

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: P885865

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1SDSLB-400LM-3500K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P885865
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-140)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D25NFL-TL1SDSLB-400LM-3500K
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER BAFFLED TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

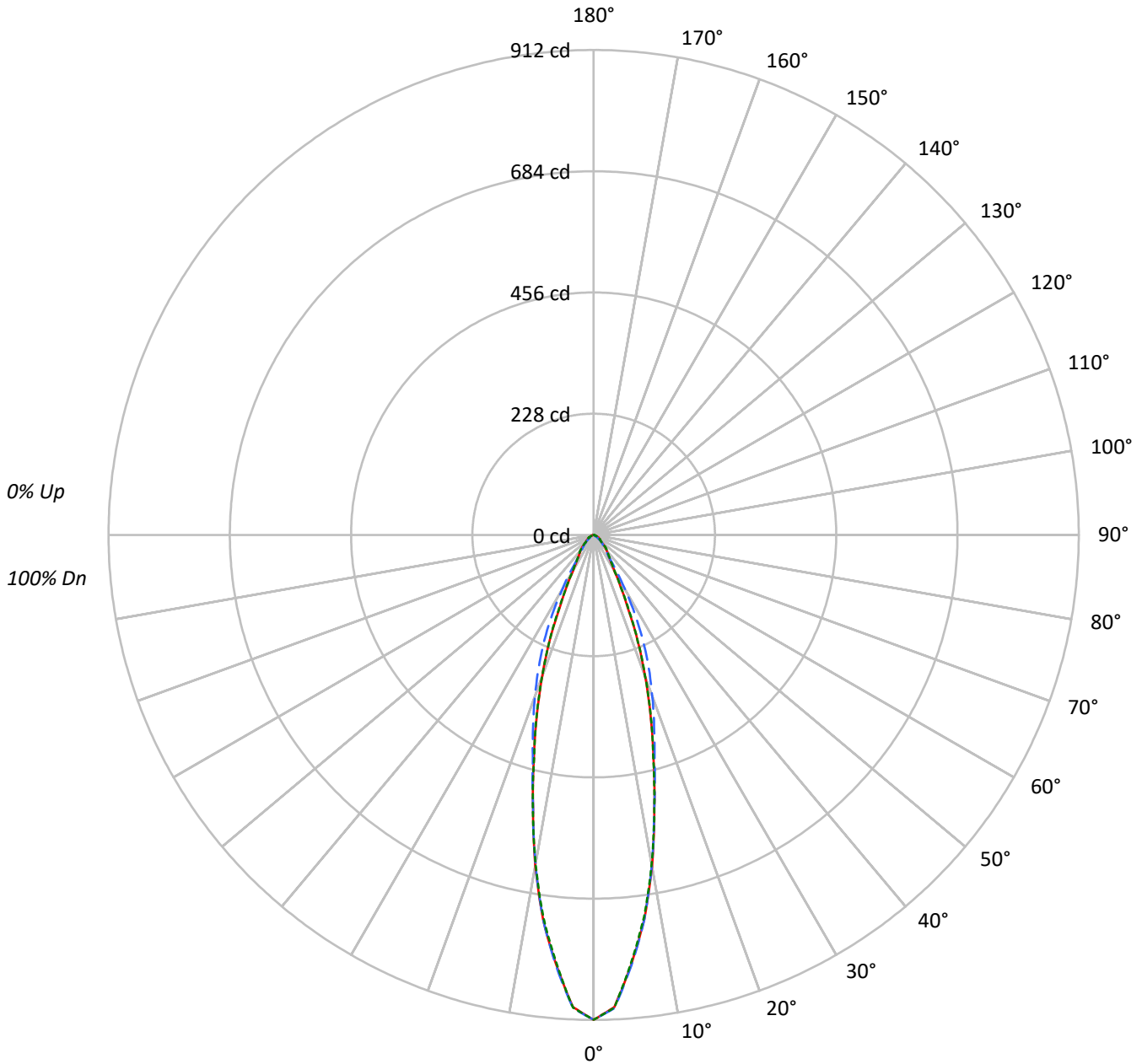
Lumens per Lamp: N/A
Luminaire Lumens: 346.0 lumens
Efficiency: N/A
Efficacy: 57.7 lumens/watt
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.56
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')
CIE Type: Direct

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				
RW	70	50	30	10	70	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	112	109	107	105	105	104	102	101	100	99	98	97	96	94		
2	109	104	101	98	107	103	99	96	99	97	94	97	94	92	94	92	90	89		
3	104	98	94	90	102	97	93	89	94	91	88	92	89	87	90	87	85	84		
4	100	93	88	84	98	92	87	83	89	86	82	88	84	81	86	83	81	79		
5	95	88	83	79	94	87	82	78	85	81	78	84	80	77	82	79	76	75		
6	91	83	78	74	90	83	78	74	81	77	73	80	76	73	79	75	72	71		
7	88	79	74	70	86	79	74	70	78	73	70	76	72	69	75	72	69	68		
8	84	76	71	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65		
9	81	73	67	64	80	72	67	64	71	67	64	70	66	63	70	66	63	62		
10	78	70	64	61	77	69	64	61	68	64	61	68	64	61	67	63	61	59		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1413305	1413305	1413305
5°	1261398	1264821	1256264
10°	994250	990787	989056
15°	698042	708633	692747
20°	465652	530972	467466
25°	259274	375743	268681
30°	139605	210302	143542
35°	93476	91394	97639
40°	75675	64547	79924
45°	57870	50636	62693
50°	42441	37136	42441
55°	38644	11890	38644
60°	34100	10230	34100
65°	24206	8069	24206
70°	14955	4985	14955
75°	6588	6588	6588
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 62693 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.9	20.8
10°-20°	122.4	35.4
20°-30°	84.2	24.3
30°-40°	34.9	10.1
40°-50°	18.9	5.5
50°-60°	8.7	2.5
60°-70°	3.9	1.1
70°-80°	1.1	0.3
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
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0°-30°	278.5	80.5
0°-40°	313.5	90.6
0°-60°	341.0	98.6
0°-90°	346.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	346.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	912	912	912	912	912	
5°	811	808	813	810	807	72
15°	435	437	442	439	432	121
25°	152	176	220	178	157	73
35°	49	54	48	54	52	33
45°	26	24	23	25	29	20
55°	14	9	4	9	14	13
65°	7	3	2	3	7	7
75°	1	1	1	1	1	2
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°	911.8	911.8	911.8	911.8	911.8
2.5°	888.7	889.8	890.9	893.1	889.8
5°	810.7	808.5	812.9	809.6	807.4
7.5°	729.4	729.4	729.4	727.2	725.0
10°	631.7	631.7	629.5	630.6	628.4
12.5°	526.2	522.9	526.2	524.0	527.3
15°	435.0	437.2	441.6	439.4	431.7
17.5°	354.8	363.6	377.9	364.7	357.0
20°	282.3	298.8	321.9	298.8	283.4
22.5°	217.5	236.2	270.2	237.3	217.5
25°	151.6	175.8	219.7	178.0	157.1
27.5°	109.9	124.1	168.1	126.3	111.0
30°	78.0	90.1	117.5	92.3	80.2
32.5°	60.4	70.3	74.7	69.2	61.5
35°	49.4	53.8	48.3	53.8	51.6
37.5°	42.8	41.7	38.4	42.8	45.0
40°	37.4	34.1	31.9	35.2	39.5
42.5°	33.0	29.7	27.5	29.7	34.1
45°	26.4	24.2	23.1	25.3	28.6
47.5°	19.8	17.6	19.8	18.7	19.8
50°	17.6	12.1	15.4	12.1	17.6
52.5°	15.4	9.9	9.9	9.9	15.4
55°	14.3	8.8	4.4	8.8	14.3
57.5°	12.1	7.7	4.4	7.7	12.1
60°	11.0	6.6	3.3	6.6	11.0
62.5°	8.8	4.4	2.2	4.4	8.8
65°	6.6	3.3	2.2	3.3	6.6
67.5°	4.4	2.2	1.1	2.2	4.4
70°	3.3	2.2	1.1	2.2	3.3
72.5°	2.2	1.1	1.1	1.1	2.2
75°	1.1	1.1	1.1	1.1	1.1
77.5°	1.1	1.1	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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