

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: P406192

Luminaire Tested: **SMD12S09SWHE 4000K**

Test Date: 2020-03-28

Test Information

Test Method: LM-79-08
Report Number: P406192
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 4000K
Description: DL-NA1UaA26MR1-2590
Light Source: -
Ballast/Driver: -

Summary

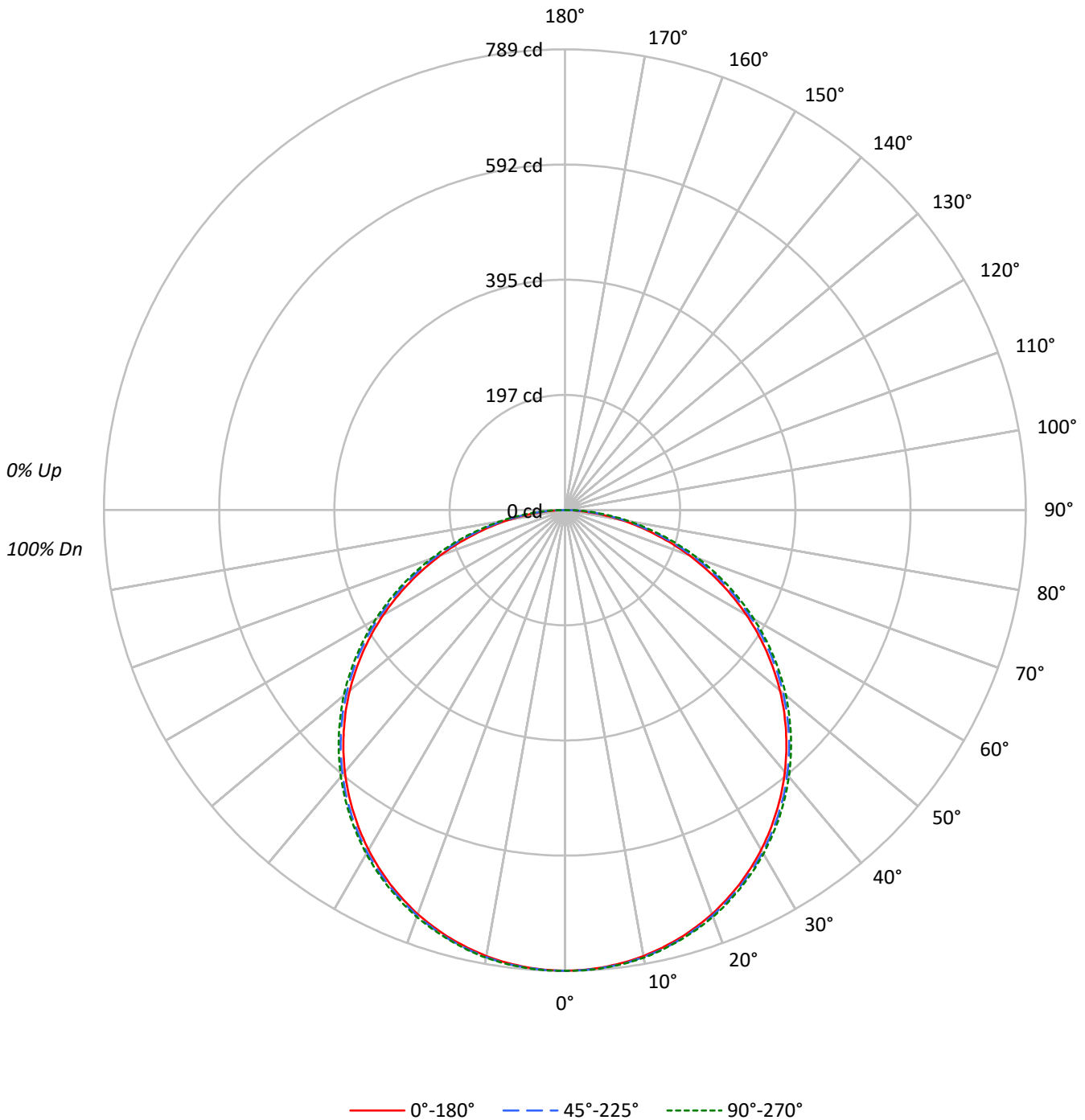
Lumens per Lamp: N/A
Luminaire Lumens: 2348.4 lumens
Efficiency: N/A
Efficacy: 89.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.39
Luminous Opening: Rectangular (W 0.15m x L: 0.15m x H: 0m)
CIE Type: Direct

Input Watts (W): 26.2
Input Voltage (V): NR
Input Current (A_{in}): 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°	33967	33967	33967
5°	33945	33984	34006
10°	33900	33979	34036
15°	33832	33952	33988
20°	33741	33874	33970
25°	33587	33763	33882
30°	33414	33653	33807
35°	33182	33482	33686
40°	32936	33268	33521
45°	32600	33027	33331
50°	32199	32688	33103
55°	31640	32263	32721
60°	30905	31655	32214
65°	29861	30818	31552
70°	28538	29722	30653
75°	26667	28214	29461
80°	24249	26357	28167
85°	20205	23910	27121



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.8	3.2
10°-20°	214.9	9.2
20°-30°	327.5	13.9
30°-40°	398.3	17.0
40°-50°	417.9	17.8
50°-60°	383.3	16.3
60°-70°	298.5	12.7
70°-80°	179.0	7.6
80°-90°	54.2	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°	617.2	26.3
0°-40°	1015.4	43.2
0°-60°	1816.6	77.4
0°-90°	2348.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2348.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	789	789	789	789	789	
5°	785	787	786	787	787	75
15°	759	761	762	762	762	214
25°	707	709	711	712	713	326
35°	631	635	637	638	641	395
45°	535	540	542	544	547	413
55°	422	426	430	432	436	376
65°	293	298	302	305	310	290
75°	160	165	170	172	177	170
85°	41	45	48	51	55	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	788.9	788.9	788.9	788.9	788.9
2.5°	788.1	788.5	788.3	788.3	788.8
5°	785.4	786.7	786.3	786.7	786.8
7.5°	781.2	782.1	783.0	782.7	783.3
10°	775.4	776.5	777.2	777.7	778.5
12.5°	767.8	769.2	770.4	770.8	771.4
15°	759.0	760.7	761.7	761.9	762.5
17.5°	748.2	750.1	750.9	751.8	752.7
20°	736.4	737.9	739.3	739.9	741.4
22.5°	722.2	724.2	725.4	726.6	728.0
25°	707.0	709.2	710.7	711.8	713.2
27.5°	690.2	692.8	694.4	695.6	697.3
30°	672.1	674.8	676.9	677.6	680.0
32.5°	652.4	655.4	657.6	659.1	660.9
35°	631.3	634.7	637.0	638.4	640.9
37.5°	609.3	612.9	615.3	616.6	619.3
40°	586.0	589.5	591.9	593.6	596.4
42.5°	561.2	565.1	567.9	569.5	572.6
45°	535.4	539.7	542.4	544.4	547.4
47.5°	508.6	512.7	515.8	517.8	520.8
50°	480.7	484.8	488.0	490.0	494.2
52.5°	451.4	456.0	459.3	461.4	465.4
55°	421.5	426.2	429.8	432.1	435.9
57.5°	390.3	395.3	399.2	401.3	405.3
60°	358.9	363.8	367.6	370.0	374.1
62.5°	326.0	331.4	335.1	338.0	342.2
65°	293.1	298.4	302.5	305.1	309.7
67.5°	259.8	265.1	269.3	271.8	276.9
70°	226.7	231.9	236.1	238.8	243.5
72.5°	193.2	198.5	202.4	205.4	210.2
75°	160.3	165.3	169.6	172.0	177.1
77.5°	128.7	133.6	137.5	140.3	144.7
80°	97.8	102.5	106.3	109.0	113.6
82.5°	68.6	72.8	76.6	79.1	83.3
85°	40.9	44.8	48.4	50.7	54.9
87.5°	15.8	19.4	22.7	24.8	28.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)