

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: P990699

Luminaire Tested: **ML2ALSFLD2W1E-TIR1D55WFL-TL2SDMW-400LM-3000K**

Issue Date: 5/13/2025

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P990699
 Test Lab: Cooper Lighting Solutions
 Issue Date: 5/13/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML2ALSFLD2W1E-TIR1D55WFL-TL2SDMW-400LM-3000K
 Description: 2IN SQUARE ML FLEX ADJUSTABLE, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE TRIM
 Light Source: (1) D2W LED 90CRI / 3000K CCT
 Ballast/Driver: -

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 438.7 lumens
 Efficiency: N/A
 Efficacy: 71.9 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

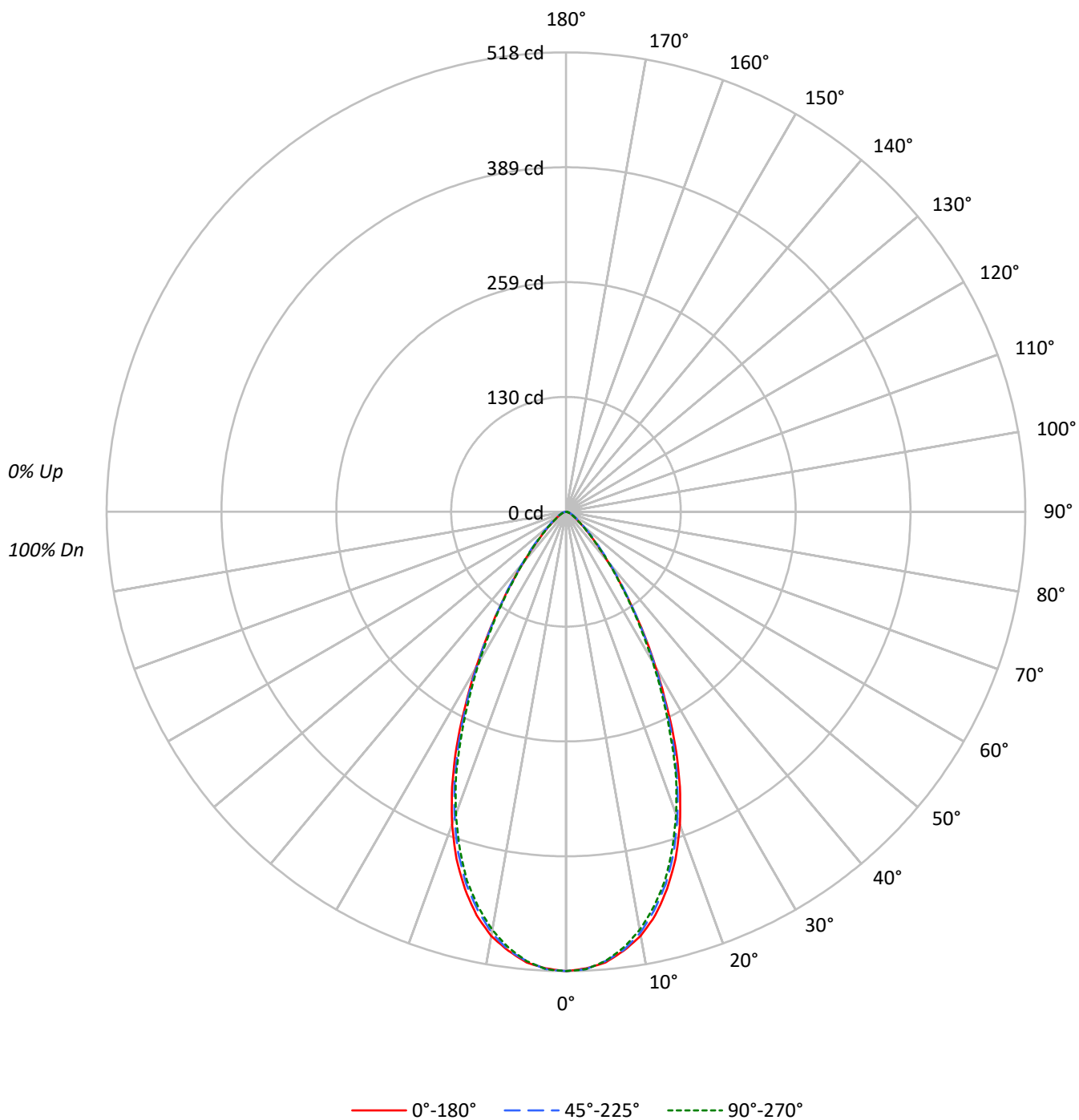
Input Watts (W): 6.1
 Input Voltage (V): NR
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 25 FT

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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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	74	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°	200725	200725	200725
5°	198496	197835	197835
10°	191073	189695	188358
15°	176635	174268	172864
20°	154844	151298	149566
25°	124762	121854	119289
30°	90474	89713	87431
35°	60550	60550	58942
40°	37534	39304	37534
45°	22907	24770	22907
50°	14408	15975	14408
55°	9796	10944	9796
60°	7285	8602	7285
65°	6235	7060	6235
70°	4872	5778	4872
75°	3893	5090	3893
80°	2008	2008	2008
85°	0	0	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.7	10.9
10°-20°	120.6	27.5
20°-30°	129.5	29.5
30°-40°	80.8	18.4
40°-50°	35.2	8.0
50°-60°	14.5	3.3
60°-70°	7.1	1.6
70°-80°	2.9	0.7
80°-90°	0.4	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°	297.9	67.9
0°-40°	378.7	86.3
0°-60°	428.3	97.6
0°-90°	438.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	438.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	518	518	518	518	518	
5°	510	510	509	509	509	48
15°	440	440	434	432	431	122
25°	292	289	285	282	279	132
35°	128	128	128	125	125	81
45°	42	44	45	43	42	34
55°	14	15	16	15	14	14
65°	7	7	8	7	7	7
75°	3	3	3	3	3	2
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°	518.0	518.0	518.0	518.0	518.0
2.5°	515.4	515.4	516.3	516.3	516.3
5°	510.3	510.3	508.6	509.4	508.6
7.5°	499.2	499.2	498.4	496.6	495.8
10°	485.6	483.8	482.1	479.6	478.7
12.5°	465.9	463.4	460.0	459.1	456.5
15°	440.3	439.5	434.4	431.8	430.9
17.5°	410.5	408.8	403.6	399.4	398.5
20°	375.5	372.1	366.9	363.5	362.7
22.5°	335.4	332.8	327.7	324.3	324.3
25°	291.8	289.3	285.0	281.6	279.0
27.5°	244.9	244.9	241.5	238.1	236.4
30°	202.2	202.2	200.5	197.1	195.4
32.5°	163.0	163.0	162.1	158.7	157.9
35°	128.0	128.0	128.0	125.4	124.6
37.5°	99.0	99.0	100.7	97.3	96.4
40°	74.2	75.9	77.7	74.2	74.2
42.5°	56.3	58.0	58.9	57.2	56.3
45°	41.8	43.5	45.2	42.7	41.8
47.5°	31.6	33.3	35.0	32.4	31.6
50°	23.9	25.6	26.5	24.7	23.9
52.5°	18.8	19.6	21.3	18.8	17.9
55°	14.5	15.4	16.2	15.4	14.5
57.5°	11.9	12.8	13.7	11.9	11.1
60°	9.4	10.2	11.1	10.2	9.4
62.5°	7.7	8.5	9.4	8.5	7.7
65°	6.8	6.8	7.7	6.8	6.8
67.5°	5.1	6.0	6.0	6.0	5.1
70°	4.3	5.1	5.1	5.1	4.3
72.5°	3.4	3.4	4.3	3.4	3.4
75°	2.6	2.6	3.4	2.6	2.6
77.5°	0.9	1.7	1.7	1.7	1.7
80°	0.9	0.9	0.9	0.9	0.9
82.5°	0.9	0.9	0.9	0.9	0.9
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)