

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: P990635

Luminaire Tested: **ML2ALSFL9FS1E-TIR1D55WFL-TL2RDMB-550LM-4000K**

Issue Date: 5/13/2025

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P990635
 Test Lab: Cooper Lighting Solutions
 Issue Date: 5/13/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML2ALSFL9FS1E-TIR1D55WFL-TL2RDMB-550LM-4000K
 Description: 2IN ROUND ML FLEX ADJUSTABLE, SELECTABLE CCT, WITH 55D TIR, MATTE BLACK TRIM
 Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
 Ballast/Driver: -

Summary

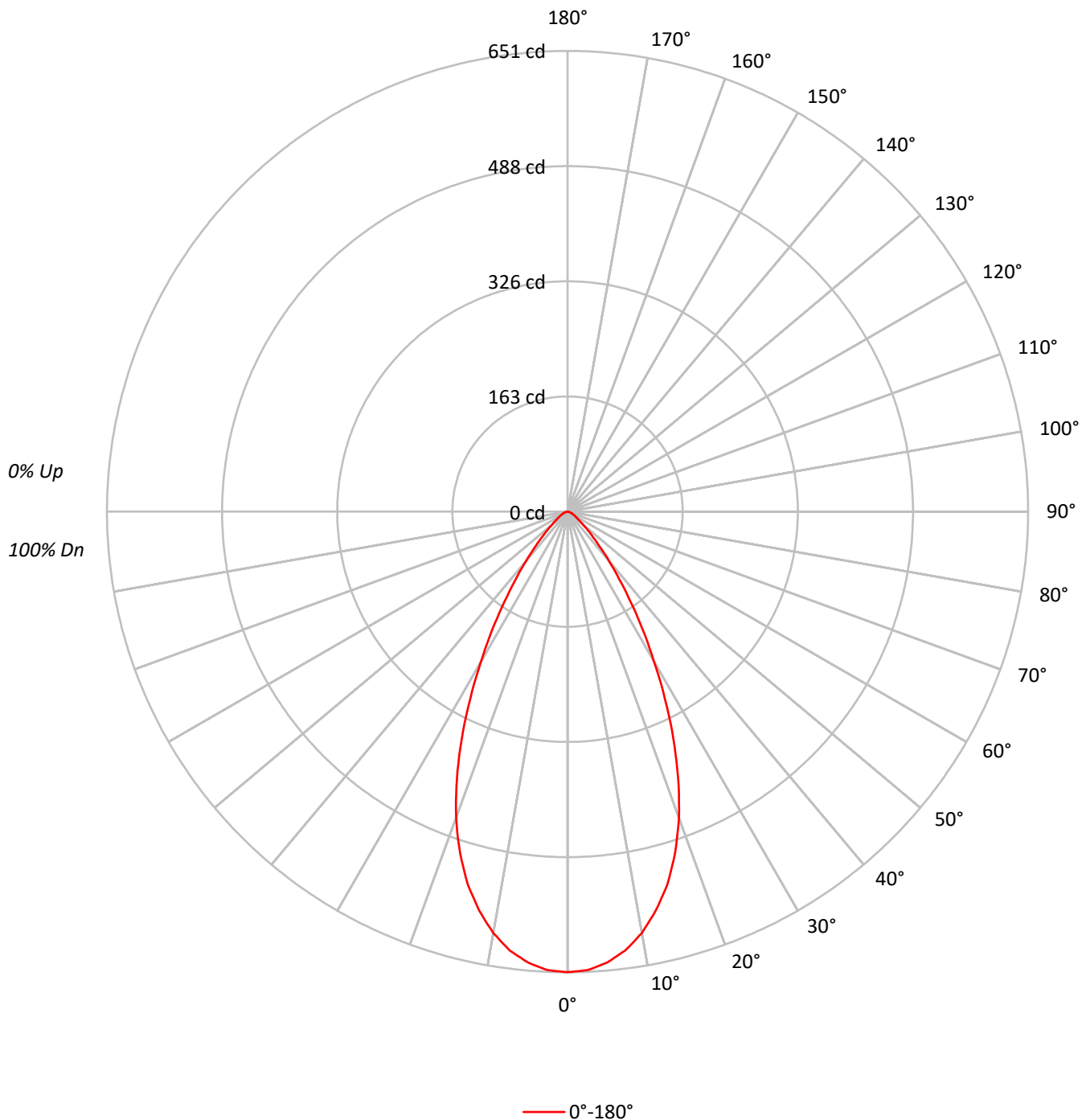
Lumens per Lamp: N/A
 Luminaire Lumens: 538.9 lumens
 Efficiency: N/A
 Efficacy: 70.9 lumens/watt
 Spacing Criteria (0/90/45): 0.82 / 0.82 / 0.81
 Luminous Opening: Circular (Dia: 0.17' x H: 0')
 CIE Type: Direct

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				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	93	97	94	91		94	92	89		92	89	88		86
3	102	95	90	86	100	94	89	85	91	87	84		89	85	82		86	83	81		80
4	96	89	83	78	95	87	82	78	85	81	77		83	79	76		81	78	75		74
5	91	83	77	72	90	82	76	72	80	75	71		78	74	71		77	73	70		69
6	87	78	71	67	85	77	71	67	75	70	66		74	69	66		73	69	65		64
7	82	73	67	62	81	72	66	62	71	66	62		70	65	62		69	64	61		60
8	78	69	63	58	77	68	62	58	67	62	58		66	61	58		65	61	57		56
9	75	65	59	55	74	64	59	55	63	58	54		62	58	54		62	57	54		53
10	71	61	55	52	70	61	55	51	60	55	51		59	55	51		59	54	51		50

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	321042
5°	316820
10°	302849
15°	278479
20°	241835
25°	192658
30°	139008
35°	93357
40°	58738
45°	36073
50°	21952
55°	15139
60°	11940
65°	8989
70°	7934
75°	4194
80°	0
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.0	11.1
10°-20°	151.0	28.0
20°-30°	160.5	29.8
30°-40°	98.7	18.3
40°-50°	41.6	7.7
50°-60°	16.5	3.1
60°-70°	8.1	1.5
70°-80°	2.5	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°	371.5	68.9
0°-40°	470.2	87.2
0°-60°	528.3	98.0
0°-90°	538.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	538.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	651	
5°	640	60
15°	545	151
25°	354	161
35°	155	99
45°	52	42
55°	18	17
65°	8	8
75°	2	2
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	650.7
2.5°	648.5
5°	639.7
7.5°	625.4
10°	604.5
12.5°	577.1
15°	545.2
17.5°	505.6
20°	460.6
22.5°	408.9
25°	353.9
27.5°	297.9
30°	244.0
32.5°	197.9
35°	155.0
37.5°	119.8
40°	91.2
42.5°	68.1
45°	51.7
47.5°	38.5
50°	28.6
52.5°	22.0
55°	17.6
57.5°	14.3
60°	12.1
62.5°	9.9
65°	7.7
67.5°	6.6
70°	5.5
72.5°	3.3
75°	2.2
77.5°	1.1
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)