

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: P990787

Luminaire Tested: **ML3ALSFL9FS1E-TIR4D55WFL-TL3RDMW-750LM-2700K**

Issue Date: 5/13/2025

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P990787
 Test Lab: Cooper Lighting Solutions
 Issue Date: 5/13/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML3ALSFL9FS1E-TIR4D55WFL-TL3RDMW-750LM-2700K
 Description: 3IN ROUND ML FLEX ADJUSTABLE, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE TRIM
 Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
 Ballast/Driver: -

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 710.2 lumens
 Efficiency: N/A
 Efficacy: 73.2 lumens/watt
 Spacing Criteria (0/90/45): 0.8 / 0.8 / 0.78
 Luminous Opening: Circular (Dia: 0.25' x H: 0')
 CIE Type: Direct

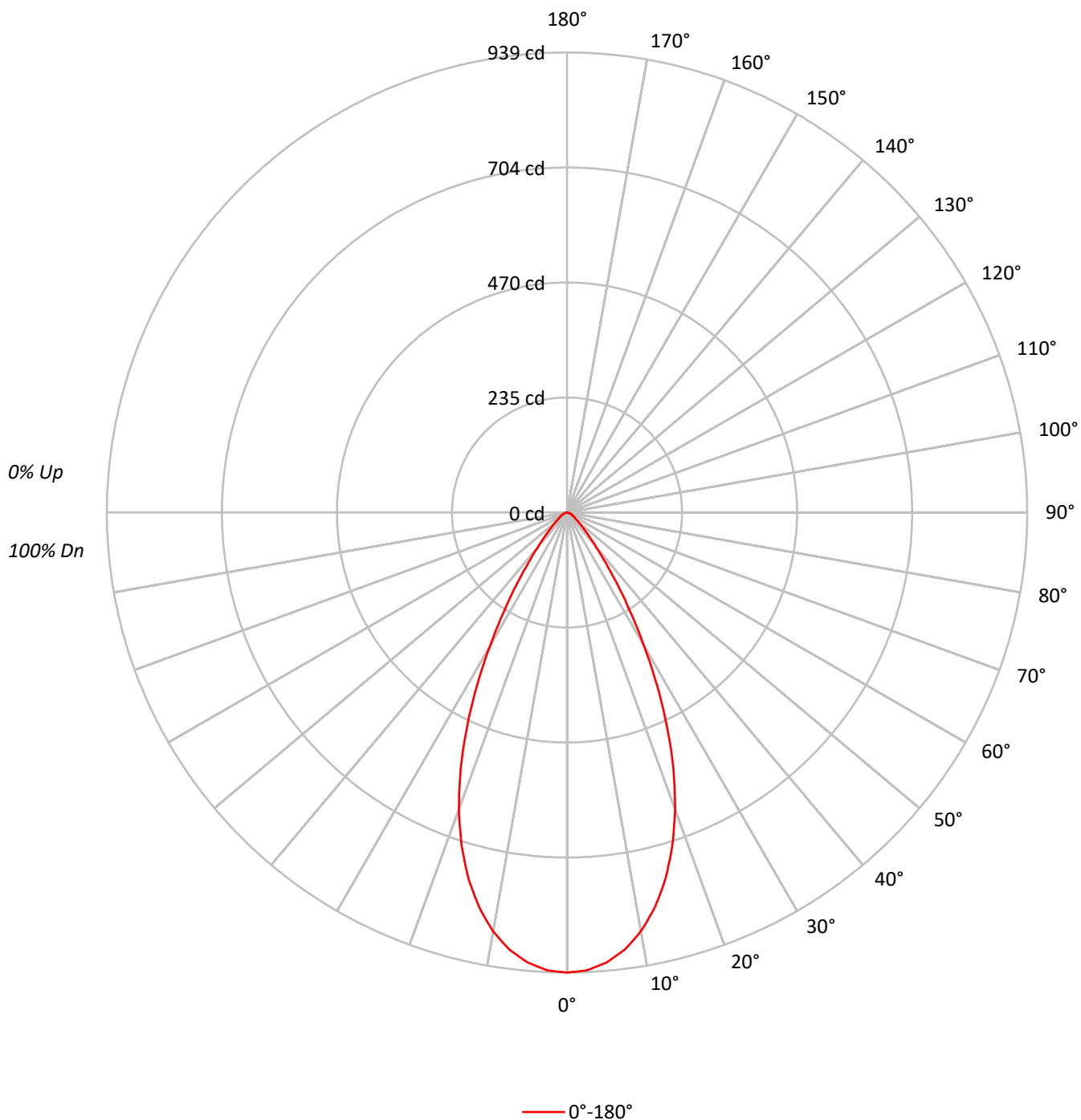
Input Watts (W): 9.7
 Input Voltage (V): NR
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 25 FT

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	111	108	106	111	108	106	104	104	103	101		101	99	98		97	96	95	93
2	108	103	99	95	105	101	97	94	98	95	92		95	92	90		92	90	88	87
3	102	96	91	87	100	94	90	86	92	88	85		89	86	83		87	84	82	80
4	97	90	84	80	95	88	83	79	86	82	78		84	80	77		82	79	76	75
5	92	84	78	74	91	83	78	73	81	76	73		80	75	72		78	74	72	70
6	88	79	73	69	86	78	73	68	77	72	68		75	71	68		74	70	67	66
7	84	74	68	64	82	74	68	64	72	67	64		71	67	63		70	66	63	62
8	80	70	64	60	79	70	64	60	69	64	60		68	63	60		67	63	59	58
9	76	67	61	57	75	66	61	57	65	60	57		64	60	56		63	59	56	55
10	73	63	57	54	72	63	57	54	62	57	53		61	57	53		60	56	53	52

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	205926
5°	202971
10°	193294
15°	175960
20°	150536
25°	116886
30°	79506
35°	47649
40°	26908
45°	16126
50°	10575
55°	7646
60°	6140
65°	5707
70°	4488
75°	3389
80°	1263
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.3	12.2
10°-20°	214.5	30.2
20°-30°	218.4	30.8
30°-40°	115.1	16.2
40°-50°	42.4	6.0
50°-60°	18.6	2.6
60°-70°	10.5	1.5
70°-80°	3.9	0.6
80°-90°	0.4	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°	519.2	73.1
0°-40°	634.3	89.3
0°-60°	695.3	97.9
0°-90°	710.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	710.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	939	
5°	922	86
15°	775	214
25°	483	218
35°	178	115
45°	52	42
55°	20	19
65°	11	11
75°	4	4
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	939.1
2.5°	935.1
5°	922.1
7.5°	900.1
10°	868.1
12.5°	826.1
15°	775.1
17.5°	714.1
20°	645.1
22.5°	567.1
25°	483.1
27.5°	397.1
30°	314.0
32.5°	239.0
35°	178.0
37.5°	129.0
40°	94.0
42.5°	69.0
45°	52.0
47.5°	39.0
50°	31.0
52.5°	24.0
55°	20.0
57.5°	17.0
60°	14.0
62.5°	12.0
65°	11.0
67.5°	9.0
70°	7.0
72.5°	5.0
75°	4.0
77.5°	2.0
80°	1.0
82.5°	1.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)