

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: P601212

Luminaire Tested: **ML406NFLD2W1E - TIR4D25NFL - TL41R_ TL42S_ 3000K**

Issue Date: 7/29/2022

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P601212
 Test Lab: COOPER LIGHTING SOLUTIONS
 Issue Date: 7/29/2022
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML406NFLD2W1E - TIR4D25NFL - TL41R_ TL42S_ 3000K
 Description: RETROFIT, 25D OPTIC, OPEN TRIM
 Light Source: (1) SELECTABLE LUMEN LED D2W / 3000K CCT
 Ballast/Driver: -

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 698.8 lumens
 Efficiency: N/A
 Efficacy: 84.2 lumens/watt
 Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.46
 Luminous Opening: Circular (Dia: 0.21' x H: 0')
 CIE Type: Direct

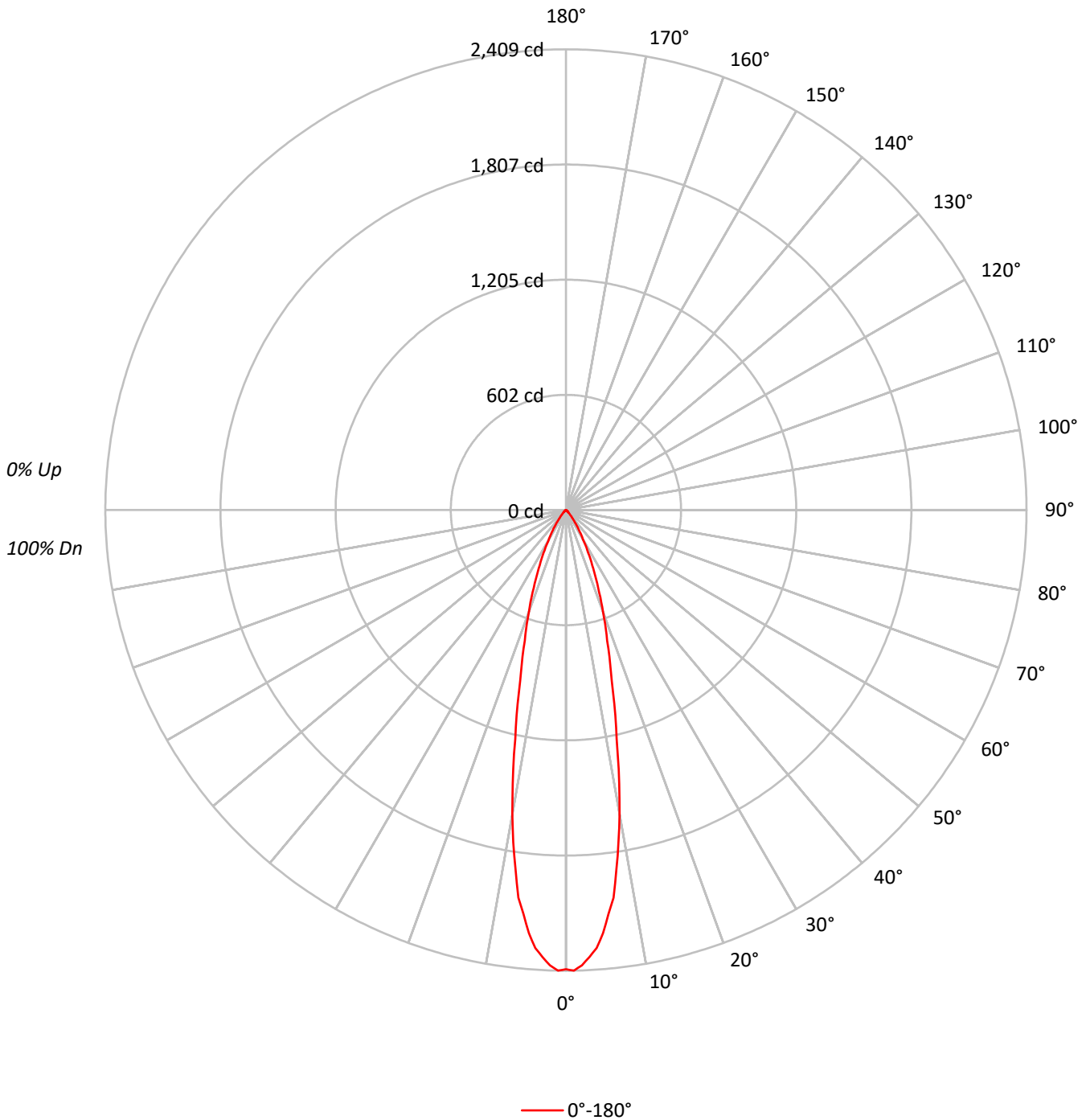
Input Watts (W): 8.3
 Input Voltage (V): NR
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 25 FT



Meas			
Instrument	Identificatio		Calibration Due Date
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	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96	96	96	96
2	110	106	103	100	108	105	102	99	101	99	97	98	97	95	96	94	93	91	91	91	91
3	106	101	97	94	104	100	96	93	97	94	91	95	92	90	93	90	89	87	87	87	87
4	102	96	92	88	101	95	91	88	93	90	87	91	88	86	89	87	85	84	84	84	84
5	98	92	87	84	97	91	87	83	89	86	83	88	84	82	86	84	81	80	80	80	80
6	95	88	83	80	94	87	83	80	86	82	79	85	81	78	83	80	78	77	77	77	77
7	92	84	80	76	91	84	79	76	83	79	76	82	78	75	81	77	75	74	74	74	74
8	89	81	76	73	88	81	76	73	80	76	73	79	75	72	78	75	72	71	71	71	71
9	86	78	74	70	85	78	73	70	77	73	70	76	72	70	75	72	70	69	69	69	69
10	83	75	71	68	82	75	71	68	74	70	68	74	70	67	73	70	67	66	66	66	66

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	758057
5°	704279
10°	517796
15°	302027
20°	190563
25°	117344
30°	67016
35°	36235
40°	17148
45°	8529
50°	4912
55°	2312
60°	1074
65°	598
70°	739
75°	0
80°	0
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.5	27.5
10°-20°	265.5	38.0
20°-30°	157.3	22.5
30°-40°	61.5	8.8
40°-50°	16.4	2.3
50°-60°	4.2	0.6
60°-70°	1.1	0.2
70°-80°	0.1	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°	615.4	88.1
0°-40°	676.9	96.9
0°-60°	697.6	99.8
0°-90°	698.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	698.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2401	
5°	2222	192
15°	924	266
25°	337	157
35°	94	62
45°	19	16
55°	4	4
65°	1	1
75°	0	0
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2400.7
1°	2409.0
2°	2382.4
3°	2340.9
4°	2296.8
5°	2221.9
6°	2124.6
7°	2042.3
8°	1897.6
9°	1757.9
10°	1614.9
12.5°	1226.6
15°	923.9
17.5°	716.8
20°	567.1
22.5°	439.9
25°	336.8
27.5°	252.0
30°	183.8
32.5°	133.9
35°	94.0
37.5°	62.4
40°	41.6
42.5°	27.4
45°	19.1
47.5°	14.1
50°	10.0
52.5°	6.7
55°	4.2
57.5°	2.5
60°	1.7
62.5°	1.7
65°	0.8
67.5°	0.8
70°	0.8
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
90°	0.0

(END OF REPORT)