

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: P885724

Luminaire Tested: ML104LSFL95FS1E-TIR1D40FL-TL1SDMWB-340LM-3000K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P885724
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-145)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL95FS1E-TIR1D40FL-TL1SDMWB-340LM-3000K
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE BAFFLED TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3000K CCT
Ballast/Driver: -

Summary

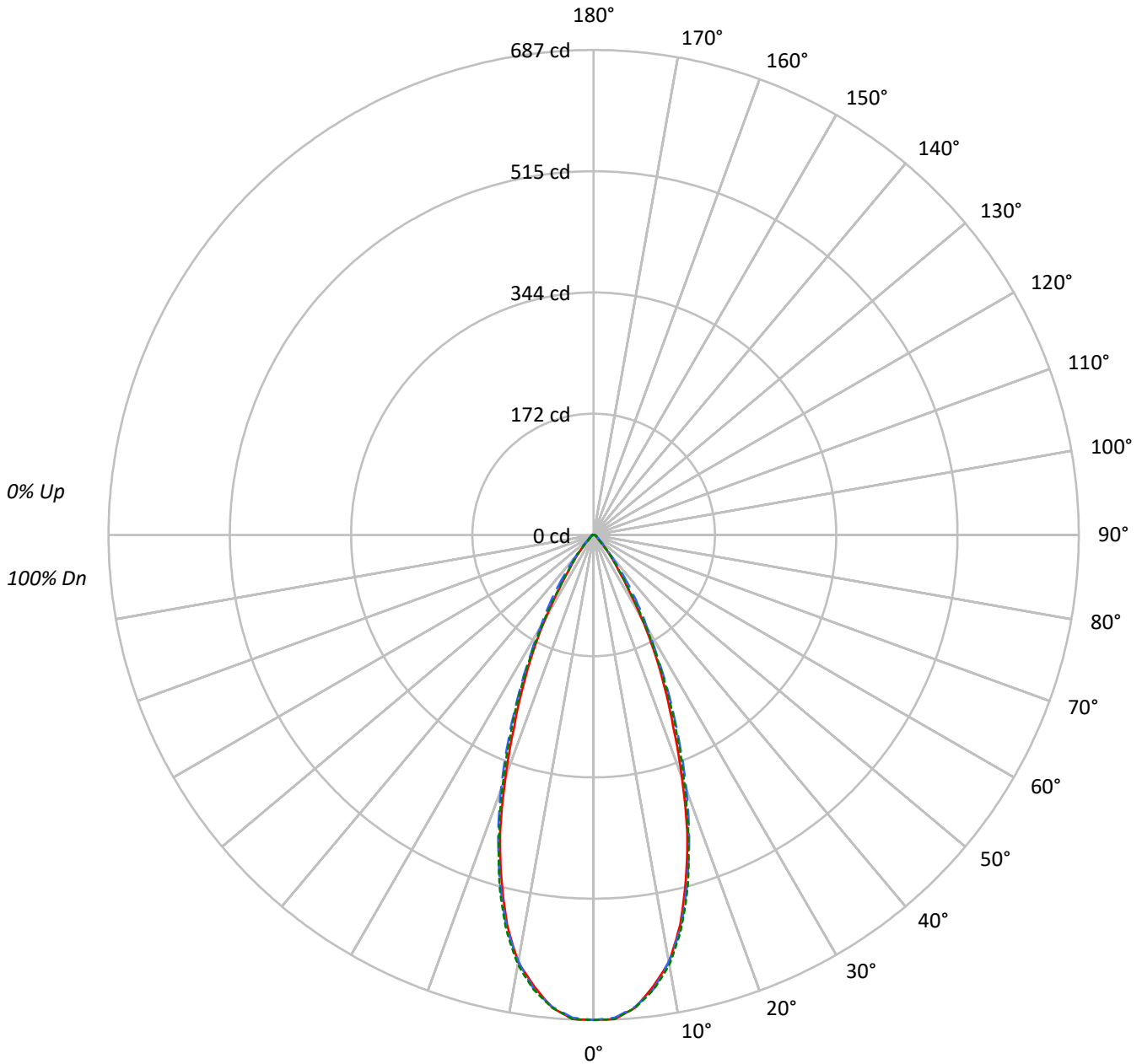
Lumens per Lamp: N/A
Luminaire Lumens: 391.0 lumens
Efficiency: N/A
Efficacy: 64.1 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.69 / 0.68
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')
CIE Type: Direct

Input Watts (W): 6.1
Input Voltage (V): NR
Input Current (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	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94								
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	92	90	88								
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	84	83								
4	99	92	87	83	97	91	86	82	89	85	81	87	83	81	85	82	80	78								
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74								
6	91	82	77	73	89	82	76	73	80	76	72	79	75	72	78	74	71	70								
7	87	78	73	69	85	78	72	69	76	72	68	75	71	68	74	70	68	66								
8	83	74	69	65	82	74	69	65	73	68	65	72	68	65	71	67	64	63								
9	80	71	66	62	79	70	65	62	70	65	62	69	64	61	68	64	61	60								
10	77	68	63	59	76	67	62	59	67	62	59	66	62	59	65	61	58	57								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1065171	1065171	1065171
5°	1046056	1044500	1046056
10°	966864	965447	972845
15°	810210	820801	826739
20°	601570	633900	620044
25°	404646	434917	423801
30°	240908	269366	254331
35°	116750	159325	123940
40°	64344	77496	66165
45°	28716	40991	26743
50°	18085	22667	18085
55°	15133	17565	15133
60°	14570	14570	14570
65°	13570	13570	13570
70°	12689	12689	12689
75°	11379	11379	11379
80°	8034	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°	62.3	15.9
10°-20°	139.8	35.8
20°-30°	113.9	29.1
30°-40°	48.7	12.5
40°-50°	13.7	3.5
50°-60°	5.6	1.4
60°-70°	3.9	1.0
70°-80°	2.3	0.6
80°-90°	0.7	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°	315.9	80.8
0°-40°	364.6	93.3
0°-60°	384.0	98.2
0°-90°	391.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	391.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	687	687	687	687	687	
5°	672	671	671	671	672	62
15°	505	507	512	513	515	138
25°	237	242	254	249	248	109
35°	62	69	84	74	66	43
45°	13	16	19	16	12	12
55°	6	6	6	6	6	5
65°	4	4	4	4	4	4
75°	2	2	2	2	2	2
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°	687.2	687.2	687.2	687.2	687.2
2.5°	686.3	685.4	684.4	685.4	686.3
5°	672.3	671.3	671.3	671.3	672.3
7.5°	645.2	648.0	648.9	649.8	649.8
10°	614.3	612.4	613.4	615.2	618.1
12.5°	565.7	566.6	569.4	571.3	572.2
15°	504.9	506.8	511.5	513.3	515.2
17.5°	440.4	442.3	449.7	448.8	446.0
20°	364.7	371.2	384.3	384.3	375.9
22.5°	294.5	303.9	316.0	312.3	309.5
25°	236.6	242.2	254.3	248.7	247.8
27.5°	184.2	191.7	197.3	197.3	191.7
30°	134.6	146.8	150.5	150.5	142.1
32.5°	90.7	101.9	115.9	107.5	95.4
35°	61.7	69.2	84.2	73.9	65.5
37.5°	44.9	48.6	58.0	49.6	46.8
40°	31.8	34.6	38.3	35.5	32.7
42.5°	21.5	23.4	26.2	24.3	21.5
45°	13.1	15.9	18.7	15.9	12.2
47.5°	9.4	10.3	14.0	10.3	9.4
50°	7.5	8.4	9.4	8.4	7.5
52.5°	6.5	6.5	7.5	6.5	6.5
55°	5.6	6.5	6.5	6.5	5.6
57.5°	4.7	5.6	5.6	5.6	4.7
60°	4.7	4.7	4.7	4.7	4.7
62.5°	4.7	4.7	4.7	4.7	4.7
65°	3.7	3.7	3.7	3.7	3.7
67.5°	3.7	3.7	3.7	3.7	3.7
70°	2.8	2.8	2.8	2.8	2.8
72.5°	2.8	2.8	2.8	2.8	2.8
75°	1.9	1.9	1.9	1.9	1.9
77.5°	1.9	1.9	1.9	1.9	1.9
80°	0.9	1.9	1.9	1.9	1.9
82.5°	0.9	0.9	0.9	0.9	0.9
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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