

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: P579672

Luminaire Tested: **SMD12S209SWHE-EM - 4000K**

Issue Date: 11/23/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579672  
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 - 4000K  
Description: SMD SELECTABLE CCT 4000K  
Light Source: SELECTABLE CCT LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

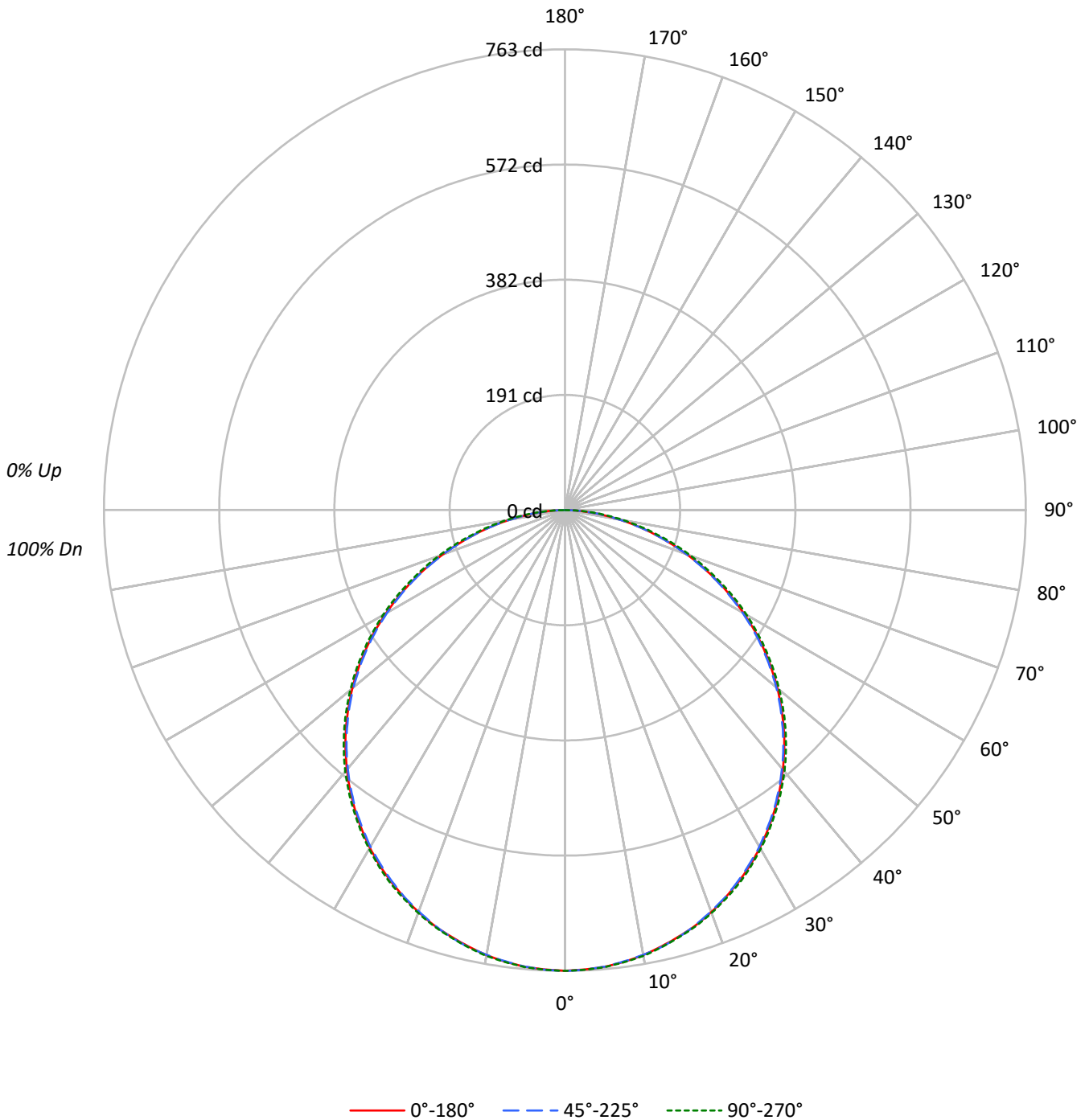
Lumens per Lamp: N/A  
Luminaire Lumens: 2210.2 lumens  
Efficiency: N/A  
Efficacy: 76.0 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
CIE Type: Direct

Input Watts (W): 29.1  
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°	8213	8213	8213
5°	8203	8199	8209
10°	8179	8173	8194
15°	8145	8154	8159
20°	8116	8101	8134
25°	8073	8054	8105
30°	8025	8001	8054
35°	7963	7937	8000
40°	7890	7857	7946
45°	7805	7762	7870
50°	7690	7654	7767
55°	7550	7501	7638
60°	7356	7309	7483
65°	7101	7065	7266
70°	6773	6741	7006
75°	6338	6330	6654
80°	5777	5796	6236
85°	4989	5039	5768



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.1	3.3
10°-20°	206.5	9.3
20°-30°	313.2	14.2
30°-40°	378.7	17.1
40°-50°	394.7	17.9
50°-60°	358.7	16.2
60°-70°	276.0	12.5
70°-80°	162.6	7.4
80°-90°	47.6	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°	591.8	26.8
0°-40°	970.6	43.9
0°-60°	1724.0	78.0
0°-90°	2210.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2210.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	763	763	763	763	763	
5°	759	758	759	760	760	72
15°	731	731	732	733	732	206
25°	680	678	678	681	682	313
35°	606	604	604	606	609	379
45°	513	510	510	512	517	395
55°	402	400	400	402	407	359
65°	279	277	277	280	285	276
75°	152	151	152	154	160	161
85°	40	40	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°	763.0	763.0	763.0	763.0	763.0
2.5°	761.5	762.0	761.8	763.3	761.8
5°	759.2	758.3	758.8	759.7	759.7
7.5°	754.6	754.3	753.8	755.8	755.1
10°	748.3	748.2	747.8	749.4	749.7
12.5°	739.8	740.8	741.0	741.8	741.2
15°	730.9	731.2	731.7	732.7	732.2
17.5°	721.0	719.9	720.3	721.8	722.2
20°	708.5	707.0	707.2	709.0	710.1
22.5°	694.5	693.0	693.7	695.5	696.7
25°	679.7	678.5	678.1	680.9	682.4
27.5°	663.5	662.0	661.4	664.2	666.1
30°	645.7	643.7	643.7	646.4	648.0
32.5°	626.4	624.4	624.1	627.2	629.1
35°	606.0	603.9	604.0	606.5	608.8
37.5°	584.2	581.9	582.1	585.2	587.9
40°	561.5	559.3	559.2	562.0	565.5
42.5°	537.5	535.4	535.2	537.7	541.7
45°	512.7	510.0	509.9	512.4	517.0
47.5°	486.4	484.1	483.8	486.2	490.6
50°	459.2	457.0	457.1	459.2	463.8
52.5°	431.2	428.6	428.4	430.9	436.1
55°	402.3	399.9	399.7	402.4	407.0
57.5°	372.6	369.7	369.9	372.5	377.7
60°	341.7	339.6	339.5	341.9	347.6
62.5°	310.7	308.6	308.3	310.8	317.0
65°	278.8	277.0	277.4	279.6	285.3
67.5°	247.1	245.2	245.5	247.8	254.0
70°	215.2	213.6	214.2	216.4	222.6
72.5°	183.3	182.4	182.9	184.6	191.4
75°	152.4	151.4	152.2	154.0	160.0
77.5°	122.1	121.4	122.3	124.1	130.1
80°	93.2	92.7	93.5	95.5	100.6
82.5°	66.0	65.6	66.5	68.1	72.8
85°	40.4	40.2	40.8	42.0	46.7
87.5°	18.0	17.8	18.2	18.7	22.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)