

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: P886421

Luminaire Tested: ML204LSFL9FS1E-TIR1D55WFL-TL2SDMW-550LM-3000K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886421  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-101)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL9FS1E-TIR1D55WFL-TL2SDMW-550LM-3000K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 600.1 lumens  
Efficiency: N/A  
Efficacy: 76.0 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.85 / 0.82  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

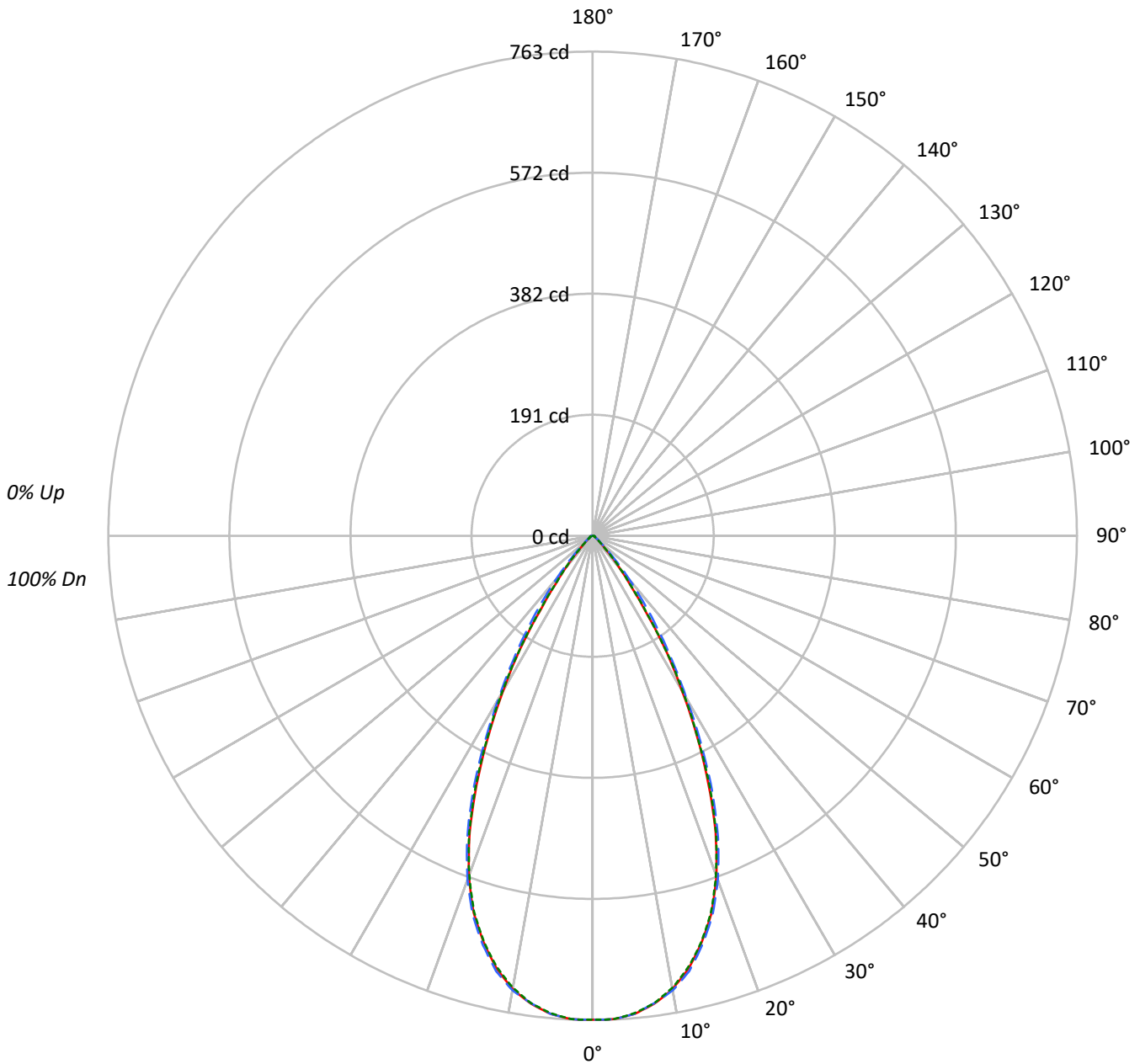
Input Watts (W): 7.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	94																			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87																			
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81																			
4	98	90	85	81	96	89	84	80	87	83	80	85	82	79	83	80	78	76																			
5	93	85	79	75	92	84	79	75	82	78	74	81	77	73	79	76	73	71																			
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67																			
7	85	76	70	66	83	75	69	65	74	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	58	55	63	58	55	62	58	54	61	57	54	53																			

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

	0°	45°	90°
0°	295507	295507	295507
5°	294224	294224	293796
10°	285428	286215	284602
15°	266135	267780	265694
20°	235215	237772	234349
25°	184662	190862	186458
30°	125777	132220	128059
35°	68450	83588	70390
40°	33436	44970	33436
45°	14139	19838	14741
50°	7475	9344	7475
55°	4864	5607	4864
60°	4030	4030	4030
65°	3759	3759	3759
70°	3512	3512	3512
75°	3144	4641	3144
80°	4686	4686	4686
85°	4446	4446	4446

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 19838 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.2	11.9
10°-20°	184.8	30.8
20°-30°	198.3	33.1
30°-40°	103.9	17.3
40°-50°	26.7	4.4
50°-60°	7.3	1.2
60°-70°	4.3	0.7
70°-80°	2.8	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°	454.3	75.7
0°-40°	558.2	93.0
0°-60°	592.1	98.7
0°-90°	600.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	600.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	763	763	763	763	763	
5°	756	756	756	755	755	71
15°	663	664	668	663	662	184
25°	432	440	446	439	436	195
35°	145	163	177	162	149	96
45°	26	29	36	29	27	24
55°	7	7	8	7	7	7
65°	4	4	4	4	4	4
75°	2	3	3	3	2	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°	762.6	762.6	762.6	762.6	762.6
2.5°	762.6	762.6	762.6	761.5	762.6
5°	756.4	756.4	756.4	755.3	755.3
7.5°	744.0	744.0	742.9	744.0	742.9
10°	725.4	725.4	727.4	725.4	723.3
12.5°	698.5	699.5	702.6	698.5	696.4
15°	663.4	664.4	667.5	663.4	662.3
17.5°	623.1	627.2	627.2	624.1	621.0
20°	570.4	572.4	576.6	572.4	568.3
22.5°	506.3	516.7	516.7	511.5	508.4
25°	431.9	440.2	446.4	439.2	436.1
27.5°	356.5	363.7	369.9	363.7	358.6
30°	281.1	288.3	295.5	291.4	286.2
32.5°	216.0	224.2	232.5	225.3	217.0
35°	144.7	163.3	176.7	162.2	148.8
37.5°	96.1	106.4	129.2	108.5	97.1
40°	66.1	69.2	88.9	69.2	66.1
42.5°	42.4	46.5	57.9	46.5	43.4
45°	25.8	28.9	36.2	28.9	26.9
47.5°	17.6	18.6	21.7	18.6	17.6
50°	12.4	12.4	15.5	13.4	12.4
52.5°	9.3	9.3	11.4	10.3	9.3
55°	7.2	7.2	8.3	7.2	7.2
57.5°	5.2	6.2	6.2	6.2	5.2
60°	5.2	5.2	5.2	5.2	5.2
62.5°	4.1	5.2	5.2	5.2	4.1
65°	4.1	4.1	4.1	4.1	4.1
67.5°	4.1	4.1	4.1	4.1	4.1
70°	3.1	3.1	3.1	3.1	3.1
72.5°	3.1	3.1	3.1	3.1	3.1
75°	2.1	3.1	3.1	3.1	2.1
77.5°	2.1	2.1	2.1	2.1	2.1
80°	2.1	2.1	2.1	2.1	2.1
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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