

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: P990656

Luminaire Tested: **ML2ALSFL9FS1E-TIR1D55WFL-TL2SDMW-550LM-5000K**

Issue Date: 5/13/2025

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P990656
 Test Lab: Cooper Lighting Solutions
 Issue Date: 5/13/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML2ALSFL9FS1E-TIR1D55WFL-TL2SDMW-550LM-5000K
 Description: 2IN SQUARE ML FLEX ADJUSTABLE, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE TRIM
 Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
 Ballast/Driver: -

Summary

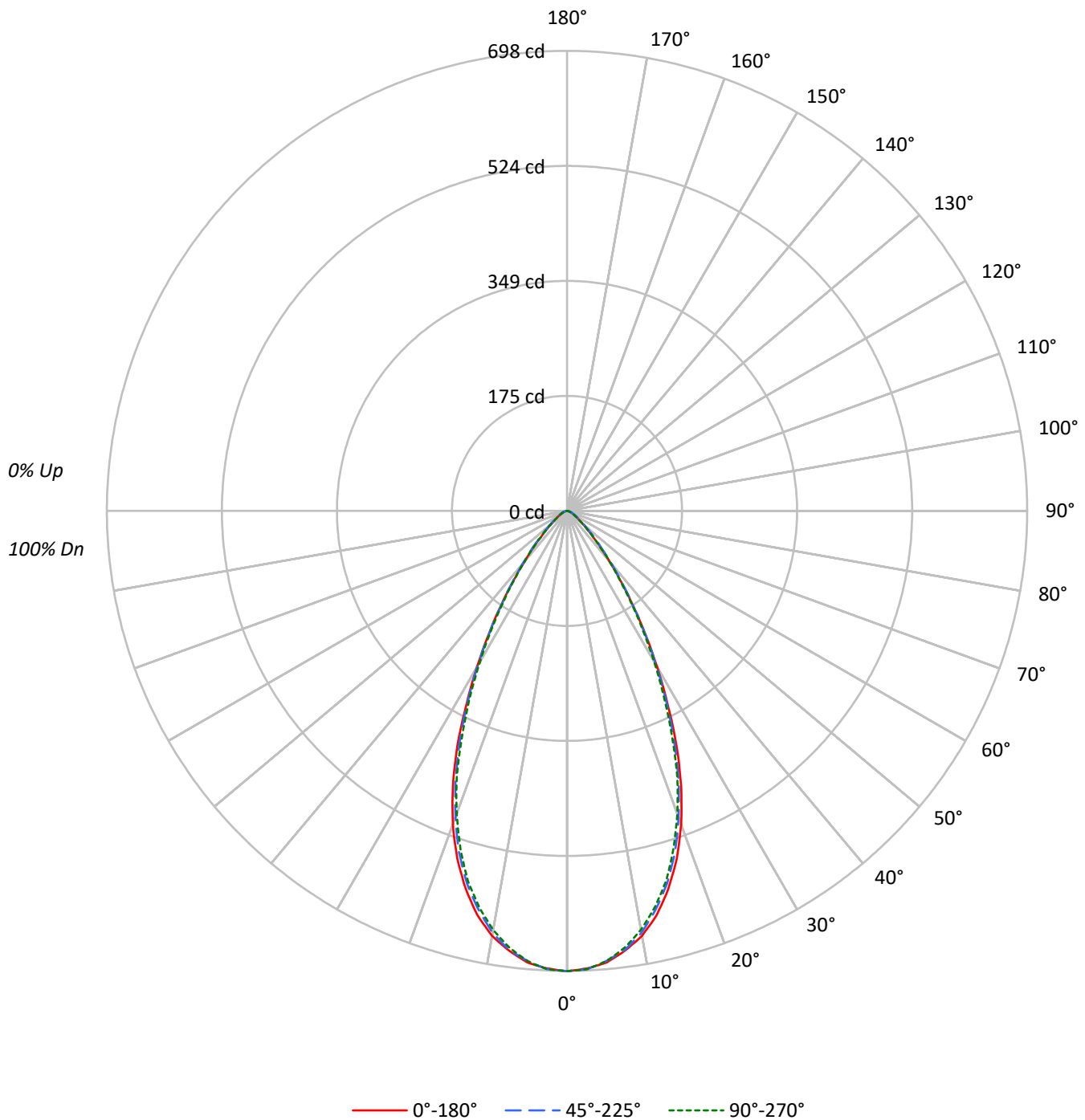
Lumens per Lamp: N/A
 Luminaire Lumens: 591.5 lumens
 Efficiency: N/A
 Efficacy: 77.8 lumens/watt
 Spacing Criteria (0/90/45): 0.84 / 0.82 / 0.82
 Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
 CIE Type: Direct

Input Watts (W): 7.6
 Input Voltage (V): NR
 Input Current (Ain): 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

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	GONIO 1 IN0055	4/22/2021	10/22/2021
Power Meter	XITRON 2801 IN0197	12/1/2020	12/1/2021
AC Power Source	CHROMA 61505 IN0196	12/1/2020	12/1/2021
DC Power Supply	AGILENT E3634A IN0198	11/30/2020	11/30/2021
Room Thermometer	ONSET IN0143	12/1/2020	12/1/2021

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Luminous Intensity Polar Plot



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CATALOG NUMBER: ML2ALSFL9FS1E-TIR1D55WFL-TL2SDMW-550LM-5000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	113	110	108	105	111	108	106	104	104	102	100		100	99	97		97
2	107	102	98	94	105	100	96	93	97	94	91		94	91	89		91
3	101	95	89	85	99	93	88	85	91	87	83		88	85	82		86
4	96	88	82	78	94	87	82	77	85	80	77		83	79	76		81
5	91	82	76	72	89	81	76	71	80	75	71		78	73	70		76
6	86	77	71	66	85	76	70	66	75	70	66		73	69	65		72
7	82	72	66	62	81	72	66	62	70	65	61		69	64	61		68
8	78	68	62	58	77	68	62	58	66	61	57		65	61	57		64
9	74	64	58	54	73	64	58	54	63	58	54		62	57	54		61
10	71	61	55	51	70	60	55	51	60	54	51		59	54	51		58

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	270630	270630	270630
5°	267618	266723	266723
10°	257610	255800	253990
15°	238174	234925	233079
20°	208782	203999	201648
25°	168244	164311	160847
30°	122018	120989	117902
35°	81648	81648	79472
40°	50635	52962	50635
45°	30908	33428	30908
50°	19412	21521	19412
55°	13241	14795	13241
60°	9842	11625	9842
65°	8435	9536	8435
70°	6571	7818	6571
75°	5240	6887	5240
80°	2678	2678	2678
85°	0	0	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.4	10.9
10°-20°	162.6	27.5
20°-30°	174.6	29.5
30°-40°	109.0	18.4
40°-50°	47.4	8.0
50°-60°	19.5	3.3
60°-70°	9.6	1.6
70°-80°	3.9	0.7
80°-90°	0.5	0.1
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°	401.6	67.9
0°-40°	510.6	86.3
0°-60°	577.5	97.6
0°-90°	591.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	591.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	698	698	698	698	698	
5°	688	688	686	687	686	65
15°	594	592	586	582	581	165
25°	394	390	384	380	376	178
35°	173	173	173	169	168	110
45°	56	59	61	58	56	46
55°	20	21	22	21	20	19
65°	9	9	10	9	9	9
75°	4	4	5	4	4	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	698.4	698.4	698.4	698.4	698.4
2.5°	694.9	694.9	696.1	696.1	696.1
5°	688.0	688.0	685.7	686.9	685.7
7.5°	673.1	673.1	671.9	669.6	668.5
10°	654.7	652.4	650.1	646.6	645.5
12.5°	628.2	624.8	620.2	619.0	615.6
15°	593.7	592.5	585.6	582.2	581.0
17.5°	553.4	551.1	544.2	538.5	537.3
20°	506.3	501.6	494.7	490.1	489.0
22.5°	452.2	448.7	441.8	437.2	437.2
25°	393.5	390.0	384.3	379.7	376.2
27.5°	330.2	330.2	325.6	321.0	318.7
30°	272.7	272.7	270.4	265.8	263.5
32.5°	219.8	219.8	218.6	214.0	212.9
35°	172.6	172.6	172.6	169.1	168.0
37.5°	133.5	133.5	135.8	131.2	130.0
40°	100.1	102.4	104.7	100.1	100.1
42.5°	75.9	78.2	79.4	77.1	75.9
45°	56.4	58.7	61.0	57.5	56.4
47.5°	42.6	44.9	47.2	43.7	42.6
50°	32.2	34.5	35.7	33.4	32.2
52.5°	25.3	26.5	28.8	25.3	24.2
55°	19.6	20.7	21.9	20.7	19.6
57.5°	16.1	17.3	18.4	16.1	15.0
60°	12.7	13.8	15.0	13.8	12.7
62.5°	10.4	11.5	12.7	11.5	10.4
65°	9.2	9.2	10.4	9.2	9.2
67.5°	6.9	8.1	8.1	8.1	6.9
70°	5.8	6.9	6.9	6.9	5.8
72.5°	4.6	4.6	5.8	4.6	4.6
75°	3.5	3.5	4.6	3.5	3.5
77.5°	1.2	2.3	2.3	2.3	2.3
80°	1.2	1.2	1.2	1.2	1.2
82.5°	1.2	1.2	1.2	1.2	1.2
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)