

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: P886568

Luminaire Tested: ML310LSFL95FS1E-TIR4D25NFL-TL3SDMB-850LM-3000K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886568
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL95FS1E-TIR4D25NFL-TL3SDMB-850LM-3000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 970.3 lumens
Efficiency: N/A
Efficacy: 71.3 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')

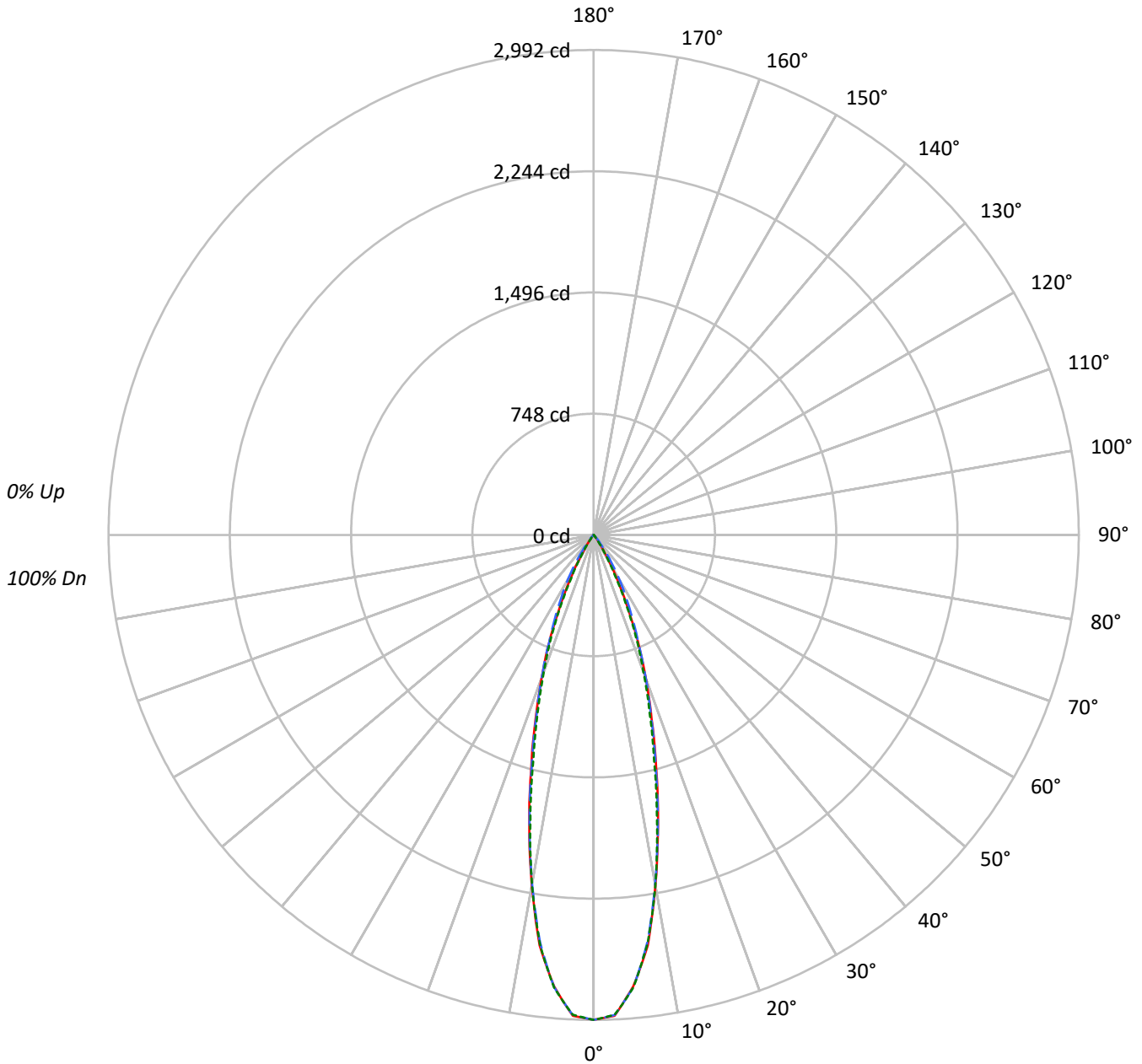
CIE Type: Direct

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									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	115	112	110	109	112	110	108	107	106	105	104	103	102	100	99	98	98	96																			
2	110	107	103	101	108	105	102	100	102	99	97	99	97	95	96	95	93	92																			
3	106	101	98	94	105	100	97	94	98	95	92	95	93	91	93	91	89	88																			
4	103	97	93	89	101	96	92	89	94	90	88	92	89	87	90	88	86	84																			
5	99	93	88	85	98	92	88	84	90	86	84	89	85	83	87	84	82	81																			
6	96	89	84	81	94	88	84	81	87	83	80	85	82	80	84	81	79	78																			
7	92	85	81	77	91	85	80	77	84	80	77	83	79	77	82	78	76	75																			
8	89	82	78	74	88	82	77	74	81	77	74	80	76	74	79	76	73	72																			
9	87	79	75	72	86	79	74	71	78	74	71	77	74	71	76	73	71	70																			
10	84	76	72	69	83	76	72	69	75	71	69	75	71	69	74	71	68	67																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	515256	515256	515256
5°	483357	484342	484826
10°	383878	382077	383720
15°	265789	263275	256054
20°	171381	171381	164142
25°	94481	106472	89826
30°	39892	62165	34642
35°	12468	26722	10302
40°	2540	9532	2540
45°	926	2289	926
50°	241	750	241
55°	0	270	0
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: 2289 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.9	25.6
10°-20°	408.8	42.1
20°-30°	244.9	25.2
30°-40°	61.9	6.4
40°-50°	6.1	0.6
50°-60°	0.5	0.1
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°	901.7	92.9
0°-40°	963.6	99.3
0°-60°	970.3	100.0
0°-90°	970.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	970.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2992	2992	2992	2992	2992	
5°	2796	2806	2802	2802	2804	248
15°	1491	1482	1477	1466	1436	412
25°	497	540	560	524	473	234
35°	59	85	127	74	49	45
45°	4	6	9	6	4	4
55°	0	0	1	0	0	0
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°	2991.8	2991.8	2991.8	2991.8	2991.8
2.5°	2969.2	2962.6	2964.5	2962.6	2963.5
5°	2795.9	2806.3	2801.6	2801.6	2804.4
7.5°	2554.8	2538.8	2536.0	2535.1	2544.5
10°	2195.1	2205.5	2184.8	2190.4	2194.2
12.5°	1833.5	1830.7	1828.8	1819.4	1806.2
15°	1490.7	1482.2	1476.6	1466.2	1436.1
17.5°	1190.3	1189.4	1177.1	1157.4	1146.1
20°	935.1	939.8	935.1	915.3	895.6
22.5°	716.6	739.2	721.3	713.8	682.7
25°	497.2	539.6	560.3	524.5	472.7
27.5°	329.6	374.8	427.5	354.1	302.3
30°	200.6	240.1	312.6	225.1	174.2
32.5°	113.9	148.8	212.8	135.6	96.1
35°	59.3	84.8	127.1	74.4	49.0
37.5°	24.5	42.4	73.5	36.7	21.7
40°	11.3	17.9	42.4	17.0	11.3
42.5°	6.6	8.5	21.7	8.5	6.6
45°	3.8	5.7	9.4	5.7	3.8
47.5°	2.8	2.8	4.7	2.8	2.8
50°	0.9	1.9	2.8	1.9	0.9
52.5°	0.9	0.9	1.9	0.9	0.9
55°	0.0	0.0	0.9	0.0	0.0
57.5°	0.0	0.0	0.0	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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