

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: P406193

Luminaire Tested: **SMD12S09SWHE 5000K**

Test Date: 2020-03-28

**Test Information**

Test Method: LM-79-08  
Report Number: P406193  
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 5000K  
Description: DL-NA1UaA26MR1-2590  
Light Source: -  
Ballast/Driver: -

**Summary**

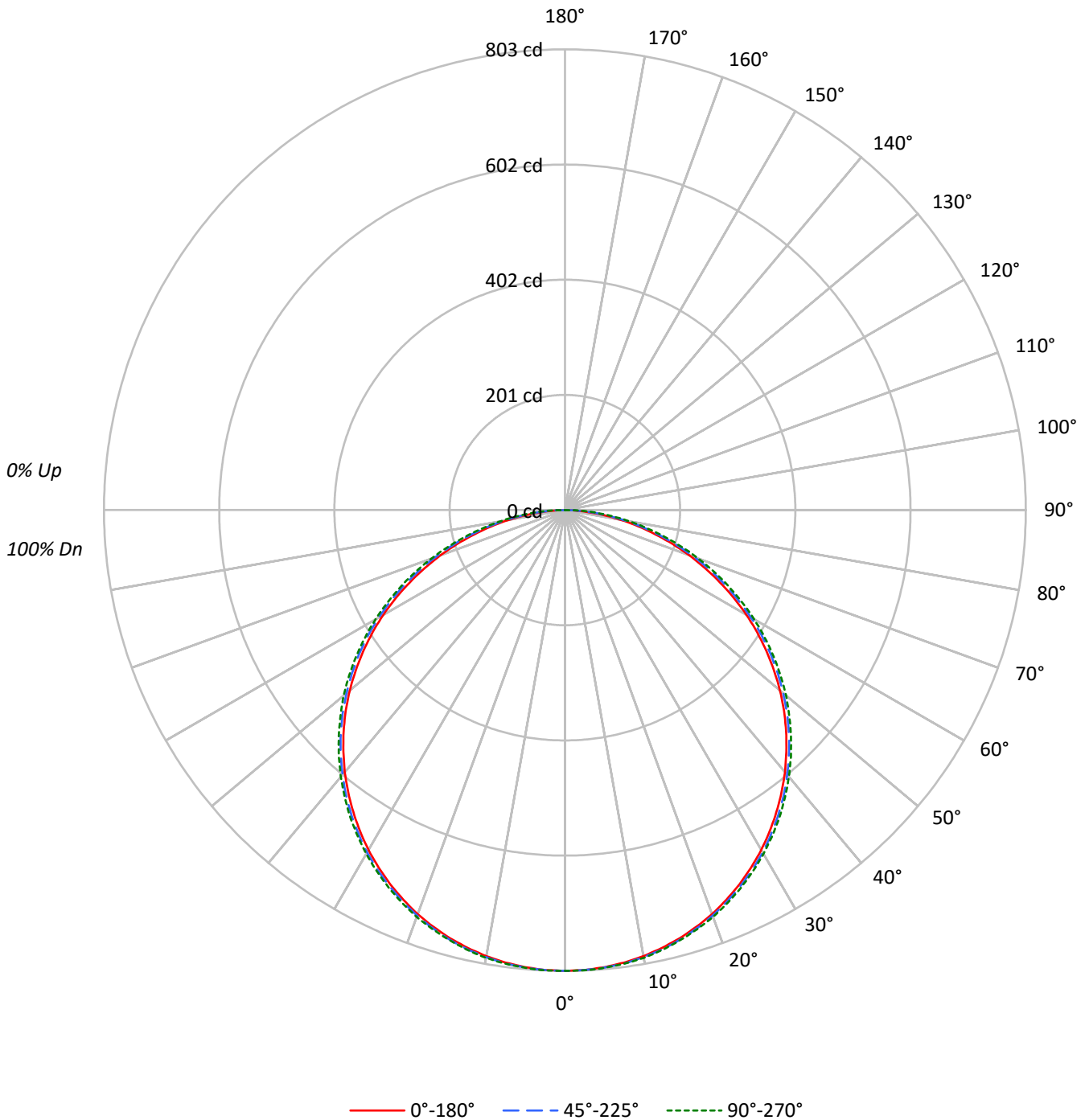
Lumens per Lamp: N/A  
Luminaire Lumens: 2390.3 lumens  
Efficiency: N/A  
Efficacy: 91.2 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.39  
Luminous Opening: Rectangular (W 0.15m x L: 0.15m x H: 0m)  
CIE Type: Direct

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°	34574	34574	34574
5°	34554	34589	34611
10°	34508	34587	34644
15°	34438	34559	34594
20°	34341	34479	34579
25°	34191	34366	34490
30°	34016	34255	34409
35°	33776	34081	34291
40°	33526	33864	34122
45°	33185	33617	33928
50°	32775	33270	33692
55°	32203	32841	33306
60°	31456	32214	32791
65°	30390	31368	32122
70°	29042	30250	31207
75°	27149	28713	29994
80°	24696	26828	28663
85°	20551	24355	27615



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.1	3.2
10°-20°	218.7	9.2
20°-30°	333.4	13.9
30°-40°	405.4	17.0
40°-50°	425.4	17.8
50°-60°	390.2	16.3
60°-70°	303.9	12.7
70°-80°	182.2	7.6
80°-90°	55.2	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°	628.2	26.3
0°-40°	1033.6	43.2
0°-60°	1849.1	77.4
0°-90°	2390.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2390.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	803	803	803	803	803	
5°	800	801	800	801	801	76
15°	773	774	775	776	776	218
25°	720	722	723	724	726	332
35°	643	646	648	650	652	402
45°	545	549	552	554	557	420
55°	429	434	438	440	444	383
65°	298	304	308	310	315	295
75°	163	168	173	175	180	173
85°	42	46	49	52	56	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	803.0	803.0	803.0	803.0	803.0
2.5°	802.2	802.6	802.4	802.4	802.9
5°	799.5	800.7	800.3	800.7	800.8
7.5°	795.2	796.1	797.0	796.7	797.3
10°	789.3	790.4	791.1	791.6	792.4
12.5°	781.5	783.0	784.1	784.5	785.2
15°	772.6	774.3	775.3	775.5	776.1
17.5°	761.6	763.5	764.4	765.2	766.1
20°	749.5	751.1	752.5	753.1	754.7
22.5°	735.1	737.1	738.4	739.6	741.0
25°	719.7	721.9	723.4	724.5	726.0
27.5°	702.5	705.2	706.9	708.0	709.8
30°	684.2	686.9	689.0	689.7	692.1
32.5°	664.1	667.1	669.3	670.9	672.7
35°	642.6	646.1	648.4	649.8	652.4
37.5°	620.2	623.8	626.3	627.6	630.3
40°	596.5	600.1	602.5	604.3	607.1
42.5°	571.2	575.2	578.1	579.7	582.8
45°	545.0	549.4	552.1	554.1	557.2
47.5°	517.7	521.8	525.0	527.1	530.1
50°	489.3	493.5	496.7	498.7	503.0
52.5°	459.5	464.1	467.5	469.7	473.7
55°	429.0	433.8	437.5	439.8	443.7
57.5°	397.3	402.4	406.3	408.5	412.5
60°	365.3	370.4	374.1	376.7	380.8
62.5°	331.9	337.3	341.1	344.1	348.3
65°	298.3	303.7	307.9	310.5	315.3
67.5°	264.5	269.9	274.2	276.7	281.8
70°	230.7	236.0	240.3	243.0	247.9
72.5°	196.7	202.0	206.0	209.1	213.9
75°	163.2	168.3	172.6	175.0	180.3
77.5°	131.0	136.0	139.9	142.8	147.3
80°	99.6	104.3	108.2	110.9	115.6
82.5°	69.8	74.1	78.0	80.5	84.8
85°	41.6	45.6	49.3	51.6	55.9
87.5°	16.1	19.8	23.1	25.2	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)