

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: P990553

Luminaire Tested: **ML2ALSFL9FS1E-TIR1D25NFL-TL2RDMB-200LM-3000K**

Issue Date: 5/13/2025

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P990553
 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-3000K
 Description: 2IN ROUND ML FLEX ADJUSTABLE, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM
 Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
 Ballast/Driver: -

Summary

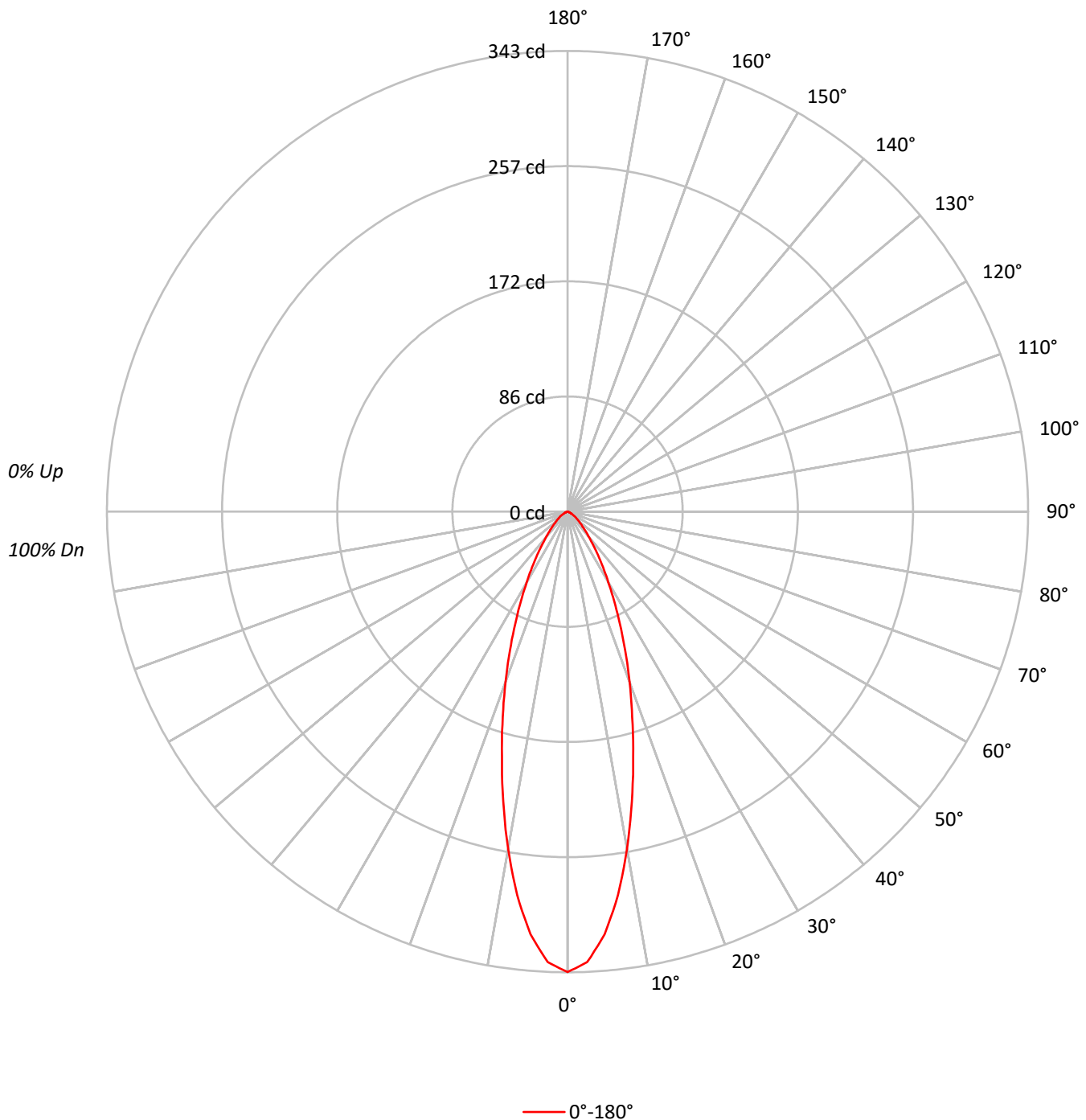
Lumens per Lamp: N/A
 Luminaire Lumens: 171.0 lumens
 Efficiency: N/A
 Efficacy: 47.5 lumens/watt
 Spacing Criteria (0/90/45): 0.53 / 0.53 / 0.6
 Luminous Opening: Circular (Dia: 0.17' x H: 0')
 CIE Type: Direct

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	105	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	69		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°	169131
5°	156503
10°	127703
15°	96436
20°	70776
25°	50083
30°	34581
35°	23671
40°	16102
45°	11234
50°	8213
55°	6107
60°	4440
65°	3152
70°	1875
75°	1716
80°	0
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.2	16.5
10°-20°	52.5	30.7
20°-30°	42.6	24.9
30°-40°	25.1	14.7
40°-50°	12.8	7.5
50°-60°	6.5	3.8
60°-70°	2.6	1.5
70°-80°	0.7	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°	123.3	72.1
0°-40°	148.3	86.7
0°-60°	167.7	98.0
0°-90°	171.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	171.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	343	
5°	316	28
15°	189	52
25°	92	43
35°	39	25
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°	342.8
2.5°	335.7
5°	316.0
7.5°	287.9
10°	254.9
12.5°	221.0
15°	188.8
17.5°	160.2
20°	134.8
22.5°	112.0
25°	92.0
27.5°	75.0
30°	60.7
32.5°	49.1
35°	39.3
37.5°	31.2
40°	25.0
42.5°	20.1
45°	16.1
47.5°	12.9
50°	10.7
52.5°	8.9
55°	7.1
57.5°	5.8
60°	4.5
62.5°	3.1
65°	2.7
67.5°	1.8
70°	1.3
72.5°	0.9
75°	0.9
77.5°	0.4
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)