

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: P990552

Luminaire Tested: **ML2ALSFL9FS1E-TIR1D25NFL-TL2RDMB-200LM-2700K**

Issue Date: 5/13/2025

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P990552
 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-2700K
 Description: 2IN ROUND ML FLEX ADJUSTABLE, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM
 Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
 Ballast/Driver: -

Summary

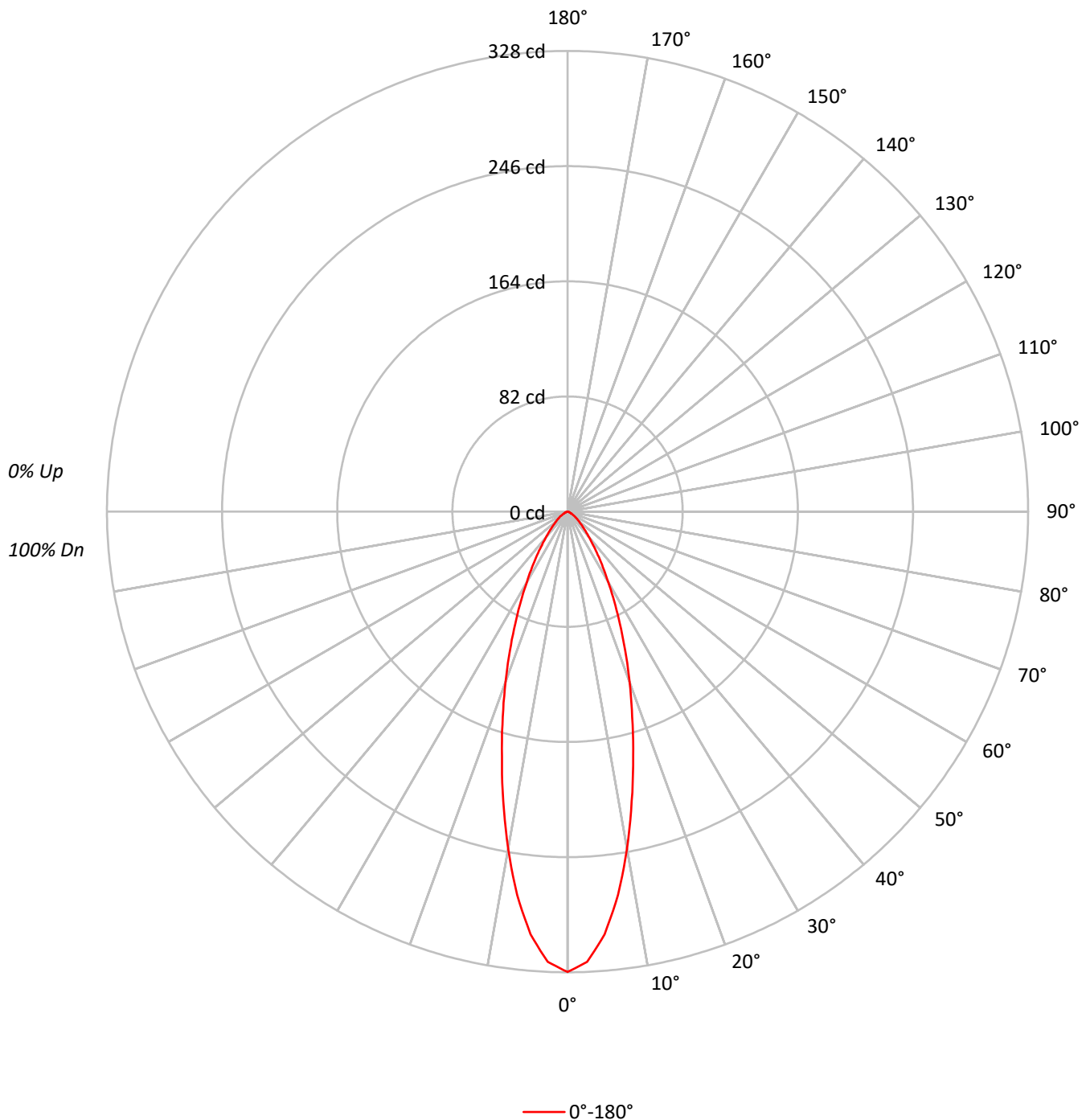
Lumens per Lamp: N/A
 Luminaire Lumens: 163.5 lumens
 Efficiency: N/A
 Efficacy: 45.4 lumens/watt
 Spacing Criteria (0/90/45): 0.53 / 0.53 / 0.6
 Luminous Opening: Circular (Dia: 0.17' x H: 0')
 CIE Type: Direct

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	102	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	68	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°	161680
5°	149619
10°	122041
15°	92197
20°	67678
25°	47851
30°	33043
35°	22586
40°	15393
45°	10745
50°	7829
55°	5849
60°	4243
65°	3035
70°	1875
75°	1716
80°	0
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.0	16.5
10°-20°	50.2	30.7
20°-30°	40.7	24.9
30°-40°	24.0	14.7
40°-50°	12.3	7.5
50°-60°	6.2	3.8
60°-70°	2.5	1.5
70°-80°	0.7	0.5
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°	117.8	72.1
0°-40°	141.8	86.7
0°-60°	160.3	98.0
0°-90°	163.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	163.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	328	
5°	302	27
15°	180	50
25°	88	41
35°	38	24
45°	15	12
55°	7	6
65°	3	2
75°	1	1
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	327.7
2.5°	320.9
5°	302.1
7.5°	275.2
10°	243.6
12.5°	211.2
15°	180.5
17.5°	153.2
20°	128.9
22.5°	107.1
25°	87.9
27.5°	71.7
30°	58.0
32.5°	46.9
35°	37.5
37.5°	29.9
40°	23.9
42.5°	19.2
45°	15.4
47.5°	12.4
50°	10.2
52.5°	8.5
55°	6.8
57.5°	5.5
60°	4.3
62.5°	3.0
65°	2.6
67.5°	1.7
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)