

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: P886109

Luminaire Tested: ML204LSFL95FS1E-TIR1D25NFL-TL2SDMBB-468LM-5000K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886109  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-94)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL95FS1E-TIR1D25NFL-TL2SDMBB-468LM-5000K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK BAFFLED TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

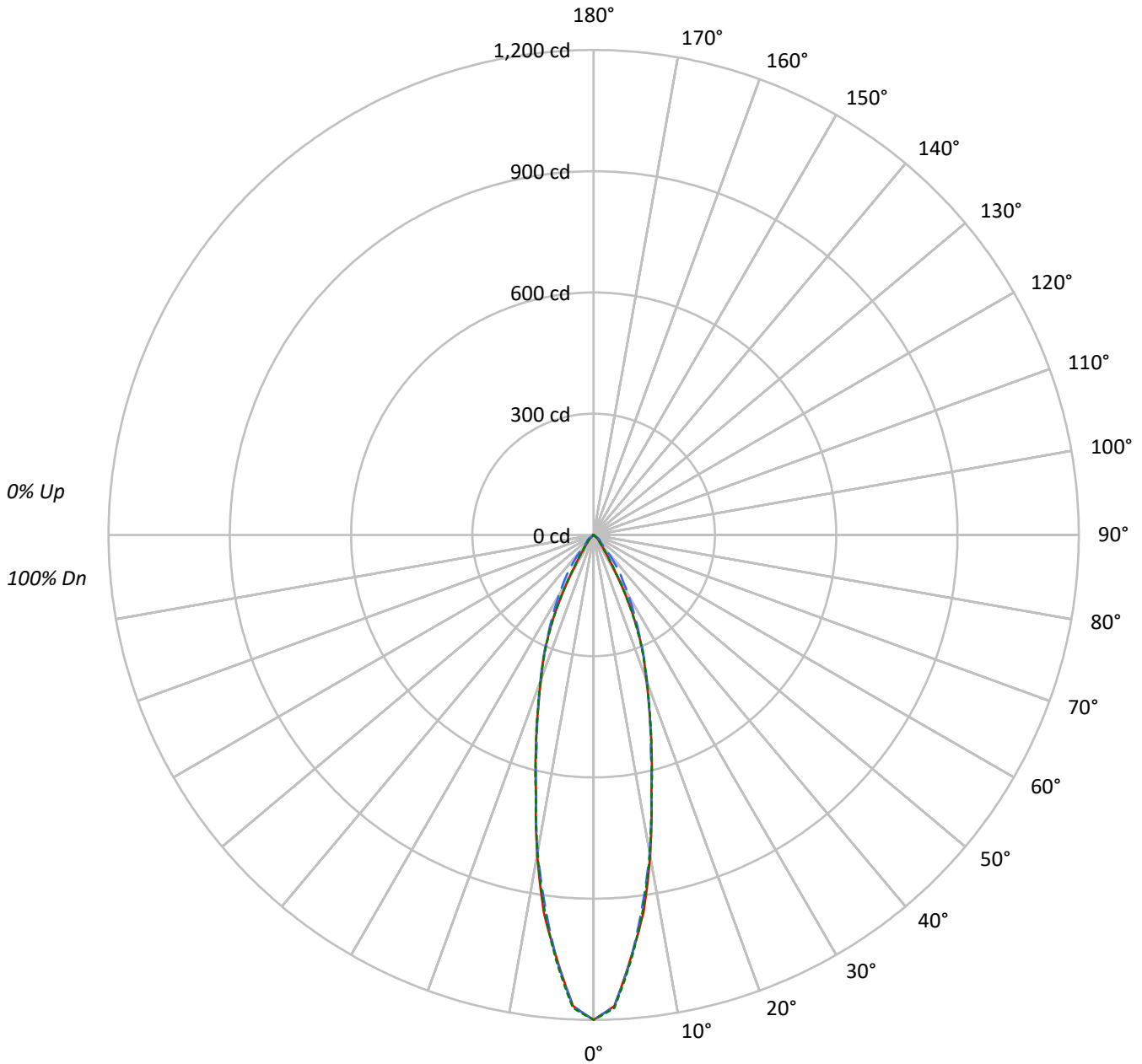
Lumens per Lamp: N/A  
Luminaire Lumens: 425.8 lumens  
Efficiency: N/A  
Efficacy: 53.2 lumens/watt  
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.54  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

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

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

	0°	45°	90°
0°	464961	464961	464961
5°	408740	409868	411385
10°	316434	313759	314900
15°	221726	218597	220924
20°	156370	158762	157978
25°	108343	111678	106291
30°	50159	75887	50606
35°	20767	50711	21666
40°	11837	20689	12343
45°	7453	12823	8001
50°	603	10550	603
55°	676	2635	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: 12823 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.7	21.8
10°-20°	154.4	36.3
20°-30°	117.4	27.6
30°-40°	45.7	10.7
40°-50°	13.6	3.2
50°-60°	1.9	0.5
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°	364.5	85.6
0°-40°	410.3	96.3
0°-60°	425.8	100.0
0°-90°	425.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	425.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1200	1200	1200	1200	1200	
5°	1051	1057	1054	1052	1058	93
15°	553	549	545	553	551	154
25°	253	263	261	261	249	112
35°	44	58	107	60	46	33
45°	14	18	23	18	15	9
55°	1	1	4	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°	1199.9	1199.9	1199.9	1199.9	1199.9
2.5°	1166.8	1167.8	1166.8	1171.7	1171.7
5°	1050.8	1056.6	1053.7	1051.8	1057.6
7.5°	942.6	929.9	924.1	928.0	934.8
10°	804.2	800.3	797.4	801.3	800.3
12.5°	658.9	661.9	658.9	663.8	660.9
15°	552.7	548.8	544.9	552.7	550.7
17.5°	458.1	462.0	458.1	460.1	460.1
20°	379.2	386.0	385.0	386.0	383.1
22.5°	320.7	319.7	321.7	320.7	317.8
25°	253.4	263.2	261.2	261.2	248.6
27.5°	181.3	201.8	212.5	204.7	179.4
30°	112.1	146.2	169.6	141.3	113.1
32.5°	71.2	93.6	135.5	91.6	72.1
35°	43.9	58.5	107.2	60.4	45.8
37.5°	31.2	41.9	74.1	41.9	31.2
40°	23.4	29.2	40.9	29.2	24.4
42.5°	18.5	22.4	27.3	22.4	19.5
45°	13.6	17.5	23.4	17.5	14.6
47.5°	3.9	11.7	20.5	11.7	5.8
50°	1.0	1.9	17.5	3.9	1.0
52.5°	1.0	1.0	12.7	1.0	1.0
55°	1.0	1.0	3.9	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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