

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: P990990

Luminaire Tested: **ML4ALSFLD2W1E-TIR4D55WFL-TL4RDMB-600LM-2700K**

Issue Date: 5/13/2025

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P990990
 Test Lab: Cooper Lighting Solutions
 Issue Date: 5/13/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML4ALSFLD2W1E-TIR4D55WFL-TL4RDMB-600LM-2700K
 Description: 4IN ROUND ML FLEX ADJUSTABLE, SELECTABLE CCT, WITH 55D TIR, MATTE BLACK TRIM
 Light Source: (1) D2W LED 90CRI / 2700K CCT
 Ballast/Driver: -

Summary

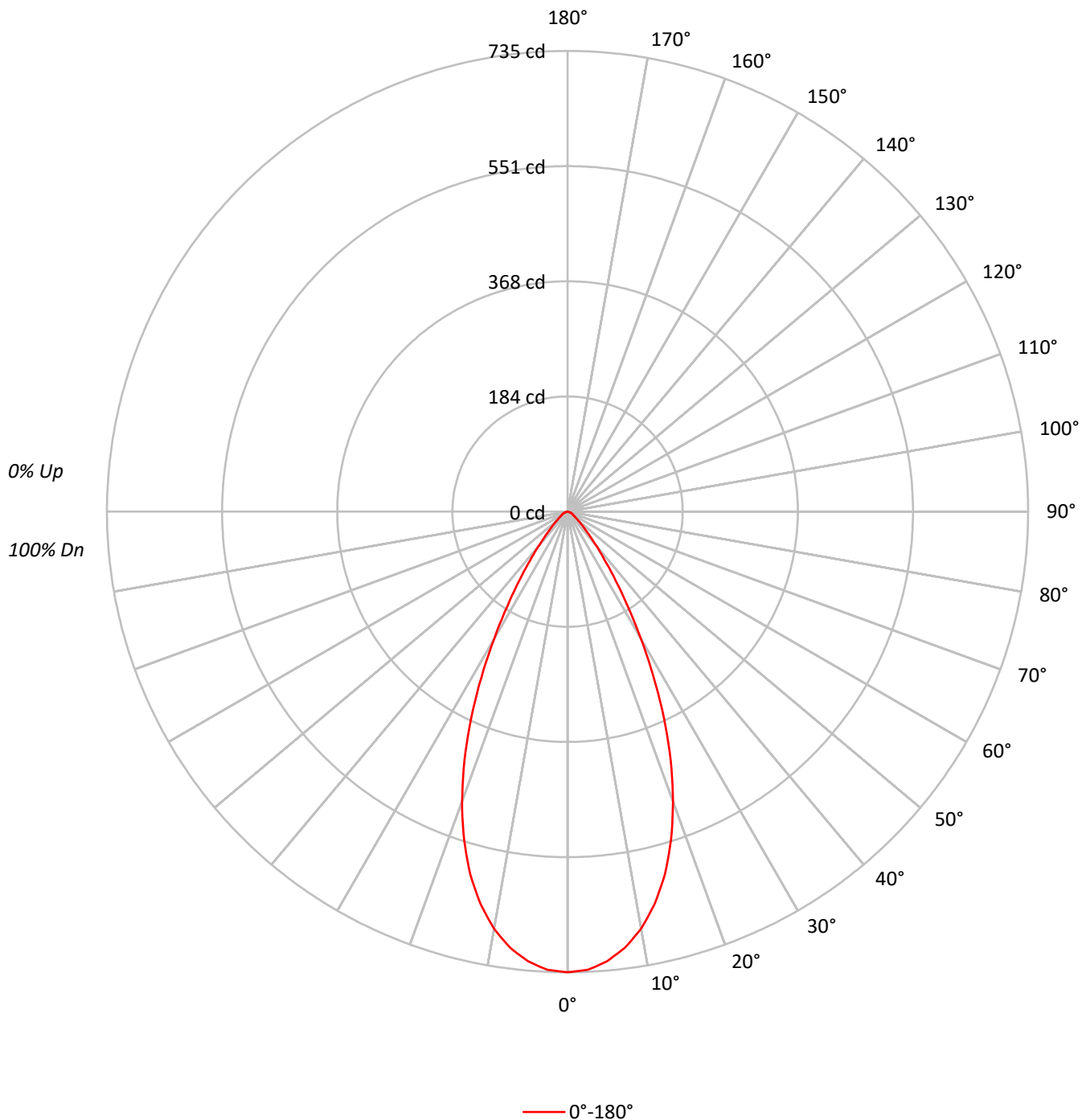
Lumens per Lamp: N/A
 Luminaire Lumens: 540.6 lumens
 Efficiency: N/A
 Efficacy: 65.1 lumens/watt
 Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.77
 Luminous Opening: Circular (Dia: 0.33' x H: 0')
 CIE Type: Direct

Input Watts (W): 8.3
 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	111	108	106	111	108	106	104	104	103	101		101	99	98		97	96	95		93
2	108	103	99	95	106	101	97	94	98	95	92		95	92	90		92	90	88		87
3	102	96	91	87	100	95	90	86	92	88	85		89	86	84		87	85	82		81
4	97	90	84	80	95	89	83	79	86	82	79		84	81	78		83	79	77		75
5	92	84	78	74	91	83	78	74	81	77	73		80	76	72		78	75	72		70
6	88	79	73	69	87	78	73	69	77	72	68		75	71	68		74	70	67		66
7	84	75	69	65	83	74	68	64	73	68	64		72	67	64		70	66	63		62
8	80	71	65	61	79	70	64	61	69	64	60		68	63	60		67	63	60		58
9	76	67	61	57	75	66	61	57	65	60	57		65	60	57		64	60	56		55
10	73	64	58	54	72	63	58	54	62	57	54		62	57	54		61	57	54		52

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	90634
5°	89185
10°	84618
15°	76567
20°	64607
25°	49526
30°	33314
35°	20102
40°	11497
45°	6786
50°	4337
55°	3118
60°	2566
65°	2364
70°	2092
75°	1382
80°	0
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.3	12.5
10°-20°	165.6	30.6
20°-30°	164.7	30.5
30°-40°	86.3	16.0
40°-50°	32.1	5.9
50°-60°	13.6	2.5
60°-70°	8.0	1.5
70°-80°	2.9	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°	397.7	73.6
0°-40°	483.9	89.5
0°-60°	529.6	98.0
0°-90°	540.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	540.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	735	
5°	720	67
15°	600	166
25°	364	165
35°	134	86
45°	39	32
55°	14	14
65°	8	8
75°	3	3
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	734.8
2.5°	731.9
5°	720.3
7.5°	701.8
10°	675.6
12.5°	641.4
15°	599.6
17.5°	549.1
20°	492.2
22.5°	430.1
25°	363.9
27.5°	297.2
30°	233.9
32.5°	178.2
35°	133.5
37.5°	97.5
40°	71.4
42.5°	52.8
45°	38.9
47.5°	29.6
50°	22.6
52.5°	18.0
55°	14.5
57.5°	12.2
60°	10.4
62.5°	9.3
65°	8.1
67.5°	7.0
70°	5.8
72.5°	4.1
75°	2.9
77.5°	1.2
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)