

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: P885931

Luminaire Tested: ML104LSFL9FS1E-TIR1D55WFL-TL1RDMB-400LM-4000K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P885931
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-132)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D55WFL-TL1RDMB-400LM-4000K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

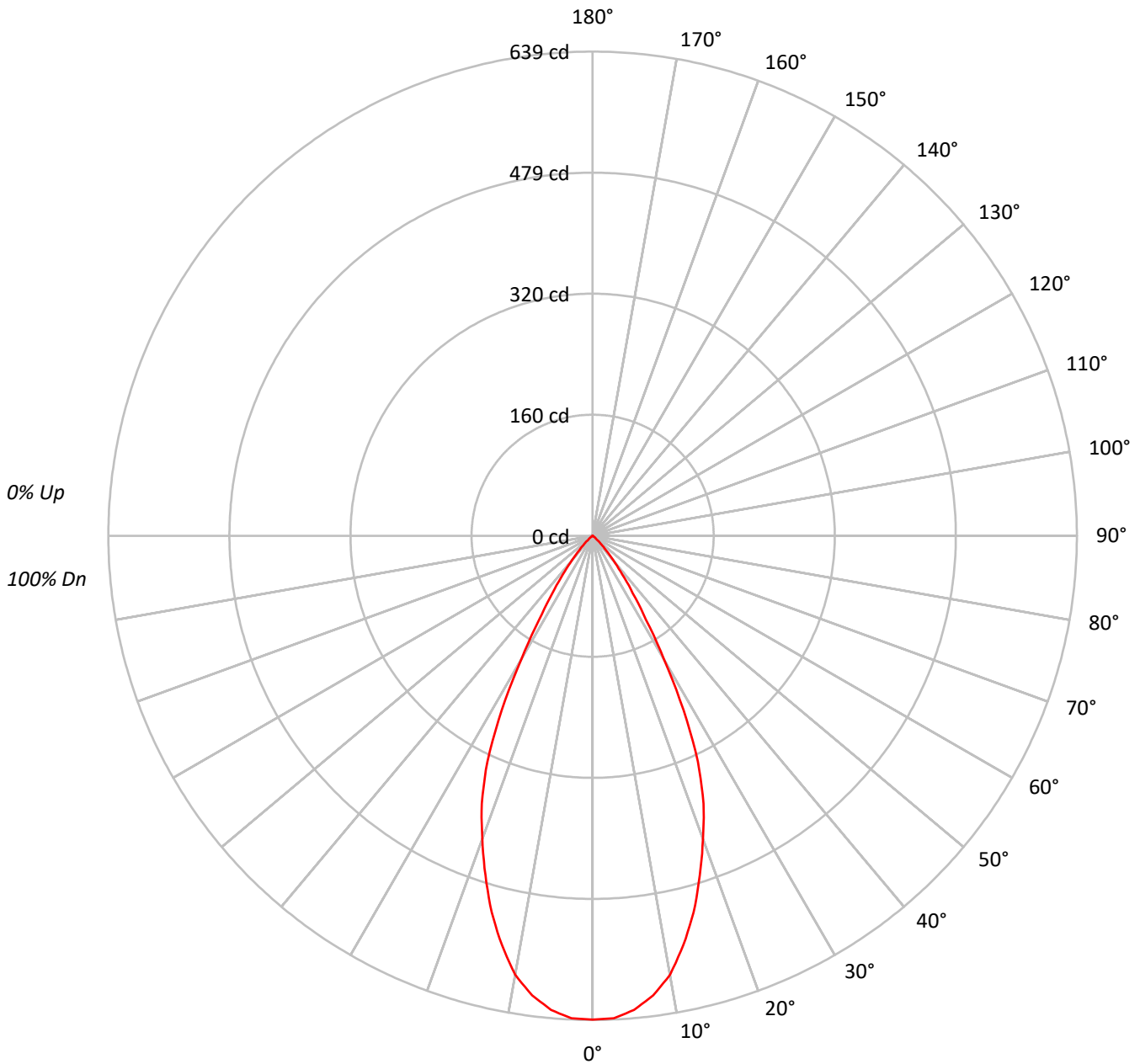
Lumens per Lamp: N/A
Luminaire Lumens: 423.0 lumens
Efficiency: N/A
Efficacy: 70.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.76
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

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				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	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		102	100	99		98	97	96	94
2	109	104	101	98	107	103	99	97	100	97	94		97	94	92		94	92	91	89
3	104	98	94	90	102	97	93	89	94	91	88		92	89	86		90	87	85	84
4	99	92	87	84	98	91	87	83	89	85	82		87	84	81		85	83	80	79
5	95	87	82	78	93	86	81	78	85	80	77		83	79	76		82	78	76	74
6	91	83	77	73	89	82	77	73	80	76	72		79	75	72		78	74	71	70
7	87	78	73	69	85	78	72	69	76	72	68		75	71	68		74	70	68	66
8	83	74	69	65	82	74	68	65	73	68	65		72	67	64		71	67	64	63
9	79	71	65	62	78	70	65	61	69	65	61		68	64	61		68	64	61	60
10	76	67	62	58	75	67	62	58	66	61	58		65	61	58		65	61	58	57

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	1260304
5°	1244317
10°	1178946
15°	1051411
20°	894055
25°	715765
30°	429107
35°	222615
40°	108461
45°	45773
50°	14430
55°	4129
60°	0
65°	0
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 45773 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.7	13.9
10°-20°	142.6	33.7
20°-30°	144.6	34.2
30°-40°	61.5	14.5
40°-50°	14.3	3.4
50°-60°	1.3	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°	345.8	81.8
0°-40°	407.4	96.3
0°-60°	423.0	100.0
0°-90°	423.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	423.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	639	
5°	628	59
15°	515	143
25°	329	145
35°	92	62
45°	16	14
55°	1	1
65°	0	0
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	638.6
2.5°	637.4
5°	628.1
7.5°	611.7
10°	588.3
12.5°	553.2
15°	514.6
17.5°	470.2
20°	425.7
22.5°	382.5
25°	328.7
27.5°	259.6
30°	188.3
32.5°	131.0
35°	92.4
37.5°	64.3
40°	42.1
42.5°	26.9
45°	16.4
47.5°	9.4
50°	4.7
52.5°	2.3
55°	1.2
57.5°	0.0
60°	0.0
62.5°	0.0
65°	0.0
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
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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