

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: P417418

Luminaire Tested: **SMD4S69SWH - 3000K**

Test Date: 2020-05-18

Test Information

Test Method: LM-79-08
Report Number: P417418
Test Lab:
Test Date: 2020-05-18
Issue Date: 11/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: SMD4S69SWH - 3000K
Description: SMD SELECTABLE CCT 3000K
Light Source: SELECTABLE CCT LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

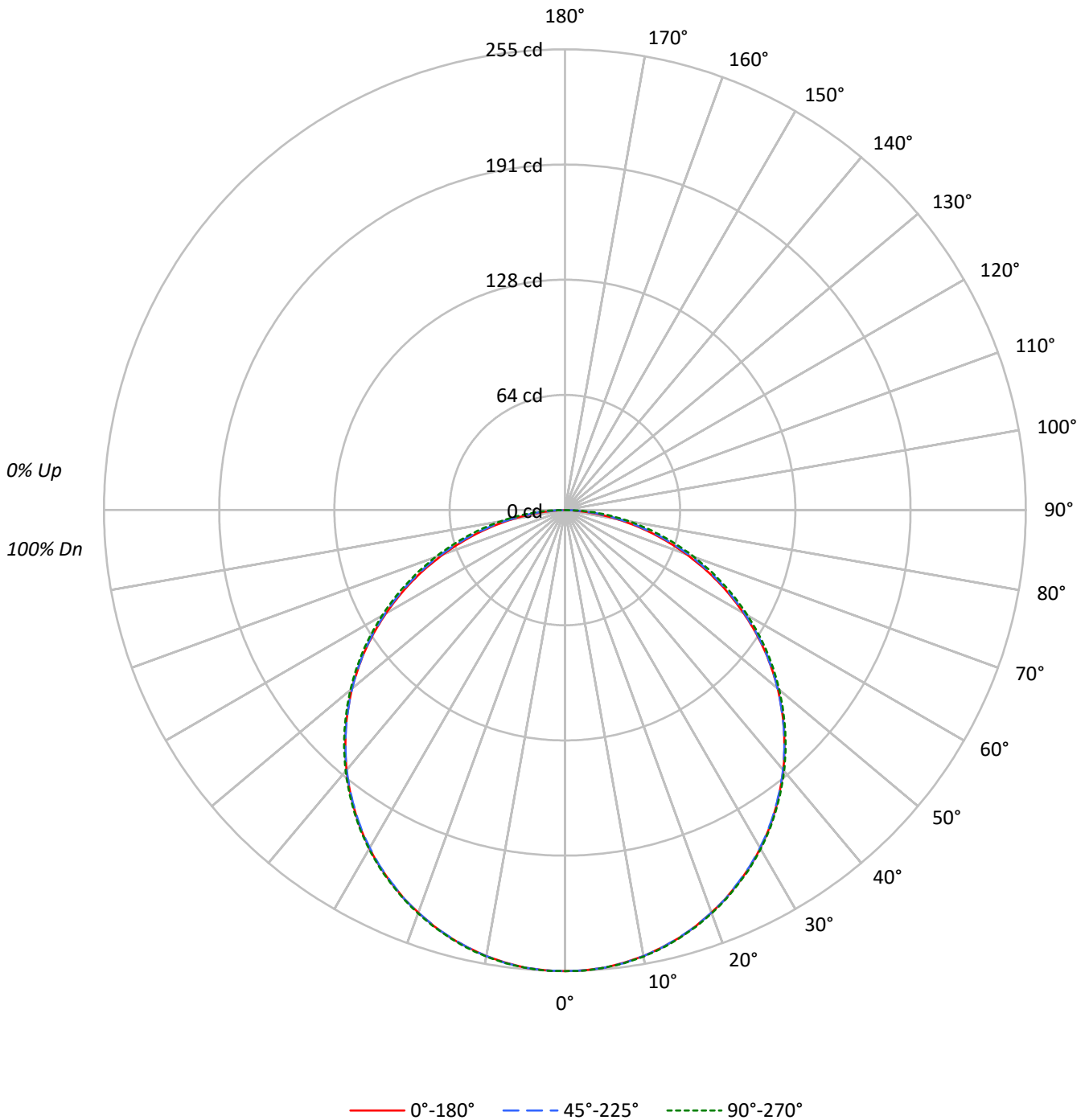
Lumens per Lamp: N/A
Luminaire Lumens: 744.1 lumens
Efficiency: N/A
Efficacy: 80.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.2
Input Voltage (V): NR
Input Current (A_{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



TEST NUMBER: P417418
CATALOG NUMBER: SMD4S69SWH - 3000K

Luminous Intensity Polar Plot





TEST NUMBER: P417418
 CATALOG NUMBER: SMD4S69SWH - 3000K

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	45	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°	25225	25225	25225
5°	25222	25222	25222
10°	25152	25152	25182
15°	25060	25050	25091
20°	24940	24934	24982
25°	24811	24784	24855
30°	24676	24641	24733
35°	24471	24434	24543
40°	24258	24225	24348
45°	23959	23952	24099
50°	23650	23627	23835
55°	23212	23247	23505
60°	22576	22753	23090
65°	21798	22125	22593
70°	20692	21270	22050
75°	19286	20126	21348
80°	17076	18357	20662
85°	12929	16217	20527



TEST NUMBER: P417418
 CATALOG NUMBER: SMD4S69SWH - 3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.2	3.2
10°-20°	69.1	9.3
20°-30°	104.9	14.1
30°-40°	126.9	17.1
40°-50°	132.3	17.8
50°-60°	120.7	16.2
60°-70°	93.6	12.6
70°-80°	55.9	7.5
80°-90°	16.5	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°	198.2	26.6
0°-40°	325.1	43.7
0°-60°	578.1	77.7
0°-90°	744.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	744.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	255	255	255	255	255	
5°	254	254	254	254	254	24
15°	245	245	245	245	245	69
25°	228	228	227	227	228	105
35°	203	203	202	203	203	127
45°	171	172	171	171	172	132
55°	135	135	135	135	136	120
65°	93	94	95	95	97	92
75°	50	51	53	55	56	53
85°	11	12	14	16	18	14
90°	0	0	0	0	0	



TEST NUMBER: P417418
 CATALOG NUMBER: SMD4S69SWH - 3000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	255.2	255.2	255.2	255.2	255.2	255.2	255.2	255.2	255.2	255.2
2.5°	254.9	254.9	255.0	255.0	254.9	254.9	255.0	255.0	255.1	255.1
5°	254.2	254.2	254.1	254.1	254.2	254.2	254.3	254.3	254.2	254.2
7.5°	252.6	252.6	252.7	252.7	252.8	252.8	252.7	252.7	252.8	252.9
10°	250.6	250.6	250.7	250.7	250.6	250.6	250.7	250.7	250.8	250.9
12.5°	248.0	248.1	248.2	248.1	248.0	248.0	248.1	248.1	248.3	248.4
15°	244.9	244.9	245.0	244.9	244.8	244.8	244.9	244.9	245.1	245.2
17.5°	241.3	241.3	241.4	241.4	241.3	241.3	241.3	241.3	241.5	241.7
20°	237.1	237.1	237.2	237.1	237.0	237.1	237.2	237.3	237.4	237.5
22.5°	232.6	232.6	232.7	232.7	232.6	232.6	232.5	232.6	232.8	233.0
25°	227.5	227.5	227.6	227.5	227.3	227.2	227.3	227.5	227.7	227.9
27.5°	222.1	222.1	222.2	222.1	222.0	221.9	222.0	222.2	222.4	222.6
30°	216.2	216.2	216.2	216.1	215.9	215.9	216.1	216.3	216.5	216.7
32.5°	209.8	209.8	209.7	209.6	209.5	209.5	209.6	209.7	210.0	210.3
35°	202.8	202.8	202.8	202.7	202.5	202.5	202.7	202.9	203.1	203.4
37.5°	195.5	195.5	195.6	195.5	195.4	195.3	195.4	195.5	195.8	196.2
40°	188.0	188.0	188.1	188.0	187.8	187.7	187.8	188.0	188.3	188.7
42.5°	179.8	179.9	180.0	179.9	179.7	179.7	179.8	180.0	180.4	180.8
45°	171.4	171.5	171.6	171.5	171.4	171.3	171.4	171.5	172.0	172.4
47.5°	162.6	162.8	163.0	162.8	162.5	162.5	162.6	162.8	163.3	163.7
50°	153.8	153.9	154.1	153.9	153.7	153.6	153.7	153.9	154.5	155.0
52.5°	144.3	144.5	144.7	144.7	144.5	144.4	144.5	144.7	145.3	145.8
55°	134.7	134.9	135.1	135.1	134.9	134.9	135.0	135.2	135.8	136.4
57.5°	124.5	124.8	125.0	125.1	125.0	125.1	125.3	125.5	126.1	126.6
60°	114.2	114.5	114.7	114.9	115.0	115.2	115.4	115.6	116.2	116.8
62.5°	103.8	104.0	104.2	104.5	104.8	105.1	105.3	105.6	106.2	106.8
65°	93.2	93.3	93.5	93.9	94.4	94.8	95.1	95.4	96.0	96.6
67.5°	82.5	82.7	82.9	83.4	84.0	84.5	84.9	85.3	85.9	86.5
70°	71.6	72.0	72.3	72.8	73.3	73.9	74.6	75.2	75.8	76.3
72.5°	60.9	61.2	61.4	62.0	62.7	63.4	64.2	64.9	65.5	66.0
75°	50.5	50.8	51.1	51.7	52.3	53.1	54.1	54.9	55.4	55.9
77.5°	40.0	40.3	40.6	41.2	41.9	42.8	43.7	44.6	45.3	46.0
80°	30.0	30.3	30.5	31.1	31.8	32.7	33.8	34.8	35.5	36.3
82.5°	20.8	20.9	21.1	21.7	22.4	23.3	24.3	25.2	26.1	26.9
85°	11.4	11.5	11.6	12.5	13.8	14.8	15.7	16.5	17.3	18.1
87.5°	4.7	4.8	4.9	5.6	6.6	7.3	7.7	8.2	8.8	9.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)