

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: P990696

Luminaire Tested: **ML2ALSFLD2W1E-TIR1D55WFL-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: P990696
 Test Lab: Cooper Lighting Solutions
 Issue Date: 5/13/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML2ALSFLD2W1E-TIR1D55WFL-TL2SDMB-400LM-2700K
 Description: 2IN SQUARE ML FLEX ADJUSTABLE, SELECTABLE CCT, WITH 55D TIR, MATTE BLACK TRIM
 Light Source: (1) D2W LED 90CRI / 2700K CCT
 Ballast/Driver: -

Summary

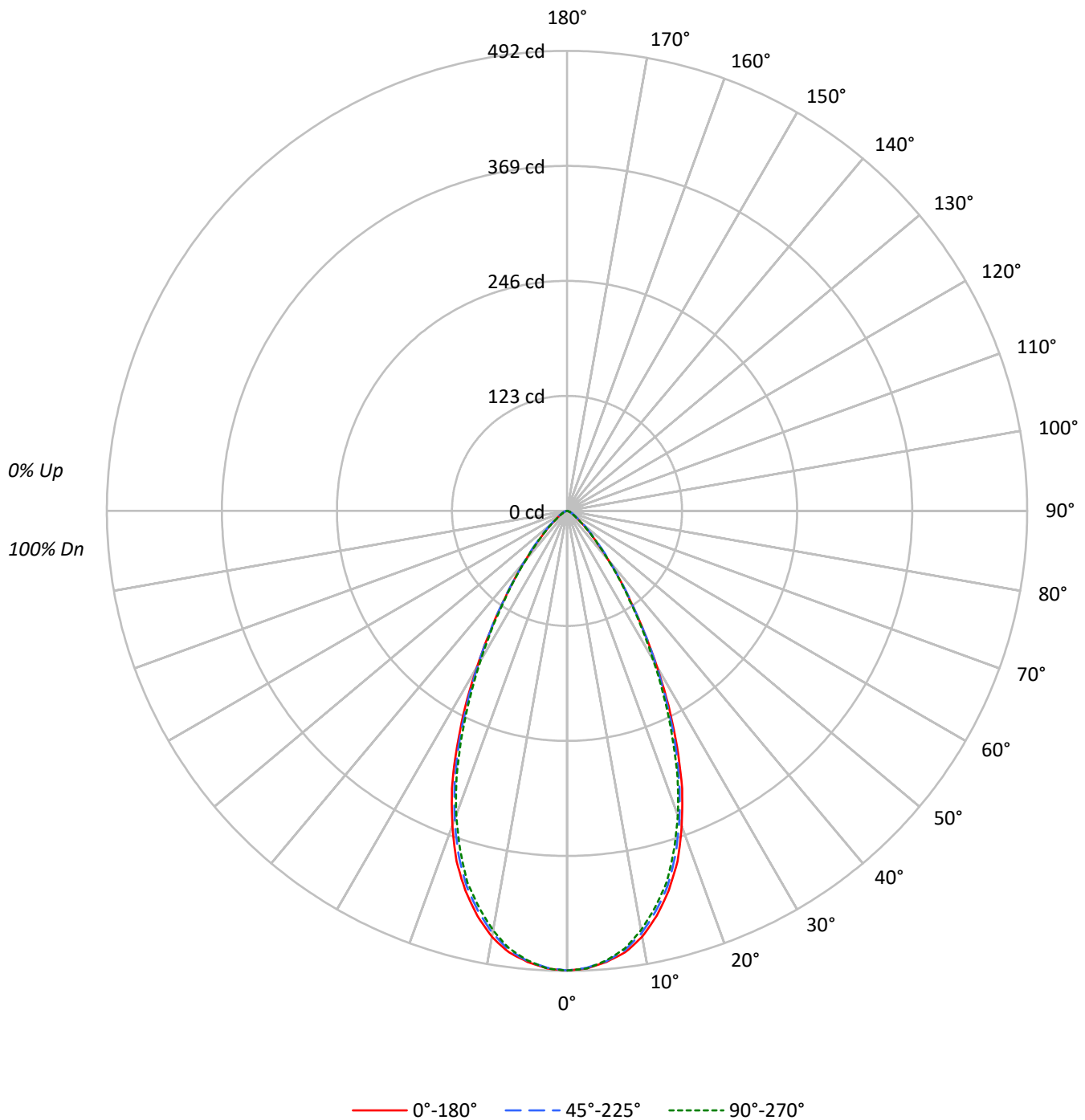
Lumens per Lamp: N/A
 Luminaire Lumens: 410.6 lumens
 Efficiency: N/A
 Efficacy: 67.3 lumens/watt
 Spacing Criteria (0/90/45): 0.85 / 0.82 / 0.82
 Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
 CIE Type: Direct

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				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	113	110	108	106	111	108	106	104	104	102	101		100	99	98		97	96	95		93
2	107	102	98	95	105	101	97	94	97	94	92		94	92	90		92	90	88		86
3	102	95	90	86	100	94	89	85	91	87	84		89	85	83		86	84	81		80
4	96	89	83	79	95	88	82	78	85	81	77		83	79	76		81	78	75		74
5	91	83	77	73	90	82	76	72	80	75	72		78	74	71		77	73	70		69
6	87	78	72	67	85	77	71	67	75	70	67		74	69	66		73	69	66		64
7	83	73	67	63	81	72	67	62	71	66	62		70	65	62		69	65	61		60
8	78	69	63	59	77	68	62	58	67	62	58		66	61	58		65	61	58		56
9	75	65	59	55	74	64	59	55	64	58	55		63	58	54		62	57	54		53
10	71	61	56	52	70	61	55	52	60	55	51		59	55	51		59	54	51		50

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	190456	190456	190456
5°	188344	188033	187722
10°	182023	180449	179190
15°	168531	166605	165001
20°	147793	144824	142803
25°	118947	116552	113816
30°	85731	85373	82509
35°	56529	56908	54968
40°	34853	36117	34448
45°	20660	22413	20660
50°	12057	13986	12539
55°	8107	9188	7567
60°	5580	6820	5580
65°	4401	5135	4401
70°	3626	3626	3626
75°	1198	2395	2395
80°	0	1785	0
85°	0	0	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.4	11.1
10°-20°	115.0	28.0
20°-30°	123.6	30.1
30°-40°	76.0	18.5
40°-50°	31.9	7.8
50°-60°	11.8	2.9
60°-70°	5.2	1.3
70°-80°	1.7	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°	284.0	69.2
0°-40°	360.0	87.7
0°-60°	403.7	98.3
0°-90°	410.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	410.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	492	492	492	492	492	
5°	484	483	483	483	483	46
15°	420	418	415	411	411	117
25°	278	277	273	269	266	126
35°	120	120	120	118	116	76
45°	38	39	41	39	38	31
55°	12	13	14	12	11	11
65°	5	5	6	5	5	5
75°	1	2	2	2	2	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°	491.5	491.5	491.5	491.5	491.5
2.5°	489.9	489.0	489.0	489.9	489.9
5°	484.2	483.4	483.4	483.4	482.6
7.5°	476.2	474.6	473.8	472.2	472.2
10°	462.6	460.2	458.6	456.2	455.4
12.5°	443.4	441.7	438.5	436.1	434.5
15°	420.1	418.5	415.3	411.3	411.3
17.5°	392.8	390.4	385.6	380.8	380.0
20°	358.4	356.8	351.2	347.1	346.3
22.5°	321.5	319.1	313.5	310.3	308.7
25°	278.2	276.6	272.6	269.4	266.2
27.5°	234.9	233.3	230.1	226.1	224.5
30°	191.6	191.6	190.8	186.8	184.4
32.5°	153.1	153.9	153.1	149.9	149.1
35°	119.5	120.3	120.3	117.9	116.2
37.5°	93.0	93.0	93.0	91.4	90.6
40°	68.9	70.6	71.4	69.7	68.1
42.5°	51.3	52.9	54.5	52.1	51.3
45°	37.7	39.3	40.9	39.3	37.7
47.5°	28.1	28.9	31.3	28.9	28.1
50°	20.0	21.6	23.2	21.6	20.8
52.5°	15.2	16.0	17.6	16.0	15.2
55°	12.0	12.8	13.6	12.0	11.2
57.5°	9.6	9.6	10.4	9.6	8.8
60°	7.2	8.0	8.8	8.0	7.2
62.5°	5.6	6.4	6.4	6.4	5.6
65°	4.8	4.8	5.6	4.8	4.8
67.5°	4.0	4.0	4.8	4.0	4.0
70°	3.2	3.2	3.2	3.2	3.2
72.5°	2.4	2.4	2.4	2.4	2.4
75°	0.8	1.6	1.6	1.6	1.6
77.5°	0.8	0.8	0.8	0.8	0.8
80°	0.0	0.0	0.8	0.0	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)