

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: P601245

Luminaire Tested: **ML408LSFL95FS1E - TIR4D40FL - 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: P601245
 Test Lab: COOPER LIGHTING SOLUTIONS
 Issue Date: 7/29/2022
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: ML408LSFL95FS1E - TIR4D40FL - TL41R_ TL42S_ 3000K
 Description: RETROFIT, 40D OPTIC, OPEN TRIM
 Light Source: (1) SELECTABLE LUMEN LED 95CRI / 3000K CCT
 Ballast/Driver: -

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 997.6 lumens
 Efficiency: N/A
 Efficacy: 96.9 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

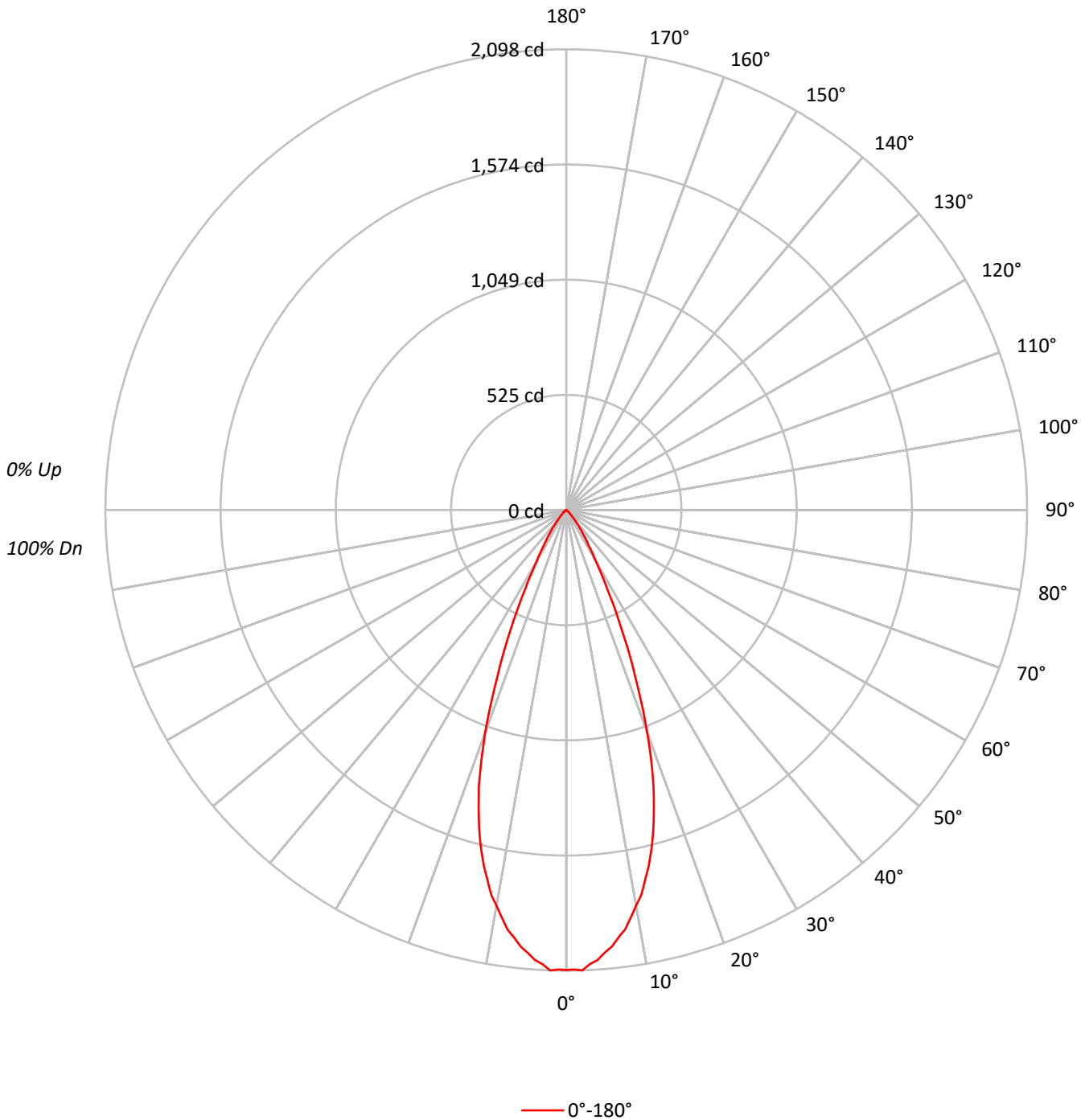
Input Watts (W): 10.3
 Input Voltage (V): NR
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 25 FT



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	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°	661307
5°	641106
10°	586765
15°	499313
20°	362140
25°	206293
30°	98118
35°	51191
40°	25639
45°	12280
50°	7074
55°	3303
60°	758
65°	897
70°	0
75°	0
80°	0
85°	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.2	18.8
10°-20°	414.5	41.6
20°-30°	276.5	27.7
30°-40°	88.6	8.9
40°-50°	24.1	2.4
50°-60°	5.9	0.6
60°-70°	0.7	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°	878.3	88.0
0°-40°	966.9	96.9
0°-60°	996.9	99.9
0°-90°	997.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	997.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2094	
5°	2023	187
15°	1527	415
25°	592	277
35°	133	89
45°	28	24
55°	6	6
65°	1	1
75°	0	0
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2094.3
1°	2093.1
2°	2097.9
3°	2070.4
4°	2053.7
5°	2022.6
6°	1997.5
7°	1959.2
8°	1928.1
9°	1877.9
10°	1830.0
11°	1787.0
12°	1723.6
13°	1665.0
14°	1599.2
15°	1527.4
17.5°	1322.9
20°	1077.7
22.5°	818.1
25°	592.1
27.5°	401.9
30°	269.1
32.5°	186.6
35°	132.8
37.5°	94.5
40°	62.2
42.5°	40.7
45°	27.5
47.5°	20.3
50°	14.4
52.5°	9.6
55°	6.0
57.5°	3.6
60°	1.2
62.5°	1.2
65°	1.2
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

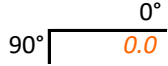
Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269


NVLAP Lab Code: 200050-0



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CANDELA DISTRIBUTION (continued):



(END OF REPORT)