

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: P990673

Luminaire Tested: **ML2ALSFLD2W1E-TIR1D25NFL-TL2SDSL-400LM-3000K**

Issue Date: 5/13/2025

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P990673
 Test Lab: Cooper Lighting Solutions
 Issue Date: 5/13/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML2ALSFLD2W1E-TIR1D25NFL-TL2SDSL-400LM-3000K
 Description: 2IN SQUARE ML FLEX ADJUSTABLE, SELECTABLE CCT, WITH 25D TIR,
 METALLIC SILVER TRIM
 Light Source: (1) D2W LED 90CRI / 3000K CCT
 Ballast/Driver: -

Summary

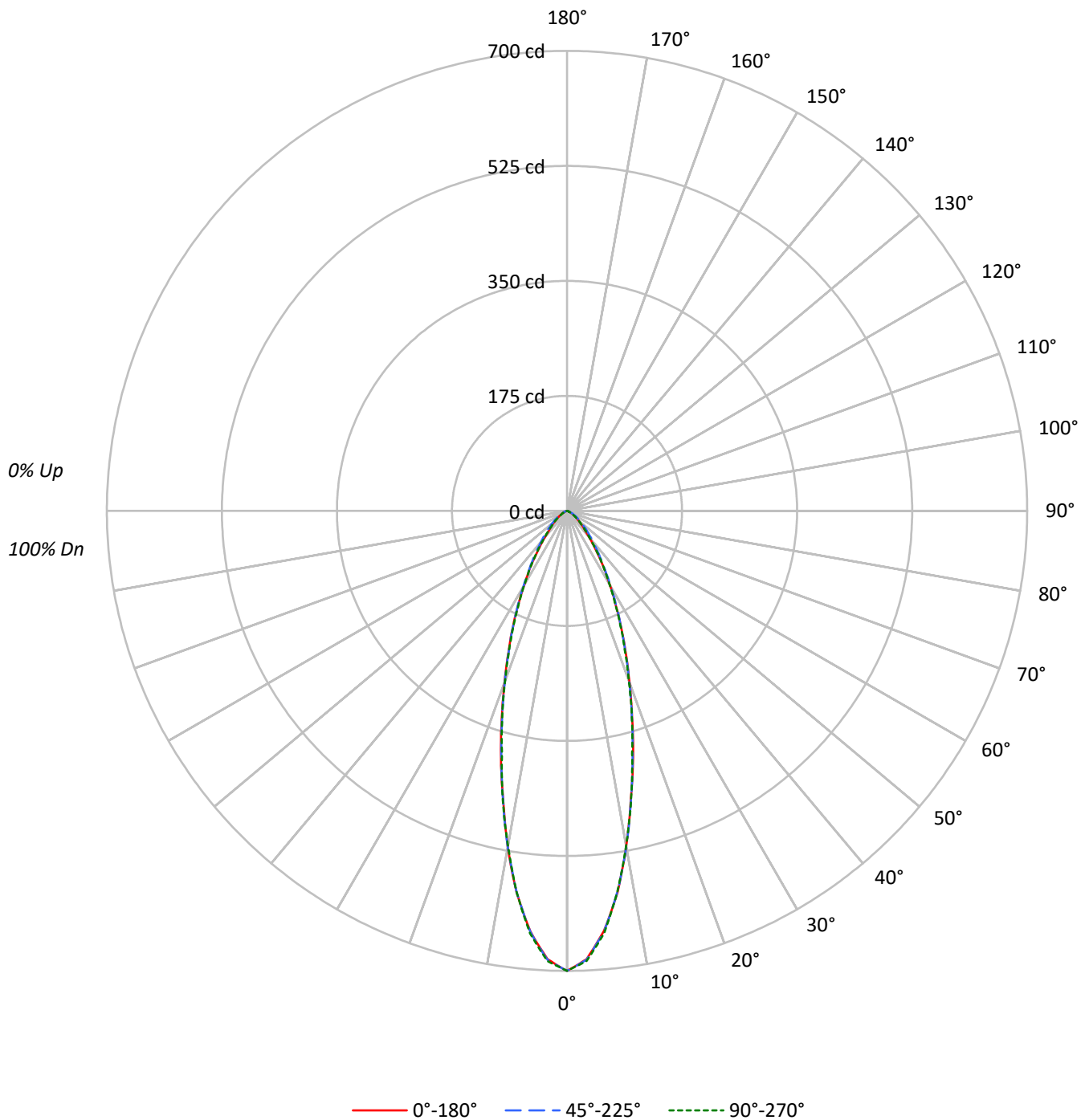
Lumens per Lamp: N/A
 Luminaire Lumens: 363.6 lumens
 Efficiency: N/A
 Efficacy: 59.6 lumens/watt
 Spacing Criteria (0/90/45): 0.54 / 0.53 / 0.6
 Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
 CIE Type: Direct

Input Watts (W): 6.1
 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	102	101		101	99	98		97
2	108	103	98	95	105	101	97	94	98	95	92		95	92	90		92
3	102	96	90	86	100	94	89	86	91	88	84		89	86	83		87
4	97	89	84	79	95	88	83	79	86	81	78		84	80	77		82
5	92	84	78	74	90	83	77	73	81	76	73		79	75	72		78
6	88	79	73	69	86	78	72	68	76	72	68		75	71	67		74
7	84	74	68	64	82	74	68	64	72	67	64		71	67	63		70
8	80	70	64	60	79	70	64	60	69	64	60		68	63	60		67
9	76	67	61	57	75	66	61	57	65	60	57		65	60	57		64
10	73	64	58	54	72	63	58	54	62	57	54		62	57	54		61

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	271211	271211	271211
5°	249647	249997	251009
10°	204175	204175	203506
15°	155774	154771	153407
20°	114391	114020	113319
25°	83203	82818	82091
30°	58436	59197	58034
35°	39973	42811	40398
40°	26759	31109	27214
45°	18687	23400	19180
50°	13865	17482	13865
55°	10404	13241	9796
60°	7285	9920	6587
65°	4676	7060	4676
70°	3852	4872	2946
75°	2545	2545	2545
80°	2008	2008	2008
85°	0	0	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.4	15.8
10°-20°	107.1	29.5
20°-30°	89.4	24.6
30°-40°	55.7	15.3
40°-50°	30.0	8.3
50°-60°	15.4	4.2
60°-70°	6.3	1.7
70°-80°	1.9	0.5
80°-90°	0.1	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°	254.0	69.9
0°-40°	309.7	85.2
0°-60°	355.2	97.7
0°-90°	363.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	363.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	700	700	700	700	700	
5°	642	644	643	645	645	57
15°	388	386	386	385	382	107
25°	195	195	194	192	192	90
35°	84	88	90	87	85	54
45°	34	37	43	38	35	27
55°	15	17	20	17	14	14
65°	5	6	8	6	5	6
75°	2	2	2	2	2	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	699.9	699.9	699.9	699.9	699.9
2.5°	682.8	685.4	683.7	685.4	685.4
5°	641.8	643.5	642.7	645.3	645.3
7.5°	586.4	586.4	585.5	585.5	585.5
10°	518.9	518.9	518.9	518.9	517.2
12.5°	448.9	450.7	449.8	448.9	450.7
15°	388.3	385.8	385.8	384.9	382.4
17.5°	329.5	329.5	327.7	325.2	327.7
20°	277.4	278.2	276.5	276.5	274.8
22.5°	233.0	233.9	232.2	232.2	230.4
25°	194.6	194.6	193.7	192.0	192.0
27.5°	159.6	161.3	161.3	158.8	157.9
30°	130.6	132.3	132.3	130.6	129.7
32.5°	106.7	108.4	108.4	107.5	105.8
35°	84.5	87.9	90.5	87.1	85.4
37.5°	66.6	70.8	74.3	71.7	68.3
40°	52.9	56.3	61.5	58.0	53.8
42.5°	41.8	45.2	51.2	46.9	43.5
45°	34.1	36.7	42.7	37.6	35.0
47.5°	27.3	29.9	35.0	31.6	28.2
50°	23.0	24.8	29.0	25.6	23.0
52.5°	18.8	20.5	23.9	20.5	17.9
55°	15.4	17.1	19.6	17.1	14.5
57.5°	11.9	12.8	16.2	12.8	11.1
60°	9.4	10.2	12.8	10.2	8.5
62.5°	6.8	7.7	10.2	7.7	6.8
65°	5.1	6.0	7.7	6.0	5.1
67.5°	4.3	4.3	5.1	4.3	3.4
70°	3.4	3.4	4.3	3.4	2.6
72.5°	2.6	2.6	2.6	2.6	2.6
75°	1.7	1.7	1.7	1.7	1.7
77.5°	0.9	0.9	0.9	0.9	0.9
80°	0.9	0.9	0.9	0.9	0.9
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)