

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: P885735

Luminaire Tested: ML104LSFL95FS1E-TIR1D40FL-TL1SDSLB-340LM-3500K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885735  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-146)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/19/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML104LSFL95FS1E-TIR1D40FL-TL1SDSLB-340LM-3500K  
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, METALLIC SILVER BAFFLED TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 410.1 lumens  
Efficiency: N/A  
Efficacy: 67.2 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

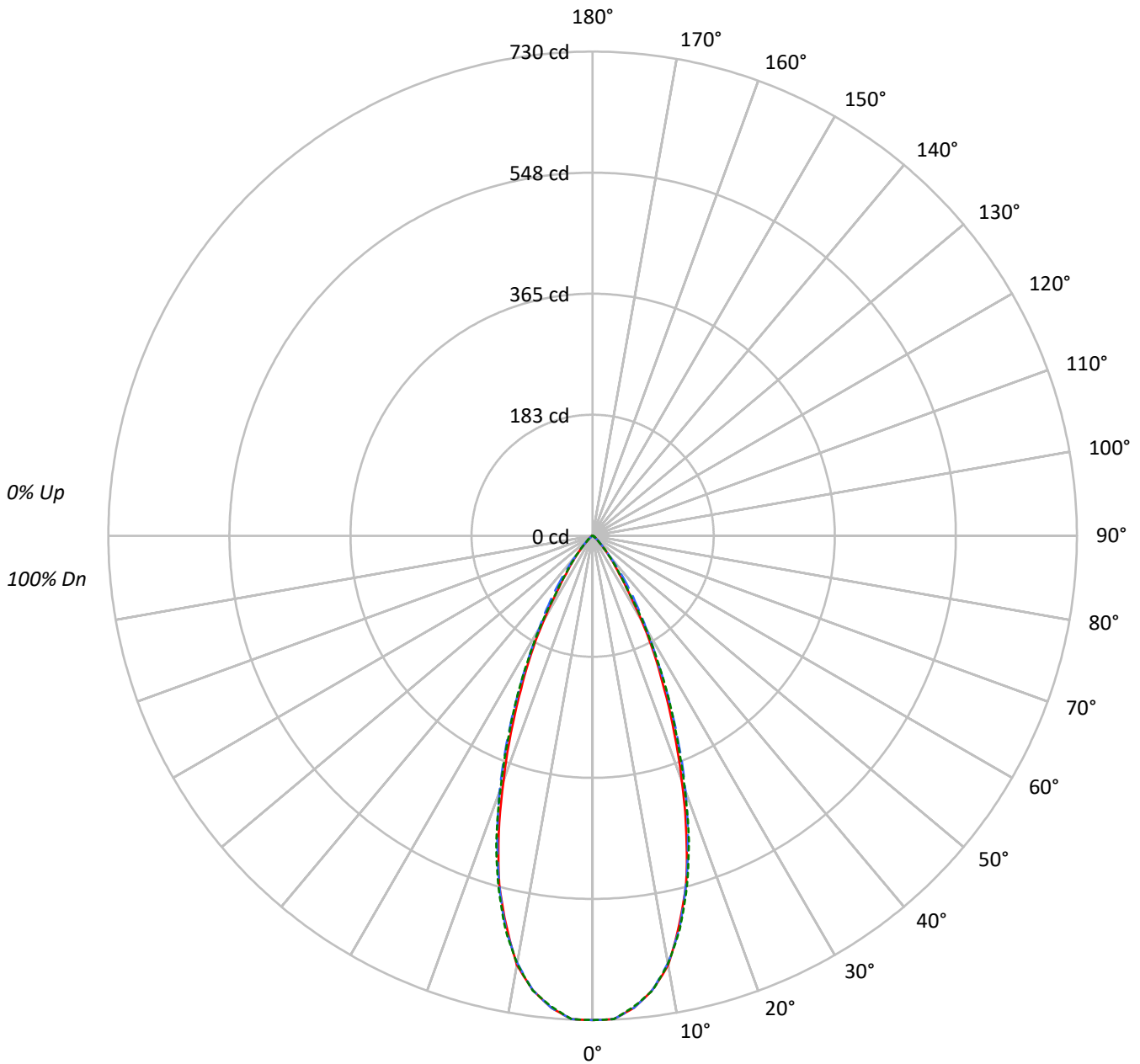
Input Watts (W): 6.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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					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	100	100	100	100	100		
	1	114	112	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95	95	95	95	95	95		
	2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89	89	89	89	89	89		
	3	104	99	94	90	102	97	93	90	95	91	88	92	89	87	90	88	86	84	84	84	84	84	84		
	4	100	93	88	84	98	92	87	84	90	86	83	88	84	82	86	83	81	79	79	79	79	79	79		
	5	95	88	83	79	94	87	82	79	85	81	78	84	80	77	82	79	77	75	75	75	75	75	75		
	6	91	83	78	74	90	83	78	74	81	77	73	80	76	73	79	75	73	71	71	71	71	71	71		
	7	88	79	74	70	86	79	74	70	77	73	70	76	72	69	75	72	69	68	68	68	68	68	68		
	8	84	75	70	66	83	75	70	66	74	69	66	73	69	66	72	68	65	64	64	64	64	64	64		
	9	81	72	67	63	80	71	66	63	71	66	63	70	66	63	69	65	62	61	61	61	61	61	61		
	10	77	69	64	60	76	68	63	60	68	63	60	67	63	60	66	62	60	58	58	58	58	58	58		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1131977	1131977	1131977
5°	1111717	1111717	1108605
10°	1034228	1029506	1031080
15°	873435	873435	879854
20°	648086	675797	669199
25°	436628	462111	463821
30°	263996	286906	281715
35°	131131	172192	136618
40°	72033	78103	74057
45°	30470	39019	32442
50°	19050	16639	19050
55°	13242	8107	13242
60°	9300	3100	9300
65°	7335	3668	7335
70°	4532	0	4532
75°	0	0	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 39019 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.3	16.2
10°-20°	149.2	36.4
20°-30°	122.7	29.9
30°-40°	52.8	12.9
40°-50°	13.9	3.4
50°-60°	3.7	0.9
60°-70°	1.3	0.3
70°-80°	0.2	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°	338.2	82.5
0°-40°	391.0	95.3
0°-60°	408.6	99.6
0°-90°	410.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	410.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	714	714	714	712	712	66
15°	544	544	544	546	548	148
25°	255	261	270	271	271	118
35°	69	76	91	79	72	47
45°	14	16	18	16	15	13
55°	5	4	3	4	5	5
65°	2	1	1	1	2	2
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	730.3	730.3	730.3	730.3	730.3
2.5°	729.4	730.3	729.4	729.4	729.4
5°	714.5	713.5	714.5	712.5	712.5
7.5°	690.8	689.8	690.8	690.8	691.7
10°	657.1	652.2	654.1	657.1	655.1
12.5°	601.7	605.6	605.6	607.6	607.6
15°	544.3	544.3	544.3	546.3	548.3
17.5°	470.1	472.1	478.0	480.0	482.9
20°	392.9	399.8	409.7	407.7	405.7
22.5°	321.6	325.6	338.5	336.5	333.5
25°	255.3	261.3	270.2	271.2	271.2
27.5°	200.9	206.8	209.8	214.7	209.8
30°	147.5	158.3	160.3	164.3	157.4
32.5°	100.0	109.8	123.7	116.8	103.9
35°	69.3	76.2	91.0	79.2	72.2
37.5°	49.5	52.5	61.4	54.4	51.5
40°	35.6	37.6	38.6	38.6	36.6
42.5°	23.8	24.7	25.7	25.7	24.7
45°	13.9	15.8	17.8	15.8	14.8
47.5°	9.9	9.9	10.9	9.9	9.9
50°	7.9	6.9	6.9	6.9	7.9
52.5°	5.9	4.9	4.0	4.9	5.9
55°	4.9	4.0	3.0	4.0	4.9
57.5°	4.0	3.0	2.0	3.0	4.0
60°	3.0	2.0	1.0	2.0	3.0
62.5°	2.0	2.0	1.0	2.0	2.0
65°	2.0	1.0	1.0	1.0	2.0
67.5°	1.0	1.0	1.0	1.0	1.0
70°	1.0	1.0	0.0	1.0	1.0
72.5°	1.0	0.0	0.0	0.0	1.0
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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