

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO

Report Number: P886031

Luminaire Tested: ML104LSFLD2W1E-TIR1D40FL-TL1SDMWB-200LM-4000K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P886031
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-145)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFLD2W1E-TIR1D40FL-TL1SDMWB-200LM-4000K
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE BAFFLED TRIM
Light Source: (1) D2W LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 248.6 lumens
Efficiency: N/A
Efficacy: 77.7 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.69 / 0.68
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')
CIE Type: Direct

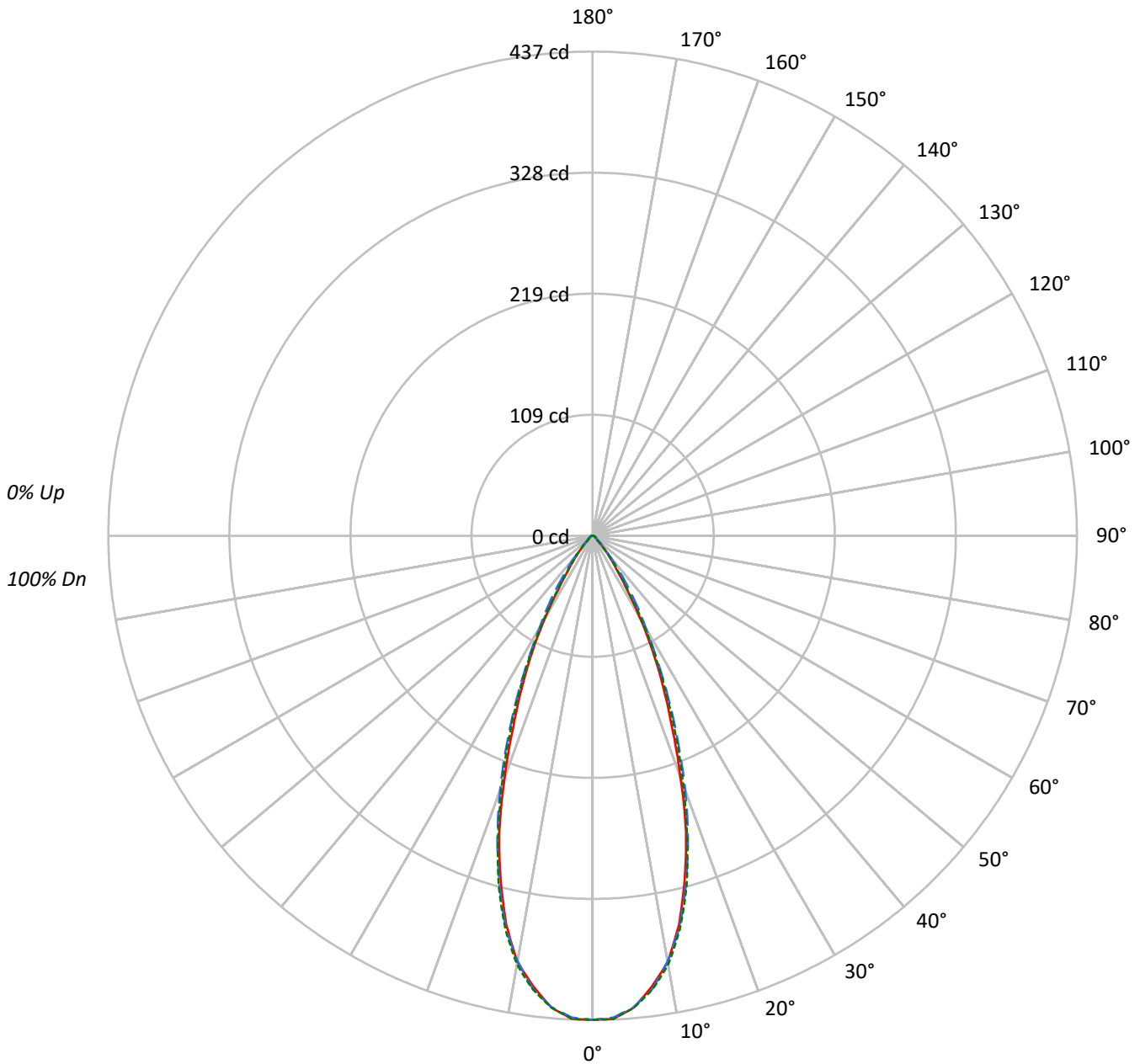
Input Watts (W): 3.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94								
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88								
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	84	83								
4	99	92	87	83	97	91	86	82	89	85	81	87	83	81	85	82	80	78								
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74								
6	91	82	77	73	89	82	76	73	80	76	72	79	75	72	78	74	71	70								
7	87	78	73	69	85	78	72	69	76	72	68	75	71	68	74	70	68	66								
8	83	74	69	65	82	74	69	65	73	68	65	72	68	65	71	67	64	63								
9	80	71	66	62	79	70	65	62	70	65	62	69	64	61	68	64	61	60								
10	77	68	62	59	76	67	62	59	67	62	59	66	62	59	65	61	58	57								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	677202	677202	677202
5°	665007	664074	665007
10°	614619	613832	618396
15°	515107	521847	525538
20°	382352	402971	394229
25°	257222	276548	269365
30°	153207	171284	161798
35°	74175	101234	78716
40°	40873	49371	42087
45°	18194	26085	16879
50°	11575	14227	11575
55°	9729	11350	9729
60°	9300	9300	9300
65°	8802	8802	8802
70°	8157	8157	8157
75°	7187	7187	7187
80°	5356	10711	10711
85°	10671	10671	10671

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 26085 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.6	15.9
10°-20°	88.9	35.7
20°-30°	72.4	29.1
30°-40°	31.0	12.5
40°-50°	8.7	3.5
50°-60°	3.6	1.4
60°-70°	2.5	1.0
70°-80°	1.5	0.6
80°-90°	0.5	0.2
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°	200.9	80.8
0°-40°	231.8	93.2
0°-60°	244.1	98.2
0°-90°	248.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	248.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	437	437	437	437	437	
5°	427	427	427	427	427	40
15°	321	322	325	326	328	88
25°	150	154	162	158	158	69
35°	39	44	54	47	42	27
45°	8	10	12	10	8	8
55°	4	4	4	4	4	3
65°	2	2	2	2	2	3
75°	1	1	1	1	1	1
85°	1	1	1	1	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	436.9	436.9	436.9	436.9	436.9
2.5°	436.3	435.7	435.1	435.7	436.3
5°	427.4	426.8	426.8	426.8	427.4
7.5°	410.2	411.9	412.5	413.1	413.1
10°	390.5	389.4	390.0	391.1	392.9
12.5°	359.6	360.2	362.0	363.2	363.8
15°	321.0	322.2	325.2	326.3	327.5
17.5°	280.0	281.2	285.9	285.3	283.5
20°	231.8	236.0	244.3	244.3	239.0
22.5°	187.2	193.2	200.9	198.5	196.8
25°	150.4	154.0	161.7	158.1	157.5
27.5°	117.1	121.9	125.4	125.4	121.9
30°	85.6	93.3	95.7	95.7	90.4
32.5°	57.7	64.8	73.7	68.4	60.6
35°	39.2	44.0	53.5	47.0	41.6
37.5°	28.5	30.9	36.9	31.5	29.7
40°	20.2	22.0	24.4	22.6	20.8
42.5°	13.7	14.9	16.6	15.5	13.7
45°	8.3	10.1	11.9	10.1	7.7
47.5°	5.9	6.5	8.9	6.5	5.9
50°	4.8	5.3	5.9	5.3	4.8
52.5°	4.2	4.2	4.8	4.2	4.2
55°	3.6	4.2	4.2	4.2	3.6
57.5°	3.0	3.6	3.6	3.6	3.0
60°	3.0	3.0	3.0	3.0	3.0
62.5°	3.0	3.0	3.0	3.0	3.0
65°	2.4	2.4	2.4	2.4	2.4
67.5°	2.4	2.4	2.4	2.4	2.4
70°	1.8	1.8	1.8	1.8	1.8
72.5°	1.8	1.8	1.8	1.8	1.8
75°	1.2	1.2	1.2	1.2	1.2
77.5°	1.2	1.2	1.2	1.2	1.2
80°	0.6	1.2	1.2	1.2	1.2
82.5°	0.6	0.6	0.6	0.6	0.6
85°	0.6	0.6	0.6	0.6	0.6
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

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

Scaled Data Report



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Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270°

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