

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: P417417

Luminaire Tested: **SMD4S69SWH - 2700K**

Test Date: 2020-05-18

Test Information

Test Method: LM-79-08
Report Number: P417417
Test Lab:
Test Date: 2020-05-18
Issue Date: 11/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: SMD4S69SWH - 2700K
Description: SMD SELECTABLE CCT 2700K
Light Source: SELECTABLE CCT LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

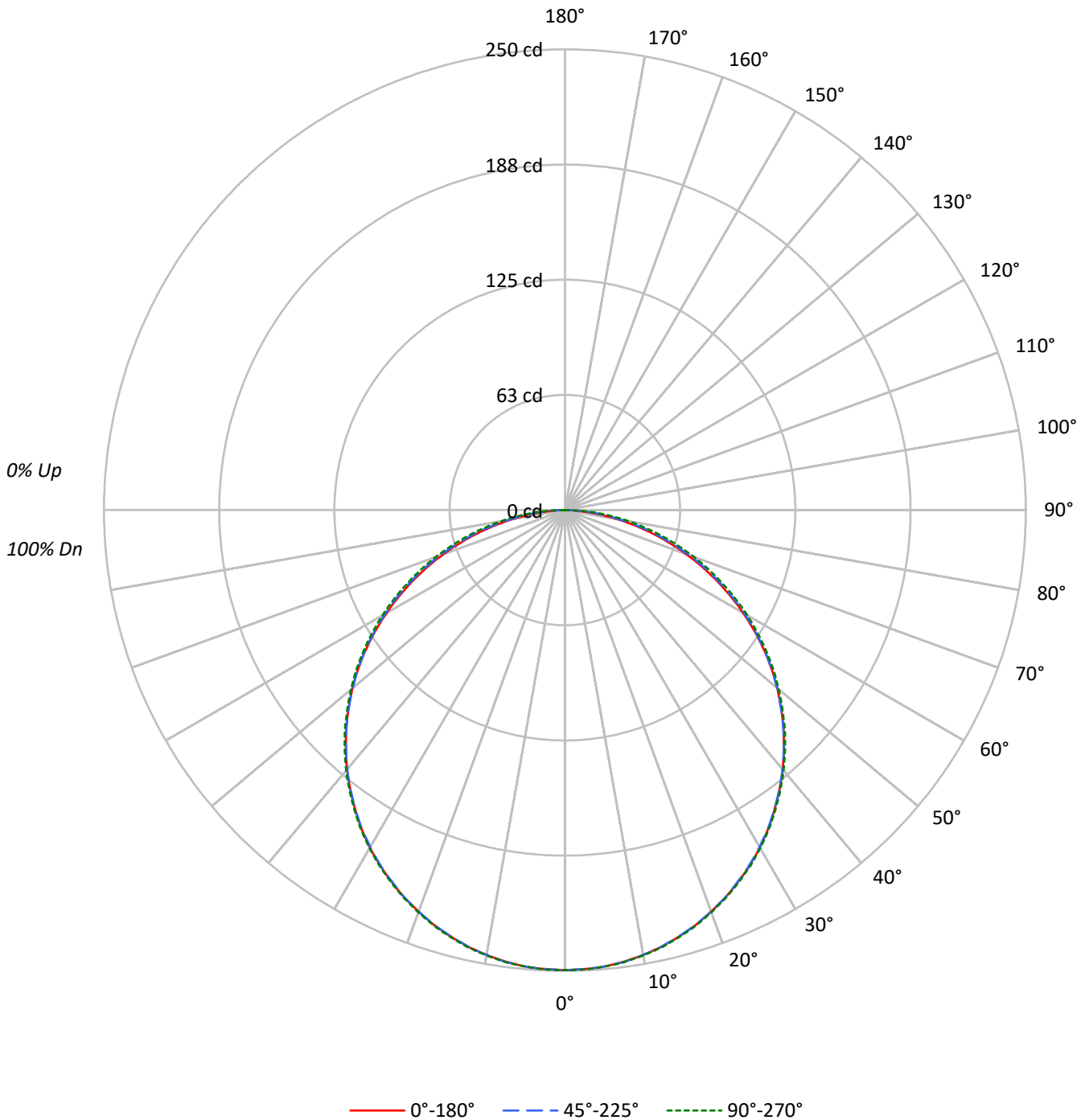
Lumens per Lamp: N/A
Luminaire Lumens: 727.8 lumens
Efficiency: N/A
Efficacy: 79.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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



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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	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°	24671	24671	24671
5°	24666	24666	24666
10°	24600	24600	24630
15°	24508	24498	24549
20°	24393	24387	24435
25°	24266	24239	24310
30°	24139	24094	24185
35°	23928	23904	24000
40°	23716	23696	23819
45°	23442	23421	23582
50°	23127	23119	23312
55°	22695	22738	22988
60°	22081	22259	22595
65°	21307	21646	22078
70°	20259	20808	21559
75°	18866	19668	20890
80°	16735	17959	20207
85°	12702	15877	20073



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.6	3.2
10°-20°	67.6	9.3
20°-30°	102.6	14.1
30°-40°	124.1	17.1
40°-50°	129.4	17.8
50°-60°	118.1	16.2
60°-70°	91.6	12.6
70°-80°	54.7	7.5
80°-90°	16.1	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°	193.8	26.6
0°-40°	317.9	43.7
0°-60°	565.4	77.7
0°-90°	727.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	727.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	250	250	250	250	250	
5°	249	248	249	249	249	24
15°	240	240	239	240	240	68
25°	222	223	222	222	223	103
35°	198	198	198	198	199	124
45°	168	168	168	168	169	129
55°	132	132	132	132	133	118
65°	91	92	93	93	94	90
75°	49	50	52	54	55	52
85°	11	12	14	16	18	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	249.6	249.6	249.6	249.6	249.6	249.6	249.6	249.6	249.6	249.6
2.5°	249.3	249.3	249.4	249.4	249.3	249.3	249.4	249.4	249.5	249.5
5°	248.6	248.6	248.5	248.5	248.6	248.6	248.7	248.7	248.6	248.6
7.5°	247.1	247.1	247.1	247.2	247.3	247.3	247.2	247.1	247.3	247.4
10°	245.1	245.1	245.2	245.2	245.1	245.1	245.2	245.2	245.3	245.4
12.5°	242.6	242.6	242.7	242.7	242.6	242.6	242.7	242.7	242.9	243.0
15°	239.5	239.5	239.6	239.5	239.4	239.4	239.5	239.6	239.8	239.9
17.5°	236.0	236.0	236.1	236.1	236.0	236.0	236.0	236.0	236.2	236.4
20°	231.9	231.9	232.0	231.9	231.8	231.9	232.0	232.1	232.2	232.3
22.5°	227.5	227.5	227.5	227.5	227.5	227.5	227.4	227.5	227.7	227.9
25°	222.5	222.5	222.6	222.5	222.3	222.2	222.3	222.5	222.7	222.9
27.5°	217.3	217.3	217.3	217.2	217.1	217.0	217.1	217.3	217.5	217.7
30°	211.5	211.5	211.4	211.3	211.1	211.1	211.3	211.5	211.7	211.9
32.5°	205.2	205.2	205.1	205.0	204.9	204.9	205.0	205.1	205.4	205.7
35°	198.3	198.3	198.4	198.3	198.1	198.1	198.3	198.5	198.7	198.9
37.5°	191.2	191.2	191.3	191.2	191.1	191.0	191.1	191.2	191.5	191.9
40°	183.8	183.9	184.0	183.9	183.7	183.6	183.7	183.9	184.2	184.6
42.5°	175.8	175.9	176.0	175.9	175.8	175.7	175.8	176.0	176.4	176.8
45°	167.7	167.8	167.9	167.8	167.6	167.5	167.6	167.7	168.2	168.7
47.5°	159.1	159.2	159.4	159.2	159.0	158.9	159.0	159.2	159.7	160.1
50°	150.4	150.5	150.7	150.6	150.4	150.3	150.4	150.5	151.1	151.6
52.5°	141.2	141.4	141.6	141.5	141.3	141.2	141.3	141.5	142.1	142.6
55°	131.7	131.9	132.1	132.1	132.0	131.9	132.0	132.2	132.8	133.4
57.5°	121.7	122.0	122.3	122.3	122.2	122.3	122.5	122.7	123.3	123.8
60°	111.7	111.9	112.1	112.3	112.5	112.7	112.9	113.1	113.7	114.3
62.5°	101.5	101.7	101.9	102.2	102.5	102.8	103.0	103.3	103.9	104.4
65°	91.1	91.3	91.5	91.9	92.4	92.7	93.0	93.3	93.9	94.4
67.5°	80.7	80.8	81.0	81.5	82.1	82.6	83.0	83.4	84.0	84.6
70°	70.1	70.4	70.7	71.2	71.7	72.3	73.0	73.6	74.1	74.6
72.5°	59.6	59.9	60.1	60.7	61.3	62.0	62.7	63.4	64.0	64.5
75°	49.4	49.7	49.9	50.5	51.1	51.9	52.9	53.7	54.2	54.7
77.5°	39.2	39.5	39.7	40.3	41.0	41.8	42.7	43.6	44.2	44.9
80°	29.4	29.6	29.8	30.4	31.1	32.0	33.1	34.1	34.8	35.5
82.5°	20.3	20.4	20.6	21.2	21.9	22.8	23.8	24.7	25.5	26.3
85°	11.2	11.2	11.3	12.2	13.5	14.5	15.4	16.2	16.9	17.7
87.5°	4.6	4.7	4.8	5.5	6.4	7.1	7.5	8.0	8.6	9.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)