

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: P990569

Luminaire Tested: **ML2ALSFL9FS1E-TIR1D25NFL-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: P990569
 Test Lab: Cooper Lighting Solutions
 Issue Date: 5/13/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML2ALSFL9FS1E-TIR1D25NFL-TL2RDMW-550LM-3500K
 Description: 2IN ROUND ML FLEX ADJUSTABLE, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM
 Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
 Ballast/Driver: -

Summary

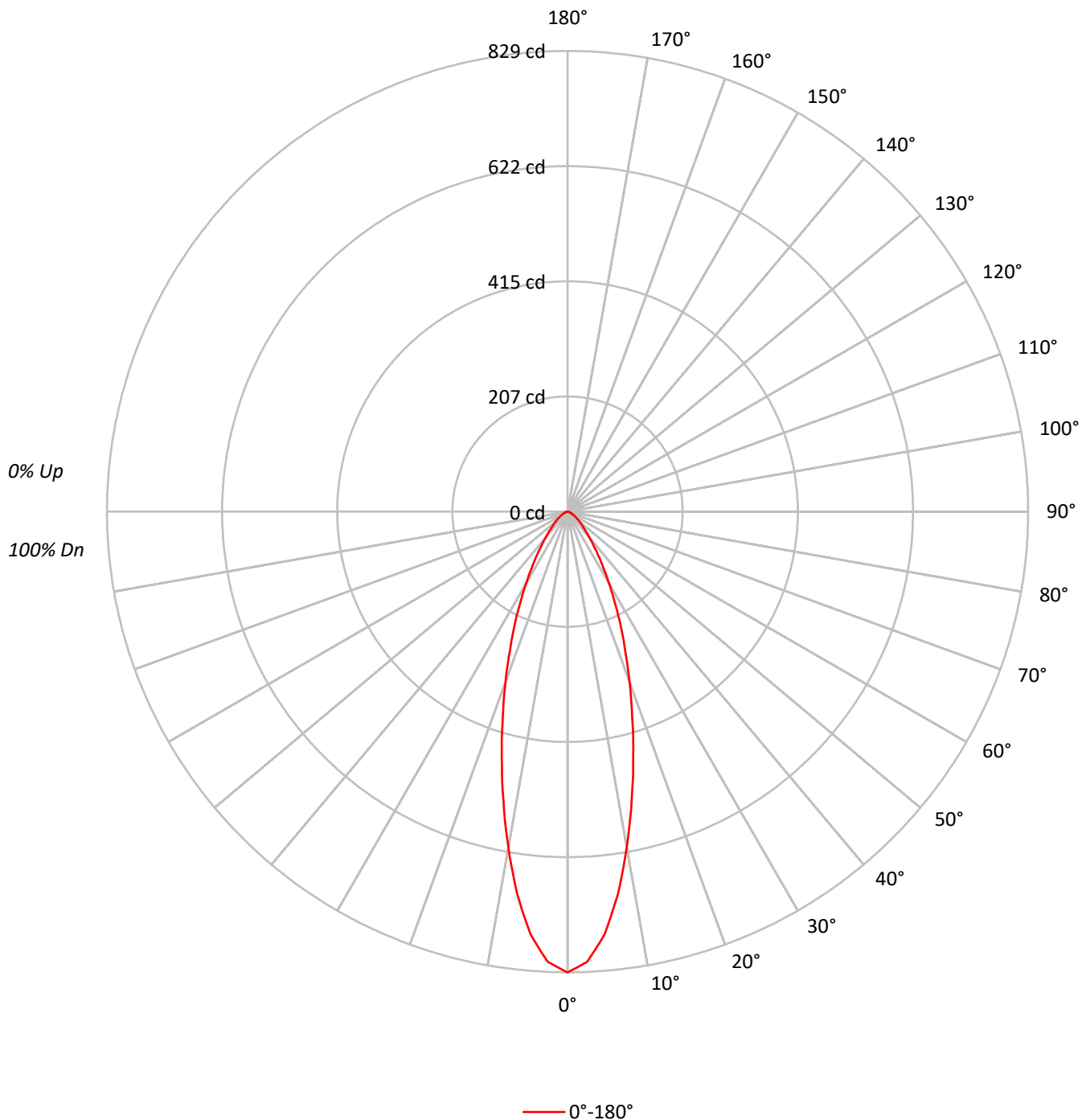
Lumens per Lamp: N/A
 Luminaire Lumens: 423.6 lumens
 Efficiency: N/A
 Efficacy: 55.7 lumens/watt
 Spacing Criteria (0/90/45): 0.53 / 0.53 / 0.6
 Luminous Opening: Circular (Dia: 0.17' x H: 0')
 CIE Type: Direct

Input Watts (W): 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			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	113	110	108	105	111	108	106	104	104	102	101		100	99	98		97	96	95	93
2	107	102	98	95	105	101	97	94	97	94	92		94	92	90		92	90	88	86
3	102	95	90	86	100	94	89	85	91	87	84		89	86	83		87	84	81	80
4	97	89	84	79	95	88	83	79	86	81	78		84	80	77		82	79	76	74
5	92	84	78	73	90	83	77	73	81	76	72		79	75	72		78	74	71	70
6	88	79	73	69	86	78	72	68	76	72	68		75	71	67		74	70	67	65
7	84	74	68	64	82	74	68	64	72	67	64		71	67	63		70	66	63	62
8	80	71	65	61	79	70	64	60	69	64	60		68	63	60		67	63	60	58
9	76	67	61	57	75	66	61	57	66	61	57		65	60	57		64	60	57	55
10	73	64	58	54	72	63	58	54	63	58	54		62	57	54		61	57	54	53

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	409110
5°	378233
10°	307408
15°	233377
20°	171217
25°	122650
30°	84943
35°	58122
40°	40061
45°	28468
50°	21415
55°	16601
60°	12729
65°	10040
70°	7790
75°	6100
80°	5967
85°	6227

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.0	16.1
10°-20°	126.7	29.9
20°-30°	103.8	24.5
30°-40°	61.7	14.6
40°-50°	32.7	7.7
50°-60°	17.7	4.2
60°-70°	8.4	2.0
70°-80°	3.8	0.9
80°-90°	0.9	0.2
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°	298.6	70.5
0°-40°	360.2	85.0
0°-60°	410.6	96.9
0°-90°	423.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	423.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	829	
5°	764	68
15°	457	127
25°	225	104
35°	96	62
45°	41	33
55°	19	18
65°	9	8
75°	3	4
85°	1	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	829.2
2.5°	810.9
5°	763.7
7.5°	694.0
10°	613.6
12.5°	533.1
15°	456.9
17.5°	387.2
20°	326.1
22.5°	271.4
25°	225.3
27.5°	183.4
30°	149.1
32.5°	120.1
35°	96.5
37.5°	77.2
40°	62.2
42.5°	50.4
45°	40.8
47.5°	34.3
50°	27.9
52.5°	23.6
55°	19.3
57.5°	16.1
60°	12.9
62.5°	9.7
65°	8.6
67.5°	6.4
70°	5.4
72.5°	4.3
75°	3.2
77.5°	3.2
80°	2.1
82.5°	1.1
85°	1.1
87.5°	0.0
90°	0.0

(END OF REPORT)