

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: P990681

Luminaire Tested: **ML2ALSFLD2W1E-TIR1D40FL-TL2RDSL-400LM-3000K**

Issue Date: 5/13/2025

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
Report Number: P990681
Test Lab: Cooper Lighting Solutions
Issue Date: 5/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML2ALSFLD2W1E-TIR1D40FL-TL2RDSL-400LM-3000K
Description: 2IN ROUND ML FLEX ADJUSTABLE, SELECTABLE CCT, WITH 40D TIR, METALLIC SILVER TRIM
Light Source: (1) D2W LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 437.2 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.69
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

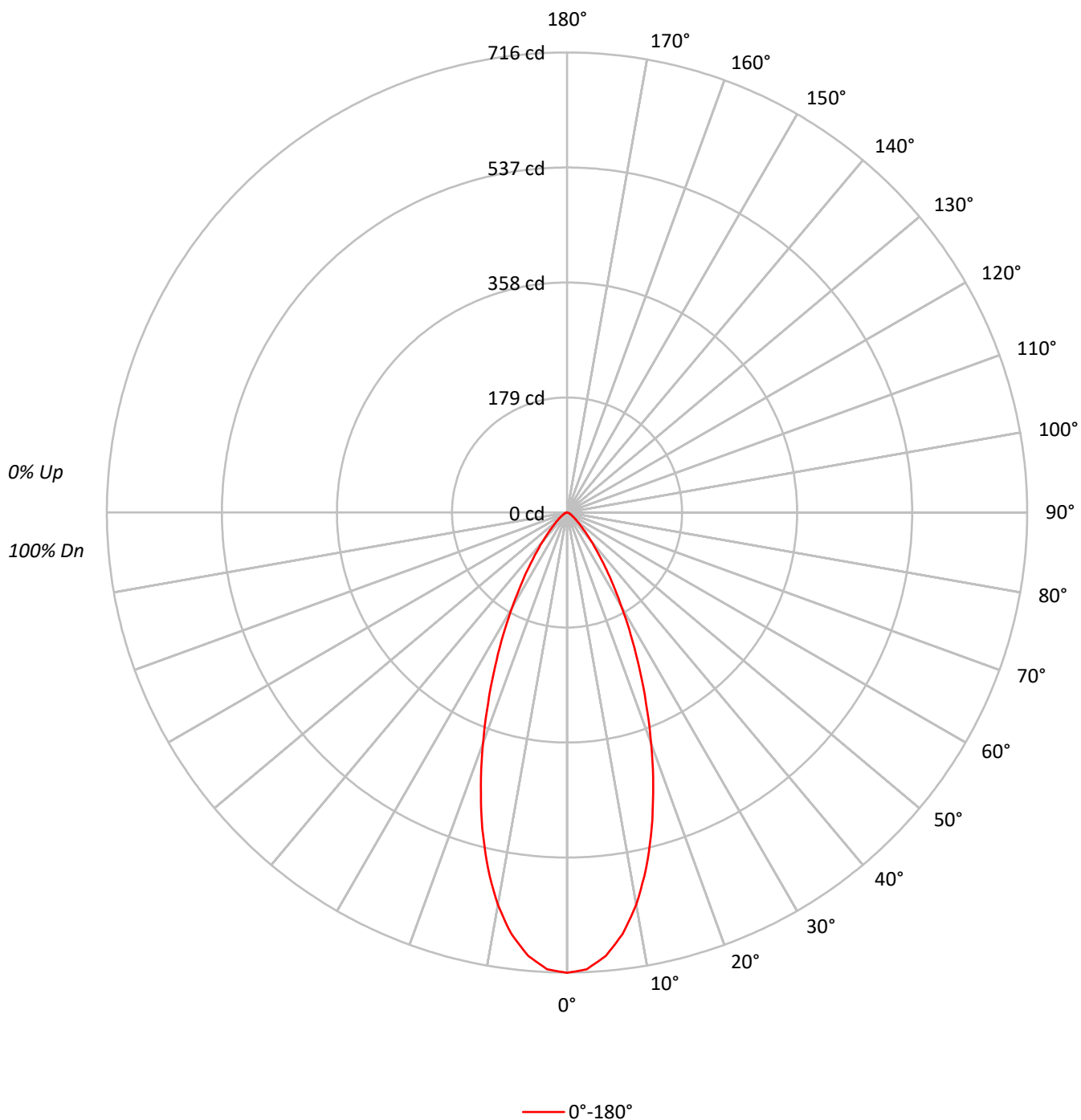
Input Watts (W): 6.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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	114	111	108	106	111	109	106	104	105	103	101		101	99	98		97
2	108	103	99	96	106	102	98	95	98	95	93		95	93	91		93
3	103	96	92	88	101	95	91	87	92	89	86		90	87	84		88
4	98	90	85	81	96	89	84	80	87	83	79		85	82	79		83
5	93	85	79	75	92	84	79	75	82	78	74		81	77	74		79
6	89	80	74	70	87	79	74	70	78	73	70		77	72	69		75
7	85	76	70	66	83	75	70	66	74	69	65		73	68	65		72
8	81	72	66	62	80	71	66	62	70	65	62		69	65	61		68
9	77	68	63	59	76	68	62	59	67	62	58		66	61	58		65
10	74	65	59	56	73	65	59	56	64	59	55		63	58	55		62

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	353506
5°	343020
10°	310614
15°	259989
20°	200882
25°	144098
30°	96850
35°	61736
40°	37935
45°	23235
50°	15044
55°	10322
60°	7598
65°	5954
70°	4905
75°	3241
80°	2557
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.8	14.6
10°-20°	140.0	32.0
20°-30°	121.8	27.9
30°-40°	65.8	15.1
40°-50°	27.2	6.2
50°-60°	11.2	2.6
60°-70°	5.4	1.2
70°-80°	1.9	0.4
80°-90°	0.1	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°	325.6	74.5
0°-40°	391.4	89.5
0°-60°	429.8	98.3
0°-90°	437.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	437.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	716	
5°	693	64
15°	509	140
25°	265	122
35°	102	66
45°	33	27
55°	12	11
65°	5	5
75°	2	2
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	716.5
2.5°	711.4
5°	692.6
7.5°	661.9
10°	620.0
12.5°	567.9
15°	509.0
17.5°	445.8
20°	382.6
22.5°	321.1
25°	264.7
27.5°	215.2
30°	170.0
32.5°	133.2
35°	102.5
37.5°	77.7
40°	58.9
42.5°	44.4
45°	33.3
47.5°	25.6
50°	19.6
52.5°	15.4
55°	12.0
57.5°	9.4
60°	7.7
62.5°	6.8
65°	5.1
67.5°	4.3
70°	3.4
72.5°	2.6
75°	1.7
77.5°	0.9
80°	0.9
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)