

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: P886350

Luminaire Tested: ML204LSFL9FS1E-TIR1D40FL-TL2SDMB-550LM-2700K

Issue Date: 6/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P886350
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-97)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML204LSFL9FS1E-TIR1D40FL-TL2SDMB-550LM-2700K
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

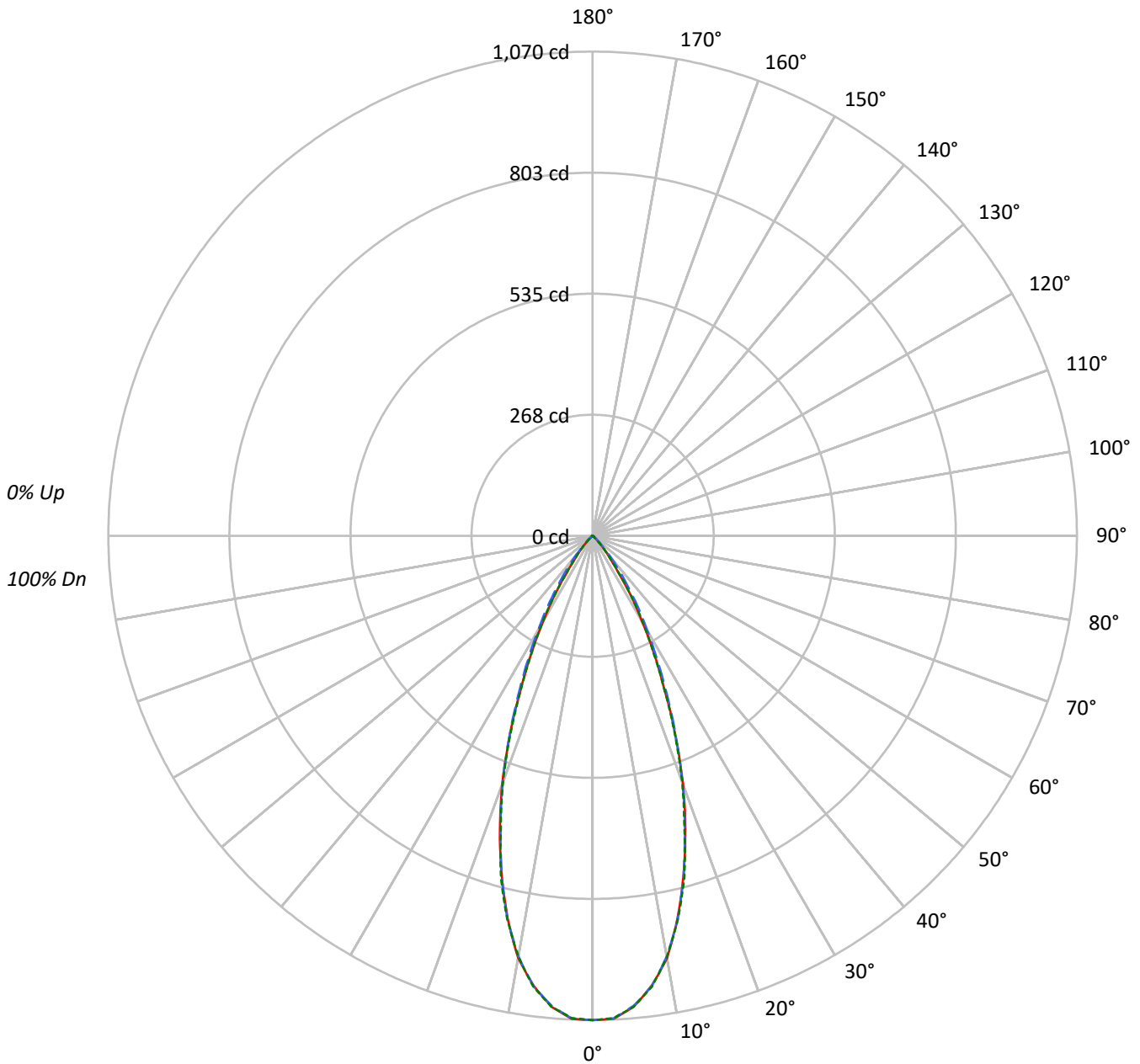
Lumens per Lamp: N/A
Luminaire Lumens: 581.0 lumens
Efficiency: N/A
Efficacy: 73.5 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.68
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 7.9
Input Voltage (V): NR
Input Current (A_{in}): 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	102	102	102	102	100			
	1	114	112	109	107	112	110	108	106	105	104	102	102	101	99	98	97	97	97	97	97	97	95			
	2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	91	91	91	91	90			
	3	105	99	95	91	103	98	94	90	95	92	89	93	90	88	90	88	86	86	86	86	86	85			
	4	100	94	89	85	98	92	88	84	90	87	83	88	85	83	87	84	82	82	82	82	82	80			
	5	96	89	83	80	94	88	83	79	86	82	79	84	81	78	83	80	77	77	77	77	77	76			
	6	92	84	79	75	91	83	78	75	82	78	74	81	77	74	79	76	73	73	73	73	73	72			
	7	88	80	75	71	87	79	74	71	78	74	70	77	73	70	76	72	70	70	70	70	70	68			
	8	85	76	71	67	83	76	71	67	75	70	67	74	70	67	73	69	66	66	66	66	66	65			
	9	81	73	67	64	80	72	67	64	71	67	64	71	66	63	70	66	63	63	63	63	63	62			
	10	78	69	64	61	77	69	64	61	68	64	61	68	63	61	67	63	60	60	60	60	60	59			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	103705	103705	103705
5°	101573	101378	101573
10°	93205	92812	92910
15°	77867	77767	78469
20°	60134	59928	59618
25°	40212	41602	40105
30°	24509	26970	24956
35°	11590	15623	11956
40°	5438	8094	5185
45°	1644	3288	1644
50°	452	1206	452
55°	169	169	169
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: 3288 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.5	16.6
10°-20°	213.4	36.7
20°-30°	176.7	30.4
30°-40°	77.0	13.3
40°-50°	16.1	2.8
50°-60°	1.3	0.2
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°	486.6	83.8
0°-40°	563.6	97.0
0°-60°	581.0	100.0
0°-90°	581.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	581.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1044	1046	1042	1044	1044	97
15°	776	774	775	779	782	214
25°	376	386	389	381	375	174
35°	98	116	132	115	101	69
45°	12	18	24	18	12	12
55°	1	1	1	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°	1070.5	1070.5	1070.5	1070.5	1070.5
2.5°	1068.5	1067.5	1067.5	1067.5	1066.5
5°	1044.5	1045.5	1042.5	1043.5	1044.5
7.5°	1002.5	1002.5	1003.5	1005.5	1004.5
10°	947.5	943.5	943.5	945.5	944.5
12.5°	866.4	868.4	868.4	872.4	869.4
15°	776.4	774.4	775.4	779.4	782.4
17.5°	681.3	680.3	676.3	677.3	674.3
20°	583.3	581.3	581.3	577.3	578.3
22.5°	479.2	482.2	480.2	481.2	475.2
25°	376.2	386.2	389.2	381.2	375.2
27.5°	293.1	298.2	309.2	301.2	290.1
30°	219.1	229.1	241.1	231.1	223.1
32.5°	159.1	172.1	183.1	174.1	160.1
35°	98.0	116.1	132.1	115.1	101.1
37.5°	64.0	74.0	94.0	73.0	64.0
40°	43.0	47.0	64.0	48.0	41.0
42.5°	26.0	30.0	38.0	31.0	25.0
45°	12.0	18.0	24.0	18.0	12.0
47.5°	5.0	8.0	16.0	7.0	5.0
50°	3.0	4.0	8.0	4.0	3.0
52.5°	2.0	2.0	3.0	2.0	2.0
55°	1.0	1.0	1.0	1.0	1.0
57.5°	0.0	0.0	1.0	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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