

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: P886419

Luminaire Tested: ML204LSFL9FS1E-TIR1D55WFL-TL2SDMBB-550LM-5000K

Issue Date: 6/20/2024

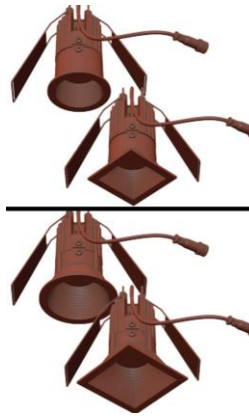
**Test Information**

Test Method: LM-79-2019  
Report Number: P886419  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-106)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL9FS1E-TIR1D55WFL-TL2SDMBB-550LM-5000K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE BLACK BAFFLED TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

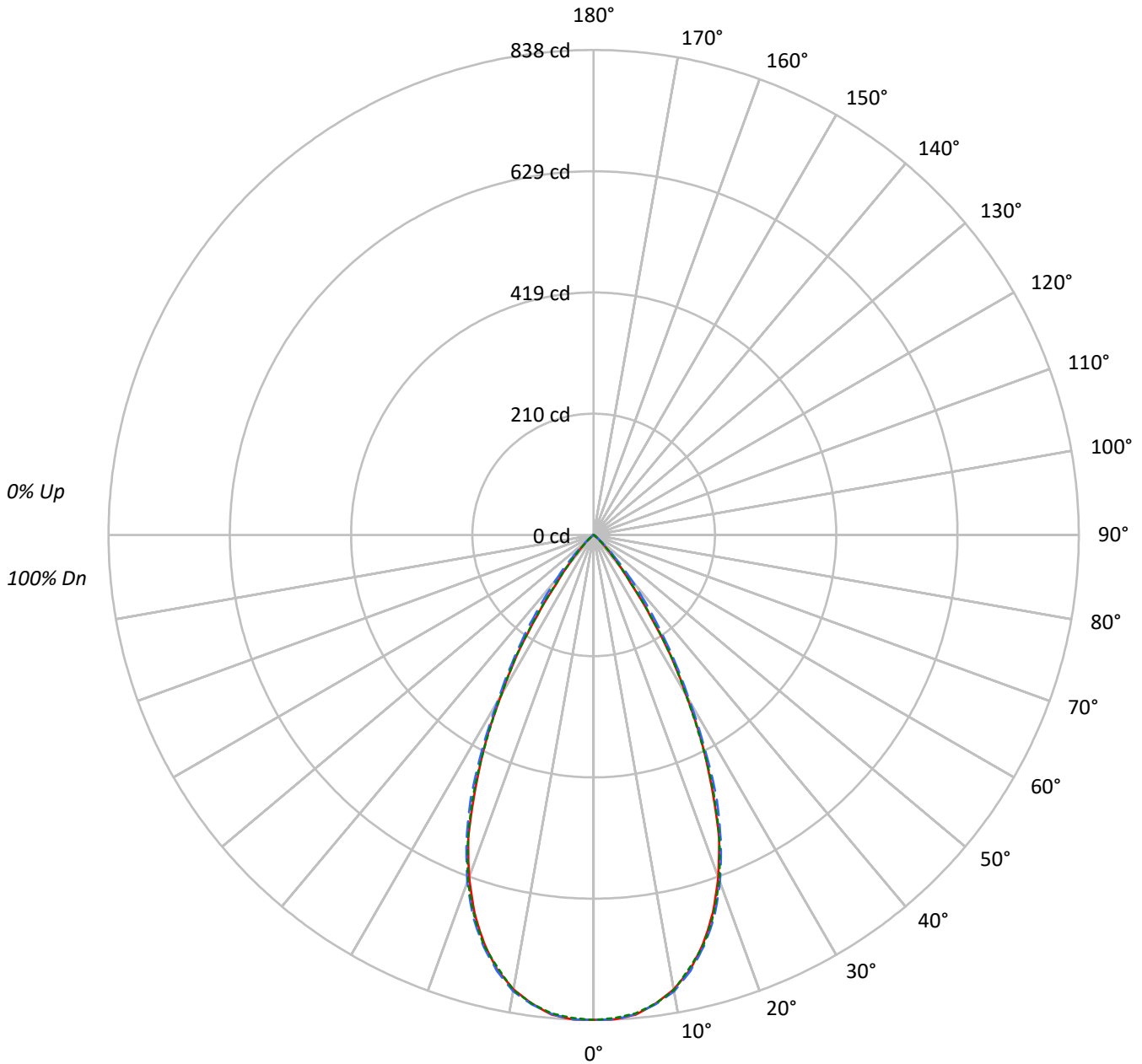
Lumens per Lamp: N/A  
Luminaire Lumens: 651.0 lumens  
Efficiency: N/A  
Efficacy: 82.4 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.82  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

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								
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94								
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88								
3	103	97	93	89	102	96	92	88	93	90	87	91	88	85	89	86	84	83								
4	99	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77								
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73								
6	90	81	75	71	88	80	75	71	79	74	71	77	73	70	76	73	70	68								
7	85	77	71	67	84	76	70	67	75	70	66	73	69	66	72	69	66	64								
8	81	72	67	63	80	72	66	63	71	66	62	70	65	62	69	65	62	61								
9	78	69	63	59	77	68	63	59	67	62	59	66	62	59	66	61	59	57								
10	74	65	60	56	73	65	59	56	64	59	56	63	59	56	62	58	55	54								

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

	0°	45°	90°
0°	324686	324686	324686
5°	323670	323242	322775
10°	313719	315097	314152
15°	293254	295140	294177
20°	259256	263091	261689
25°	206724	214677	209204
30°	143004	148194	142467
35°	80276	94563	81932
40°	34701	51141	34701
45°	13371	20386	13371
50°	4883	6993	4220
55°	811	2365	1554
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: 20386 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.3	12.0
10°-20°	203.8	31.3
20°-30°	222.1	34.1
30°-40°	117.6	18.1
40°-50°	26.5	4.1
50°-60°	2.7	0.4
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°	504.1	77.4
0°-40°	621.7	95.5
0°-60°	651.0	100.0
0°-90°	651.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	651.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	838	838	838	838	838	
5°	832	830	831	830	830	78
15°	731	731	736	732	733	203
25°	484	497	502	497	489	219
35°	170	187	200	186	173	109
45°	24	28	37	28	24	23
55°	1	2	4	2	2	2
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	837.9	837.9	837.9	837.9	837.9
2.5°	837.9	836.8	837.9	836.8	835.6
5°	832.1	829.8	831.0	829.8	829.8
7.5°	817.0	817.0	818.2	818.2	817.0
10°	797.3	799.6	800.8	799.6	798.4
12.5°	769.4	767.1	771.7	769.4	765.9
15°	731.0	731.0	735.7	732.2	733.3
17.5°	684.5	690.3	692.7	688.0	688.0
20°	628.7	634.6	638.0	638.0	634.6
22.5°	566.0	575.3	574.1	574.1	567.2
25°	483.5	497.4	502.1	497.4	489.3
27.5°	404.4	403.3	414.9	409.1	402.1
30°	319.6	325.4	331.2	326.6	318.4
32.5°	247.5	256.8	262.7	254.5	249.9
35°	169.7	187.1	199.9	186.0	173.2
37.5°	104.6	120.9	144.1	123.2	108.1
40°	68.6	75.5	101.1	76.7	68.6
42.5°	43.0	47.7	65.1	47.7	43.0
45°	24.4	27.9	37.2	27.9	24.4
47.5°	13.9	15.1	19.8	15.1	12.8
50°	8.1	9.3	11.6	8.1	7.0
52.5°	3.5	4.6	5.8	4.6	3.5
55°	1.2	2.3	3.5	2.3	2.3
57.5°	0.0	1.2	1.2	1.2	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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