

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: P886295

Luminaire Tested: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMBB-550LM-2700K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886295  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-94)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMBB-550LM-2700K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK BAFFLED TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 437.4 lumens  
Efficiency: N/A  
Efficacy: 55.4 lumens/watt  
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.54  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

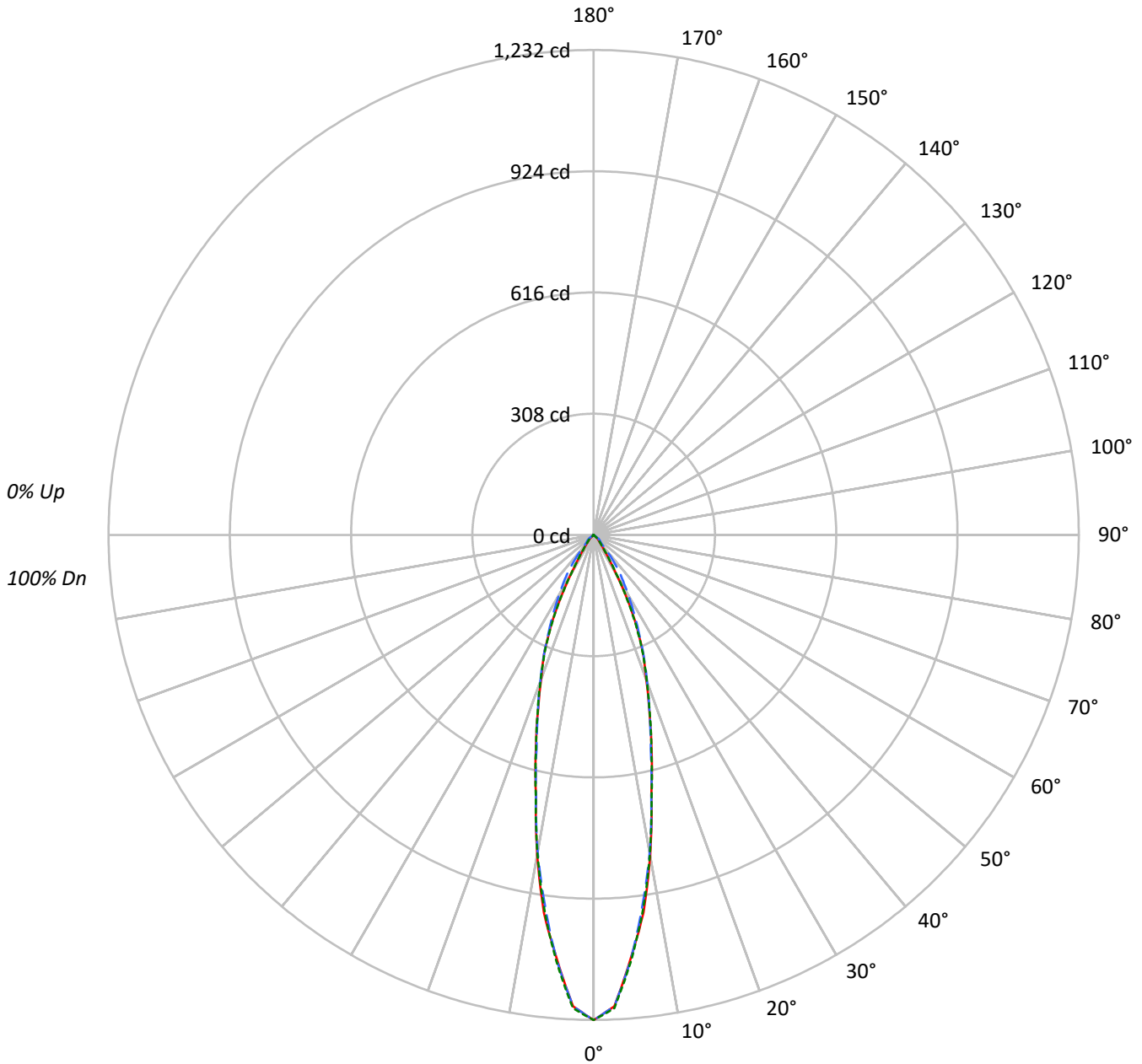
Input Watts (W): 7.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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			
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95					95			
2	110	105	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90					90			
3	105	100	96	92	103	98	95	91	96	93	90	94	91	89	91	89	87	86					86			
4	101	95	90	86	99	94	89	86	91	88	85	90	86	84	88	85	83	82					82			
5	97	90	85	81	95	89	84	81	87	83	80	86	82	80	84	81	79	78					78			
6	93	86	81	77	92	85	80	77	84	79	76	82	79	76	81	78	75	74					74			
7	90	82	77	73	88	81	76	73	80	76	73	79	75	72	78	74	72	71					71			
8	86	78	73	70	85	78	73	70	77	72	69	76	72	69	75	71	69	68					68			
9	83	75	70	67	82	75	70	67	74	69	66	73	69	66	72	69	66	65					65			
10	80	72	67	64	79	72	67	64	71	67	64	70	66	63	69	66	63	62					62			

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

	0°	45°	90°
0°	477593	477593	477593
5°	419826	420993	422549
10°	325012	322258	323438
15°	227744	224534	226941
20°	160617	163092	162267
25°	111293	114714	109156
30°	51501	77945	51948
35°	21335	52083	22281
40°	12140	21296	12646
45°	7672	13152	8220
50°	603	10851	603
55°	676	2702	676
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 13152 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.2	21.8
10°-20°	158.6	36.3
20°-30°	120.6	27.6
30°-40°	47.0	10.7
40°-50°	14.0	3.2
50°-60°	2.0	0.5
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°	374.4	85.6
0°-40°	421.4	96.4
0°-60°	437.4	100.0
0°-90°	437.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	437.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1079	1085	1082	1080	1086	96
15°	568	564	560	568	566	158
25°	260	270	268	268	255	115
35°	45	60	110	62	47	33
45°	14	18	24	18	15	9
55°	1	1	4	1	1	1
65°	0	0	0	0	0	0
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°	1232.5	1232.5	1232.5	1232.5	1232.5
2.5°	1198.5	1199.5	1198.5	1203.5	1203.5
5°	1079.3	1085.3	1082.3	1080.3	1086.3
7.5°	968.2	955.2	949.2	953.2	960.2
10°	826.0	822.0	819.0	823.0	822.0
12.5°	676.8	679.8	676.8	681.8	678.8
15°	567.7	563.7	559.7	567.7	565.7
17.5°	470.6	474.6	470.6	472.6	472.6
20°	389.5	396.5	395.5	396.5	393.5
22.5°	329.4	328.4	330.4	329.4	326.4
25°	260.3	270.3	268.3	268.3	255.3
27.5°	186.2	207.3	218.3	210.3	184.2
30°	115.1	150.2	174.2	145.2	116.1
32.5°	73.1	96.1	139.2	94.1	74.1
35°	45.1	60.1	110.1	62.1	47.1
37.5°	32.0	43.1	76.1	43.1	32.0
40°	24.0	30.0	42.1	30.0	25.0
42.5°	19.0	23.0	28.0	23.0	20.0
45°	14.0	18.0	24.0	18.0	15.0
47.5°	4.0	12.0	21.0	12.0	6.0
50°	1.0	2.0	18.0	4.0	1.0
52.5°	1.0	1.0	13.0	1.0	1.0
55°	1.0	1.0	4.0	1.0	1.0
57.5°	0.0	0.0	1.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
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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