

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: P406189

Luminaire Tested: **SMD12S09SWHE 2700K**

Test Date: 2020-03-28

**Test Information**

Test Method: LM-79-08  
Report Number: P406189  
Test Lab: EVERFINE  
Test Date: 2020-03-28  
Issue Date: 2020-03-28 16:13:16  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: SMD12S09SWHE 2700K  
Description: DL-NA1UaA26MR1-2590  
Light Source: -  
Ballast/Driver: -

**Summary**

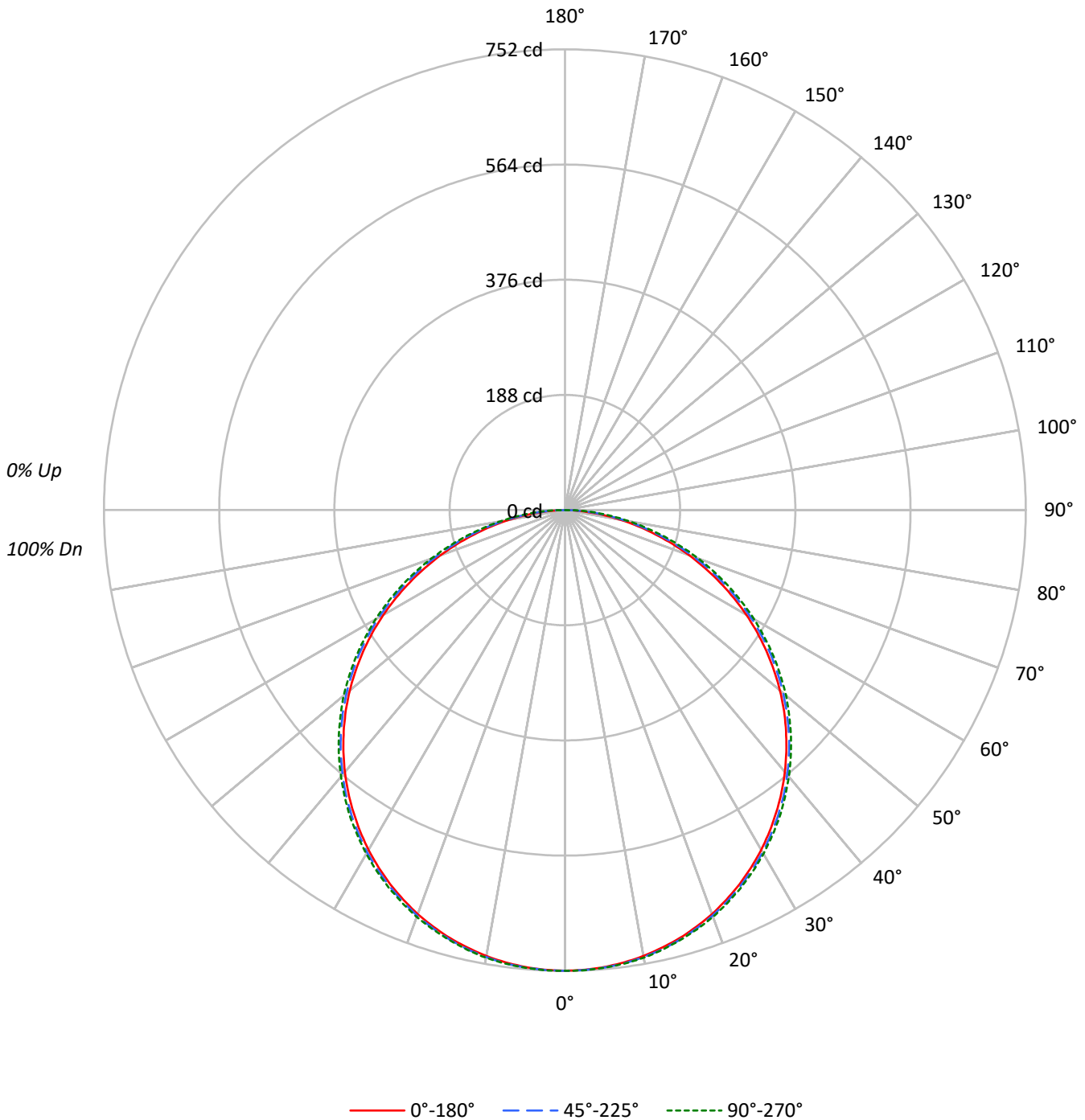
Lumens per Lamp: N/A  
Luminaire Lumens: 2238.2 lumens  
Efficiency: N/A  
Efficacy: 85.4 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.39  
Luminous Opening: Rectangular (W 0.15m x L: 0.15m x H: 0m)  
CIE Type: Direct

Input Watts (W): 26.2  
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	103	99	95	106	101	97	93	97	94	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	29	25	23

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

	0°	45°	90°
0°	32374	32374	32374
5°	32355	32385	32406
10°	32309	32383	32440
15°	32245	32357	32392
20°	32156	32284	32376
25°	32015	32176	32295
30°	31848	32072	32221
35°	31626	31910	32110
40°	31391	31705	31947
45°	31072	31480	31766
50°	30685	31154	31549
55°	30154	30754	31190
60°	29450	30165	30699
65°	28455	29372	30074
70°	27204	28324	29218
75°	25419	26883	28081
80°	23109	25117	26853
85°	19266	22823	25886



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.3	3.2
10°-20°	204.8	9.2
20°-30°	312.1	13.9
30°-40°	379.6	17.0
40°-50°	398.3	17.8
50°-60°	365.3	16.3
60°-70°	284.5	12.7
70°-80°	170.6	7.6
80°-90°	51.7	2.3
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°	588.2	26.3
0°-40°	967.8	43.2
0°-60°	1731.4	77.4
0°-90°	2238.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2238.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	752	752	752	752	752	
5°	749	750	749	750	750	71
15°	723	725	726	726	727	204
25°	674	676	677	678	680	311
35°	602	605	607	608	611	377
45°	510	514	517	519	522	394
55°	402	406	410	412	416	359
65°	279	284	288	291	295	276
75°	153	158	162	164	169	162
85°	39	43	46	48	52	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	751.9	751.9	751.9	751.9	751.9
2.5°	751.1	751.5	751.3	751.3	751.8
5°	748.6	749.7	749.3	749.7	749.8
7.5°	744.5	745.4	746.2	746.0	746.5
10°	739.0	740.1	740.7	741.2	742.0
12.5°	731.7	733.1	734.2	734.6	735.2
15°	723.4	725.0	725.9	726.1	726.7
17.5°	713.1	714.9	715.7	716.5	717.4
20°	701.8	703.3	704.6	705.2	706.6
22.5°	688.3	690.2	691.4	692.5	693.8
25°	673.9	675.9	677.3	678.4	679.8
27.5°	657.8	660.3	661.8	662.9	664.6
30°	640.6	643.1	645.1	645.8	648.1
32.5°	621.8	624.6	626.7	628.2	629.9
35°	601.7	605.0	607.1	608.4	610.9
37.5°	580.7	584.1	586.4	587.6	590.2
40°	558.5	561.8	564.1	565.8	568.4
42.5°	534.9	538.6	541.3	542.7	545.7
45°	510.3	514.4	517.0	518.8	521.7
47.5°	484.8	488.6	491.6	493.5	496.4
50°	458.1	462.0	465.1	467.0	471.0
52.5°	430.2	434.6	437.7	439.8	443.5
55°	401.7	406.2	409.7	411.8	415.5
57.5°	372.0	376.8	380.4	382.5	386.2
60°	342.0	346.8	350.3	352.7	356.5
62.5°	310.7	315.9	319.4	322.2	326.1
65°	279.3	284.4	288.3	290.8	295.2
67.5°	247.7	252.7	256.7	259.1	263.9
70°	216.1	221.0	225.0	227.6	232.1
72.5°	184.2	189.2	192.9	195.8	200.3
75°	152.8	157.6	161.6	163.9	168.8
77.5°	122.6	127.4	131.0	133.7	137.9
80°	93.2	97.6	101.3	103.8	108.3
82.5°	65.4	69.4	73.0	75.4	79.4
85°	39.0	42.7	46.2	48.3	52.4
87.5°	15.1	18.5	21.7	23.6	27.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)