

Scaled data based on original data using  
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: P579673

Luminaire Tested: **SMD12S209SWHE-EM - 5000K**

Issue Date: 11/23/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579673  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2110240A001)  
Test Lab:  
Issue Date: 11/23/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: SMD12S209SWHE-EM - 5000K  
Description: SMD SELECTABLE CCT 5000K  
Light Source: SELECTABLE CCT LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

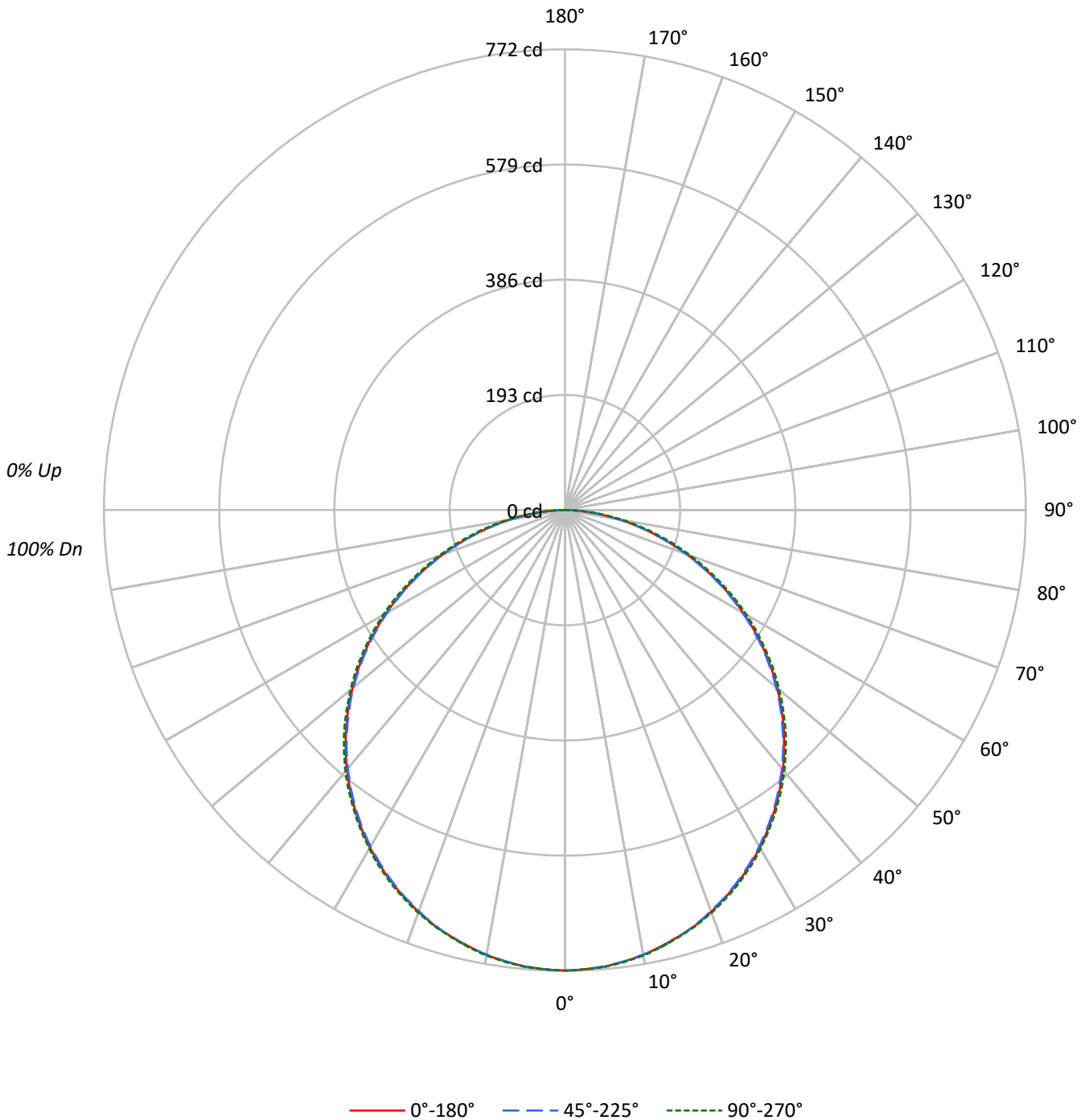
Lumens per Lamp: N/A  
Luminaire Lumens: 2235.1 lumens  
Efficiency: N/A  
Efficacy: 76.0 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
CIE Type: Direct

Input Watts (W): 29.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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



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### Luminous Intensity Polar Plot





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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	46	73	61	53	46	59	52	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	33	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24

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

	0°	45°	90°
0°	8305	8305	8305
5°	8296	8292	8302
10°	8271	8265	8287
15°	8237	8246	8251
20°	8207	8192	8226
25°	8163	8145	8196
30°	8116	8091	8145
35°	8054	8026	8089
40°	7978	7946	8035
45°	7891	7850	7958
50°	7775	7740	7854
55°	7634	7585	7724
60°	7438	7391	7567
65°	7180	7147	7348
70°	6848	6817	7084
75°	6409	6400	6729
80°	5839	5864	6310
85°	5051	5101	5829



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.9	3.3
10°-20°	208.8	9.3
20°-30°	316.7	14.2
30°-40°	383.0	17.1
40°-50°	399.2	17.9
50°-60°	362.8	16.2
60°-70°	279.1	12.5
70°-80°	164.4	7.4
80°-90°	48.2	2.2
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°	598.5	26.8
0°-40°	981.5	43.9
0°-60°	1743.4	78.0
0°-90°	2235.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2235.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	772	772	772	772	772	
5°	768	767	767	768	768	73
15°	739	739	740	741	740	209
25°	687	686	686	688	690	317
35°	613	611	611	613	616	383
45°	518	516	516	518	523	400
55°	407	404	404	407	412	363
65°	282	280	281	283	288	279
75°	154	153	154	156	162	163
85°	41	41	41	42	47	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	771.6	771.6	771.6	771.6	771.6
2.5°	770.1	770.6	770.4	771.8	770.3
5°	767.8	766.9	767.4	768.2	768.3
7.5°	763.1	762.7	762.3	764.3	763.6
10°	756.7	756.6	756.2	757.9	758.2
12.5°	748.2	749.2	749.4	750.1	749.6
15°	739.2	739.4	740.0	740.9	740.4
17.5°	729.2	728.0	728.4	729.9	730.3
20°	716.5	715.0	715.2	717.0	718.1
22.5°	702.3	700.8	701.5	703.3	704.5
25°	687.3	686.1	685.8	688.5	690.1
27.5°	670.9	669.5	668.9	671.7	673.6
30°	653.0	651.0	651.0	653.7	655.3
32.5°	633.4	631.5	631.2	634.2	636.2
35°	612.9	610.7	610.8	613.4	615.6
37.5°	590.8	588.4	588.6	591.8	594.5
40°	567.8	565.6	565.5	568.4	571.8
42.5°	543.6	541.4	541.3	543.8	547.8
45°	518.4	515.7	515.7	518.2	522.8
47.5°	491.9	489.6	489.3	491.7	496.1
50°	464.3	462.2	462.2	464.4	469.0
52.5°	436.0	433.4	433.3	435.8	441.0
55°	406.8	404.4	404.2	406.9	411.6
57.5°	376.7	373.9	374.1	376.7	381.9
60°	345.5	343.4	343.3	345.7	351.5
62.5°	314.2	312.1	311.8	314.3	320.6
65°	281.9	280.1	280.6	282.7	288.5
67.5°	249.9	248.0	248.3	250.6	256.9
70°	217.6	216.0	216.6	218.8	225.1
72.5°	185.4	184.5	184.9	186.7	193.5
75°	154.1	153.1	153.9	155.8	161.8
77.5°	123.5	122.7	123.7	125.4	131.6
80°	94.2	93.7	94.6	96.6	101.8
82.5°	66.7	66.4	67.2	68.8	73.6
85°	40.9	40.6	41.3	42.5	47.2
87.5°	18.3	18.0	18.4	18.9	22.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)