

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: P886413

Luminaire Tested: ML204LSFL9FS1E-TIR1D55WFL-TL2SDMB-550LM-4000K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886413  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-103)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL9FS1E-TIR1D55WFL-TL2SDMB-550LM-4000K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE BLACK TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

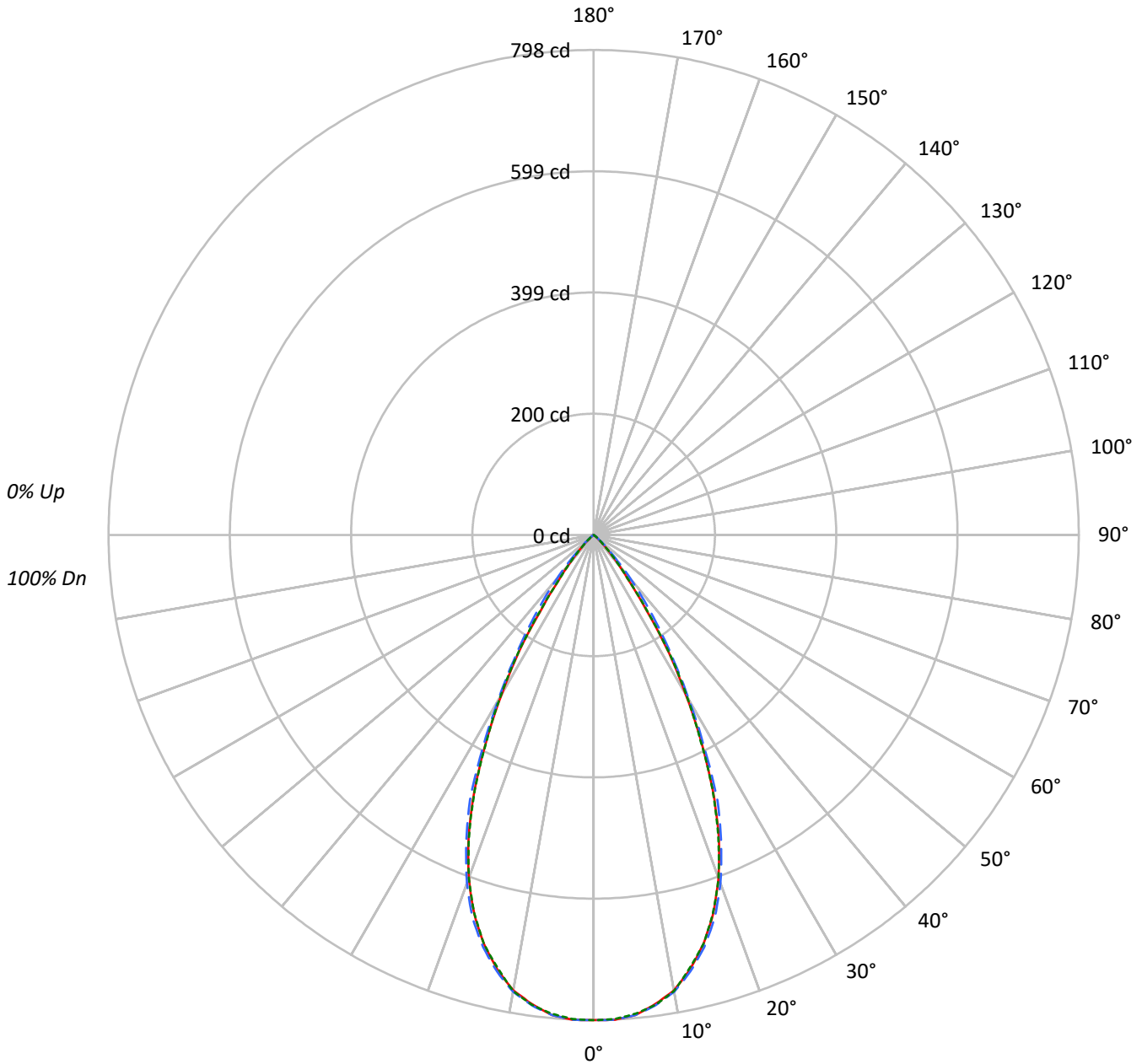
Lumens per Lamp: N/A  
Luminaire Lumens: 615.8 lumens  
Efficiency: N/A  
Efficacy: 78.0 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.82  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 7.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94								
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	92	90	88								
3	104	97	93	89	102	96	92	88	94	90	87	91	88	86	89	86	84	83								
4	99	92	86	82	97	90	86	82	88	84	81	86	83	80	85	82	79	78								
5	94	86	81	77	92	85	80	76	83	79	76	82	78	75	80	77	74	73								
6	90	81	76	72	88	80	75	71	79	74	71	78	73	70	76	73	70	68								
7	85	77	71	67	84	76	71	67	75	70	67	74	69	66	73	69	66	64								
8	82	73	67	63	80	72	67	63	71	66	63	70	66	62	69	65	62	61								
9	78	69	63	59	77	68	63	59	67	63	59	67	62	59	66	62	59	57								
10	75	65	60	56	74	65	60	56	64	59	56	63	59	56	63	59	56	54								

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

	0°	45°	90°
0°	309418	309418	309418
5°	308461	308461	307605
10°	299436	300302	299869
15°	279575	281781	279575
20°	247751	251421	247751
25°	198344	205869	197874
30°	135397	140364	137366
35°	72093	88318	73654
40°	31868	48055	32425
45°	12111	17536	12111
50°	3316	5968	3979
55°	743	2229	743
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: 17536 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.6	12.1
10°-20°	194.4	31.6
20°-30°	211.0	34.3
30°-40°	109.6	17.8
40°-50°	24.0	3.9
50°-60°	2.3	0.4
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°	480.0	78.0
0°-40°	589.6	95.7
0°-60°	615.8	100.0
0°-90°	615.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	615.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	798	798	798	798	798	
5°	793	792	793	792	791	75
15°	697	699	702	698	697	194
25°	464	467	482	466	463	208
35°	152	171	187	174	156	101
45°	22	24	32	24	22	20
55°	1	2	3	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°	798.5	798.5	798.5	798.5	798.5
2.5°	798.5	797.4	798.5	798.5	797.4
5°	793.0	791.9	793.0	791.9	790.8
7.5°	778.6	779.7	780.8	779.7	779.7
10°	761.0	762.1	763.2	762.1	762.1
12.5°	732.3	734.5	735.6	734.5	730.0
15°	696.9	699.1	702.4	698.0	696.9
17.5°	653.8	659.4	661.6	657.1	652.7
20°	600.8	606.3	609.7	606.3	600.8
22.5°	537.9	545.6	547.8	544.5	535.7
25°	463.9	467.2	481.5	466.1	462.8
27.5°	382.1	387.7	394.3	388.8	379.9
30°	302.6	308.1	313.7	310.4	307.0
32.5°	230.8	244.1	245.2	240.8	235.2
35°	152.4	171.2	186.7	174.5	155.7
37.5°	96.1	108.2	135.8	109.3	97.2
40°	63.0	68.5	95.0	69.6	64.1
42.5°	39.8	44.2	58.5	43.1	39.8
45°	22.1	24.3	32.0	24.3	22.1
47.5°	11.0	13.3	18.8	13.3	12.1
50°	5.5	7.7	9.9	7.7	6.6
52.5°	2.2	4.4	5.5	4.4	3.3
55°	1.1	2.2	3.3	1.1	1.1
57.5°	0.0	0.0	1.1	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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