

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: P601416

Luminaire Tested: **ML4DM08LSNFL95FS1E - TIR4D25NFL - TL43R2G\_ TL44S2G\_ 5000K**

Issue Date: 7/29/2022

Tested By:

Approved By:



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**Test Information**

Test Method: LM-79-08  
 Report Number: P601416  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Issue Date: 7/29/2022  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: HALO  
 Catalog Number: ML4DM08LSNFL95FS1E - TIR4D25NFL - TL43R2G\_ TL44S2G\_ 5000K  
 Description: DIRECT MOUNT, 25D OPTIC, DIFFUSE CLEAR LENS TRIM  
 Light Source: (1) SELECTABLE LUMEN LED 95CRI / 5000K CCT  
 Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
 Luminaire Lumens: 1040.6 lumens  
 Efficiency: N/A  
 Efficacy: 101.0 lumens/watt  
 Spacing Criteria (0/90/45): 0.44 / 0.44 / 0.47  
 Luminous Opening: Circular (Dia: 0.21' x H: 0')  
 CIE Type: Direct

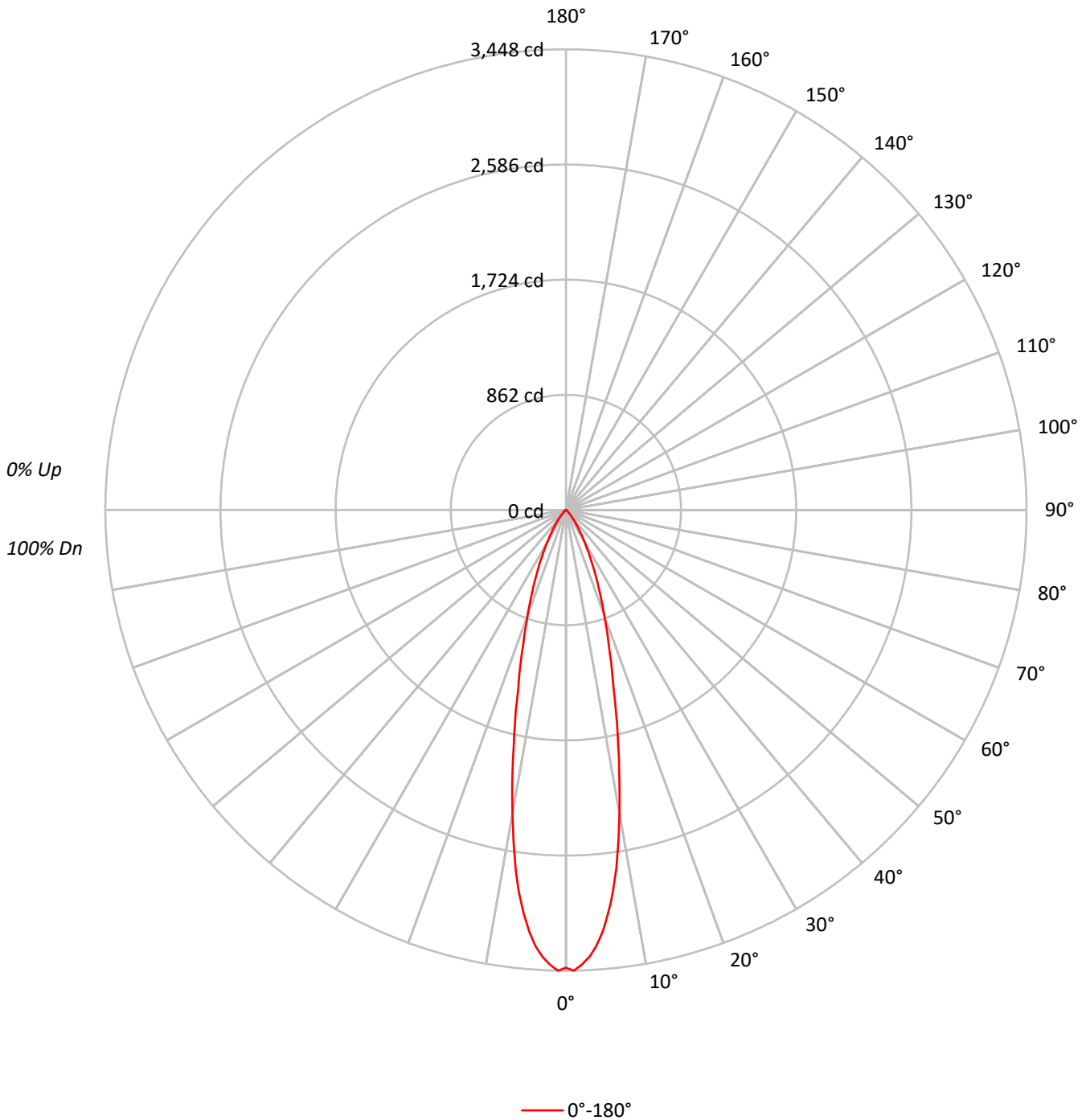
Input Watts (W): 10.3  
 Input Voltage (V): NR  
 Input Current (A<sub>in</sub>): NR  
 Voltage Rise (V): NR  
 Power Factor: NR  
 Total Harmonic Distortion (THDi): NR  
 Frequency (hertz): 60  
 Stabilization Time: NR  
 Operation Time: NR  
 Ambient Temperature (°C): NR  
 Test Distance: 25 FT



Meas		Calibration Due Date	
Instrument	Identificatio		
Photometer	GONIO 1 11111111	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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95
2	110	106	103	100	108	104	101	99	101	99	96	98	96	94	95	94	92	91
3	106	100	96	93	104	99	95	92	97	93	91	94	92	89	92	90	88	87
4	102	96	91	88	100	94	90	87	92	89	86	91	87	85	89	86	84	83
5	98	91	86	83	96	90	86	83	89	85	82	87	84	81	86	83	80	79
6	94	87	82	79	93	86	82	79	85	81	78	84	80	78	83	79	77	76
7	91	84	79	75	90	83	78	75	82	78	75	81	77	74	80	76	74	73
8	88	80	75	72	87	80	75	72	79	75	72	78	74	71	77	74	71	70
9	85	77	72	69	84	77	72	69	76	72	69	75	71	69	74	71	68	67
10	82	74	70	67	81	74	70	67	73	69	66	73	69	66	72	69	66	65

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	1081812
5°	1003309
10°	738810
15°	450212
20°	281392
25°	175702
30°	102238
35°	57860
40°	30379
45°	15853
50°	9039
55°	5065
60°	2463
65°	1943
70°	1200
75°	1586
80°	0
85°	0

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	274.2	26.4
10°-20°	391.3	37.6
20°-30°	235.0	22.6
30°-40°	97.9	9.4
40°-50°	30.0	2.9
50°-60°	9.2	0.9
60°-70°	2.2	0.2
70°-80°	0.9	0.1
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°	900.5	86.5
0°-40°	998.4	95.9
0°-60°	1037.5	99.7
0°-90°	1040.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1040.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3426	
5°	3165	274
15°	1377	391
25°	504	235
35°	150	98
45°	36	30
55°	9	9
65°	3	2
75°	1	1
85°	0	0
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3426.0
1°	3448.3
2°	3403.6
3°	3349.6
4°	3269.3
5°	3165.3
6°	3032.3
7°	2882.2
8°	2707.1
9°	2508.2
10°	2304.2
12.5°	1805.1
15°	1377.2
17.5°	1067.8
20°	837.4
22.5°	653.1
25°	504.3
27.5°	379.2
30°	280.4
32.5°	205.4
35°	150.1
37.5°	106.6
40°	73.7
42.5°	51.3
45°	35.5
47.5°	25.0
50°	18.4
52.5°	14.5
55°	9.2
57.5°	6.6
60°	3.9
62.5°	2.6
65°	2.6
67.5°	1.3
70°	1.3
72.5°	1.3
75°	1.3
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)