

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: P417421

Luminaire Tested: **SMD4S69SWH - 5000K**

Test Date: 2020-05-18

**Test Information**

Test Method: LM-79-08  
Report Number: P417421  
Test Lab:  
Test Date: 2020-05-18  
Issue Date: 11/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: SMD4S69SWH - 5000K  
Description: SMD SELECTABLE CCT 5000K  
Light Source: SELECTABLE CCT LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

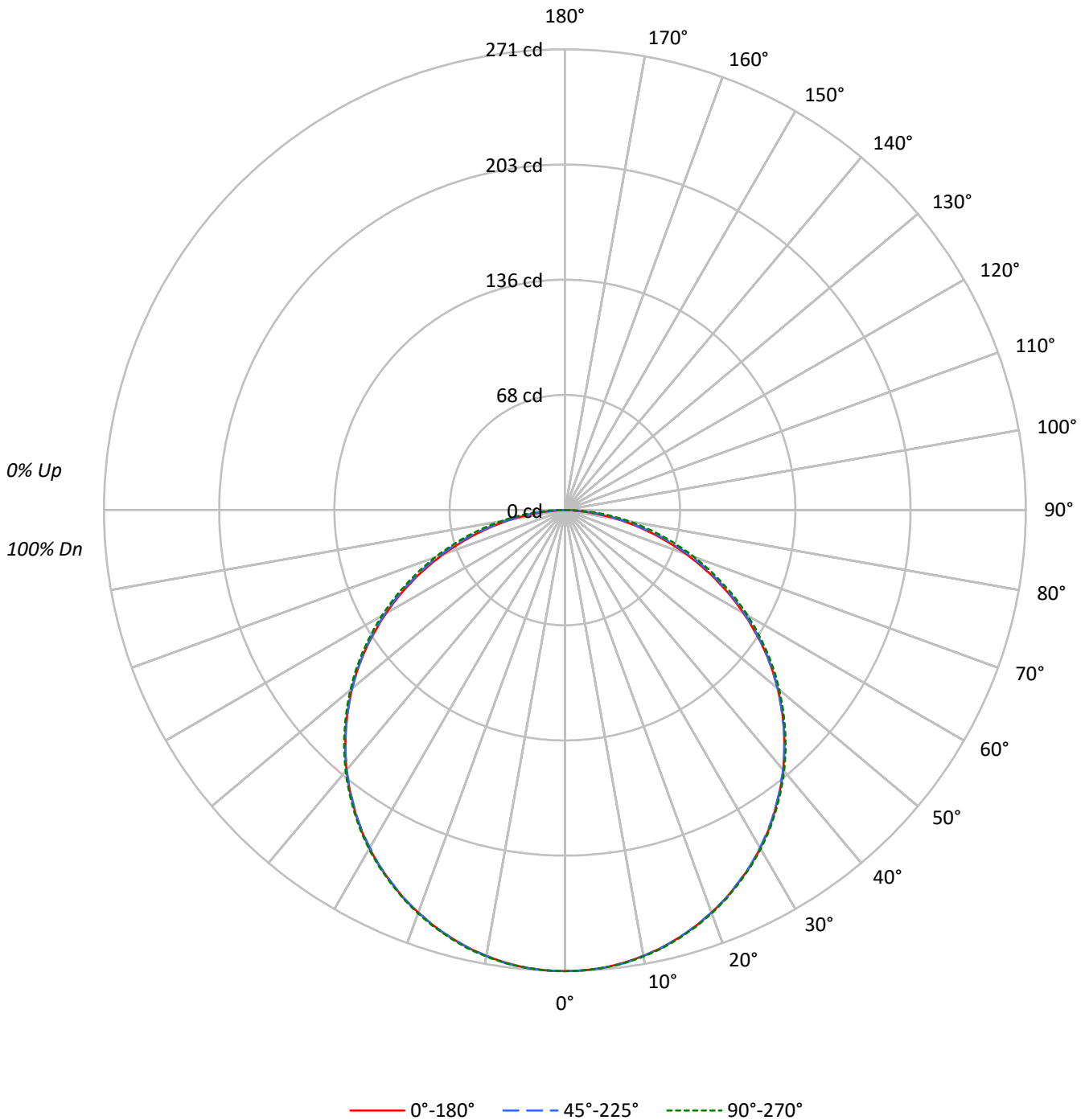
Lumens per Lamp: N/A  
Luminaire Lumens: 790.6 lumens  
Efficiency: N/A  
Efficacy: 85.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 9.2  
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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	55	42	34	28	41	33	28	40	33	28	39	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	26806	26806	26806
5°	26799	26799	26799
10°	26718	26728	26758
15°	26626	26616	26667
20°	26496	26496	26549
25°	26360	26338	26403
30°	26216	26182	26273
35°	26003	25967	26075
40°	25767	25741	25870
45°	25455	25448	25608
50°	25126	25103	25326
55°	24660	24712	24970
60°	23999	24177	24533
65°	23154	23505	23996
70°	21993	22599	23438
75°	20470	21386	22685
80°	18158	19467	21915
85°	13722	17238	21888



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.7	3.2
10°-20°	73.5	9.3
20°-30°	111.5	14.1
30°-40°	134.8	17.1
40°-50°	140.6	17.8
50°-60°	128.3	16.2
60°-70°	99.5	12.6
70°-80°	59.4	7.5
80°-90°	17.5	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°	210.6	26.6
0°-40°	345.4	43.7
0°-60°	614.3	77.7
0°-90°	790.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	790.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	271	271	271	271	271	
5°	270	270	270	270	270	26
15°	260	260	260	260	261	73
25°	242	242	242	242	242	111
35°	216	215	215	216	216	135
45°	182	182	182	182	183	140
55°	143	144	143	144	145	128
65°	99	100	100	101	103	98
75°	54	54	56	58	59	57
85°	12	13	15	17	19	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2
2.5°	270.9	270.9	271.0	271.0	270.9	270.9	270.9	270.9	271.0	271.0
5°	270.1	270.1	270.0	270.0	270.1	270.1	270.2	270.2	270.1	270.1
7.5°	268.4	268.4	268.5	268.6	268.7	268.7	268.6	268.5	268.7	268.8
10°	266.2	266.3	266.4	266.4	266.3	266.3	266.4	266.4	266.5	266.6
12.5°	263.6	263.6	263.7	263.6	263.5	263.5	263.6	263.6	263.8	264.0
15°	260.2	260.2	260.3	260.2	260.1	260.1	260.2	260.3	260.5	260.6
17.5°	256.4	256.4	256.5	256.5	256.4	256.4	256.4	256.5	256.7	256.9
20°	251.9	251.9	252.0	252.0	251.9	251.9	252.0	252.1	252.3	252.4
22.5°	247.2	247.2	247.2	247.2	247.1	247.1	247.1	247.2	247.4	247.6
25°	241.7	241.8	241.9	241.7	241.5	241.5	241.6	241.7	241.9	242.1
27.5°	236.0	236.0	236.1	236.0	235.9	235.8	235.9	236.1	236.3	236.5
30°	229.7	229.7	229.7	229.6	229.4	229.4	229.6	229.8	230.0	230.2
32.5°	222.9	222.9	222.8	222.7	222.6	222.6	222.7	222.8	223.1	223.5
35°	215.5	215.5	215.5	215.4	215.2	215.2	215.4	215.6	215.8	216.1
37.5°	207.7	207.7	207.8	207.7	207.6	207.5	207.6	207.7	208.1	208.5
40°	199.7	199.8	199.9	199.7	199.5	199.5	199.6	199.8	200.1	200.5
42.5°	191.0	191.1	191.2	191.1	191.0	190.9	191.0	191.2	191.7	192.1
45°	182.1	182.2	182.4	182.3	182.1	182.0	182.1	182.2	182.7	183.2
47.5°	172.8	173.0	173.2	173.0	172.7	172.6	172.7	172.9	173.5	174.0
50°	163.4	163.5	163.7	163.5	163.3	163.2	163.3	163.5	164.1	164.7
52.5°	153.4	153.6	153.8	153.7	153.5	153.4	153.5	153.8	154.4	155.0
55°	143.1	143.3	143.5	143.5	143.4	143.4	143.5	143.7	144.3	144.9
57.5°	132.2	132.5	132.8	132.9	132.8	132.9	133.1	133.3	133.9	134.5
60°	121.4	121.6	121.8	122.0	122.2	122.4	122.6	122.9	123.5	124.1
62.5°	110.3	110.5	110.7	111.0	111.4	111.7	111.9	112.3	112.9	113.5
65°	99.0	99.2	99.4	99.8	100.3	100.7	101.0	101.4	102.0	102.6
67.5°	87.6	87.8	88.0	88.5	89.2	89.7	90.2	90.7	91.3	91.9
70°	76.1	76.5	76.9	77.4	77.9	78.5	79.2	79.9	80.5	81.1
72.5°	64.7	65.0	65.3	65.9	66.6	67.4	68.2	68.9	69.5	70.1
75°	53.6	54.0	54.3	54.9	55.6	56.4	57.4	58.3	58.9	59.4
77.5°	42.6	42.9	43.2	43.8	44.5	45.4	46.4	47.3	48.0	48.8
80°	31.9	32.2	32.4	33.0	33.7	34.7	35.9	37.0	37.7	38.5
82.5°	22.1	22.2	22.4	23.0	23.8	24.7	25.8	26.8	27.7	28.6
85°	12.1	12.2	12.3	13.3	14.6	15.8	16.7	17.6	18.5	19.3
87.5°	5.0	5.1	5.3	6.0	7.0	7.7	8.2	8.7	9.4	10.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)