

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: P885710

Luminaire Tested: ML104LSFL95FS1E-TIR1D40FL-TL1SDMB-340LM-3500K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P885710
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-144)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL95FS1E-TIR1D40FL-TL1SDMB-340LM-3500K
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 383.4 lumens
Efficiency: N/A
Efficacy: 62.8 lumens/watt
Spacing Criteria (0/90/45): 0.67 / 0.68 / 0.68
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')

CIE Type: Direct

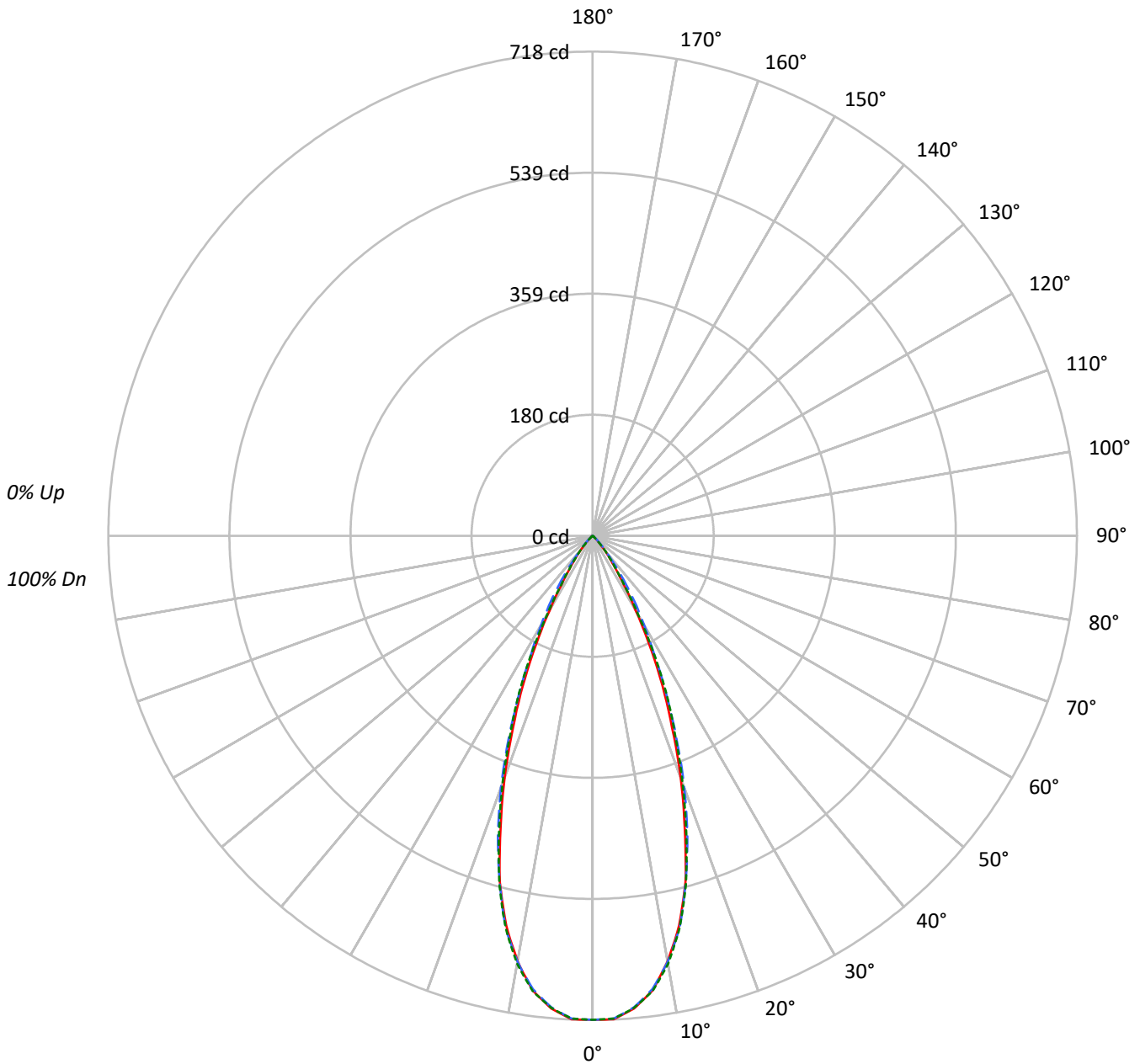
Input Watts (W): 6.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1112447	1112447	1112447
5°	1095068	1092112	1093513
10°	1008101	1009675	1014239
15°	853056	854660	857870
20°	628622	654849	643302
25°	418157	438509	443640
30°	228558	272766	242697
35°	108613	151756	114290
40°	52001	64142	56048
45°	17317	28277	15125
50°	4823	9646	4823
55°	2702	2702	2702
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: 28277 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.2	17.0
10°-20°	145.5	38.0
20°-30°	116.5	30.4
30°-40°	45.8	11.9
40°-50°	9.4	2.5
50°-60°	1.0	0.3
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°	327.2	85.3
0°-40°	372.9	97.3
0°-60°	383.4	100.0
0°-90°	383.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	383.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	704	702	702	703	703	65
15°	532	530	533	534	535	144
25°	244	246	256	260	259	111
35°	57	65	80	67	60	40
45°	8	10	13	10	7	8
55°	1	1	1	1	1	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°	717.7	717.7	717.7	717.7	717.7
2.5°	717.7	715.7	716.7	717.7	716.7
5°	703.8	701.9	701.9	702.8	702.8
7.5°	680.1	679.1	678.1	679.1	681.1
10°	640.5	642.5	641.5	644.4	644.4
12.5°	592.0	591.0	595.9	595.9	595.9
15°	531.6	529.6	532.6	533.6	534.6
17.5°	453.4	460.3	467.2	464.3	461.3
20°	381.1	387.1	397.0	393.0	390.0
22.5°	307.9	315.8	324.7	322.7	318.8
25°	244.5	246.5	256.4	260.3	259.4
27.5°	181.2	193.0	197.0	202.9	195.0
30°	127.7	141.6	152.4	149.5	135.6
32.5°	86.1	97.0	114.8	103.0	88.1
35°	57.4	65.3	80.2	67.3	60.4
37.5°	39.6	43.6	51.5	45.5	40.6
40°	25.7	29.7	31.7	30.7	27.7
42.5°	14.8	18.8	20.8	18.8	15.8
45°	7.9	9.9	12.9	9.9	6.9
47.5°	4.0	4.9	7.9	4.9	4.0
50°	2.0	3.0	4.0	3.0	2.0
52.5°	1.0	2.0	2.0	2.0	1.0
55°	1.0	1.0	1.0	1.0	1.0
57.5°	0.0	0.0	1.0	0.0	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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