

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: P886365

Luminaire Tested: ML204LSFL9FS1E-TIR1D40FL-TL2SDMWB-550LM-2700K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886365  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-98)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL9FS1E-TIR1D40FL-TL2SDMWB-550LM-2700K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE BAFFLED TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 611.3 lumens  
Efficiency: N/A  
Efficacy: 77.4 lumens/watt  
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.69  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

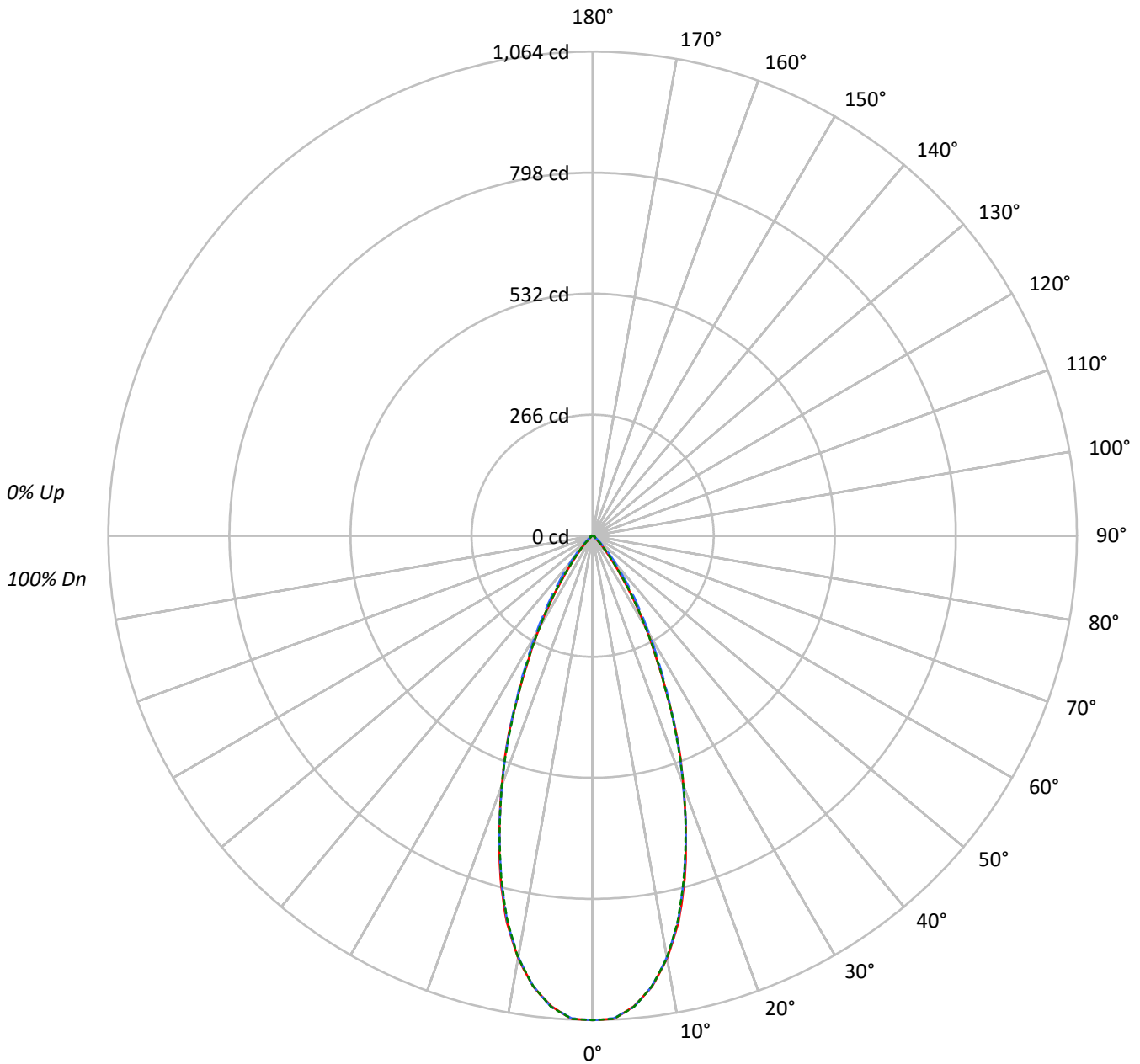
Input Watts (W): 7.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					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	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	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	85	83				
4	99	92	87	83	97	91	86	83	89	85	82	87	83	81	85	82	80	78				
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74				
6	91	82	77	73	89	82	76	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	69	65	73	68	65	72	68	64	71	67	64	63				
9	80	71	65	62	79	70	65	62	69	65	61	69	64	61	68	64	61	60				
10	76	68	62	59	75	67	62	59	66	62	59	66	61	58	65	61	58	57				

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

	0°	45°	90°
0°	103105	103105	103105
5°	100970	101067	101067
10°	92684	92487	92586
15°	78349	77847	77747
20°	60010	59907	60113
25°	41377	42019	41270
30°	26299	27753	25963
35°	13600	16912	14073
40°	6323	9358	6576
45°	2877	4521	3014
50°	1356	2411	1507
55°	1013	1351	1013
60°	969	969	969
65°	917	917	917
70°	850	1133	850
75°	1123	1123	1123
80°	1116	1116	1116
85°	1112	1112	1112

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 4521 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.1	15.7
10°-20°	213.6	34.9
20°-30°	180.4	29.5
30°-40°	84.0	13.7
40°-50°	22.7	3.7
50°-60°	6.5	1.1
60°-70°	4.3	0.7
70°-80°	2.9	0.5
80°-90°	0.8	0.1
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°	490.0	80.2
0°-40°	574.1	93.9
0°-60°	603.3	98.7
0°-90°	611.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	611.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1038	1040	1039	1039	1039	96
15°	781	779	776	775	775	214
25°	387	394	393	394	386	179
35°	115	129	143	131	119	77
45°	21	26	33	26	22	18
55°	6	7	8	7	6	6
65°	4	4	4	4	4	4
75°	3	3	3	3	3	3
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1064.3	1064.3	1064.3	1064.3	1064.3
2.5°	1062.3	1061.3	1061.3	1061.3	1062.3
5°	1038.3	1040.3	1039.3	1039.3	1039.3
7.5°	999.2	998.2	998.2	998.2	998.2
10°	942.2	941.2	940.2	944.2	941.2
12.5°	870.2	870.2	867.2	868.2	865.2
15°	781.2	779.2	776.2	775.2	775.2
17.5°	681.2	681.2	681.2	677.2	679.2
20°	582.1	585.1	581.1	585.1	583.1
22.5°	490.1	487.1	487.1	485.1	484.1
25°	387.1	394.1	393.1	394.1	386.1
27.5°	302.1	308.1	315.1	311.1	305.1
30°	235.1	238.1	248.1	240.1	232.1
32.5°	170.0	181.0	191.0	183.0	174.0
35°	115.0	129.0	143.0	131.0	119.0
37.5°	75.0	86.0	102.0	88.0	77.0
40°	50.0	55.0	74.0	57.0	52.0
42.5°	34.0	39.0	51.0	39.0	36.0
45°	21.0	26.0	33.0	26.0	22.0
47.5°	11.0	16.0	24.0	16.0	13.0
50°	9.0	10.0	16.0	10.0	10.0
52.5°	7.0	8.0	10.0	8.0	8.0
55°	6.0	7.0	8.0	7.0	6.0
57.5°	5.0	6.0	6.0	6.0	5.0
60°	5.0	5.0	5.0	5.0	5.0
62.5°	5.0	5.0	5.0	5.0	5.0
65°	4.0	4.0	4.0	4.0	4.0
67.5°	4.0	4.0	4.0	4.0	4.0
70°	3.0	4.0	4.0	4.0	3.0
72.5°	3.0	3.0	3.0	3.0	3.0
75°	3.0	3.0	3.0	3.0	3.0
77.5°	2.0	2.0	2.0	2.0	2.0
80°	2.0	2.0	2.0	2.0	2.0
82.5°	1.0	1.0	1.0	1.0	1.0
85°	1.0	1.0	1.0	1.0	1.0
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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