

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: P990557

Luminaire Tested: **ML2ALSFL9FS1E-TIR1D25NFL-TL2RDMB-400LM-2700K**

Issue Date: 5/13/2025

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P990557
 Test Lab: Cooper Lighting Solutions
 Issue Date: 5/13/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML2ALSFL9FS1E-TIR1D25NFL-TL2RDMB-400LM-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

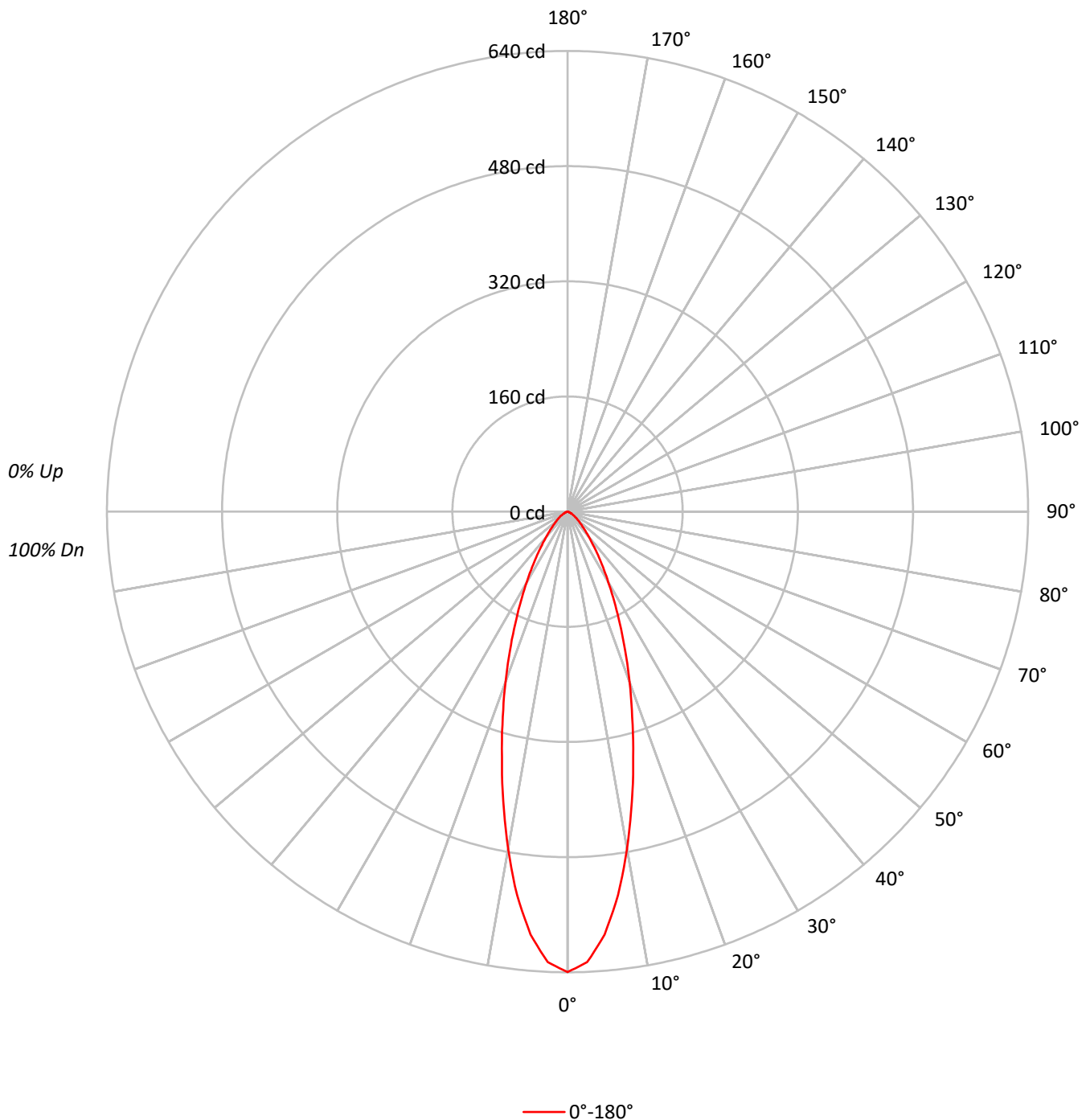
Lumens per Lamp: N/A
 Luminaire Lumens: 319.2 lumens
 Efficiency: N/A
 Efficacy: 52.3 lumens/watt
 Spacing Criteria (0/90/45): 0.53 / 0.53 / 0.6
 Luminous Opening: Circular (Dia: 0.17' x H: 0')
 CIE Type: Direct

Input Watts (W): 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	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	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°	315615
5°	292107
10°	238271
15°	180000
20°	132101
25°	93416
30°	64548
35°	44149
40°	30013
45°	20932
50°	15351
55°	11440
60°	8190
65°	5837
70°	3606
75°	3241
80°	0
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.6	16.5
10°-20°	97.9	30.7
20°-30°	79.5	24.9
30°-40°	46.8	14.7
40°-50°	23.9	7.5
50°-60°	12.2	3.8
60°-70°	4.8	1.5
70°-80°	1.4	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°	230.0	72.1
0°-40°	276.8	86.7
0°-60°	312.9	98.0
0°-90°	319.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	319.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	640	
5°	590	53
15°	352	98
25°	172	79
35°	73	47
45°	30	24
55°	13	12
65°	5	5
75°	2	1
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	639.7
2.5°	626.4
5°	589.8
7.5°	537.3
10°	475.6
12.5°	412.3
15°	352.4
17.5°	299.0
20°	251.6
22.5°	209.1
25°	171.6
27.5°	139.9
30°	113.3
32.5°	91.6
35°	73.3
37.5°	58.3
40°	46.6
42.5°	37.5
45°	30.0
47.5°	24.2
50°	20.0
52.5°	16.7
55°	13.3
57.5°	10.8
60°	8.3
62.5°	5.8
65°	5.0
67.5°	3.3
70°	2.5
72.5°	1.7
75°	1.7
77.5°	0.8
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)