

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: P885832

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDSL-400LM-5000K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P885832
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-119)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/18/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D25NFL-TL1RDSL-400LM-5000K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

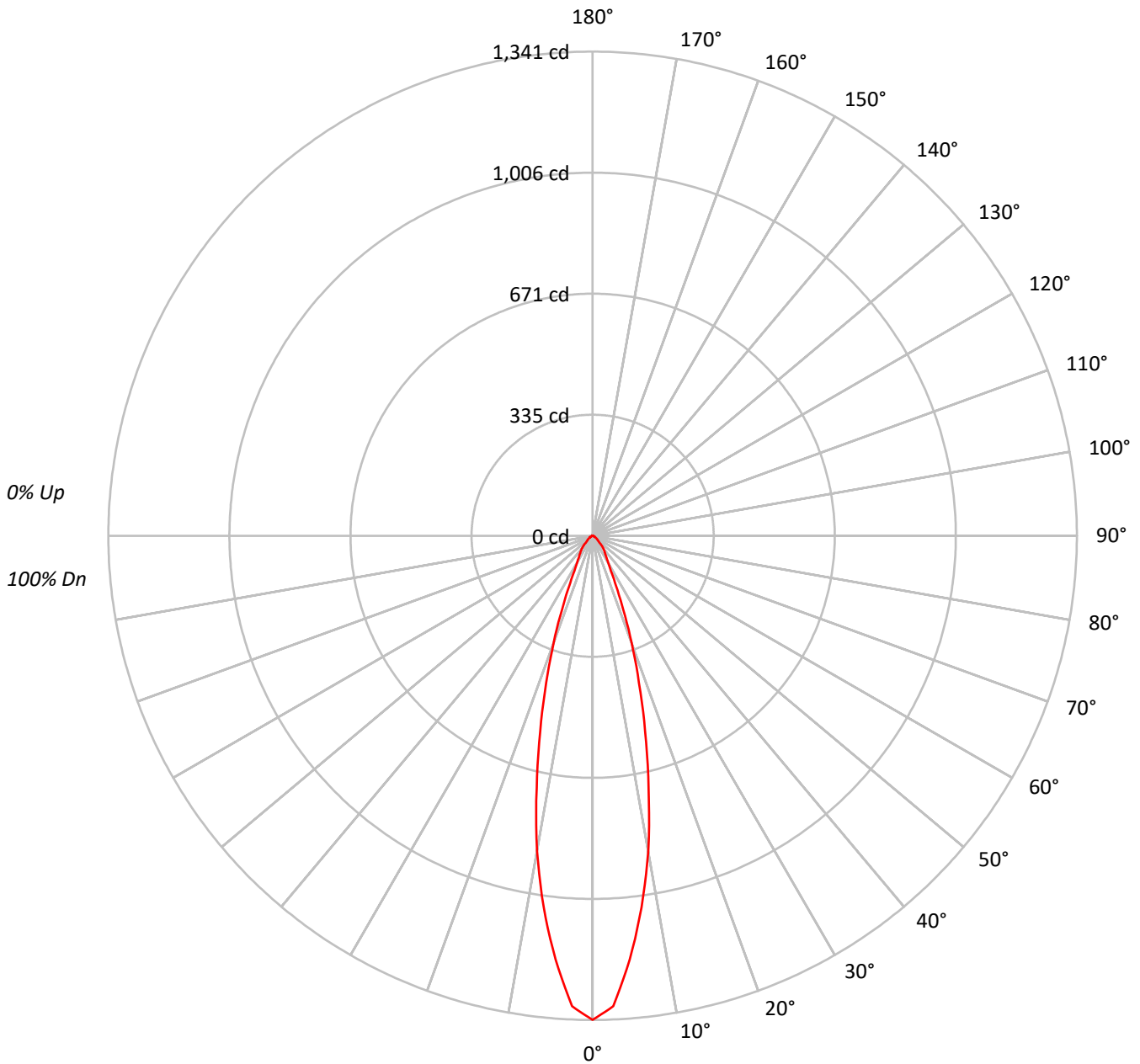
Lumens per Lamp: N/A
Luminaire Lumens: 414.8 lumens
Efficiency: N/A
Efficacy: 69.1 lumens/watt
Spacing Criteria (0/90/45): 0.44 / 0.44 / 0.47
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

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									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	111	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	91	103	97	93	90	95	91	89	92	90	87	90	88	86	84	84	84	84	84	84													
	4	100	93	89	85	98	92	88	84	90	86	83	88	85	82	87	84	82	80	80	80	80	80	80													
	5	96	89	84	80	95	88	83	80	86	82	79	85	81	78	83	80	78	76	76	76	76	76	76													
	6	92	85	79	76	91	84	79	76	82	78	75	81	77	75	80	77	74	73	73	73	73	73	73													
	7	89	81	76	72	88	80	75	72	79	75	72	78	74	71	77	74	71	70	70	70	70	70	70													
	8	86	78	72	69	85	77	72	69	76	72	69	75	71	68	74	71	68	67	67	67	67	67	67													
	9	83	75	69	66	82	74	69	66	73	69	66	72	68	66	72	68	65	64	64	64	64	64	64													
	10	80	72	67	64	79	71	67	63	71	66	63	70	66	63	69	66	63	62	62	62	62	62	62													

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2646125
5°	2334307
10°	1777336
15°	1145192
20°	660933
25°	331425
30°	195525
35°	147205
40°	117221
45°	76195
50°	55879
55°	44730
60°	35918
65°	24283
70°	15003
75°	9913
80°	14775
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 76195 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.4	24.9
10°-20°	154.9	37.4
20°-30°	75.9	18.3
30°-40°	39.0	9.4
40°-50°	22.5	5.4
50°-60°	11.7	2.8
60°-70°	5.3	1.3
70°-80°	1.9	0.5
80°-90°	0.2	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°	334.2	80.6
0°-40°	373.3	90.0
0°-60°	407.4	98.2
0°-90°	414.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	414.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1341	
5°	1178	103
15°	560	155
25°	152	76
35°	61	39
45°	27	22
55°	13	12
65°	5	5
75°	1	2
85°	0	0
90°	0	



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CATALOG NUMBER: ML104LSFL9FS1E-TIR1D25NFL-TL1RD5L-400LM-5000K

CANDELA DISTRIBUTION (FULL):

	0°
0°	1340.8
2.5°	1304.4
5°	1178.3
7.5°	1037.8
10°	886.9
12.5°	715.3
15°	560.5
17.5°	426.6
20°	314.7
22.5°	221.1
25°	152.2
27.5°	109.2
30°	85.8
32.5°	71.5
35°	61.1
37.5°	53.3
40°	45.5
42.5°	37.7
45°	27.3
47.5°	20.8
50°	18.2
52.5°	15.6
55°	13.0
57.5°	10.4
60°	9.1
62.5°	6.5
65°	5.2
67.5°	3.9
70°	2.6
72.5°	2.6
75°	1.3
77.5°	1.3
80°	1.3
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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(END OF REPORT)