

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: P885731

Luminaire Tested: ML104LSFL95FS1E-TIR1D40FL-TL1SDSL-340LM-4000K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P885731
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-143)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL95FS1E-TIR1D40FL-TL1SDSL-340LM-4000K
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, METALLIC SILVER TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 4000K CCT
Ballast/Driver: -

Summary

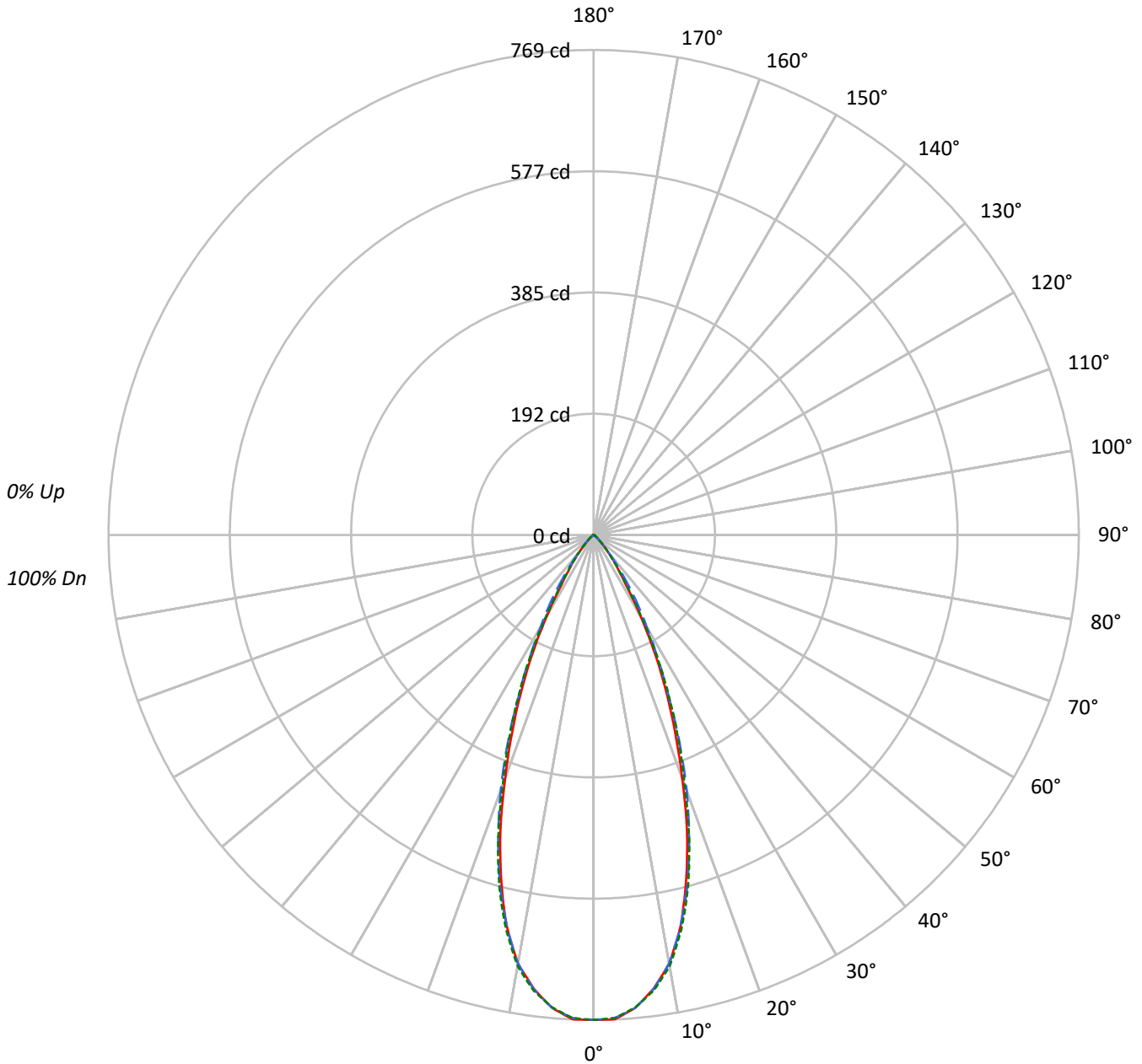
Lumens per Lamp: N/A
Luminaire Lumens: 426.8 lumens
Efficiency: N/A
Efficacy: 70.0 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.69 / 0.68
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')
CIE Type: Direct

Input Watts (W): 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				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100
	1	114	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95	95
	2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89	89
	3	104	99	94	91	102	97	93	90	95	91	88	92	89	87	90	88	86	84	84
	4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80	80
	5	96	88	83	79	94	87	82	79	85	81	78	84	80	77	82	79	77	75	75
	6	92	84	78	74	90	83	78	74	81	77	74	80	76	73	79	75	73	71	71
	7	88	79	74	70	86	79	74	70	78	73	70	76	72	69	75	72	69	68	68
	8	84	76	70	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65	65
	9	81	72	67	63	80	72	67	63	71	66	63	70	66	63	69	65	63	61	61
	10	78	69	64	60	77	69	64	60	68	63	60	67	63	60	66	63	60	59	59

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1191807	1191807	1191807
5°	1171776	1171776	1170220
10°	1085853	1085853	1092621
15°	909381	921255	927995
20°	675962	710601	694931
25°	459374	479213	482805
30°	263996	299792	277062
35°	133591	173327	137564
40°	72438	78913	72438
45°	30031	39238	32223
50°	17844	17844	17844
55°	11350	8648	11350
60°	6510	3410	6510
65°	4034	4034	7702
70°	4985	4985	4985
75°	6588	0	6588
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 39238 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.9	16.4
10°-20°	156.8	36.7
20°-30°	127.9	30.0
30°-40°	53.2	12.5
40°-50°	13.9	3.2
50°-60°	3.5	0.8
60°-70°	1.3	0.3
70°-80°	0.5	0.1
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°	354.5	83.1
0°-40°	407.7	95.5
0°-60°	425.0	99.6
0°-90°	426.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	426.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	769	769	769	769	769	
5°	753	753	753	754	752	70
15°	567	568	574	576	578	155
25°	269	276	280	283	282	123
35°	71	77	92	78	73	48
45°	14	16	18	16	15	13
55°	4	3	3	3	4	4
65°	1	1	1	1	2	1
75°	1	0	0	0	1	1
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°	768.9	768.9	768.9	768.9	768.9
2.5°	768.9	768.9	766.8	767.9	766.8
5°	753.1	753.1	753.1	754.2	752.1
7.5°	725.8	727.9	726.8	726.8	728.9
10°	689.9	689.9	689.9	691.0	694.2
12.5°	636.2	637.3	636.2	639.4	641.5
15°	566.7	567.8	574.1	576.2	578.3
17.5°	491.9	495.1	503.5	504.6	503.5
20°	409.8	418.2	430.8	427.7	421.3
22.5°	336.0	341.3	355.0	349.7	350.8
25°	268.6	276.0	280.2	283.4	282.3
27.5°	206.5	215.9	219.1	222.3	218.0
30°	147.5	159.1	167.5	166.4	154.8
32.5°	99.0	112.7	127.5	115.9	105.3
35°	70.6	76.9	91.6	77.9	72.7
37.5°	51.6	53.7	60.0	53.7	51.6
40°	35.8	37.9	39.0	37.9	35.8
42.5°	23.2	25.3	26.3	25.3	23.2
45°	13.7	15.8	17.9	15.8	14.7
47.5°	9.5	8.4	11.6	9.5	10.5
50°	7.4	6.3	7.4	7.4	7.4
52.5°	5.3	5.3	4.2	5.3	5.3
55°	4.2	3.2	3.2	3.2	4.2
57.5°	3.2	2.1	2.1	3.2	3.2
60°	2.1	2.1	1.1	2.1	2.1
62.5°	2.1	1.1	1.1	2.1	2.1
65°	1.1	1.1	1.1	1.1	2.1
67.5°	1.1	1.1	1.1	1.1	1.1
70°	1.1	1.1	1.1	1.1	1.1
72.5°	1.1	1.1	0.0	1.1	1.1
75°	1.1	0.0	0.0	0.0	1.1
77.5°	0.0	0.0	0.0	0.0	1.1
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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