

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: P886410

Luminaire Tested: ML204LSFL9FS1E-TIR1D55WFL-TL2SDMB-550LM-2700K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886410  
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-2700K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE BLACK TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

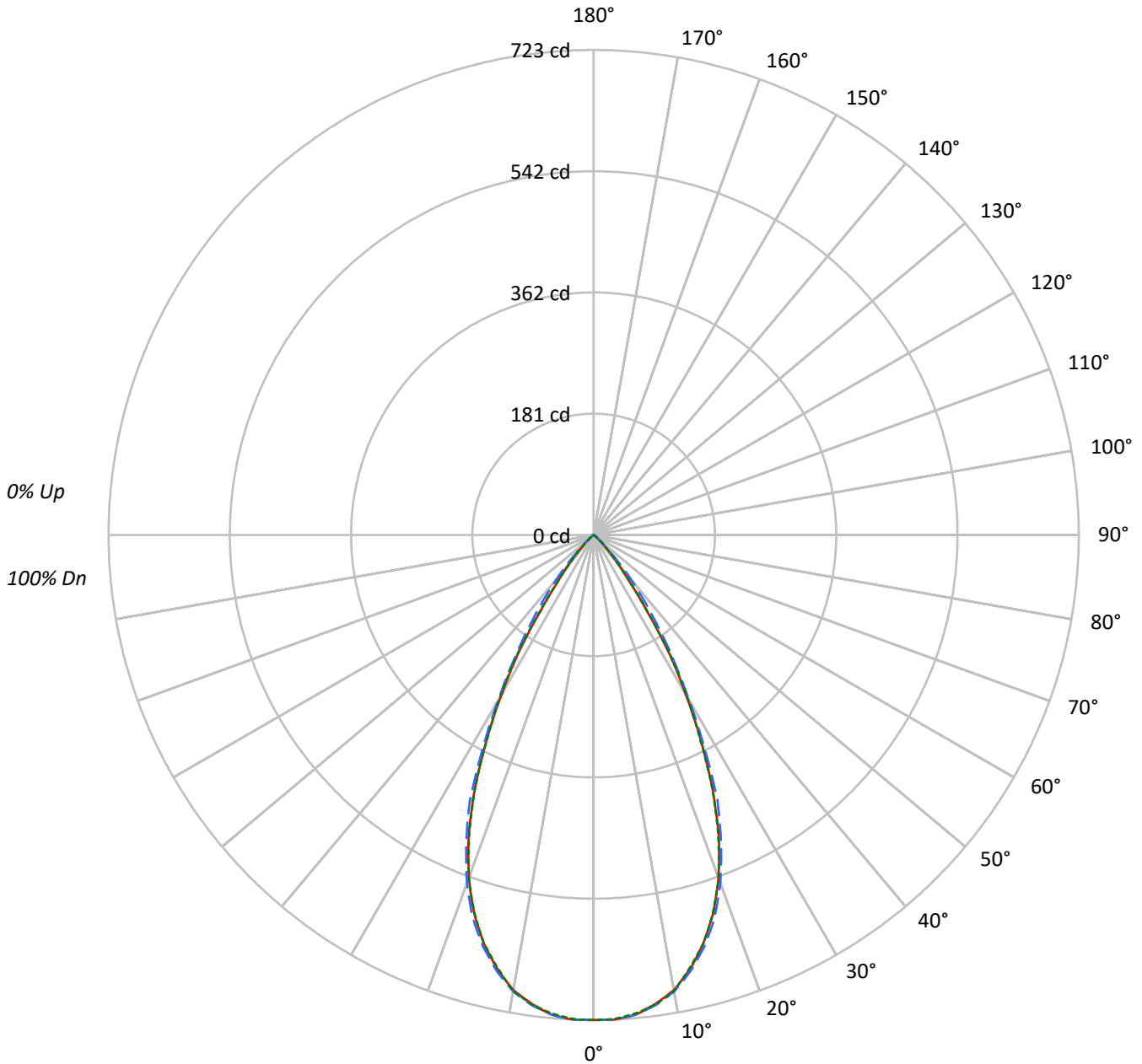
Lumens per Lamp: N/A  
Luminaire Lumens: 557.7 lumens  
Efficiency: N/A  
Efficacy: 70.6 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.82  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

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									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	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°	280240	280240	280240
5°	279365	279365	278587
10°	271184	271971	271578
15°	253178	255184	253178
20°	224370	227669	224370
25°	179617	186458	179190
30°	122645	127119	124435
35°	65281	79945	66700
40°	28833	43503	29339
45°	10960	15892	10960
50°	3014	5426	3617
55°	676	2027	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: 15892 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.6	12.1
10°-20°	176.1	31.6
20°-30°	191.1	34.3
30°-40°	99.2	17.8
40°-50°	21.7	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°	434.7	78.0
0°-40°	534.0	95.7
0°-60°	557.7	100.0
0°-90°	557.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	557.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	723	723	723	723	723	
5°	718	717	718	717	716	68
15°	631	633	636	632	631	175
25°	420	423	436	422	419	189
35°	138	155	169	158	141	91
45°	20	22	29	22	20	18
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°	723.2	723.2	723.2	723.2	723.2
2.5°	723.2	722.2	723.2	723.2	722.2
5°	718.2	717.2	718.2	717.2	716.2
7.5°	705.2	706.2	707.2	706.2	706.2
10°	689.2	690.2	691.2	690.2	690.2
12.5°	663.2	665.2	666.2	665.2	661.2
15°	631.1	633.1	636.1	632.1	631.1
17.5°	592.1	597.1	599.1	595.1	591.1
20°	544.1	549.1	552.1	549.1	544.1
22.5°	487.1	494.1	496.1	493.1	485.1
25°	420.1	423.1	436.1	422.1	419.1
27.5°	346.1	351.1	357.1	352.1	344.1
30°	274.1	279.1	284.1	281.1	278.1
32.5°	209.0	221.1	222.1	218.1	213.0
35°	138.0	155.0	169.0	158.0	141.0
37.5°	87.0	98.0	123.0	99.0	88.0
40°	57.0	62.0	86.0	63.0	58.0
42.5°	36.0	40.0	53.0	39.0	36.0
45°	20.0	22.0	29.0	22.0	20.0
47.5°	10.0	12.0	17.0	12.0	11.0
50°	5.0	7.0	9.0	7.0	6.0
52.5°	2.0	4.0	5.0	4.0	3.0
55°	1.0	2.0	3.0	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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