

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: P886114

Luminaire Tested: ML204LSFL95FS1E-TIR1D25NFL-TL2SDMW-468LM-5000K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886114  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-89)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL95FS1E-TIR1D25NFL-TL2SDMW-468LM-5000K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 483.6 lumens  
Efficiency: N/A  
Efficacy: 60.4 lumens/watt  
Spacing Criteria (0/90/45): 0.46 / 0.47 / 0.55  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

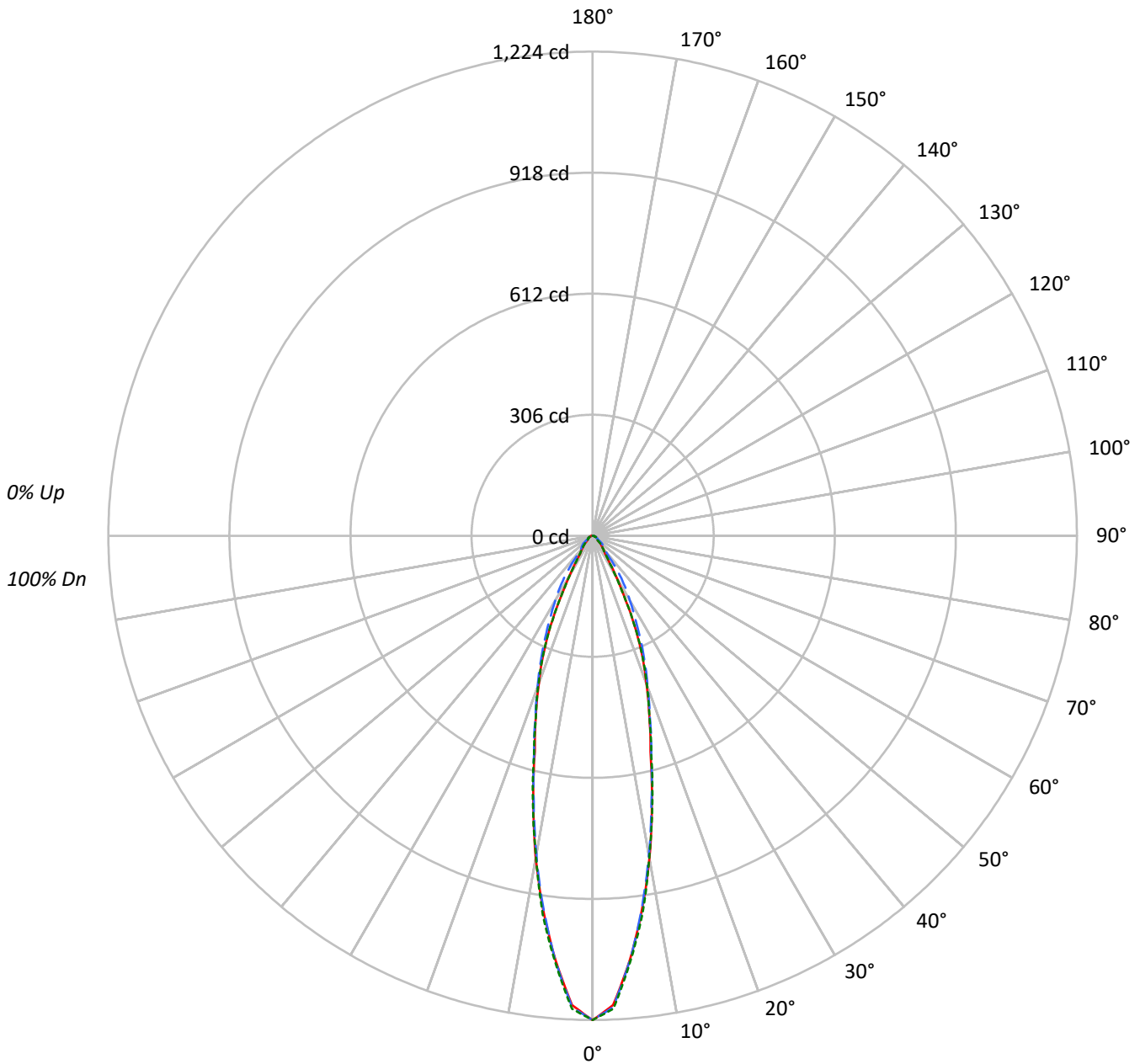
Input Watts (W): 8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					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					100			
1	113	111	108	106	111	109	106	104	104	103	101	101	99	98	97	96	95	93					93			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87					87			
3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	86	83	82					82			
4	98	91	86	82	97	90	85	81	88	84	80	86	82	79	84	81	79	77					77			
5	94	86	81	77	92	85	80	76	83	79	76	82	78	75	80	77	74	73					73			
6	90	82	76	72	89	81	76	72	79	75	71	78	74	71	77	73	70	69					69			
7	86	78	72	68	85	77	72	68	76	71	68	75	70	67	74	70	67	66					66			
8	83	74	69	65	82	73	68	65	72	68	64	71	67	64	71	67	64	63					63			
9	80	71	65	62	79	70	65	62	69	65	61	69	64	61	68	64	61	60					60			
10	77	68	62	59	76	67	62	59	67	62	59	66	62	59	65	61	58	57					57			

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

	0°	45°	90°
0°	474416	474416	474416
5°	419009	419398	421304
10°	325760	322297	324225
15°	226620	229749	229749
20°	163875	167463	165483
25°	107445	120785	107445
30°	52306	84120	50561
35°	26254	54353	25781
40°	19728	24129	19728
45°	15454	20824	14961
50°	10007	18809	10007
55°	9864	10539	9864
60°	9842	9842	9842
65°	8894	8894	8894
70°	7704	8837	7704
75°	7336	7336	7336
80°	6471	6471	6471
85°	4446	4446	4446

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 20824 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.0	19.6
10°-20°	160.6	33.2
20°-30°	121.8	25.2
30°-40°	51.2	10.6
40°-50°	24.1	5.0
50°-60°	13.9	2.9
60°-70°	9.9	2.0
70°-80°	5.3	1.1
80°-90°	1.7	0.4
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°	377.4	78.0
0°-40°	428.6	88.6
0°-60°	466.7	96.5
0°-90°	483.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	483.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1224	1224	1224	1224	1224	
5°	1077	1074	1078	1077	1083	95
15°	565	567	573	572	573	160
25°	251	272	282	272	251	112
35°	56	70	115	69	54	39
45°	28	31	38	31	27	21
55°	15	15	16	15	15	13
65°	10	10	10	10	10	10
75°	5	5	5	5	5	5
85°	1	2	1	2	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1224.3	1224.3	1224.3	1224.3	1224.3
2.5°	1187.3	1190.2	1192.1	1197.0	1197.0
5°	1077.2	1074.3	1078.2	1077.2	1083.1
7.5°	954.5	955.5	950.6	956.4	965.2
10°	827.9	820.1	819.1	823.0	824.0
12.5°	692.5	688.6	687.6	687.6	697.4
15°	564.9	566.8	572.7	571.7	572.7
17.5°	476.3	482.1	482.1	479.2	476.3
20°	397.4	402.2	406.1	402.2	401.3
22.5°	326.3	338.0	342.8	339.9	328.2
25°	251.3	271.7	282.5	271.7	251.3
27.5°	171.4	205.5	228.9	204.5	171.4
30°	116.9	142.2	188.0	140.3	113.0
32.5°	76.9	96.4	151.0	96.4	77.9
35°	55.5	70.1	114.9	69.2	54.5
37.5°	45.8	54.5	72.1	53.6	45.8
40°	39.0	41.9	47.7	42.9	39.0
42.5°	34.1	36.0	41.9	37.0	34.1
45°	28.2	31.2	38.0	31.2	27.3
47.5°	17.5	24.3	34.1	24.3	17.5
50°	16.6	16.6	31.2	16.6	16.6
52.5°	15.6	15.6	23.4	15.6	15.6
55°	14.6	14.6	15.6	14.6	14.6
57.5°	13.6	13.6	13.6	13.6	13.6
60°	12.7	12.7	12.7	12.7	12.7
62.5°	10.7	11.7	11.7	11.7	10.7
65°	9.7	9.7	9.7	9.7	9.7
67.5°	8.8	8.8	8.8	8.8	8.8
70°	6.8	7.8	7.8	7.8	6.8
72.5°	5.8	5.8	5.8	6.8	5.8
75°	4.9	4.9	4.9	4.9	4.9
77.5°	3.9	3.9	3.9	3.9	3.9
80°	2.9	2.9	2.9	2.9	2.9
82.5°	1.9	2.9	1.9	2.9	1.9
85°	1.0	1.9	1.0	1.9	1.0
87.5°	1.0	1.0	1.0	1.0	1.0
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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