

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: P417419

Luminaire Tested: **SMD4S69SWH - 3500K**

Test Date: 2020-05-18

Test Information

Test Method: LM-79-08
Report Number: P417419
Test Lab:
Test Date: 2020-05-18
Issue Date: 11/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: SMD4S69SWH - 3500K
Description: SMD SELECTABLE CCT 3500K
Light Source: SELECTABLE CCT LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

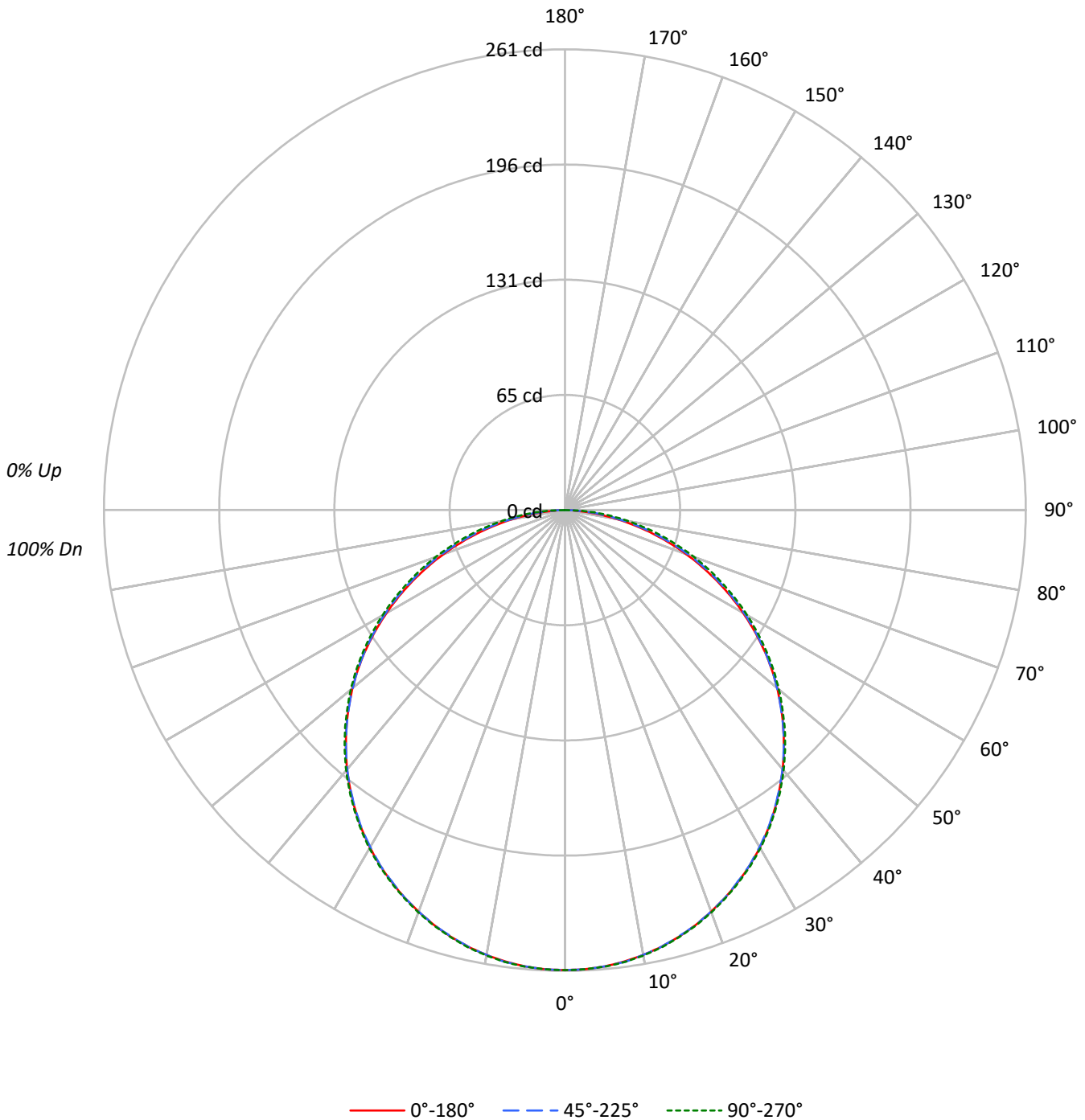
Lumens per Lamp: N/A
Luminaire Lumens: 759.8 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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°	25758	25758	25758
5°	25748	25748	25757
10°	25684	25684	25714
15°	25592	25577	25623
20°	25465	25460	25508
25°	25335	25307	25378
30°	25201	25155	25258
35°	24990	24953	25062
40°	24761	24741	24864
45°	24462	24455	24616
50°	24142	24134	24342
55°	23695	23747	23988
60°	23050	23248	23584
65°	22242	22593	23061
70°	21154	21732	22513
75°	19668	20546	21806
80°	17475	18727	21061
85°	13269	16558	20981



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.7	3.2
10°-20°	70.6	9.3
20°-30°	107.1	14.1
30°-40°	129.6	17.1
40°-50°	135.1	17.8
50°-60°	123.3	16.2
60°-70°	95.6	12.6
70°-80°	57.1	7.5
80°-90°	16.8	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°	202.4	26.6
0°-40°	331.9	43.7
0°-60°	590.3	77.7
0°-90°	759.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	759.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	261	261	261	261	261	
5°	260	259	260	260	260	25
15°	250	250	250	250	250	71
25°	232	232	232	232	233	107
35°	207	207	207	207	208	130
45°	175	175	175	175	176	135
55°	138	138	138	138	139	123
65°	95	96	97	97	99	94
75°	52	52	54	56	57	54
85°	12	12	15	17	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°	260.6	260.6	260.6	260.6	260.6	260.6	260.6	260.6	260.6	260.6
2.5°	260.3	260.3	260.4	260.4	260.3	260.3	260.4	260.4	260.4	260.4
5°	259.5	259.5	259.4	259.4	259.5	259.5	259.6	259.6	259.6	259.6
7.5°	257.9	257.9	258.0	258.1	258.2	258.2	258.1	258.0	258.2	258.3
10°	255.9	255.9	256.0	256.0	255.9	255.9	256.0	256.0	256.1	256.2
12.5°	253.3	253.3	253.4	253.4	253.3	253.3	253.4	253.4	253.6	253.7
15°	250.1	250.1	250.2	250.1	250.0	249.9	250.0	250.1	250.3	250.4
17.5°	246.4	246.4	246.5	246.5	246.4	246.4	246.4	246.4	246.6	246.8
20°	242.1	242.1	242.2	242.1	242.0	242.1	242.2	242.3	242.4	242.5
22.5°	237.5	237.5	237.6	237.6	237.5	237.5	237.4	237.5	237.7	237.9
25°	232.3	232.3	232.4	232.3	232.1	232.0	232.1	232.3	232.5	232.7
27.5°	226.8	226.8	226.9	226.8	226.7	226.6	226.7	226.9	227.1	227.3
30°	220.8	220.8	220.7	220.6	220.4	220.4	220.6	220.8	221.0	221.3
32.5°	214.2	214.2	214.1	214.1	214.0	214.0	214.0	214.1	214.4	214.8
35°	207.1	207.1	207.1	207.0	206.8	206.8	207.0	207.2	207.4	207.7
37.5°	199.6	199.6	199.7	199.6	199.5	199.4	199.5	199.6	200.0	200.4
40°	191.9	192.0	192.1	192.0	191.8	191.7	191.8	192.0	192.3	192.7
42.5°	183.6	183.7	183.8	183.7	183.5	183.5	183.6	183.8	184.2	184.6
45°	175.0	175.1	175.3	175.2	175.0	174.9	175.0	175.1	175.6	176.1
47.5°	166.1	166.2	166.4	166.2	166.0	165.9	166.0	166.2	166.7	167.2
50°	157.0	157.1	157.3	157.2	157.0	156.9	157.0	157.2	157.8	158.3
52.5°	147.4	147.6	147.8	147.8	147.6	147.5	147.6	147.7	148.3	148.9
55°	137.5	137.7	137.9	137.9	137.8	137.8	137.9	138.1	138.7	139.2
57.5°	127.1	127.4	127.6	127.7	127.6	127.7	127.9	128.1	128.7	129.3
60°	116.6	116.9	117.1	117.3	117.5	117.7	117.9	118.1	118.7	119.3
62.5°	106.0	106.2	106.4	106.7	107.0	107.3	107.5	107.8	108.4	109.0
65°	95.1	95.3	95.5	95.9	96.4	96.8	97.1	97.4	98.0	98.6
67.5°	84.2	84.4	84.6	85.1	85.7	86.2	86.7	87.2	87.8	88.4
70°	73.2	73.6	73.9	74.4	74.9	75.5	76.2	76.8	77.4	77.9
72.5°	62.2	62.5	62.7	63.3	64.0	64.8	65.5	66.2	66.8	67.4
75°	51.5	51.9	52.2	52.8	53.4	54.2	55.2	56.0	56.6	57.1
77.5°	40.9	41.2	41.5	42.1	42.8	43.6	44.6	45.5	46.2	46.9
80°	30.7	30.9	31.1	31.7	32.4	33.4	34.5	35.6	36.3	37.0
82.5°	21.2	21.3	21.5	22.1	22.9	23.8	24.8	25.8	26.7	27.5
85°	11.7	11.7	11.8	12.8	14.1	15.1	16.0	16.9	17.7	18.5
87.5°	4.8	4.9	5.1	5.8	6.7	7.4	7.9	8.4	9.0	9.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)