

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: P990604

Luminaire Tested: **ML2ALSFL9FS1E-TIR1D40FL-TL2RDMW-550LM-3500K**

Issue Date: 5/13/2025

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P990604
 Test Lab: Cooper Lighting Solutions
 Issue Date: 5/13/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML2ALSFL9FS1E-TIR1D40FL-TL2RDMW-550LM-3500K
 Description: 2IN ROUND ML FLEX ADJUSTABLE, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE TRIM
 Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
 Ballast/Driver: -

Summary

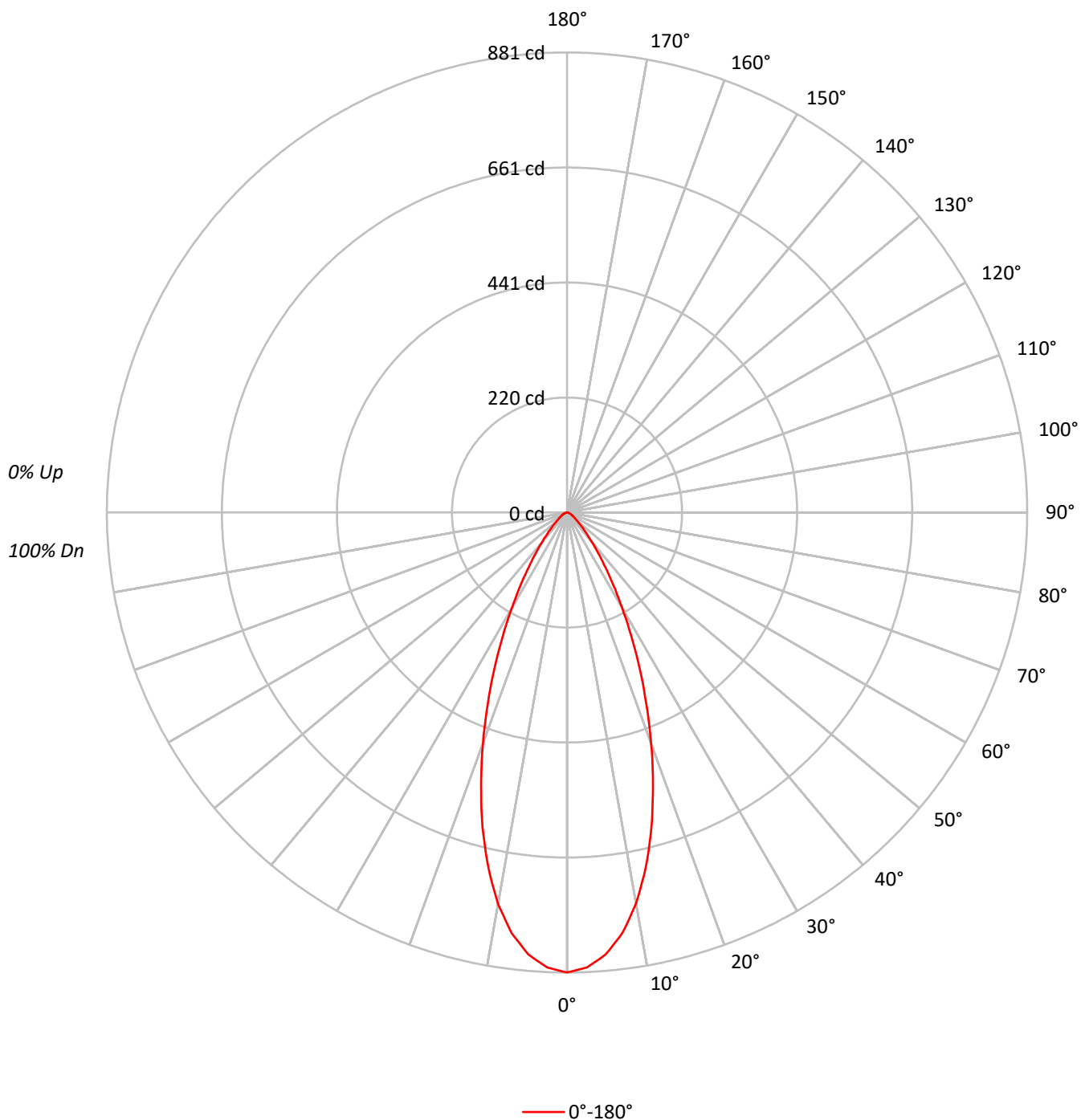
Lumens per Lamp: N/A
 Luminaire Lumens: 546.2 lumens
 Efficiency: N/A
 Efficacy: 71.9 lumens/watt
 Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.69
 Luminous Opening: Circular (Dia: 0.17' x H: 0')
 CIE Type: Direct

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



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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	108	106	104	104	103	101		101	99	98		97
2	108	103	99	95	106	101	97	94	98	95	92		95	92	90		92
3	102	96	91	87	100	95	90	86	92	88	85		90	86	84		87
4	97	90	84	80	96	89	84	80	87	82	79		85	81	78		83
5	93	84	79	74	91	83	78	74	82	77	73		80	76	73		78
6	88	80	74	69	87	79	73	69	77	72	69		76	72	68		75
7	84	75	69	65	83	74	69	65	73	68	65		72	68	64		71
8	80	71	65	61	79	71	65	61	70	65	61		69	64	61		68
9	77	68	62	58	76	67	62	58	66	61	58		65	61	57		64
10	74	64	59	55	73	64	58	55	63	58	55		62	58	55		62

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	434519
5°	420776
10°	381054
15°	318883
20°	247243
25°	178721
30°	119809
35°	76914
40°	48369
45°	30701
50°	19726
55°	14795
60°	11644
65°	10040
70°	9232
75°	6100
80°	3125
85°	6227

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.3	14.3
10°-20°	171.8	31.4
20°-30°	150.3	27.5
30°-40°	82.1	15.0
40°-50°	35.2	6.4
50°-60°	15.6	2.9
60°-70°	8.6	1.6
70°-80°	3.5	0.6
80°-90°	0.7	0.1
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°	400.4	73.3
0°-40°	482.4	88.3
0°-60°	533.3	97.6
0°-90°	546.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	546.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	881	
5°	850	78
15°	624	172
25°	328	150
35°	128	82
45°	44	35
55°	17	16
65°	9	9
75°	3	4
85°	1	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	880.7
2.5°	872.1
5°	849.6
7.5°	812.1
10°	760.6
12.5°	696.2
15°	624.3
17.5°	547.1
20°	470.9
22.5°	395.8
25°	328.3
27.5°	265.0
30°	210.3
32.5°	165.2
35°	127.7
37.5°	97.6
40°	75.1
42.5°	56.9
45°	44.0
47.5°	33.3
50°	25.7
52.5°	20.4
55°	17.2
57.5°	13.9
60°	11.8
62.5°	9.7
65°	8.6
67.5°	7.5
70°	6.4
72.5°	4.3
75°	3.2
77.5°	2.1
80°	1.1
82.5°	1.1
85°	1.1
87.5°	0.0
90°	0.0

(END OF REPORT)