°	504.2	502.4	505.3	509.2	513.3	515.7
58°	495.8	493.9	497.0	501.1	505.0	507.6
58.5°	487.6	485.4	488.8	492.8	496.9	499.5
59°	479.3	477.2	480.4	484.2	488.4	490.9
59.5°	470.7	468.5	471.8	475.9	479.8	482.6
60°	462.3	460.0	463.4	467.5	471.4	474.1
60.5°	454.0	451.8	454.4	459.1	462.9	465.8
61°	445.4	443.3	446.4	450.4	454.4	457.6
61.5°	436.7	434.7	437.9	442.1	446.2	448.8
62°	428.1	426.1	429.2	433.3	437.5	440.1
62.5°	419.7	417.5	420.5	424.6	428.7	431.5
63°	410.8	408.6	411.6	415.5	420.0	422.9
63.5°	402.2	399.9	402.9	406.8	411.2	414.1
64°	393.2	390.8	393.9	398.3	402.5	405.6
64.5°	384.3	382.2	385.2	389.2	393.6	396.8
65°	375.7	373.6	376.3	380.1	384.9	388.0
65.5°	366.7	364.5	367.7	371.4	375.8	379.1
66°	357.8	355.8	358.5	362.6	367.0	370.5
66.5°	348.9	346.3	349.7	353.5	358.0	361.3
67°	339.6	337.6	340.5	344.3	349.1	352.4

TEST NUMBER: P869710  
 CATALOG NUMBER: SMX18RLSFS010-2500LM-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	331.0	328.7	331.6	335.6	340.2	343.5
68°	322.0	319.2	322.6	326.4	331.3	334.3
68.5°	312.8	310.4	313.2	317.2	321.9	325.4
69°	303.8	301.2	304.1	308.1	312.8	316.5
69.5°	294.6	292.0	295.1	299.0	303.6	306.9
70°	285.7	283.0	286.3	290.1	294.4	297.9
70.5°	276.8	273.9	277.0	280.7	285.6	289.0
71°	267.5	264.8	268.1	271.9	276.3	279.7
71.5°	258.3	255.5	258.5	262.3	267.1	270.4
72°	249.2	246.6	249.2	253.2	257.9	261.5
72.5°	239.9	237.4	240.3	244.2	248.8	252.3
73°	230.7	228.2	231.0	234.9	239.4	243.1
73.5°	221.8	219.1	221.7	225.8	230.4	234.1
74°	212.8	209.8	212.6	216.7	221.0	225.0
74.5°	203.6	200.9	203.5	207.4	211.8	215.8
75°	194.6	191.9	194.6	198.5	202.6	206.4
75.5°	185.9	183.0	185.4	189.6	193.8	197.7
76°	176.7	173.8	176.5	180.3	184.6	188.6
76.5°	167.7	165.0	167.5	171.4	175.9	179.6
77°	158.6	156.1	158.8	162.6	166.9	170.6
77.5°	149.9	147.3	150.0	154.0	158.2	161.6
78°	141.1	138.6	141.3	145.0	149.4	152.9
78.5°	132.5	130.0	132.6	136.2	140.7	144.0
79°	124.0	121.2	124.0	127.8	132.2	135.5
79.5°	115.5	112.9	115.4	119.2	123.5	126.7
80°	107.4	104.7	107.1	110.9	114.9	118.2
80.5°	99.3	96.5	99.0	102.6	106.4	110.1
81°	91.5	88.5	90.9	94.5	98.4	101.8
81.5°	83.5	80.7	82.9	86.6	90.5	93.8
82°	75.6	73.2	75.2	78.8	82.4	85.5
82.5°	68.2	65.8	68.0	71.1	74.9	77.8
83°	61.1	58.6	60.8	64.0	67.6	70.5
83.5°	54.1	51.7	53.5	56.7	60.4	63.1
84°	47.3	45.1	47.0	50.0	53.3	56.1
84.5°	40.9	38.9	40.7	43.6	46.7	49.3
85°	34.5	33.0	34.8	37.4	40.3	42.8
85.5°	28.9	27.8	29.3	31.5	34.4	36.7
86°	23.7	22.6	24.1	26.4	29.1	31.1
86.5°	19.3	18.0	19.3	21.5	23.9	26.1
87°	15.2	13.7	15.0	16.9	19.2	21.0
87.5°	11.3	9.5	10.9	12.9	14.9	16.7
88°	7.8	6.8	7.4	8.9	10.6	12.6
88.5°	5.0	4.3	5.0	6.1	7.4	8.5
89°	2.8	2.6	3.1	4.1	4.9	5.8
89.5°	1.2	1.6	2.0	2.6	3.2	3.8

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

  
NVLAP Lab Code: 200050-0



TEST NUMBER: P869710  
CATALOG NUMBER: SMX18RLSFS010-2500LM-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)