

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: P990554

Luminaire Tested: **ML2ALSFL9FS1E-TIR1D25NFL-TL2RDMB-200LM-3500K**

Issue Date: 5/13/2025

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
Report Number: P990554
Test Lab: Cooper Lighting Solutions
Issue Date: 5/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML2ALSFL9FS1E-TIR1D25NFL-TL2RDMB-200LM-3500K
Description: 2IN ROUND ML FLEX ADJUSTABLE, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

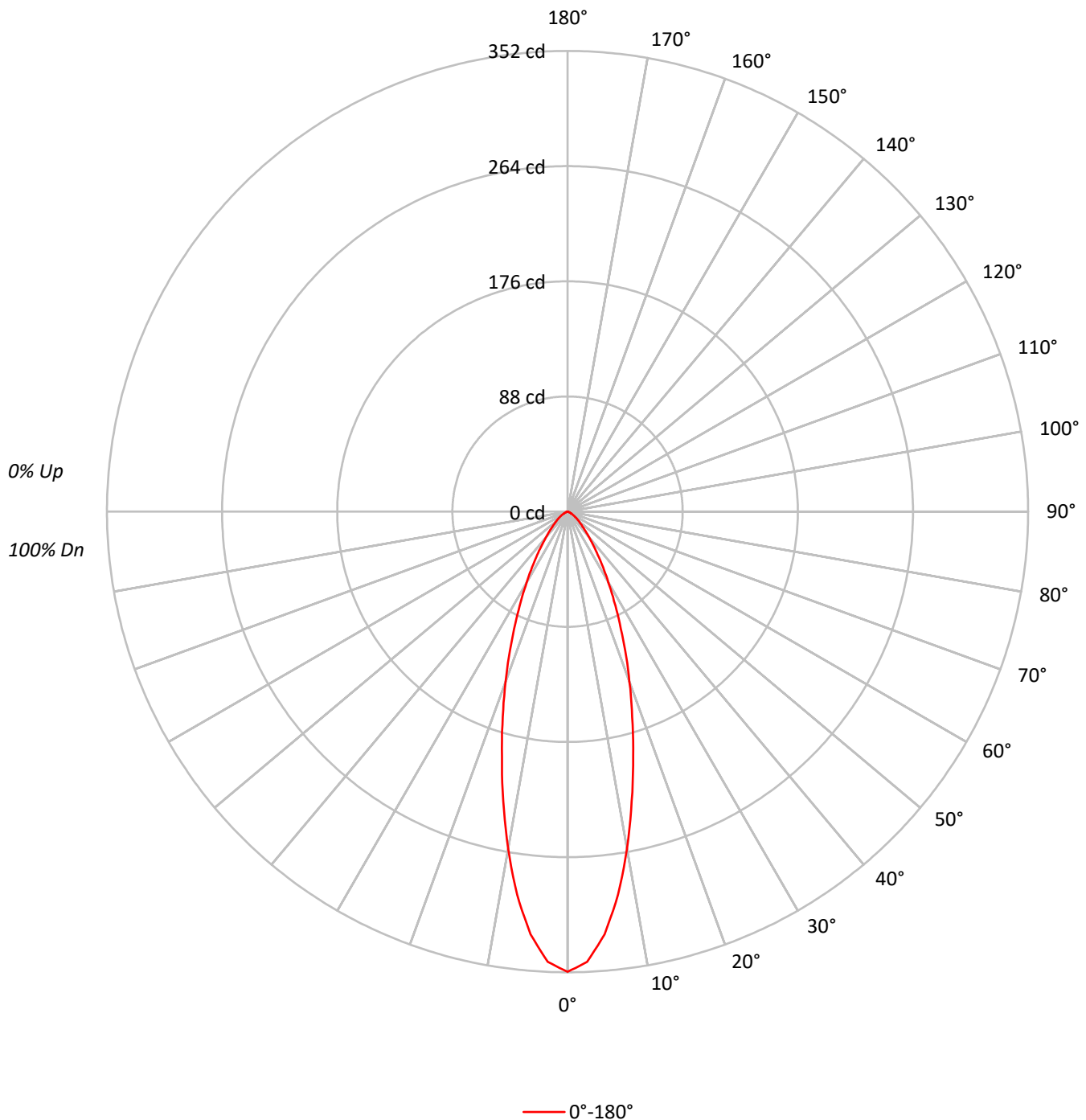
Lumens per Lamp: N/A
Luminaire Lumens: 175.5 lumens
Efficiency: N/A
Efficacy: 48.7 lumens/watt
Spacing Criteria (0/90/45): 0.53 / 0.53 / 0.6
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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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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	109	106	104	104	103	101		101	99	98		97
2	108	103	99	96	106	101	98	94	98	95	92		95	93	90		92
3	103	96	91	87	101	95	90	86	92	88	85		90	86	84		87
4	97	90	85	80	96	89	84	80	87	82	79		85	81	78		83
5	93	85	79	75	91	84	78	74	82	77	74		80	76	73		79
6	88	80	74	70	87	79	73	69	77	73	69		76	72	68		75
7	84	75	70	65	83	75	69	65	73	69	65		72	68	65		71
8	81	71	66	62	79	71	65	62	70	65	61		69	64	61		68
9	77	68	62	58	76	67	62	58	67	62	58		66	61	58		65
10	74	65	59	55	73	64	59	55	64	59	55		63	58	55		62

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	173472
5°	160515
10°	130959
15°	98939
20°	72614
25°	51335
30°	35493
35°	24273
40°	16488
45°	11513
50°	8443
55°	6279
60°	4539
65°	3152
70°	2020
75°	1716
80°	0
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.9	16.5
10°-20°	53.8	30.7
20°-30°	43.7	24.9
30°-40°	25.7	14.7
40°-50°	13.1	7.5
50°-60°	6.7	3.8
60°-70°	2.6	1.5
70°-80°	0.8	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°	126.4	72.1
0°-40°	152.1	86.7
0°-60°	172.0	98.0
0°-90°	175.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	175.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	352	
5°	324	29
15°	194	54
25°	94	44
35°	40	26
45°	16	13
55°	7	7
65°	3	3
75°	1	1
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	351.6
2.5°	344.3
5°	324.1
7.5°	295.3
10°	261.4
12.5°	226.6
15°	193.7
17.5°	164.4
20°	138.3
22.5°	114.9
25°	94.3
27.5°	76.9
30°	62.3
32.5°	50.4
35°	40.3
37.5°	32.0
40°	25.6
42.5°	20.6
45°	16.5
47.5°	13.3
50°	11.0
52.5°	9.2
55°	7.3
57.5°	6.0
60°	4.6
62.5°	3.2
65°	2.7
67.5°	1.8
70°	1.4
72.5°	0.9
75°	0.9
77.5°	0.5
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)