

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: P990668

Luminaire Tested: **ML2ALSFLD2W1E-TIR1D25NFL-TL2SDMB-400LM-2700K**

Issue Date: 5/13/2025

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P990668
 Test Lab: Cooper Lighting Solutions
 Issue Date: 5/13/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML2ALSFLD2W1E-TIR1D25NFL-TL2SDMB-400LM-2700K
 Description: 2IN SQUARE ML FLEX ADJUSTABLE, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM
 Light Source: (1) D2W LED 90CRI / 2700K CCT
 Ballast/Driver: -

Summary

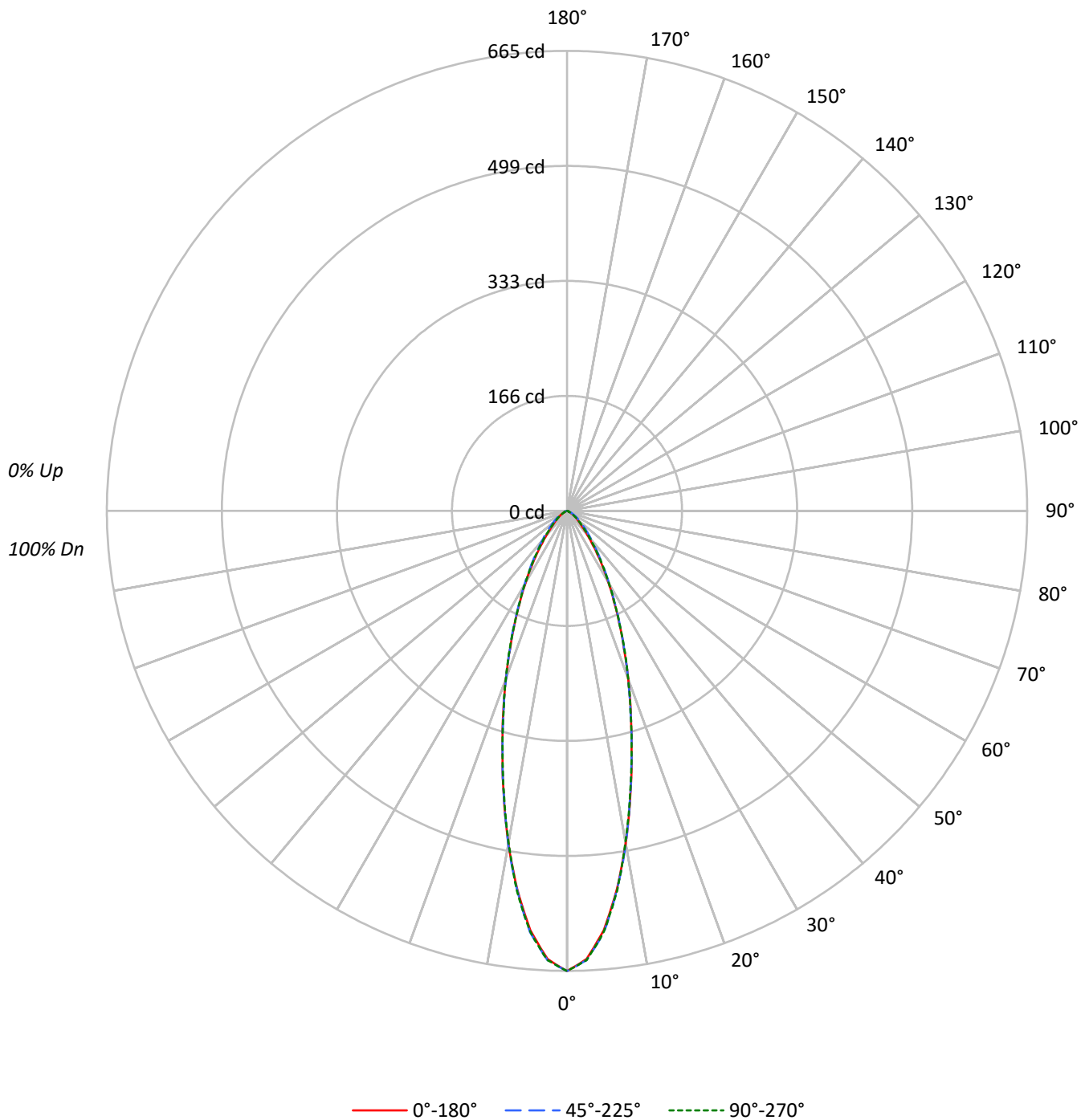
Lumens per Lamp: N/A
 Luminaire Lumens: 335.0 lumens
 Efficiency: N/A
 Efficacy: 54.9 lumens/watt
 Spacing Criteria (0/90/45): 0.52 / 0.52 / 0.59
 Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
 CIE Type: Direct

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	111	108	106	111	108	106	104	104	103	101		101	99	98		97
2	108	103	99	95	106	101	97	94	98	95	92		95	92	90		92
3	102	96	91	87	100	94	90	86	92	88	85		89	86	83		87
4	97	90	84	80	95	89	83	79	86	82	79		84	81	78		83
5	92	84	78	74	91	83	78	74	81	77	73		80	76	72		78
6	88	79	73	69	87	78	73	69	77	72	68		76	71	68		74
7	84	75	69	65	83	74	69	65	73	68	64		72	67	64		71
8	80	71	65	61	79	70	65	61	69	64	61		68	64	60		67
9	77	67	62	58	76	67	61	58	66	61	57		65	61	57		64
10	74	64	59	55	73	64	58	55	63	58	55		62	58	54		61

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	257765	257765	257765
5°	236616	237861	237550
10°	192056	192371	191427
15°	144341	144341	144341
20°	106432	106102	106432
25°	76063	76747	76405
30°	53425	54857	54141
35°	35999	39027	37513
40°	23522	27973	25545
45°	15837	20660	17153
50°	12057	15433	12057
55°	8647	11890	8647
60°	5580	8680	5580
65°	3668	5868	3668
70°	2719	3626	2719
75°	1198	2395	1198
80°	0	0	0
85°	0	0	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.3	16.2
10°-20°	100.1	29.9
20°-30°	82.8	24.7
30°-40°	51.0	15.2
40°-50°	26.8	8.0
50°-60°	13.4	4.0
60°-70°	5.2	1.6
70°-80°	1.4	0.4
80°-90°	0.0	0.0
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°	237.2	70.8
0°-40°	288.2	86.0
0°-60°	328.4	98.0
0°-90°	335.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	335.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	665	665	665	665	665	
5°	608	609	612	611	611	54
15°	360	360	360	361	360	100
25°	178	180	180	179	179	82
35°	76	80	82	81	79	49
45°	29	32	38	34	31	23
55°	13	14	18	14	13	12
65°	4	5	6	5	4	4
75°	1	1	2	2	1	1
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°	665.2	665.2	665.2	665.2	665.2
2.5°	648.4	649.2	650.0	650.0	650.0
5°	608.3	609.1	611.5	610.7	610.7
7.5°	551.4	551.4	553.0	555.4	553.8
10°	488.1	488.1	488.9	487.3	486.5
12.5°	422.4	422.4	421.5	423.2	420.7
15°	359.8	359.8	359.8	360.6	359.8
17.5°	306.1	305.3	305.3	304.5	305.3
20°	258.1	258.1	257.3	257.3	258.1
22.5°	214.8	214.8	215.6	215.6	216.4
25°	177.9	179.5	179.5	178.7	178.7
27.5°	145.9	147.5	148.3	147.5	147.5
30°	119.4	120.2	122.6	121.0	121.0
32.5°	96.2	98.6	100.2	99.4	98.6
35°	76.1	80.1	82.5	80.9	79.3
37.5°	59.3	64.1	67.3	65.7	63.3
40°	46.5	50.5	55.3	52.9	50.5
42.5°	36.1	40.1	45.7	42.5	40.1
45°	28.9	32.1	37.7	34.5	31.3
47.5°	24.0	26.4	31.3	28.0	25.6
50°	20.0	21.6	25.6	22.4	20.0
52.5°	16.0	17.6	20.8	18.4	16.0
55°	12.8	14.4	17.6	14.4	12.8
57.5°	9.6	11.2	14.4	11.2	9.6
60°	7.2	8.8	11.2	8.8	7.2
62.5°	5.6	6.4	8.8	6.4	5.6
65°	4.0	4.8	6.4	4.8	4.0
67.5°	3.2	3.2	4.8	3.2	3.2
70°	2.4	2.4	3.2	2.4	2.4
72.5°	1.6	1.6	2.4	1.6	1.6
75°	0.8	0.8	1.6	1.6	0.8
77.5°	0.8	0.8	0.8	0.8	0.8
80°	0.0	0.0	0.0	0.8	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
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)