

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: P885940

Luminaire Tested: ML104LSFL9FS1E-TIR1D55WFL-TL1RDMW-400LM-3500K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P885940
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-130)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D55WFL-TL1RDMW-400LM-3500K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

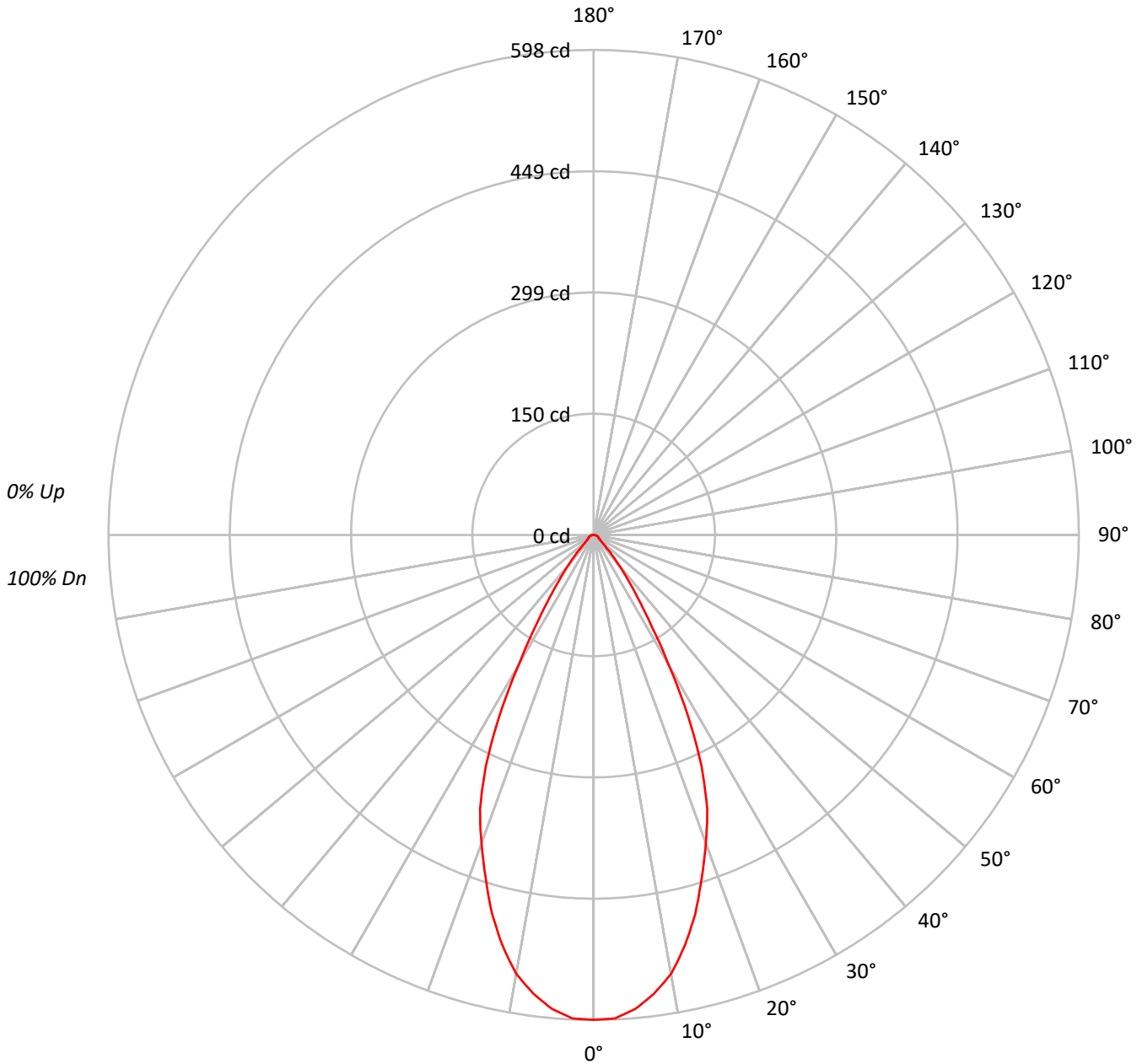
Lumens per Lamp: N/A
Luminaire Lumens: 429.2 lumens
Efficiency: N/A
Efficacy: 71.5 lumens/watt
Spacing Criteria (0/90/45): 0.81 / 0.81 / 0.77
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	113	111	108	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93																			
2	108	103	99	95	106	101	97	94	98	95	92	95	92	90	92	90	88	87																			
3	102	96	91	87	100	95	90	86	92	88	85	90	86	84	87	85	82	81																			
4	98	90	85	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76																			
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71																			
6	88	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67																			
7	84	75	70	65	83	75	69	65	73	69	65	72	68	65	71	67	64	63																			
8	81	71	66	62	79	71	65	61	70	65	61	69	64	61	68	64	61	59																			
9	77	68	62	58	76	67	62	58	66	61	58	65	61	58	65	60	57	56																			
10	74	64	59	55	73	64	59	55	63	58	55	62	58	55	62	58	55	53																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	1179981
5°	1162696
10°	1101391
15°	988073
20°	849531
25°	684626
30°	420904
35°	227674
40°	121858
45°	61402
50°	37150
55°	30279
60°	26051
65°	30821
70°	31736
75°	33551
80°	25003
85°	24908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 61402 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.8	12.8
10°-20°	134.1	31.2
20°-30°	138.9	32.4
30°-40°	62.8	14.6
40°-50°	19.0	4.4
50°-60°	8.0	1.9
60°-70°	6.1	1.4
70°-80°	4.2	1.0
80°-90°	1.2	0.3
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°	327.8	76.4
0°-40°	390.7	91.0
0°-60°	417.6	97.3
0°-90°	429.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	429.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	598	
5°	587	55
15°	484	134
25°	314	139
35°	94	63
45°	22	19
55°	9	8
65°	7	6
75°	4	4
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	597.9
2.5°	596.8
5°	586.9
7.5°	570.4
10°	549.6
12.5°	518.8
15°	483.6
17.5°	442.9
20°	404.5
22.5°	366.0
25°	314.4
27.5°	251.7
30°	184.7
32.5°	131.9
35°	94.5
37.5°	68.1
40°	47.3
42.5°	33.0
45°	22.0
47.5°	15.4
50°	12.1
52.5°	9.9
55°	8.8
57.5°	7.7
60°	6.6
62.5°	6.6
65°	6.6
67.5°	5.5
70°	5.5
72.5°	4.4
75°	4.4
77.5°	3.3
80°	2.2
82.5°	2.2
85°	1.1
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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