

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: P601200

Luminaire Tested: **ML406FLD2W1E - TIR4D40FL - TL43R2G_ TL44S2G_ 3000K**

Issue Date: 7/29/2022

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P601200
 Test Lab: COOPER LIGHTING SOLUTIONS
 Issue Date: 7/29/2022
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML406FLD2W1E - TIR4D40FL - TL43R2G_ TL44S2G_ 3000K
 Description: RETROFIT, 40D OPTIC, DIFFUSE CLEAR LENS TRIM
 Light Source: (1) SELECTABLE LUMEN LED D2W / 3000K CCT
 Ballast/Driver: -

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 658.0 lumens
 Efficiency: N/A
 Efficacy: 79.3 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

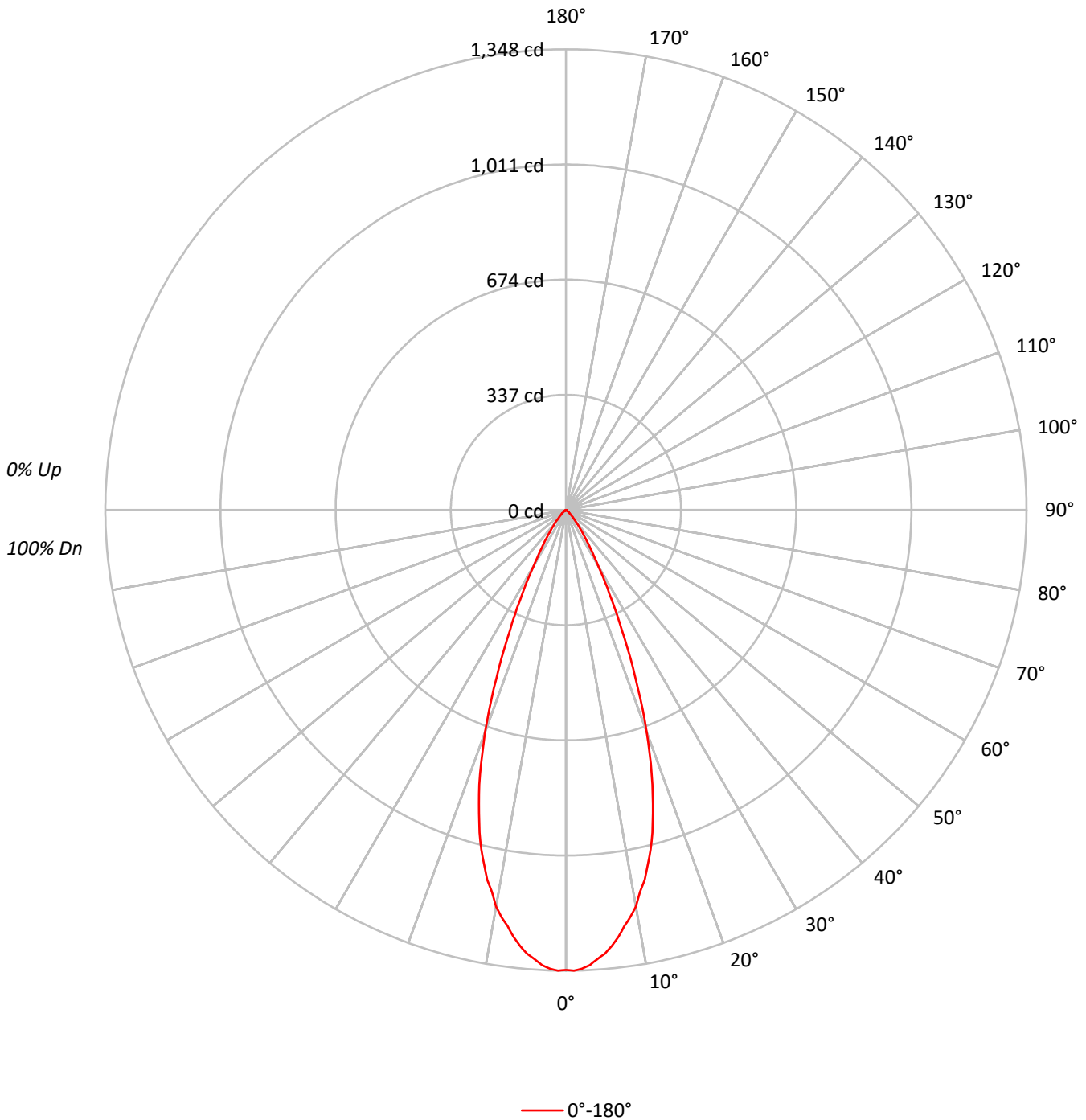
Input Watts (W): 8.3
 Input Voltage (V): NR
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 25 FT



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	109	105	102	99	107	104	100	98	100	98	95	97	95	93	95	93	92	90
3	105	99	95	92	103	98	94	91	95	92	89	93	90	88	91	89	87	85
4	101	94	89	86	99	93	89	85	91	87	84	89	86	83	87	85	82	81
5	97	89	84	81	95	88	84	80	87	83	80	85	82	79	84	81	78	77
6	93	85	80	76	91	84	79	76	83	79	75	82	78	75	80	77	75	73
7	89	81	76	72	88	80	76	72	79	75	72	78	74	71	77	74	71	70
8	86	77	72	69	85	77	72	69	76	72	68	75	71	68	74	71	68	67
9	82	74	69	66	81	74	69	66	73	68	65	72	68	65	71	68	65	64
10	79	71	66	63	78	71	66	63	70	66	63	69	65	62	69	65	62	61

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	424957
5°	413140
10°	377613
15°	319418
20°	232701
25°	134834
30°	69204
35°	36273
40°	19538
45°	10405
50°	6141
55°	3193
60°	1579
65°	1270
70°	739
75°	0
80°	0
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	18.3
10°-20°	265.1	40.3
20°-30°	182.3	27.7
30°-40°	63.2	9.6
40°-50°	19.6	3.0
50°-60°	5.9	0.9
60°-70°	1.4	0.2
70°-80°	0.3	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°	567.5	86.2
0°-40°	630.7	95.9
0°-60°	656.3	99.7
0°-90°	658.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	658.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1346	
5°	1303	120
15°	977	265
25°	387	182
35°	94	63
45°	23	20
55°	6	6
65°	2	1
75°	0	0
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1345.8
1°	1348.3
2°	1343.3
3°	1333.4
4°	1317.5
5°	1303.4
6°	1282.6
7°	1258.5
8°	1229.3
9°	1206.0
10°	1177.7
11°	1137.8
12°	1107.0
13°	1065.4
14°	1023.7
15°	977.1
17.5°	842.3
20°	692.5
22.5°	531.8
25°	387.0
27.5°	274.7
30°	189.8
32.5°	133.2
35°	94.1
37.5°	67.4
40°	47.4
42.5°	33.3
45°	23.3
47.5°	16.6
50°	12.5
52.5°	9.2
55°	5.8
57.5°	4.2
60°	2.5
62.5°	1.7
65°	1.7
67.5°	0.8
70°	0.8
72.5°	0.8
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0

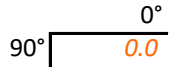
Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269


NVLAP Lab Code: 200050-0



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CANDELA DISTRIBUTION (continued):



(END OF REPORT)