

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: P886411

Luminaire Tested: ML204LSFL9FS1E-TIR1D55WFL-TL2SDMB-550LM-3000K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886411  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-103)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL9FS1E-TIR1D55WFL-TL2SDMB-550LM-3000K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE BLACK TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 576.1 lumens  
Efficiency: N/A  
Efficacy: 72.9 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

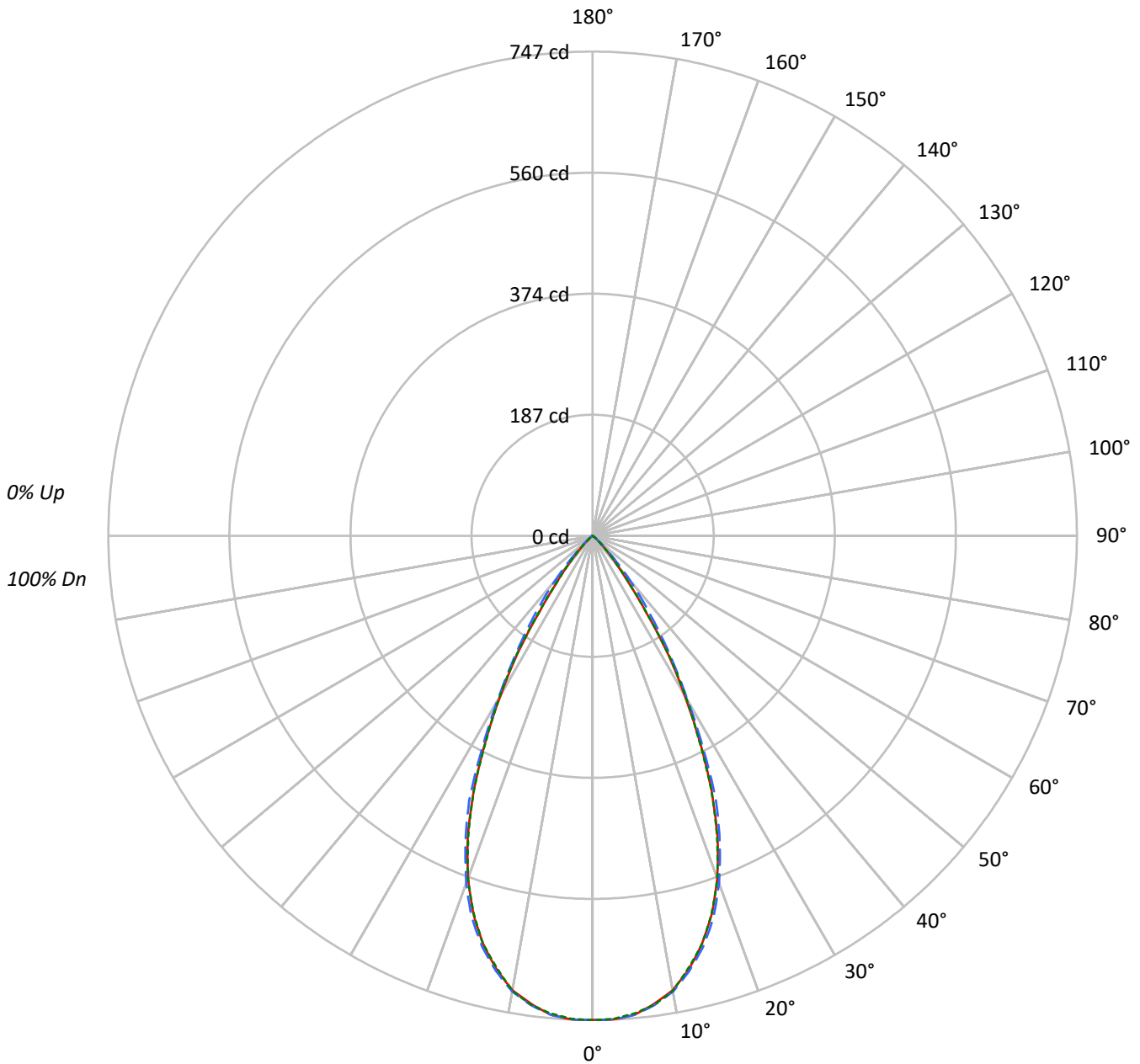
Input Watts (W): 7.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	92	90	88								
3	104	97	93	89	102	96	92	88	94	90	87	91	88	86	89	86	84	83								
4	99	92	86	82	97	90	86	82	88	84	81	86	83	80	85	82	79	78								
5	94	86	81	77	92	85	80	76	83	79	76	82	78	75	80	77	74	73								
6	90	81	76	72	88	80	75	71	79	74	71	78	73	70	76	73	70	68								
7	85	77	71	67	84	76	71	67	75	70	67	74	69	66	73	69	66	64								
8	82	73	67	63	80	72	67	63	71	66	63	70	66	62	69	65	62	61								
9	78	69	63	59	77	68	63	59	67	63	59	67	62	59	66	62	59	57								
10	75	65	60	56	74	65	60	56	64	59	56	63	59	56	63	59	56	54								

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

	0°	45°	90°
0°	289462	289462	289462
5°	288584	288584	287767
10°	280116	280943	280510
15°	261562	263608	261562
20°	231792	235174	231792
25°	185560	192615	185090
30°	126672	131281	128506
35°	67457	82594	68923
40°	29794	44970	30300
45°	11344	16440	11344
50°	3135	5606	3738
55°	676	2094	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: 16440 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.8	12.1
10°-20°	181.9	31.6
20°-30°	197.4	34.3
30°-40°	102.5	17.8
40°-50°	22.4	3.9
50°-60°	2.1	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°	449.1	78.0
0°-40°	551.6	95.7
0°-60°	576.1	100.0
0°-90°	576.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	576.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	747	747	747	747	747	
5°	742	741	742	741	740	70
15°	652	654	657	653	652	181
25°	434	437	450	436	433	195
35°	143	160	175	163	146	94
45°	21	23	30	23	21	19
55°	1	2	3	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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	747.0	747.0	747.0	747.0	747.0
2.5°	747.0	746.0	747.0	747.0	746.0
5°	741.9	740.8	741.9	740.8	739.8
7.5°	728.4	729.5	730.5	729.5	729.5
10°	711.9	712.9	714.0	712.9	712.9
12.5°	685.0	687.1	688.1	687.1	683.0
15°	652.0	654.0	657.1	653.0	652.0
17.5°	611.7	616.8	618.9	614.8	610.6
20°	562.1	567.2	570.3	567.2	562.1
22.5°	503.2	510.4	512.5	509.4	501.1
25°	434.0	437.1	450.5	436.0	432.9
27.5°	357.5	362.7	368.9	363.7	355.4
30°	283.1	288.3	293.4	290.3	287.2
32.5°	215.9	228.3	229.4	225.2	220.1
35°	142.6	160.1	174.6	163.2	145.7
37.5°	89.9	101.3	127.1	102.3	90.9
40°	58.9	64.1	88.9	65.1	59.9
42.5°	37.2	41.3	54.8	40.3	37.2
45°	20.7	22.7	30.0	22.7	20.7
47.5°	10.3	12.4	17.6	12.4	11.4
50°	5.2	7.2	9.3	7.2	6.2
52.5°	2.1	4.1	5.2	4.1	3.1
55°	1.0	2.1	3.1	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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