

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: P886423

Luminaire Tested: ML204LSFL9FS1E-TIR1D55WFL-TL2SDMW-550LM-4000K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886423  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-101)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL9FS1E-TIR1D55WFL-TL2SDMW-550LM-4000K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

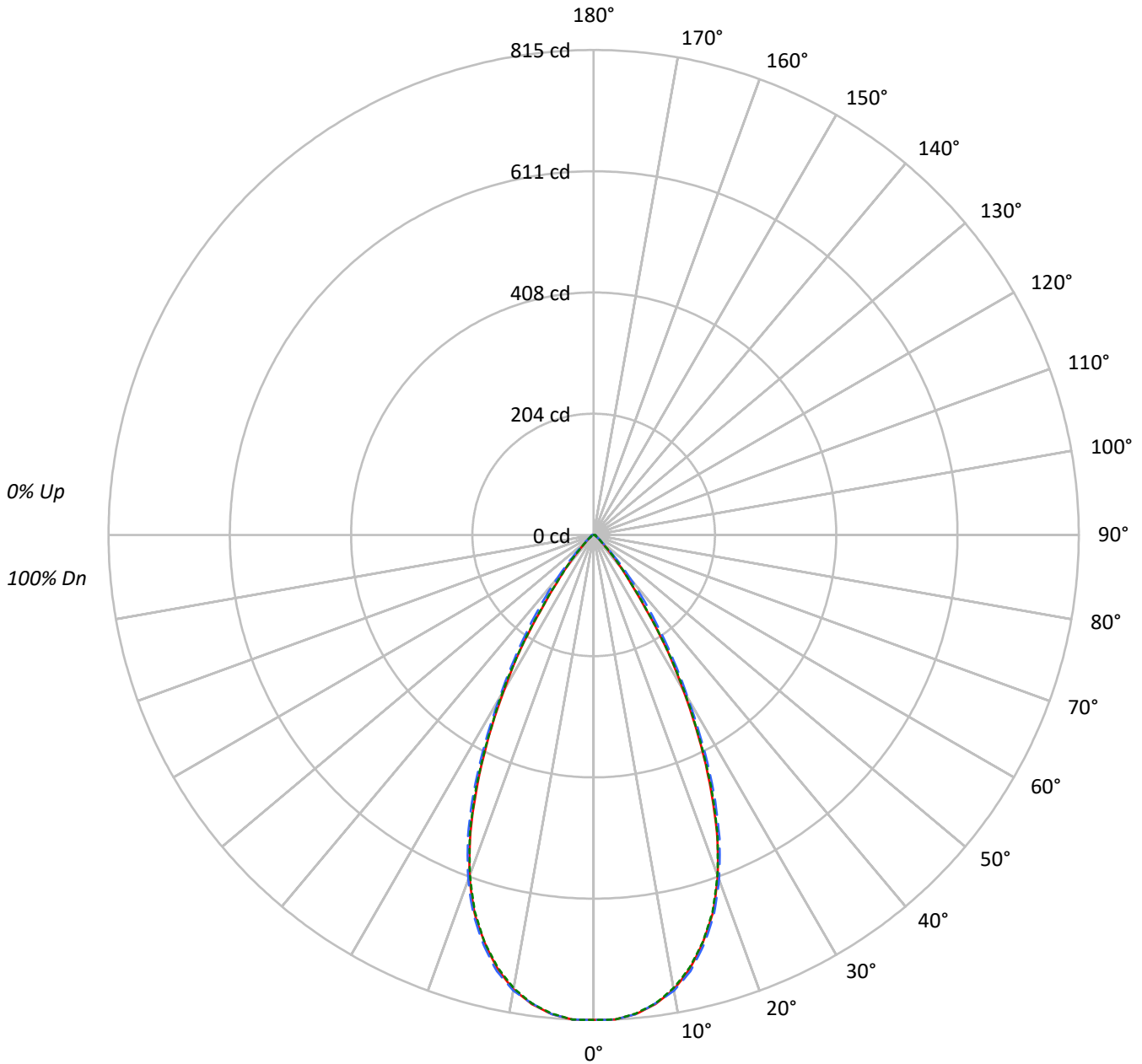
Lumens per Lamp: N/A  
Luminaire Lumens: 641.4 lumens  
Efficiency: N/A  
Efficacy: 81.2 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.85 / 0.82  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 7.9  
Input Voltage (V): NR  
Input Current (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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	94				
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87				
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81				
4	98	90	85	81	96	89	84	80	87	83	80	85	82	79	83	80	78	76				
5	93	85	79	75	92	84	79	75	82	78	74	81	77	73	79	76	73	71				
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67				
7	85	76	70	66	83	75	69	65	74	69	65	72	68	65	71	67	64	63				
8	81	71	66	62	79	71	65	61	70	65	61	69	64	61	68	64	61	59				
9	77	68	62	58	76	67	62	58	66	61	58	65	61	58	65	60	57	56				
10	74	64	59	55	73	64	58	55	63	58	55	62	58	54	61	57	54	53				

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

	0°	45°	90°
0°	315851	315851	315851
5°	314490	314490	314062
10°	305102	305968	304237
15°	284469	286234	284028
20°	251421	254143	250514
25°	197404	204031	199285
30°	134413	141348	136918
35°	73133	89359	75262
40°	35763	48055	35763
45°	15125	21208	15728
50°	8018	10007	8018
55°	5202	5945	5202
60°	4262	4262	4262
65°	4034	4034	4034
70°	3739	3739	3739
75°	3294	4941	3294
80°	4909	4909	4909
85°	4891	4891	4891

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 21208 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.1	11.9
10°-20°	197.5	30.8
20°-30°	212.0	33.1
30°-40°	111.0	17.3
40°-50°	28.5	4.4
50°-60°	7.8	1.2
60°-70°	4.6	0.7
70°-80°	3.0	0.5
80°-90°	0.9	0.1
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°	485.6	75.7
0°-40°	596.7	93.0
0°-60°	633.0	98.7
0°-90°	641.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	641.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	815	815	815	815	815	
5°	808	808	808	807	807	76
15°	709	710	714	709	708	197
25°	462	470	477	469	466	209
35°	155	174	189	173	159	103
45°	28	31	39	31	29	25
55°	8	8	9	8	8	7
65°	4	4	4	4	4	4
75°	2	3	3	3	2	3
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	815.1	815.1	815.1	815.1	815.1
2.5°	815.1	815.1	815.1	814.0	815.1
5°	808.5	808.5	808.5	807.4	807.4
7.5°	795.3	795.3	794.2	795.3	794.2
10°	775.4	775.4	777.6	775.4	773.2
12.5°	746.7	747.8	751.1	746.7	744.5
15°	709.1	710.2	713.5	709.1	708.0
17.5°	666.0	670.5	670.5	667.1	663.8
20°	609.7	611.9	616.3	611.9	607.5
22.5°	541.2	552.3	552.3	546.7	543.4
25°	461.7	470.5	477.2	469.4	466.1
27.5°	381.1	388.8	395.4	388.8	383.3
30°	300.4	308.2	315.9	311.5	306.0
32.5°	230.8	239.7	248.5	240.8	232.0
35°	154.6	174.5	188.9	173.4	159.1
37.5°	102.7	113.8	138.1	116.0	103.8
40°	70.7	74.0	95.0	74.0	70.7
42.5°	45.3	49.7	61.9	49.7	46.4
45°	27.6	30.9	38.7	30.9	28.7
47.5°	18.8	19.9	23.2	19.9	18.8
50°	13.3	13.3	16.6	14.4	13.3
52.5°	9.9	9.9	12.1	11.0	9.9
55°	7.7	7.7	8.8	7.7	7.7
57.5°	5.5	6.6	6.6	6.6	5.5
60°	5.5	5.5	5.5	5.5	5.5
62.5°	4.4	5.5	5.5	5.5	4.4
65°	4.4	4.4	4.4	4.4	4.4
67.5°	4.4	4.4	4.4	4.4	4.4
70°	3.3	3.3	3.3	3.3	3.3
72.5°	3.3	3.3	3.3	3.3	3.3
75°	2.2	3.3	3.3	3.3	2.2
77.5°	2.2	2.2	2.2	2.2	2.2
80°	2.2	2.2	2.2	2.2	2.2
82.5°	1.1	1.1	1.1	1.1	1.1
85°	1.1	1.1	1.1	1.1	1.1
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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