

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: P885964

Luminaire Tested: ML104LSFL9FS1E-TIR1D55WFL-TL1SDMBB-400LM-3000K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P885964
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-3000K
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE BLACK BAFFLED TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

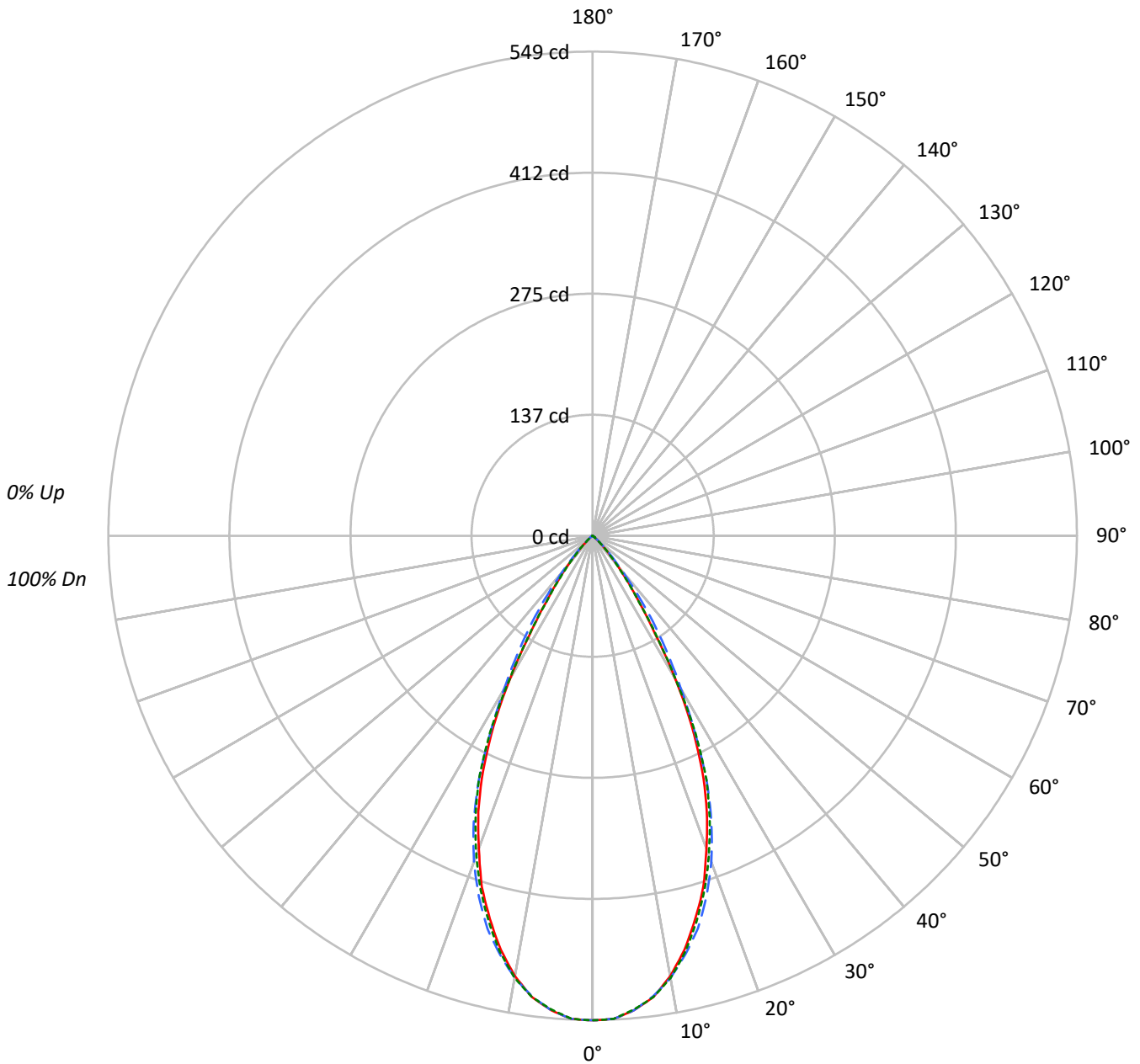
Lumens per Lamp: N/A
Luminaire Lumens: 396.9 lumens
Efficiency: N/A
Efficacy: 66.2 lumens/watt
Spacing Criteria (0/90/45): 0.81 / 0.83 / 0.8
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')
CIE Type: Direct

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°	851579	851579	851579
5°	840206	840206	838650
10°	797667	800972	800972
15°	721631	739925	728211
20°	621859	649240	635550
25°	502644	522140	522140
30°	336483	358677	338273
35°	174841	225931	172949
40°	88220	105015	83971
45°	34196	40991	34196
50°	12539	12539	10128
55°	2702	5675	5675
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: 40991 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.5	12.7
10°-20°	126.6	31.9
20°-30°	135.3	34.1
30°-40°	67.4	17.0
40°-50°	15.2	3.8
50°-60°	1.8	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°	312.5	78.7
0°-40°	379.9	95.7
0°-60°	396.9	100.0
0°-90°	396.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	396.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	549	549	549	549	549	
5°	540	540	540	540	539	51
15°	450	454	461	458	454	125
25°	294	298	305	305	305	131
35°	92	100	119	102	91	62
45°	16	17	19	17	16	14
55°	1	2	2	2	2	1
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°	549.4	549.4	549.4	549.4	549.4
2.5°	548.3	548.3	548.3	548.3	548.3
5°	540.0	540.0	540.0	540.0	539.0
7.5°	527.5	527.5	526.5	526.5	527.5
10°	506.8	507.8	508.9	508.9	508.9
12.5°	480.8	481.9	486.0	485.0	483.9
15°	449.7	453.8	461.1	458.0	453.8
17.5°	417.5	421.6	428.9	426.8	421.6
20°	377.0	382.2	393.6	389.4	385.3
22.5°	338.5	343.7	352.0	352.0	346.8
25°	293.9	298.0	305.3	305.3	305.3
27.5°	243.0	249.2	250.3	255.5	252.3
30°	188.0	196.3	200.4	199.4	189.0
32.5°	131.9	145.4	157.8	150.6	135.0
35°	92.4	99.7	119.4	101.8	91.4
37.5°	63.3	66.5	83.1	66.5	62.3
40°	43.6	44.7	51.9	45.7	41.5
42.5°	27.0	29.1	32.2	28.0	26.0
45°	15.6	16.6	18.7	16.6	15.6
47.5°	8.3	9.3	10.4	9.3	8.3
50°	5.2	5.2	5.2	5.2	4.2
52.5°	3.1	3.1	3.1	3.1	3.1
55°	1.0	2.1	2.1	2.1	2.1
57.5°	0.0	1.0	1.0	1.0	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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