

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: P886319

Luminaire Tested: ML204LSFL9FS1E-TIR1D25NFL-TL2SDSLB-550LM-5000K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886319  
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-5000K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER BAFFLED TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 557.1 lumens  
Efficiency: N/A  
Efficacy: 70.5 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

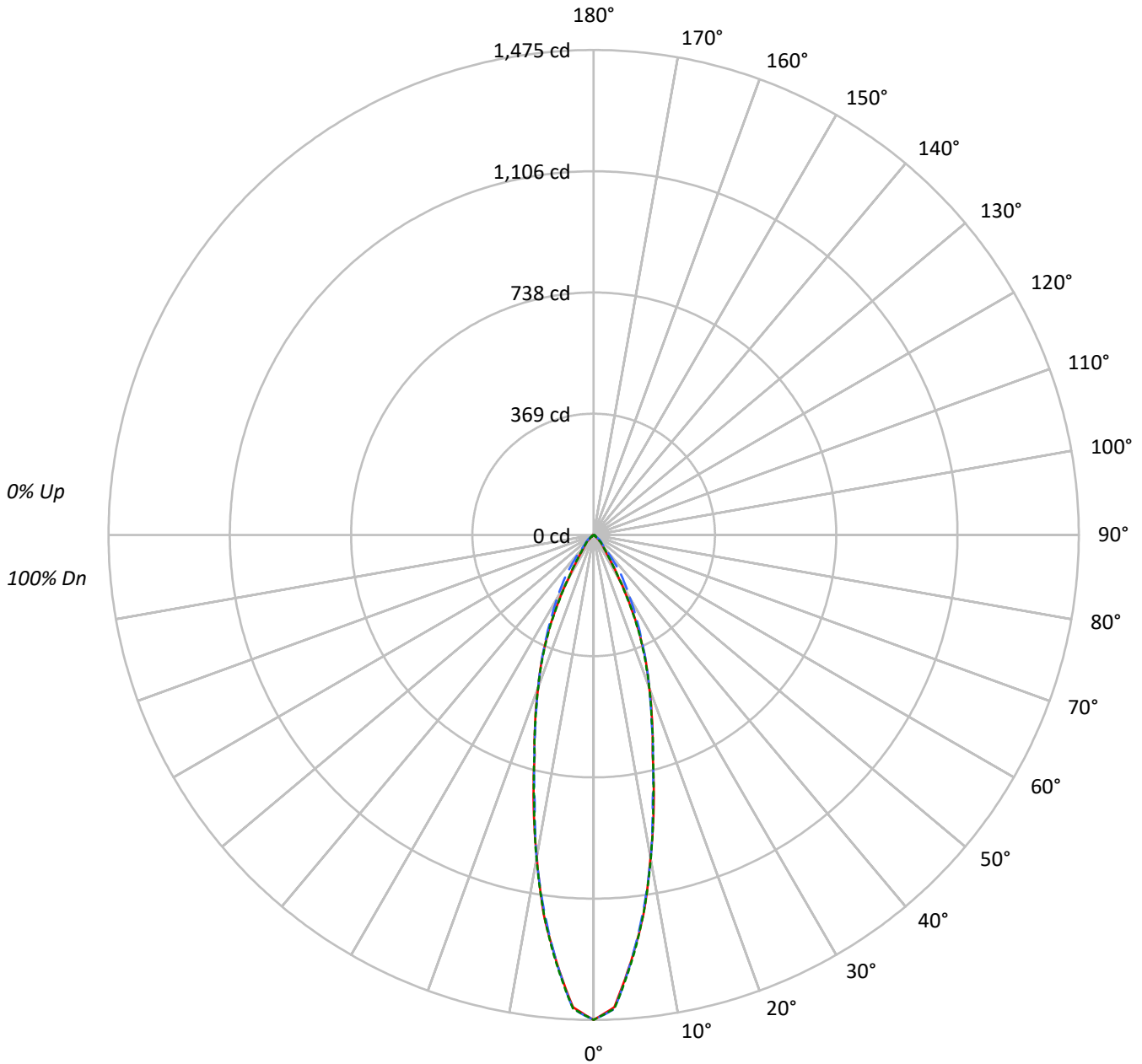
Input Watts (W): 7.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	90	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	75	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°	571562	571562	571562
5°	506374	506374	508630
10°	391943	392848	393753
15°	277890	279294	279294
20°	203710	203215	203710
25°	139641	144130	138144
30°	69667	98304	70204
35°	32451	64902	34627
40°	21751	29390	21751
45°	14632	18468	14029
50°	5606	14709	5606
55°	3918	4729	3918
60°	2712	1782	2712
65°	2109	1100	2109
70°	1360	1360	1360
75°	1797	1797	1797
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 18468 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.0	20.6
10°-20°	195.7	35.1
20°-30°	151.4	27.2
30°-40°	63.6	11.4
40°-50°	22.4	4.0
50°-60°	5.9	1.1
60°-70°	2.0	0.4
70°-80°	1.0	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°	462.1	83.0
0°-40°	525.7	94.4
0°-60°	554.0	99.4
0°-90°	557.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	557.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1475	1475	1475	1475	1475	
5°	1302	1308	1302	1304	1308	115
15°	693	697	696	698	696	196
25°	327	337	337	336	323	146
35°	69	86	137	87	73	49
45°	27	29	34	28	26	19
55°	6	5	7	5	6	5
65°	2	2	1	2	2	3
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°	1475.0	1475.0	1475.0	1475.0	1475.0
2.5°	1437.8	1435.4	1443.6	1443.6	1442.4
5°	1301.8	1307.6	1301.8	1304.1	1307.6
7.5°	1163.5	1158.8	1154.2	1155.3	1162.3
10°	996.1	996.1	998.4	998.4	1000.7
12.5°	843.8	829.9	828.7	836.9	836.9
15°	692.7	697.4	696.2	698.5	696.2
17.5°	590.5	584.6	583.5	588.1	587.0
20°	494.0	496.3	492.8	495.1	494.0
22.5°	412.6	411.5	412.6	413.8	405.6
25°	326.6	337.1	337.1	335.9	323.1
27.5°	237.1	262.7	273.1	258.0	233.6
30°	155.7	190.6	219.7	188.3	156.9
32.5°	103.4	126.7	176.7	127.9	105.8
35°	68.6	86.0	137.2	87.2	73.2
37.5°	52.3	62.8	95.3	61.6	53.5
40°	43.0	45.3	58.1	46.5	43.0
42.5°	34.9	36.0	40.7	36.0	34.9
45°	26.7	29.1	33.7	27.9	25.6
47.5°	12.8	19.8	29.1	18.6	16.3
50°	9.3	8.1	24.4	11.6	9.3
52.5°	7.0	5.8	17.4	5.8	7.0
55°	5.8	4.6	7.0	4.6	5.8
57.5°	4.6	3.5	3.5	3.5	4.6
60°	3.5	3.5	2.3	3.5	3.5
62.5°	3.5	2.3	2.3	2.3	3.5
65°	2.3	2.3	1.2	2.3	2.3
67.5°	2.3	1.2	1.2	1.2	2.3
70°	1.2	1.2	1.2	1.2	1.2
72.5°	1.2	1.2	1.2	1.2	1.2
75°	1.2	1.2	1.2	1.2	1.2
77.5°	1.2	1.2	0.0	1.2	1.2
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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