

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: P886005

Luminaire Tested: ML104LSFLD2W1E-TIR1D25NFL-TL1SDMW-200LM-3000K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P886005
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-136)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFLD2W1E-TIR1D25NFL-TL1SDMW-200LM-3000K
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM
Light Source: (1) D2W LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

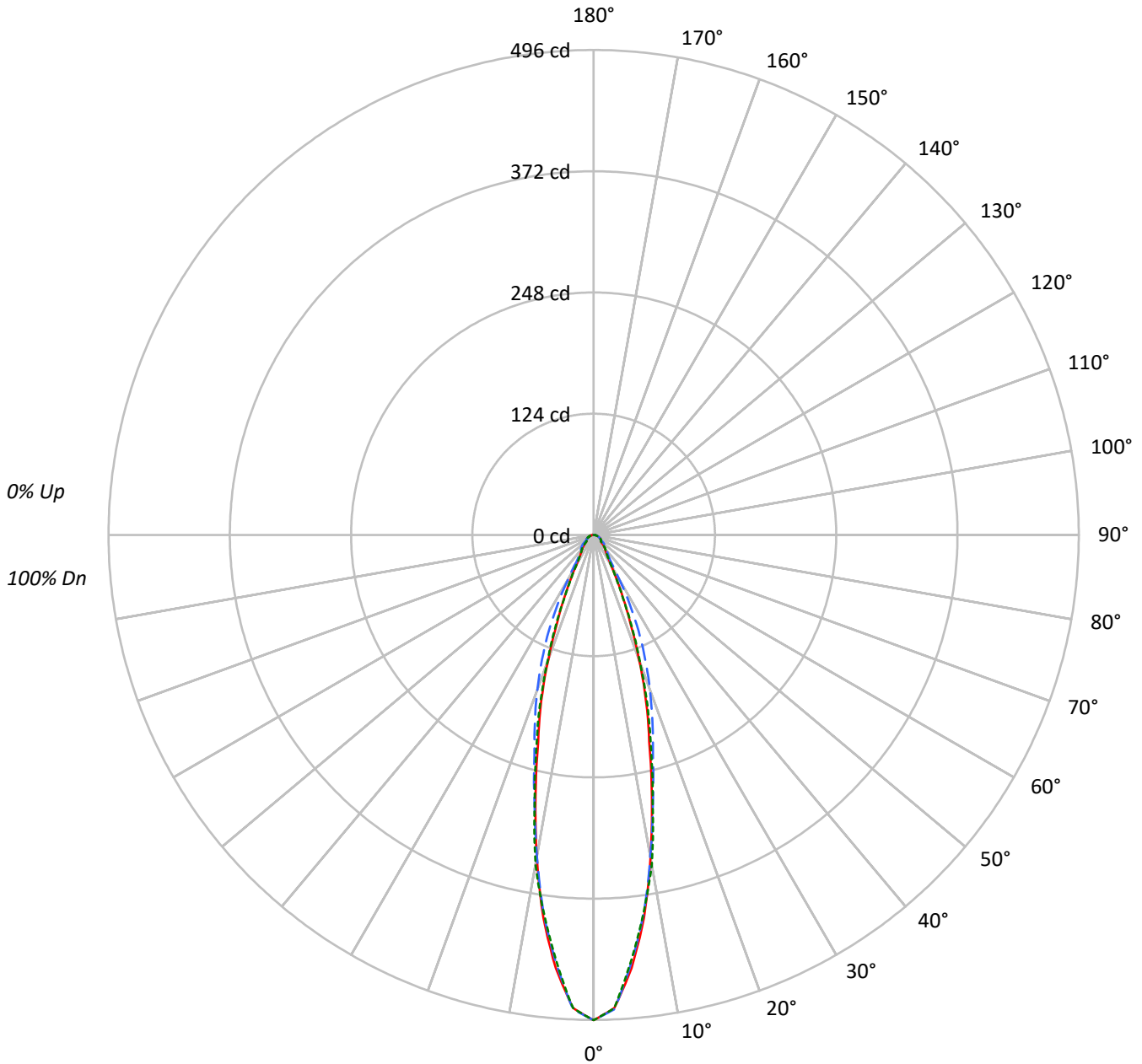
Lumens per Lamp: N/A
Luminaire Lumens: 191.3 lumens
Efficiency: N/A
Efficacy: 59.8 lumens/watt
Spacing Criteria (0/90/45): 0.45 / 0.46 / 0.55
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')
CIE Type: Direct

Input Watts (W): 3.2
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										
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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92								
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86								
3	102	95	90	86	100	94	89	85	91	87	84	89	86	83	87	84	82	80								
4	97	90	84	80	95	88	83	79	86	82	78	84	80	77	82	79	77	75								
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	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	84	75	70	66	74	69	66	73	69	65	72	68	65	64								
8	82	73	67	63	80	72	67	63	71	66	63	70	66	62	69	65	62	61								
9	78	69	64	60	77	69	64	60	68	63	60	67	63	60	66	62	59	58								
10	76	67	61	58	75	66	61	58	65	61	57	65	60	57	64	60	57	56								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	769273	769273	769273
5°	691925	684457	680722
10°	526951	525220	539228
15°	351589	375338	362982
20°	223341	277115	228125
25°	121770	185734	118863
30°	62643	93428	62643
35°	42764	49387	43900
40°	36017	42087	37231
45°	27401	37703	28716
50°	22908	33036	22908
55°	24051	24051	24051
60°	25730	23870	25730
65°	23840	23840	23840
70°	24019	24019	24019
75°	21560	21560	21560
80°	21423	21423	21423
85°	21341	10671	21341

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 37703 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.8	20.3
10°-20°	63.8	33.4
20°-30°	40.3	21.1
30°-40°	17.1	8.9
40°-50°	11.4	6.0
50°-60°	8.1	4.3
60°-70°	6.6	3.4
70°-80°	3.9	2.0
80°-90°	1.3	0.7
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°	142.9	74.7
0°-40°	160.0	83.7
0°-60°	179.5	93.9
0°-90°	191.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	191.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	496	496	496	496	496	
5°	445	441	440	436	438	39
15°	219	226	234	229	226	61
25°	71	81	109	82	70	34
35°	23	27	26	26	23	15
45°	12	15	17	15	13	10
55°	9	9	9	9	9	8
65°	6	6	6	6	6	7
75°	4	4	4	4	4	4
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°	496.3	496.3	496.3	496.3	496.3
2.5°	484.4	484.4	485.6	484.4	484.4
5°	444.7	441.1	439.9	436.4	437.5
7.5°	394.8	393.6	391.2	391.2	390.1
10°	334.8	336.0	333.7	337.2	342.6
12.5°	274.3	274.9	279.6	282.0	279.0
15°	219.1	225.6	233.9	229.2	226.2
17.5°	178.1	184.6	199.5	187.6	182.9
20°	135.4	147.8	168.0	150.8	138.3
22.5°	98.6	114.0	137.7	115.2	102.7
25°	71.2	81.3	108.6	82.5	69.5
27.5°	49.9	58.2	79.0	58.8	49.3
30°	35.0	43.9	52.2	42.7	35.0
32.5°	27.3	34.4	33.2	33.2	26.7
35°	22.6	26.7	26.1	26.1	23.2
37.5°	19.6	21.4	23.2	22.0	20.2
40°	17.8	19.0	20.8	19.0	18.4
42.5°	15.4	17.2	19.0	17.2	16.0
45°	12.5	14.8	17.2	14.8	13.1
47.5°	10.1	11.3	16.0	11.9	10.1
50°	9.5	9.5	13.7	9.5	9.5
52.5°	9.5	9.5	10.7	9.5	9.5
55°	8.9	8.9	8.9	8.9	8.9
57.5°	8.3	8.3	8.3	8.3	8.3
60°	8.3	8.3	7.7	8.3	8.3
62.5°	7.1	7.7	7.1	7.7	7.1
65°	6.5	6.5	6.5	6.5	6.5
67.5°	5.9	5.9	5.9	5.9	5.9
70°	5.3	5.3	5.3	5.3	5.3
72.5°	4.2	4.2	4.2	4.7	4.2
75°	3.6	3.6	3.6	3.6	3.6
77.5°	3.0	3.0	3.0	3.0	3.0
80°	2.4	2.4	2.4	2.4	2.4
82.5°	1.8	1.8	1.8	1.8	1.8
85°	1.2	1.2	0.6	1.2	1.2
87.5°	0.6	0.6	0.6	0.6	0.6
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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