

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: P885727

Luminaire Tested: ML104LSFL95FS1E-TIR1D40FL-TL1SDMWB-340LM-5000K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885727  
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-5000K  
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE BAFFLED TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

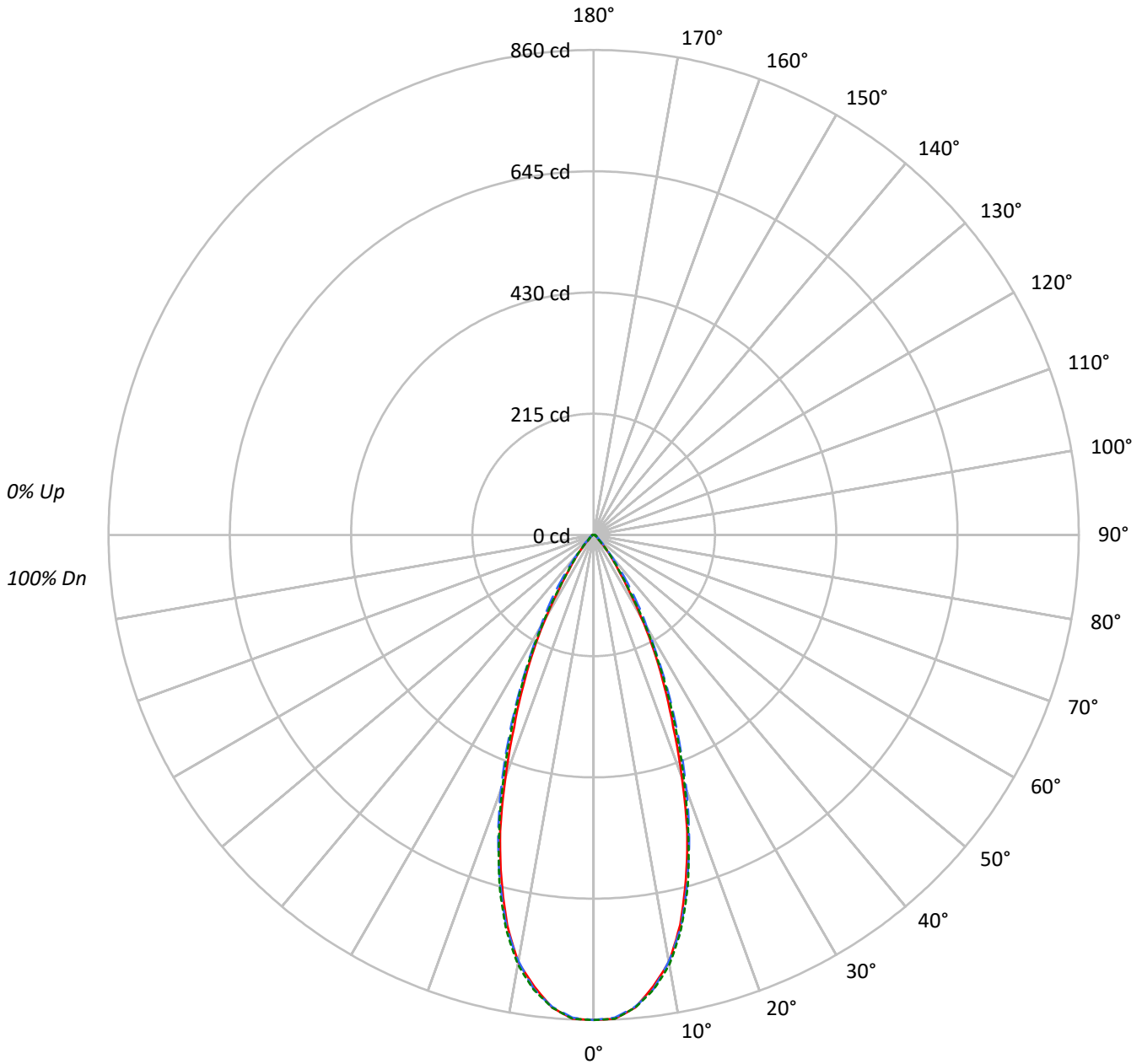
Lumens per Lamp: N/A  
Luminaire Lumens: 489.4 lumens  
Efficiency: N/A  
Efficacy: 80.2 lumens/watt  
Spacing Criteria (0/90/45): 0.68 / 0.69 / 0.68  
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')  
CIE Type: Direct

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									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	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	91	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	62	59	76	67	62	59	67	62	59	66	62	59	65	61	58	57																			

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

	0°	45°	90°
0°	1333324	1333324	1333324
5°	1309321	1307454	1309321
10°	1210193	1208304	1217590
15°	1014167	1027326	1034868
20°	752828	793406	776086
25°	506406	544374	530350
30°	301582	337199	318406
35°	146079	199251	154973
40°	80531	97123	82959
45°	35950	51294	33319
50°	22667	28213	22667
55°	18917	22159	18917
60°	18290	18290	18290
65°	17238	17238	17238
70°	15862	15862	15862
75°	13774	13774	13774
80°	10711	20530	20530
85°	21341	21341	21341

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 51294 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.0	15.9
10°-20°	175.0	35.8
20°-30°	142.5	29.1
30°-40°	61.0	12.5
40°-50°	17.2	3.5
50°-60°	7.0	1.4
60°-70°	4.9	1.0
70°-80°	2.9	0.6
80°-90°	0.9	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°	395.5	80.8
0°-40°	456.4	93.3
0°-60°	480.6	98.2
0°-90°	489.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	489.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	860	860	860	860	860	
5°	842	840	840	840	842	78
15°	632	634	640	642	645	173
25°	296	303	318	311	310	136
35°	77	87	105	92	82	54
45°	16	20	23	20	15	15
55°	7	8	8	8	7	6
65°	5	5	5	5	5	5
75°	2	2	2	2	2	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°	860.2	860.2	860.2	860.2	860.2
2.5°	859.0	857.9	856.7	857.9	859.0
5°	841.5	840.3	840.3	840.3	841.5
7.5°	807.5	811.1	812.2	813.4	813.4
10°	768.9	766.6	767.7	770.1	773.6
12.5°	708.1	709.2	712.7	715.1	716.3
15°	632.0	634.3	640.2	642.5	644.9
17.5°	551.2	553.6	562.9	561.8	558.3
20°	456.4	464.6	481.0	481.0	470.5
22.5°	368.7	380.4	395.6	390.9	387.4
25°	296.1	303.1	318.3	311.3	310.1
27.5°	230.6	239.9	246.9	246.9	239.9
30°	168.5	183.7	188.4	188.4	177.9
32.5°	113.5	127.6	145.1	134.6	119.4
35°	77.2	86.6	105.3	92.5	81.9
37.5°	56.2	60.9	72.6	62.0	58.5
40°	39.8	43.3	48.0	44.5	41.0
42.5°	26.9	29.3	32.8	30.4	26.9
45°	16.4	19.9	23.4	19.9	15.2
47.5°	11.7	12.9	17.6	12.9	11.7
50°	9.4	10.5	11.7	10.5	9.4
52.5°	8.2	8.2	9.4	8.2	8.2
55°	7.0	8.2	8.2	8.2	7.0
57.5°	5.9	7.0	7.0	7.0	5.9
60°	5.9	5.9	5.9	5.9	5.9
62.5°	5.9	5.9	5.9	5.9	5.9
65°	4.7	4.7	4.7	4.7	4.7
67.5°	4.7	4.7	4.7	4.7	4.7
70°	3.5	3.5	3.5	3.5	3.5
72.5°	3.5	3.5	3.5	3.5	3.5
75°	2.3	2.3	2.3	2.3	2.3
77.5°	2.3	2.3	2.3	2.3	2.3
80°	1.2	2.3	2.3	2.3	2.3
82.5°	1.2	1.2	1.2	1.2	1.2
85°	1.2	1.2	1.2	1.2	1.2
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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