

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: P885719

Luminaire Tested: ML104LSFL95FS1E-TIR1D40FL-TL1SDMW-340LM-3000K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P885719
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-142)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL95FS1E-TIR1D40FL-TL1SDMW-340LM-3000K
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 389.3 lumens
Efficiency: N/A
Efficacy: 63.8 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.68
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')
CIE Type: Direct

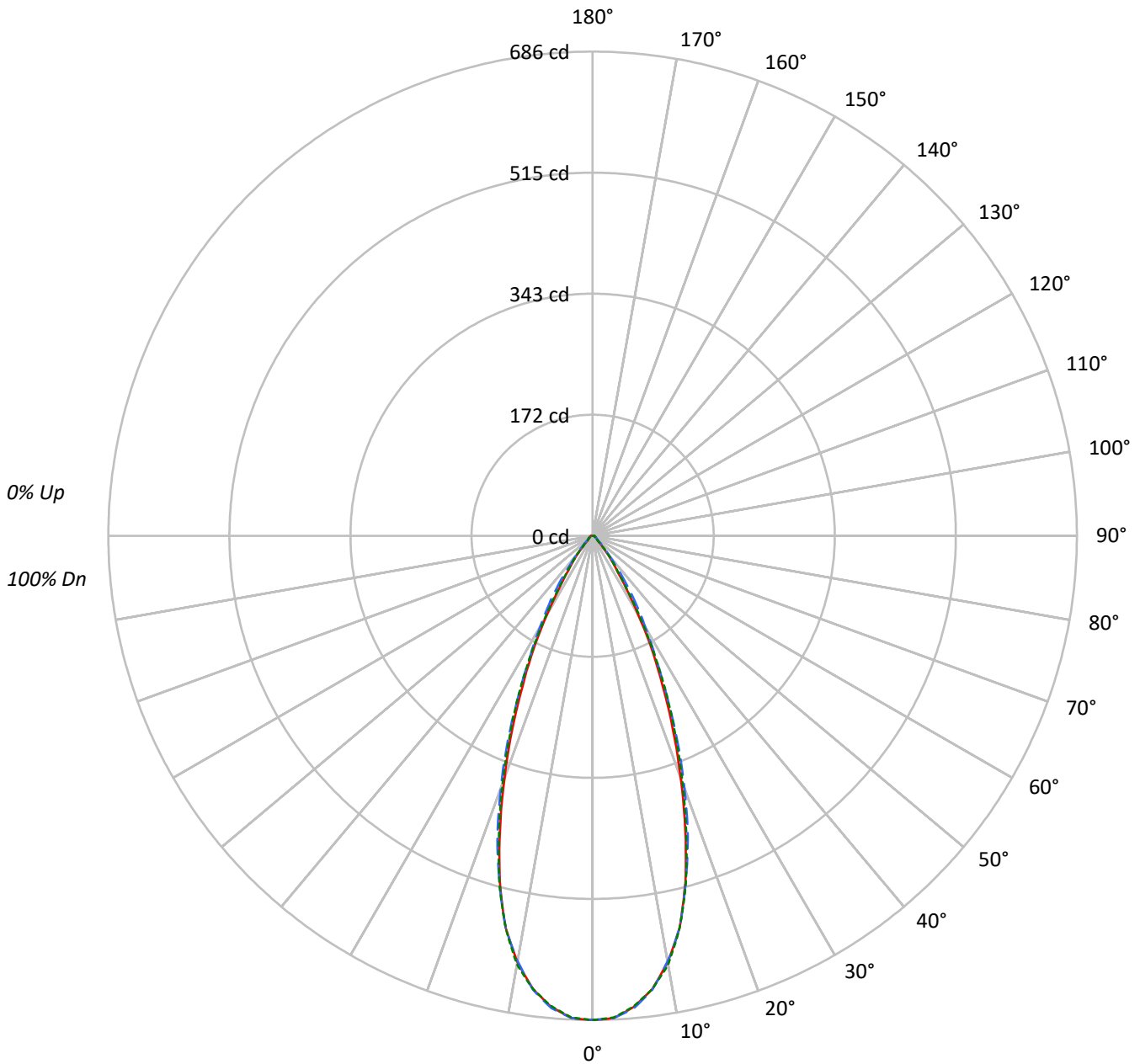
Input Watts (W): 6.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	100								
1	114	111	109	106	111	109	107	105	105	103	101	101	100	98	98	97	96	94								
2	108	104	100	97	106	102	99	96	99	96	93	96	94	92	93	91	90	88								
3	103	97	93	89	102	96	92	88	93	90	87	91	88	86	89	86	84	83								
4	99	92	87	83	97	91	86	82	89	84	81	87	83	80	85	82	79	78								
5	94	87	81	77	93	86	81	77	84	80	76	82	79	76	81	78	75	74								
6	90	82	77	73	89	81	76	72	80	75	72	79	75	71	77	74	71	70								
7	87	78	73	69	85	77	72	68	76	72	68	75	71	68	74	70	67	66								
8	83	74	69	65	82	74	69	65	73	68	65	72	67	64	71	67	64	63								
9	80	71	65	62	79	70	65	62	69	65	61	69	64	61	68	64	61	60								
10	77	68	62	59	76	67	62	59	66	62	59	66	61	58	65	61	58	57								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1063311	1063311	1063311
5°	1042633	1045434	1041077
10°	964975	963401	970799
15°	814383	817271	818876
20°	601240	627467	613611
25°	401225	420380	421920
30°	230885	265965	244129
35°	113155	157433	118453
40°	62321	73652	66165
45°	26524	40991	26524
50°	20256	22426	20256
55°	17565	17565	17565
60°	17360	17360	17360
65°	17238	17238	17238
70°	16768	16768	16768
75°	16769	16769	16769
80°	16960	16960	16960
85°	16006	16006	16006

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 40991 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.2	16.0
10°-20°	139.2	35.8
20°-30°	112.4	28.9
30°-40°	47.1	12.1
40°-50°	13.6	3.5
50°-60°	6.0	1.5
60°-70°	4.6	1.2
70°-80°	3.2	0.8
80°-90°	1.0	0.2
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°	313.9	80.6
0°-40°	361.0	92.7
0°-60°	380.5	97.7
0°-90°	389.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	389.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	686	686	686	686	686	
5°	670	670	672	671	669	62
15°	508	506	509	508	510	138
25°	235	242	246	247	247	108
35°	60	66	83	68	63	41
45°	12	15	19	16	12	12
55°	6	6	6	6	6	6
65°	5	5	5	5	5	4
75°	3	3	3	3	3	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°	686.0	686.0	686.0	686.0	686.0
2.5°	684.1	684.1	684.1	685.0	683.2
5°	670.1	670.1	671.9	671.0	669.1
7.5°	647.6	647.6	648.6	648.6	647.6
10°	613.1	614.0	612.1	614.9	616.8
12.5°	569.1	568.2	569.1	570.1	569.1
15°	507.5	505.6	509.3	507.5	510.3
17.5°	436.4	443.0	448.6	444.8	441.1
20°	364.5	370.1	380.4	375.7	372.0
22.5°	297.2	304.7	313.1	311.2	306.5
25°	234.6	242.0	245.8	246.7	246.7
27.5°	181.3	187.8	190.6	194.4	188.8
30°	129.0	138.3	148.6	147.7	136.4
32.5°	87.8	97.2	114.9	103.7	91.6
35°	59.8	66.4	83.2	68.2	62.6
37.5°	43.9	47.7	55.1	48.6	45.8
40°	30.8	33.6	36.4	35.5	32.7
42.5°	20.6	23.4	26.2	24.3	20.6
45°	12.1	15.0	18.7	15.9	12.1
47.5°	9.3	10.3	14.0	10.3	9.3
50°	8.4	8.4	9.3	8.4	8.4
52.5°	7.5	7.5	7.5	7.5	7.5
55°	6.5	6.5	6.5	6.5	6.5
57.5°	5.6	5.6	5.6	5.6	5.6
60°	5.6	5.6	5.6	5.6	5.6
62.5°	4.7	4.7	4.7	4.7	4.7
65°	4.7	4.7	4.7	4.7	4.7
67.5°	3.7	4.7	4.7	4.7	4.7
70°	3.7	3.7	3.7	3.7	3.7
72.5°	3.7	3.7	3.7	3.7	3.7
75°	2.8	2.8	2.8	2.8	2.8
77.5°	2.8	2.8	2.8	2.8	2.8
80°	1.9	1.9	1.9	1.9	1.9
82.5°	1.9	1.9	0.9	1.9	1.9
85°	0.9	0.9	0.9	0.9	0.9
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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