

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: P601399

Luminaire Tested: **ML4DM08LSFL95FS1E - TIR4D40FL - TL41R_ TL42S_ 3500K**

Issue Date: 7/29/2022

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P601399
 Test Lab: COOPER LIGHTING SOLUTIONS
 Issue Date: 7/29/2022
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML4DM08LSFL95FS1E - TIR4D40FL - TL41R_ TL42S_ 3500K
 Description: DIRECT MOUNT, 40D OPTIC, OPEN TRIM
 Light Source: (1) SELECTABLE LUMEN LED 95CRI / 3500K CCT
 Ballast/Driver: -

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 1056.2 lumens
 Efficiency: N/A
 Efficacy: 102.5 lumens/watt
 Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.63
 Luminous Opening: Circular (Dia: 0.21' x H: 0')
 CIE Type: Direct

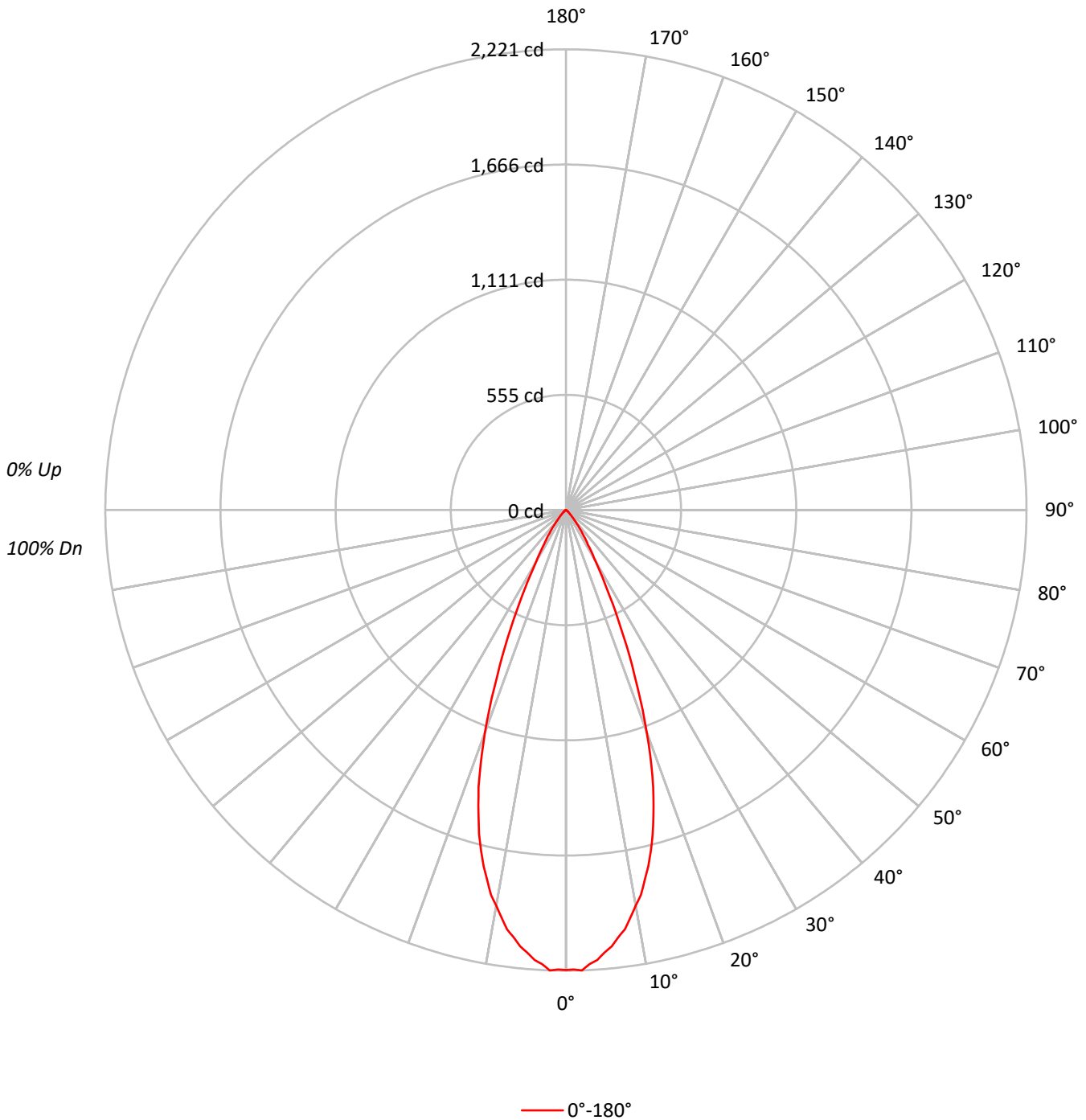
Input Watts (W): 10.3
 Input Voltage (V): NR
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 25 FT



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	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	95	95	95
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90	90	90	90
3	105	100	96	92	103	98	95	91	96	93	90	94	91	89	91	89	87	86	86	86	86
4	101	95	90	86	99	94	89	86	92	88	85	90	87	84	88	85	83	82	82	82	82
5	97	90	85	81	96	89	85	81	87	83	80	86	82	80	84	81	79	78	78	78	78
6	93	86	81	77	92	85	80	77	84	79	76	82	79	76	81	78	75	74	74	74	74
7	90	82	77	73	89	81	77	73	80	76	73	79	75	72	78	75	72	71	71	71	71
8	86	78	73	70	85	78	73	70	77	73	69	76	72	69	75	72	69	68	68	68	68
9	83	75	70	67	82	75	70	67	74	69	66	73	69	66	72	69	66	65	65	65	65
10	80	72	67	64	79	72	67	64	71	67	64	70	66	63	70	66	63	62	62	62	62

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	700178
5°	678762
10°	621233
15°	528637
20°	383411
25°	218382
30°	103879
35°	54198
40°	27164
45°	12995
50°	7467
55°	3468
60°	821
65°	971
70°	0
75°	0
80°	0
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.2	18.8
10°-20°	438.9	41.6
20°-30°	292.8	27.7
30°-40°	93.8	8.9
40°-50°	25.5	2.4
50°-60°	6.3	0.6
60°-70°	0.8	0.1
70°-80°	0.0	0.0
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°	929.9	88.0
0°-40°	1023.7	96.9
0°-60°	1055.4	99.9
0°-90°	1056.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1056.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2217	
5°	2141	198
15°	1617	439
25°	627	293
35°	141	94
45°	29	25
55°	6	6
65°	1	1
75°	0	0
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2217.4
1°	2216.1
2°	2221.2
3°	2192.1
4°	2174.3
5°	2141.4
6°	2114.8
7°	2074.3
8°	2041.4
9°	1988.2
10°	1937.5
11°	1891.9
12°	1824.8
13°	1762.8
14°	1693.1
15°	1617.1
17.5°	1400.6
20°	1141.0
22.5°	866.2
25°	626.8
27.5°	425.5
30°	284.9
32.5°	197.6
35°	140.6
37.5°	100.0
40°	65.9
42.5°	43.1
45°	29.1
47.5°	21.5
50°	15.2
52.5°	10.1
55°	6.3
57.5°	3.8
60°	1.3
62.5°	1.3
65°	1.3
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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CANDELA DISTRIBUTION (continued):



(END OF REPORT)