

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: P886316

Luminaire Tested: ML204LSFL9FS1E-TIR1D25NFL-TL2SDSLB-550LM-3000K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886316  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-93)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL9FS1E-TIR1D25NFL-TL2SDSLB-550LM-3000K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER BAFFLED TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 495.3 lumens  
Efficiency: N/A  
Efficacy: 62.7 lumens/watt  
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.55  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

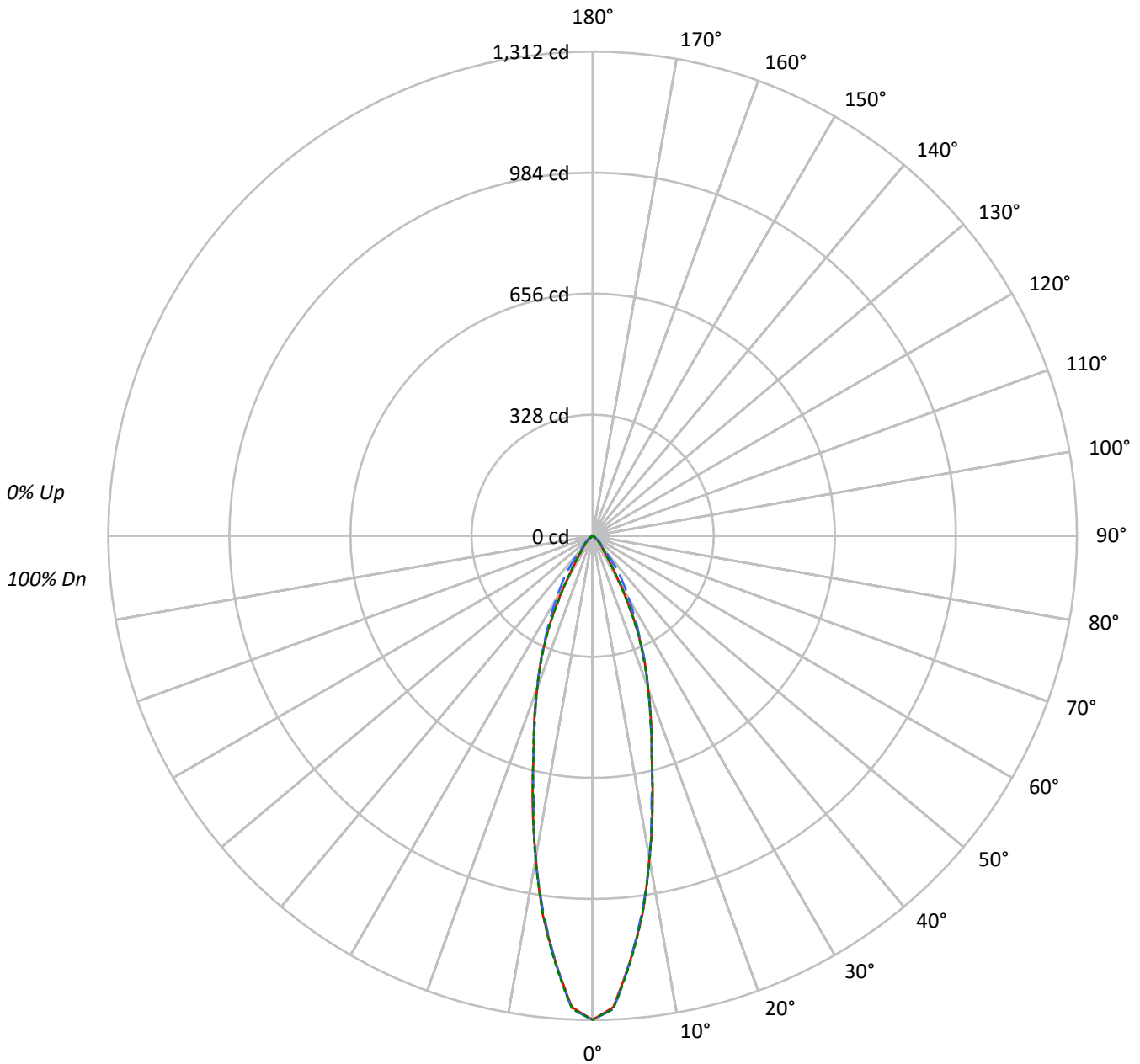
Input Watts (W): 7.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	112	109	107	112	109	107	106	105	104	102	102	101	99	98	97	97	95								
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	90								
3	105	99	95	91	103	98	94	90	95	92	89	93	90	88	91	88	86	85								
4	100	94	89	85	99	93	88	85	90	87	84	89	85	83	87	84	82	80								
5	96	89	84	80	95	88	83	80	86	82	79	85	81	78	83	80	78	76								
6	92	84	79	76	91	84	79	75	82	78	75	81	77	74	80	76	74	73								
7	89	80	75	72	87	80	75	71	79	74	71	78	74	71	76	73	70	69								
8	85	77	72	68	84	76	71	68	75	71	68	74	70	67	73	70	67	66								
9	82	74	68	65	81	73	68	65	72	68	65	71	67	64	71	67	64	63								
10	79	70	65	62	78	70	65	62	69	65	62	69	65	62	68	64	62	60								

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

	0°	45°	90°
0°	508244	508244	508244
5°	450283	450283	452267
10°	348542	349329	350155
15°	247120	248364	248364
20°	181153	180700	181153
25°	124163	128139	122837
30°	61971	87386	62419
35°	28856	57712	30796
40°	19323	26152	19323
45°	13043	16440	12440
50°	5004	13082	5004
55°	3513	4189	3513
60°	2402	1627	2402
65°	1925	917	1925
70°	1133	1133	1133
75°	1497	1497	1497
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°	102.3	20.7
10°-20°	174.0	35.1
20°-30°	134.6	27.2
30°-40°	56.6	11.4
40°-50°	19.9	4.0
50°-60°	5.2	1.1
60°-70°	1.8	0.4
70°-80°	0.9	0.2
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°	410.9	83.0
0°-40°	467.5	94.4
0°-60°	492.6	99.5
0°-90°	495.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	495.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1312	1312	1312	1312	1312	
5°	1158	1163	1158	1160	1163	102
15°	616	620	619	621	619	175
25°	290	300	300	299	287	130
35°	61	76	122	78	65	44
45°	24	26	30	25	23	17
55°	5	4	6	4	5	5
65°	2	2	1	2	2	2
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1311.6	1311.6	1311.6	1311.6	1311.6
2.5°	1278.5	1276.4	1283.7	1283.7	1282.6
5°	1157.6	1162.7	1157.6	1159.6	1162.7
7.5°	1034.6	1030.4	1026.3	1027.3	1033.6
10°	885.8	885.8	887.8	887.8	889.9
12.5°	750.4	738.0	736.9	744.2	744.2
15°	616.0	620.1	619.1	621.2	619.1
17.5°	525.0	519.9	518.8	523.0	521.9
20°	439.3	441.3	438.2	440.3	439.3
22.5°	366.9	365.9	366.9	367.9	360.7
25°	290.4	299.7	299.7	298.7	287.3
27.5°	210.8	233.6	242.9	229.4	207.7
30°	138.5	169.5	195.3	167.4	139.5
32.5°	92.0	112.7	157.1	113.7	94.1
35°	61.0	76.5	122.0	77.5	65.1
37.5°	46.5	55.8	84.8	54.8	47.5
40°	38.2	40.3	51.7	41.3	38.2
42.5°	31.0	32.0	36.2	32.0	31.0
45°	23.8	25.8	30.0	24.8	22.7
47.5°	11.4	17.6	25.8	16.5	14.5
50°	8.3	7.2	21.7	10.3	8.3
52.5°	6.2	5.2	15.5	5.2	6.2
55°	5.2	4.1	6.2	4.1	5.2
57.5°	4.1	3.1	3.1	3.1	4.1
60°	3.1	3.1	2.1	3.1	3.1
62.5°	3.1	2.1	2.1	2.1	3.1
65°	2.1	2.1	1.0	2.1	2.1
67.5°	2.1	1.0	1.0	1.0	2.1
70°	1.0	1.0	1.0	1.0	1.0
72.5°	1.0	1.0	1.0	1.0	1.0
75°	1.0	1.0	1.0	1.0	1.0
77.5°	1.0	1.0	0.0	1.0	1.0
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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