

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: P886121

Luminaire Tested: ML204LSFL95FS1E-TIR1D25NFL-TL2SDSL-468LM-3000K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886121  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-90)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL95FS1E-TIR1D25NFL-TL2SDSL-468LM-3000K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 413.3 lumens  
Efficiency: N/A  
Efficacy: 51.7 lumens/watt  
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.54  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

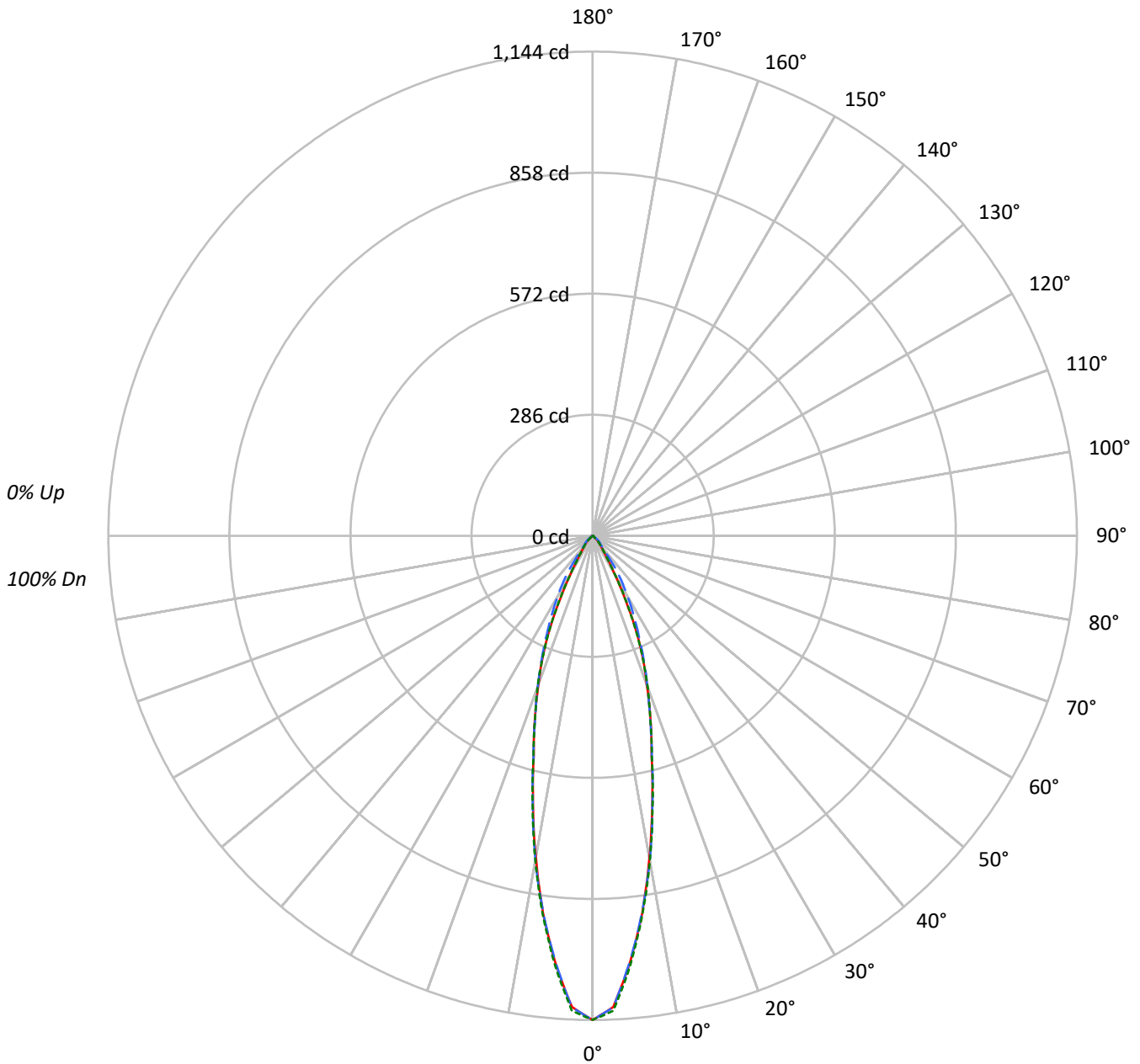
Input Watts (W): 8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95																			
2	110	105	102	99	107	104	100	98	100	98	96	98	95	94	95	93	92	90																			
3	105	100	95	92	103	98	94	91	96	92	90	93	91	88	91	89	87	86																			
4	101	94	90	86	99	93	89	85	91	87	84	89	86	84	87	85	83	81																			
5	97	90	85	81	95	89	84	81	87	83	80	85	82	79	84	81	79	77																			
6	93	85	80	77	92	85	80	76	83	79	76	82	78	75	81	77	75	74																			
7	89	82	76	73	88	81	76	73	80	75	72	79	75	72	78	74	72	70																			
8	86	78	73	69	85	77	73	69	76	72	69	75	72	69	75	71	68	67																			
9	83	75	70	66	82	74	70	66	73	69	66	73	69	66	72	68	66	65																			
10	80	72	67	64	79	71	67	63	71	66	63	70	66	63	69	66	63	62																			

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

	0°	45°	90°
0°	443261	443261	443261
5°	393764	392753	396448
10°	303922	306322	306676
15°	215749	216792	216792
20°	154267	155710	156782
25°	100348	109241	99578
30°	46490	73247	46490
35°	21713	43852	22139
40°	14467	17098	14012
45°	7617	13262	8056
50°	2592	9947	2592
55°	1757	2365	1757
60°	1317	1317	1317
65°	825	825	825
70°	1020	1020	1020
75°	1347	0	1347
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 13262 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.2	21.6
10°-20°	151.4	36.6
20°-30°	111.7	27.0
30°-40°	42.3	10.2
40°-50°	14.0	3.4
50°-60°	3.2	0.8
60°-70°	1.0	0.3
70°-80°	0.5	0.1
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°	352.4	85.2
0°-40°	394.7	95.5
0°-60°	411.8	99.6
0°-90°	413.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	413.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1144	1144	1144	1144	1144	
5°	1012	1010	1010	1014	1019	89
15°	538	538	540	540	540	151
25°	235	248	256	247	233	105
35°	46	57	93	58	47	33
45°	14	18	24	18	15	11
55°	3	3	4	3	3	3
65°	1	1	1	1	1	1
75°	1	1	0	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°	1143.9	1143.9	1143.9	1143.9	1143.9
2.5°	1114.5	1114.5	1115.3	1117.9	1123.1
5°	1012.3	1009.7	1009.7	1014.0	1019.2
7.5°	898.0	897.1	896.3	896.3	902.3
10°	772.4	776.8	778.5	770.7	779.4
12.5°	650.3	643.4	652.9	647.7	654.7
15°	537.8	537.8	540.4	539.5	540.4
17.5°	453.8	454.6	450.3	452.0	451.2
20°	374.1	376.7	377.6	378.4	380.2
22.5°	307.4	310.9	313.5	311.7	304.8
25°	234.7	248.5	255.5	246.8	232.9
27.5°	157.6	183.6	207.8	186.2	162.8
30°	103.9	126.4	163.7	125.6	103.9
32.5°	67.5	83.1	128.2	82.3	66.7
35°	45.9	57.2	92.7	58.0	46.8
37.5°	35.5	40.7	55.4	40.7	35.5
40°	28.6	29.4	33.8	30.3	27.7
42.5°	22.5	23.4	27.7	23.4	21.6
45°	13.9	18.2	24.2	18.2	14.7
47.5°	6.1	10.4	19.9	10.4	6.1
50°	4.3	4.3	16.5	4.3	4.3
52.5°	3.5	3.5	10.4	3.5	3.5
55°	2.6	2.6	3.5	2.6	2.6
57.5°	2.6	1.7	1.7	1.7	2.6
60°	1.7	1.7	1.7	1.7	1.7
62.5°	1.7	0.9	0.9	0.9	1.7
65°	0.9	0.9	0.9	0.9	0.9
67.5°	0.9	0.9	0.9	0.9	0.9
70°	0.9	0.9	0.9	0.9	0.9
72.5°	0.9	0.9	0.0	0.9	0.9
75°	0.9	0.9	0.0	0.9	0.9
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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