

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: P886577

Luminaire Tested: ML310LSFL95FS1E-TIR4D25NFL-TL3SDSL-850LM-2700K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886577
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-14)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL95FS1E-TIR4D25NFL-TL3SDSL-850LM-2700K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 989.7 lumens
Efficiency: N/A
Efficacy: 72.8 lumens/watt
Spacing Criteria (0/90/45): 0.5 / 0.49 / 0.52
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')

CIE Type: Direct

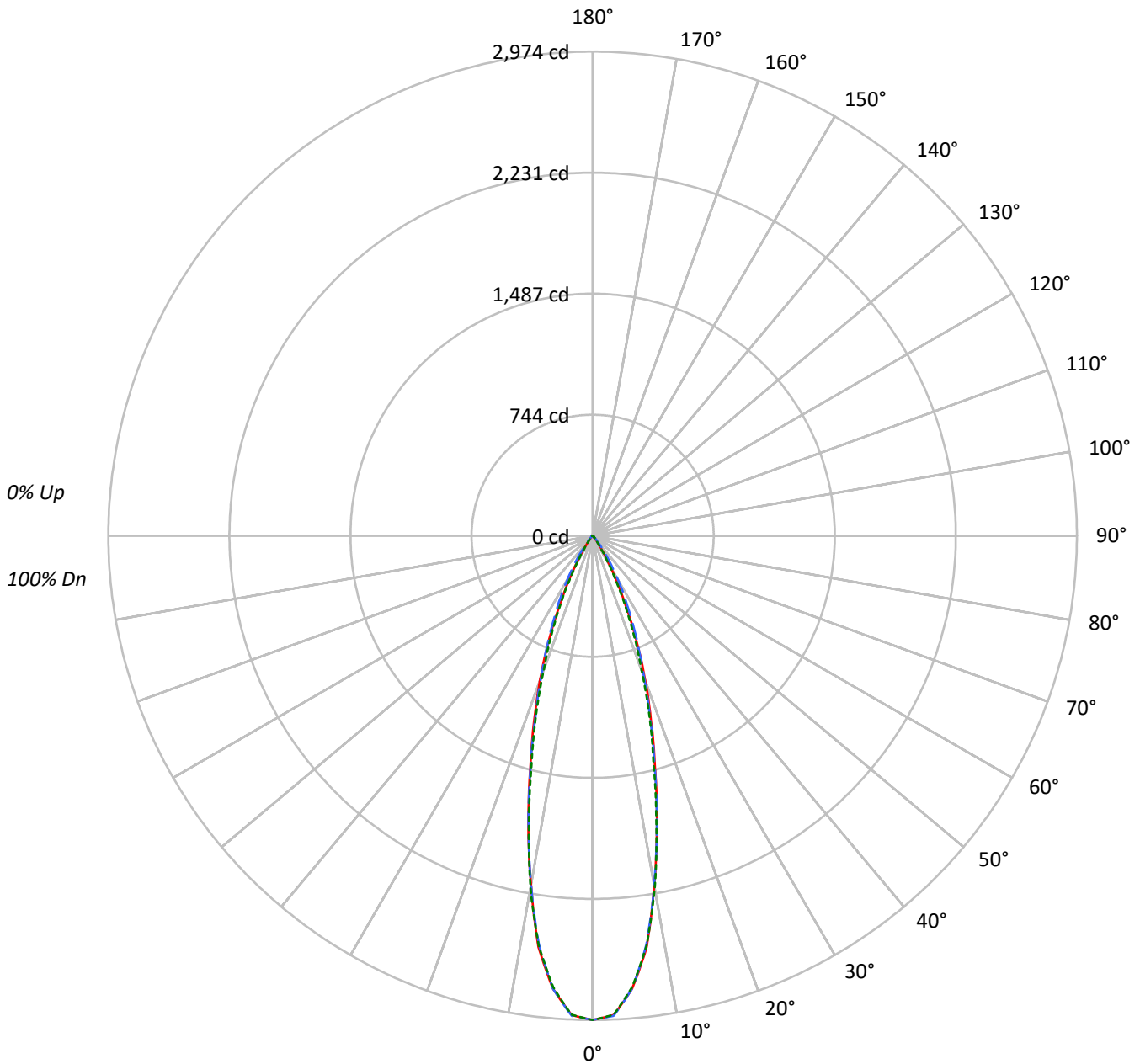
Input Watts (W): 13.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95								
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91								
3	106	101	97	93	104	99	96	93	97	94	91	94	92	90	92	90	88	87								
4	102	96	91	88	100	95	91	88	93	89	87	91	88	86	89	87	85	83								
5	98	92	87	84	97	91	86	83	89	85	82	88	84	82	86	83	81	80								
6	95	88	83	80	94	87	83	79	86	82	79	84	81	78	83	80	78	77								
7	92	84	79	76	90	84	79	76	82	78	76	81	78	75	80	77	75	74								
8	88	81	76	73	87	80	76	73	79	75	73	79	75	72	78	74	72	71								
9	86	78	73	70	85	78	73	70	77	73	70	76	72	70	75	72	69	68								
10	83	75	71	68	82	75	70	67	74	70	67	73	70	67	73	69	67	66								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	512173	512173	512173
5°	482717	482717	480988
10°	381237	380765	384420
15°	263988	262526	257676
20°	172810	168980	160824
25°	95450	105978	89750
30°	41006	61052	37566
35°	13561	28656	12404
40°	4294	10612	4699
45°	2655	4214	2874
50°	2197	2438	2197
55°	1922	2192	1922
60°	1894	1894	1894
65°	1467	1834	1834
70°	1360	1813	1813
75°	1198	1797	1797
80°	893	1785	1785
85°	1778	1778	1778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 4214 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.8	24.9
10°-20°	406.9	41.1
20°-30°	244.0	24.7
30°-40°	66.1	6.7
40°-50°	11.8	1.2
50°-60°	6.0	0.6
60°-70°	4.4	0.4
70°-80°	2.7	0.3
80°-90°	1.0	0.1
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°	897.7	90.7
0°-40°	963.8	97.4
0°-60°	981.6	99.2
0°-90°	989.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	989.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2974	2974	2974	2974	2974	
5°	2792	2795	2792	2789	2782	247
15°	1481	1477	1472	1454	1445	411
25°	502	536	558	509	472	236
35°	64	90	136	82	59	50
45°	11	12	17	13	12	9
55°	6	6	7	6	6	6
65°	4	4	4	4	4	4
75°	2	3	3	3	3	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°	2973.9	2973.9	2973.9	2973.9	2973.9
2.5°	2947.6	2949.4	2951.2	2947.6	2945.7
5°	2792.2	2795.0	2792.2	2788.6	2782.2
7.5°	2547.0	2530.6	2530.6	2513.4	2537.0
10°	2180.0	2190.9	2177.3	2180.0	2198.2
12.5°	1823.0	1810.3	1820.3	1803.1	1809.4
15°	1480.6	1477.0	1472.4	1454.3	1445.2
17.5°	1194.5	1175.4	1170.8	1156.3	1156.3
20°	942.9	944.7	922.0	906.5	877.5
22.5°	713.0	734.8	724.9	698.5	664.9
25°	502.3	535.9	557.7	508.7	472.3
27.5°	337.0	371.5	426.0	363.3	309.7
30°	206.2	241.6	307.0	232.5	188.9
32.5°	120.8	155.3	210.7	142.6	106.3
35°	64.5	89.9	136.3	81.8	59.0
37.5°	32.7	49.1	79.9	46.3	34.5
40°	19.1	25.4	47.2	27.3	20.9
42.5°	13.6	15.4	29.1	17.3	15.4
45°	10.9	11.8	17.3	12.7	11.8
47.5°	9.1	10.0	11.8	10.0	10.0
50°	8.2	8.2	9.1	8.2	8.2
52.5°	6.4	7.3	8.2	7.3	7.3
55°	6.4	6.4	7.3	6.4	6.4
57.5°	5.5	5.5	6.4	5.5	5.5
60°	5.5	5.5	5.5	5.5	5.5
62.5°	4.5	4.5	5.5	4.5	4.5
65°	3.6	4.5	4.5	4.5	4.5
67.5°	3.6	3.6	4.5	4.5	3.6
70°	2.7	3.6	3.6	3.6	3.6
72.5°	2.7	2.7	3.6	3.6	2.7
75°	1.8	2.7	2.7	2.7	2.7
77.5°	1.8	1.8	1.8	2.7	1.8
80°	0.9	1.8	1.8	1.8	1.8
82.5°	0.9	0.9	0.9	1.8	1.8
85°	0.9	0.9	0.9	0.9	0.9
87.5°	0.0	0.0	0.9	0.9	0.9
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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