

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: P990594

Luminaire Tested: **ML2ALSFL9FS1E-TIR1D40FL-TL2RDMB-550LM-3500K**

Issue Date: 5/13/2025

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P990594
 Test Lab: Cooper Lighting Solutions
 Issue Date: 5/13/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML2ALSFL9FS1E-TIR1D40FL-TL2RDMB-550LM-3500K
 Description: 2IN ROUND ML FLEX ADJUSTABLE, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK TRIM
 Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
 Ballast/Driver: -

Summary

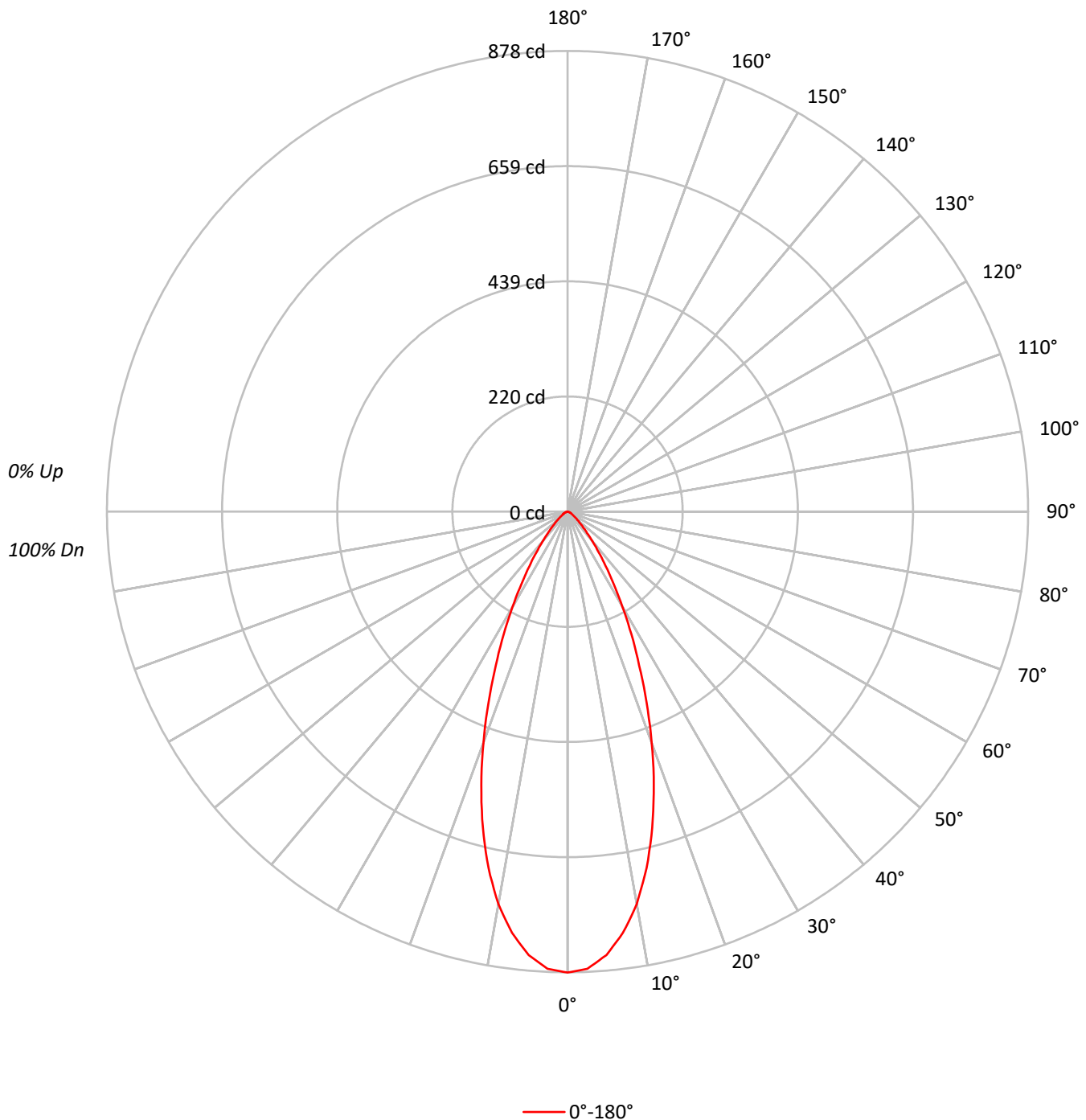
Lumens per Lamp: N/A
 Luminaire Lumens: 537.2 lumens
 Efficiency: N/A
 Efficacy: 70.7 lumens/watt
 Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.69
 Luminous Opening: Circular (Dia: 0.17' x H: 0')
 CIE Type: Direct

Input Watts (W): 7.6
 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



TEST NUMBER: P990594

CATALOG NUMBER: ML2ALSFL9FS1E-TIR1D40FL-TL2RDDB-550LM-3500K

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	101	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	81	78		83
5	93	85	79	75	91	84	79	75	82	78	74		81	77	73		79
6	89	80	74	70	87	79	74	70	78	73	69		76	72	69		75
7	85	76	70	66	83	75	70	66	74	69	65		73	68	65		71
8	81	72	66	62	80	71	66	62	70	65	62		69	65	61		68
9	77	68	62	59	76	68	62	59	67	62	58		66	61	58		65
10	74	65	59	56	73	64	59	56	64	59	55		63	58	55		62

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	433385
5°	420133
10°	380352
15°	318678
20°	246403
25°	175945
30°	119296
35°	76312
40°	47016
45°	29235
50°	18959
55°	12903
60°	9572
65°	8756
70°	6203
75°	4003
80°	0
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.1	14.5
10°-20°	171.6	31.9
20°-30°	149.1	27.7
30°-40°	81.2	15.1
40°-50°	33.9	6.3
50°-60°	14.1	2.6
60°-70°	7.0	1.3
70°-80°	2.2	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°	398.7	74.2
0°-40°	480.0	89.3
0°-60°	527.9	98.3
0°-90°	537.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	537.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	878	
5°	848	78
15°	624	172
25°	323	149
35°	127	81
45°	42	34
55°	15	14
65°	8	7
75°	2	2
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	878.4
2.5°	872.0
5°	848.3
7.5°	809.7
10°	759.2
12.5°	695.9
15°	623.9
17.5°	546.6
20°	469.3
22.5°	393.0
25°	323.2
27.5°	263.1
30°	209.4
32.5°	163.2
35°	126.7
37.5°	96.6
40°	73.0
42.5°	54.8
45°	41.9
47.5°	32.2
50°	24.7
52.5°	19.3
55°	15.0
57.5°	11.8
60°	9.7
62.5°	8.6
65°	7.5
67.5°	5.4
70°	4.3
72.5°	3.2
75°	2.1
77.5°	1.1
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)