

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: P601340

Luminaire Tested: **ML4DM06FL9FS1E - TIR4D40FL - TL41R_ TL42S_ 2700K**

Issue Date: 7/29/2022

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P601340
 Test Lab: COOPER LIGHTING SOLUTIONS
 Issue Date: 7/29/2022
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML4DM06FL9FS1E - TIR4D40FL - TL41R_ TL42S_ 2700K
 Description: DIRECT MOUNT, 40D OPTIC, OPEN TRIM
 Light Source: (1) SELECTABLE LUMEN LED 90CRI / 2700K CCT
 Ballast/Driver: -

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 835.0 lumens
 Efficiency: N/A
 Efficacy: 100.6 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

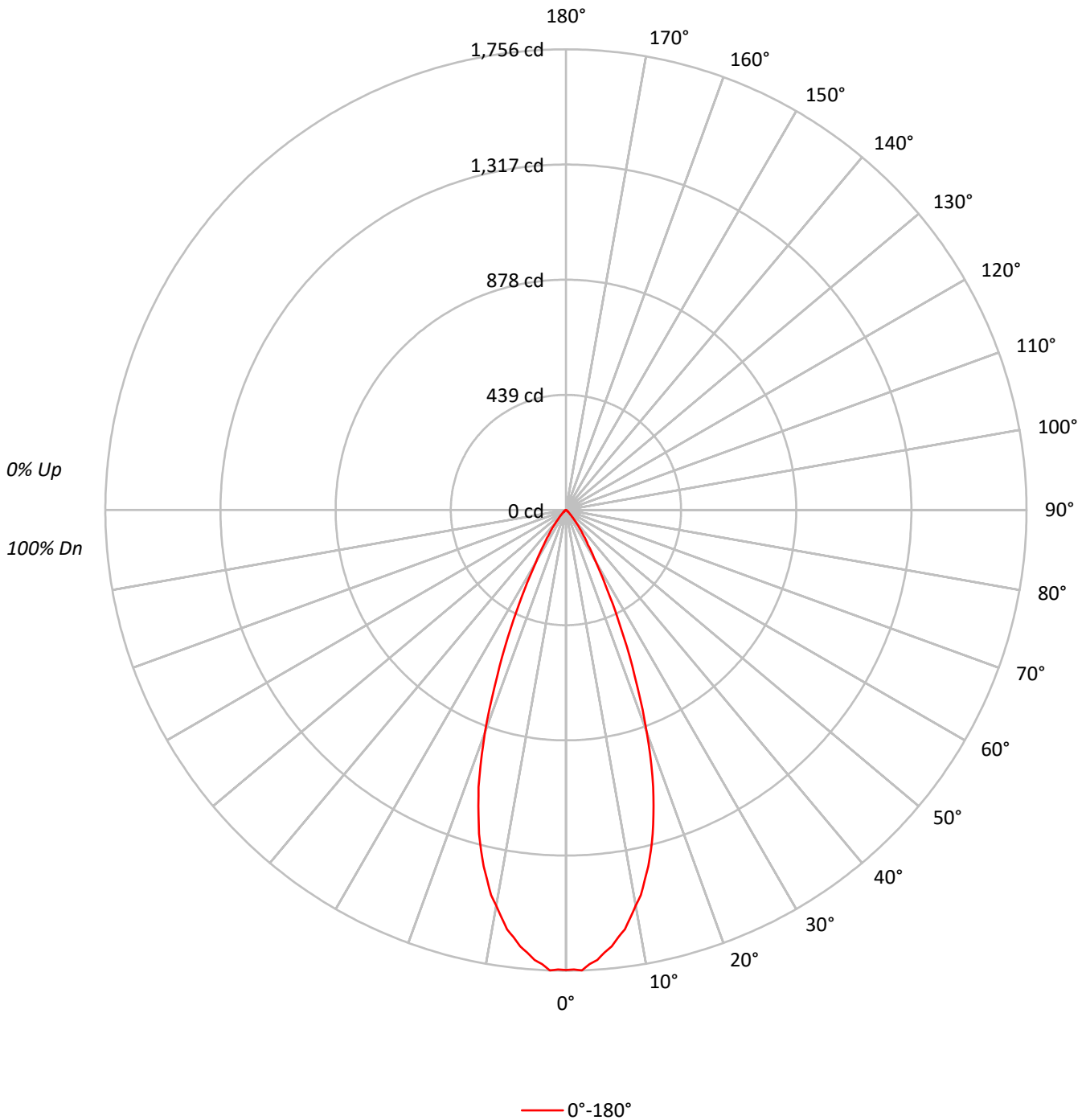
Input Watts (W): 8.3
 Input Voltage (V): NR
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	553536
5°	536601
10°	491151
15°	417947
20°	303099
25°	172671
30°	82148
35°	42827
40°	21476
45°	10271
50°	5895
55°	2753
60°	632
65°	747
70°	0
75°	0
80°	0
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.7	18.8
10°-20°	347.0	41.6
20°-30°	231.5	27.7
30°-40°	74.2	8.9
40°-50°	20.1	2.4
50°-60°	5.0	0.6
60°-70°	0.6	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°	735.1	88.0
0°-40°	809.3	96.9
0°-60°	834.4	99.9
0°-90°	835.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	835.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1753	
5°	1693	157
15°	1278	347
25°	496	231
35°	111	74
45°	23	20
55°	5	5
65°	1	1
75°	0	0
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	1753.0
1°	1752.0
2°	1756.0
3°	1733.0
4°	1719.0
5°	1692.9
6°	1671.9
7°	1639.9
8°	1613.8
9°	1571.8
10°	1531.8
11°	1495.7
12°	1442.7
13°	1393.6
14°	1338.5
15°	1278.5
17.5°	1107.3
20°	902.0
22.5°	684.8
25°	495.6
27.5°	336.4
30°	225.3
32.5°	156.2
35°	111.1
37.5°	79.1
40°	52.1
42.5°	34.0
45°	23.0
47.5°	17.0
50°	12.0
52.5°	8.0
55°	5.0
57.5°	3.0
60°	1.0
62.5°	1.0
65°	1.0
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


NVLAP Lab Code: 200050-0



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CANDELA DISTRIBUTION (continued):

90° | $\frac{0^\circ}{0.0}$

(END OF REPORT)