

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: P886457

Luminaire Tested: ML204LSFLD2W1E-TIR1D25NFL-TL2SDMW-400LM-3000K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886457  
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: ML204LSFLD2W1E-TIR1D25NFL-TL2SDMW-400LM-3000K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM  
Light Source: (1) D2W LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

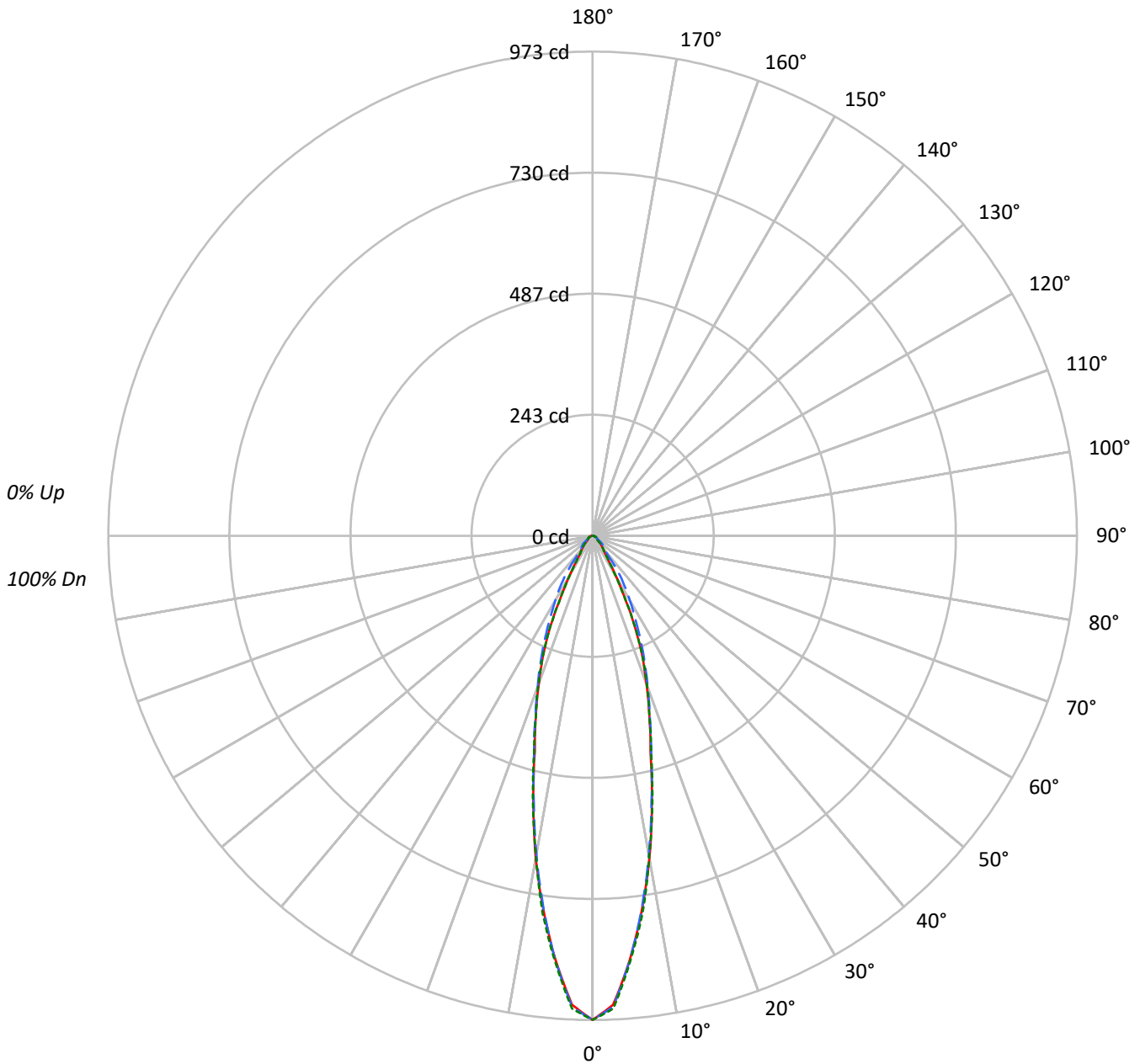
Lumens per Lamp: N/A  
Luminaire Lumens: 384.3 lumens  
Efficiency: N/A  
Efficacy: 62.0 lumens/watt  
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.55  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 6.2  
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	100	100	100	100		
	1	113	111	108	106	111	109	106	104	104	103	101	101	99	98	97	96	95	93	93	93	93	93	93		
	2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87	87	87	87	87	87		
	3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	86	83	82	82	82	82	82	82		
	4	98	91	86	82	97	90	85	81	88	84	80	86	82	79	84	81	79	77	77	77	77	77	77		
	5	94	86	81	77	92	85	80	76	83	79	76	82	78	75	80	77	74	73	73	73	73	73	73		
	6	90	82	76	72	89	81	76	72	79	75	71	78	74	71	77	73	70	69	69	69	69	69	69		
	7	86	78	72	68	85	77	72	68	76	71	68	75	70	67	74	70	67	66	66	66	66	66	66		
	8	83	74	69	65	82	73	68	65	72	68	64	71	67	64	71	67	64	63	63	63	63	63	63		
	9	80	71	65	62	79	70	65	62	69	65	61	69	64	61	68	64	61	60	60	60	60	60	60		
	10	77	68	62	59	76	67	62	59	67	62	59	66	62	59	65	61	58	57	57	57	57	57	57		

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

	0°	45°	90°
0°	376959	376959	376959
5°	332967	333239	334756
10°	258829	256114	257610
15°	180085	182572	182572
20°	130226	133071	131504
25°	85383	95944	85383
30°	41568	66848	40181
35°	20861	43189	20483
40°	15681	19172	15681
45°	12275	16550	11892
50°	7958	14950	7958
55°	7837	8377	7837
60°	7827	7827	7827
65°	7060	7060	7060
70°	6118	7024	6118
75°	5839	5839	5839
80°	5132	5132	5132
85°	3557	3557	3557

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 16550 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.5	19.6
10°-20°	127.6	33.2
20°-30°	96.8	25.2
30°-40°	40.7	10.6
40°-50°	19.2	5.0
50°-60°	11.1	2.9
60°-70°	7.9	2.1
70°-80°	4.2	1.1
80°-90°	1.4	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°	299.9	78.0
0°-40°	340.6	88.6
0°-60°	370.8	96.5
0°-90°	384.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	384.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	973	973	973	973	973	
5°	856	854	857	856	861	75
15°	449	450	455	454	455	127
25°	200	216	224	216	200	89
35°	44	56	91	55	43	31
45°	22	25	30	25	22	16
55°	12	12	12	12	12	10
65°	8	8	8	8	8	8
75°	4	4	4	4	4	4
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°	972.8	972.8	972.8	972.8	972.8
2.5°	943.4	945.7	947.3	951.2	951.2
5°	856.0	853.6	856.7	856.0	860.6
7.5°	758.4	759.2	755.4	760.0	767.0
10°	657.8	651.6	650.9	654.0	654.7
12.5°	550.3	547.2	546.4	546.4	554.1
15°	448.9	450.4	455.1	454.3	455.1
17.5°	378.5	383.1	383.1	380.8	378.5
20°	315.8	319.6	322.7	319.6	318.9
22.5°	259.3	268.6	272.4	270.1	260.8
25°	199.7	215.9	224.4	215.9	199.7
27.5°	136.2	163.3	181.9	162.5	136.2
30°	92.9	113.0	149.4	111.4	89.8
32.5°	61.1	76.6	120.0	76.6	61.9
35°	44.1	55.7	91.3	54.9	43.3
37.5°	36.4	43.3	57.3	42.6	36.4
40°	31.0	33.3	37.9	34.1	31.0
42.5°	27.1	28.6	33.3	29.4	27.1
45°	22.4	24.8	30.2	24.8	21.7
47.5°	13.9	19.3	27.1	19.3	13.9
50°	13.2	13.2	24.8	13.2	13.2
52.5°	12.4	12.4	18.6	12.4	12.4
55°	11.6	11.6	12.4	11.6	11.6
57.5°	10.8	10.8	10.8	10.8	10.8
60°	10.1	10.1	10.1	10.1	10.1
62.5°	8.5	9.3	9.3	9.3	8.5
65°	7.7	7.7	7.7	7.7	7.7
67.5°	7.0	7.0	7.0	7.0	7.0
70°	5.4	6.2	6.2	6.2	5.4
72.5°	4.6	4.6	4.6	5.4	4.6
75°	3.9	3.9	3.9	3.9	3.9
77.5°	3.1	3.1	3.1	3.1	3.1
80°	2.3	2.3	2.3	2.3	2.3
82.5°	1.5	2.3	1.5	2.3	1.5
85°	0.8	1.5	0.8	1.5	0.8
87.5°	0.8	0.8	0.8	0.8	0.8
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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