

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: P885965

Luminaire Tested: ML104LSFL9FS1E-TIR1D55WFL-TL1SDMBB-400LM-3500K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P885965
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-153)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D55WFL-TL1SDMBB-400LM-3500K
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE BLACK BAFFLED TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

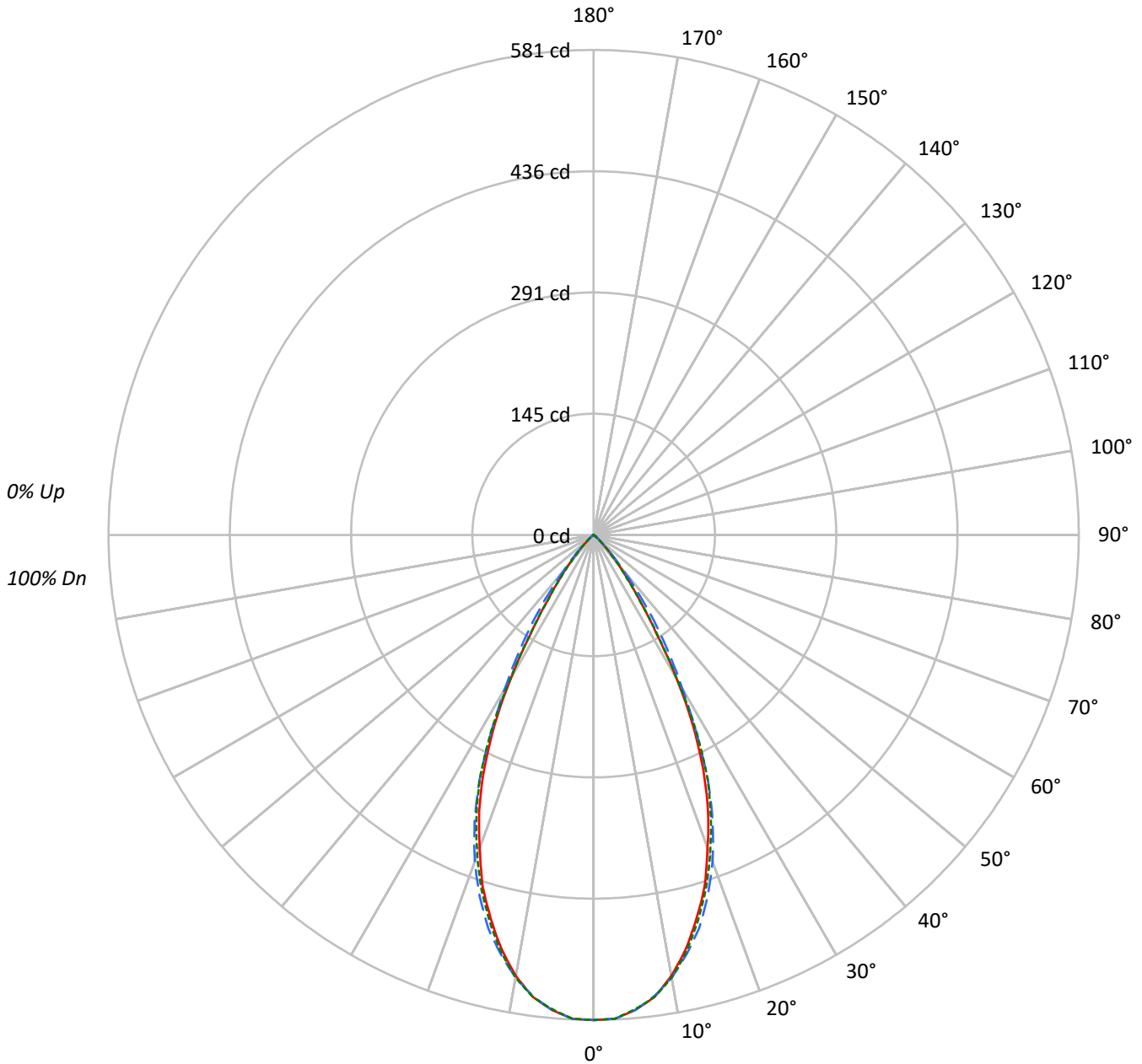
Lumens per Lamp: N/A
Luminaire Lumens: 420.0 lumens
Efficiency: N/A
Efficacy: 70.0 lumens/watt
Spacing Criteria (0/90/45): 0.81 / 0.83 / 0.8
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')
CIE Type: Direct

Input Watts (W): 6
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	107	102	99	96	99	96	94	96	94	92	94	92	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	84	81	87	83	80	85	82	79	78								
5	94	86	81	77	93	85	80	77	84	79	76	82	78	75	81	77	75	73								
6	90	82	76	72	88	81	75	72	79	75	71	78	74	71	77	73	70	69								
7	86	77	71	67	84	76	71	67	75	70	67	74	70	67	73	69	66	65								
8	82	73	67	64	81	72	67	63	71	67	63	70	66	63	69	66	63	61								
9	78	69	64	60	77	69	63	60	68	63	60	67	63	59	66	62	59	58								
10	75	66	60	57	74	65	60	57	65	60	56	64	59	56	63	59	56	55								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	901024	901024	901024
5°	889062	889062	887351
10°	844097	847560	847560
15°	763514	782931	770574
20°	657983	687014	672498
25°	531889	552583	552583
30°	355992	379618	357961
35°	185059	239177	182978
40°	93481	111085	89030
45°	36169	43403	36169
50°	13263	13263	10610
55°	2973	5945	5945
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 43403 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.5	12.7
10°-20°	134.0	31.9
20°-30°	143.2	34.1
30°-40°	71.3	17.0
40°-50°	16.1	3.8
50°-60°	1.9	0.5
60°-70°	0.0	0.0
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°	330.7	78.7
0°-40°	402.0	95.7
0°-60°	420.0	100.0
0°-90°	420.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	420.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	581	581	581	581	581	
5°	571	571	571	571	570	53
15°	476	480	488	485	480	132
25°	311	315	323	323	323	139
35°	98	106	126	108	97	65
45°	16	18	20	18	16	15
55°	1	2	2	2	2	2
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	581.3	581.3	581.3	581.3	581.3
2.5°	580.2	580.2	580.2	580.2	580.2
5°	571.4	571.4	571.4	571.4	570.3
7.5°	558.3	558.3	557.2	557.2	558.3
10°	536.3	537.4	538.5	538.5	538.5
12.5°	508.8	509.9	514.3	513.2	512.1
15°	475.8	480.2	487.9	484.6	480.2
17.5°	441.8	446.2	453.9	451.7	446.2
20°	398.9	404.4	416.5	412.1	407.7
22.5°	358.2	363.7	372.5	372.5	367.0
25°	311.0	315.4	323.1	323.1	323.1
27.5°	257.1	263.7	264.8	270.3	267.0
30°	198.9	207.7	212.1	211.0	200.0
32.5°	139.6	153.8	167.0	159.3	142.9
35°	97.8	105.5	126.4	107.7	96.7
37.5°	67.0	70.3	87.9	70.3	65.9
40°	46.2	47.3	54.9	48.4	44.0
42.5°	28.6	30.8	34.1	29.7	27.5
45°	16.5	17.6	19.8	17.6	16.5
47.5°	8.8	9.9	11.0	9.9	8.8
50°	5.5	5.5	5.5	5.5	4.4
52.5°	3.3	3.3	3.3	3.3	3.3
55°	1.1	2.2	2.2	2.2	2.2
57.5°	0.0	1.1	1.1	1.1	0.0
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
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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