

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: HALO

Report Number: P601421

Luminaire Tested: **ML4DM08LSWFL95FS1E - TIR4D55WFL - TL41R\_ TL42S\_ 5000K**

Issue Date: 7/29/2022

Tested By:

Approved By:



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**Test Information**

Test Method: LM-79-08  
 Report Number: P601421  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Issue Date: 7/29/2022  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: HALO  
 Catalog Number: ML4DM08LSWFL95FS1E - TIR4D55WFL - TL41R\_TL42S\_5000K  
 Description: DIRECT MOUNT, 55D OPTIC, OPEN TRIM  
 Light Source: (1) SELECTABLE LUMEN LED 95CRI / 5000K CCT  
 Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
 Luminaire Lumens: 1111.8 lumens  
 Efficiency: N/A  
 Efficacy: 107.9 lumens/watt  
 Spacing Criteria (0/90/45): 0.91 / 0.91 / 0.84  
 Luminous Opening: Circular (Dia: 0.21' x H: 0')  
 CIE Type: Direct

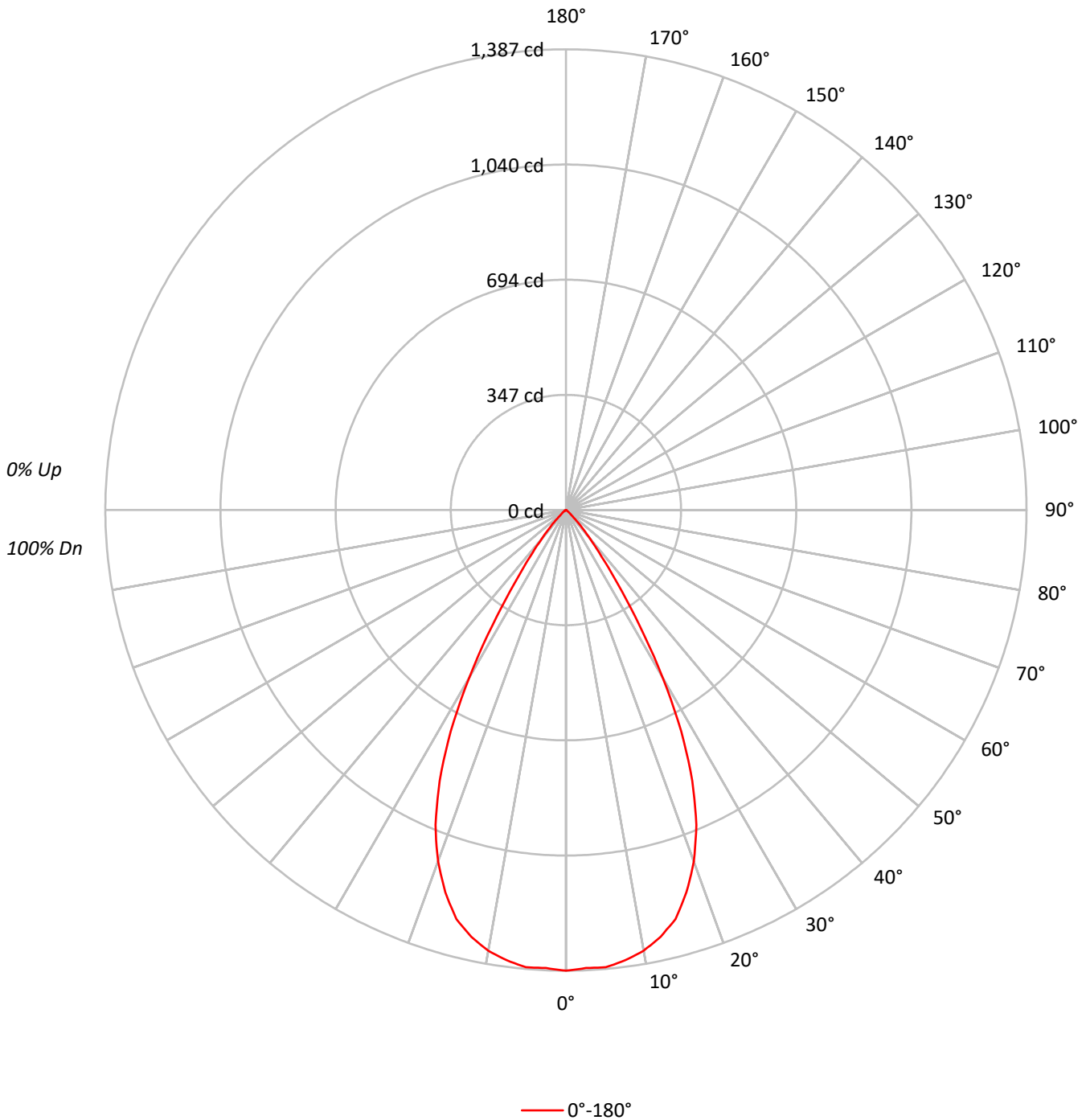
Input Watts (W): 10.3  
 Input Voltage (V): NR  
 Input Current (Ain): NR  
 Voltage Rise (V): NR  
 Power Factor: NR  
 Total Harmonic Distortion (THDi): NR  
 Frequency (hertz): 60  
 Stabilization Time: NR  
 Operation Time: NR  
 Ambient Temperature (°C): NR  
 Test Distance: 25 FT



Meas		Calibration Due Date	
Instrument	Identificatio		
Photometer	GONIO 1 11111111	4/22/2021	10/22/2021
Power Meter	XITRON 2801 IN0197	12/1/2020	12/1/2021
AC Power Source	CHROMA 61505 IN0196	12/1/2020	12/1/2021
DC Power Supply	AGILENT E3634A IN0198	11/30/2020	11/30/2021
Room Thermometer	ONSET IN0143	12/1/2020	12/1/2021

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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94	94	94	94
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	92	90	88	88	88	88
3	104	98	93	89	102	96	92	88	94	90	87	91	88	86	89	86	84	83	83	83	83
4	99	92	86	82	97	91	86	82	88	84	81	86	83	80	85	82	79	78	78	78	78
5	94	86	81	77	93	85	80	76	84	79	76	82	78	75	80	77	74	73	73	73	73
6	90	81	76	72	88	81	75	71	79	74	71	78	74	71	76	73	70	69	69	69	69
7	86	77	71	67	84	76	71	67	75	70	67	74	70	66	73	69	66	65	65	65	65
8	82	73	67	63	81	72	67	63	71	66	63	70	66	63	69	65	62	61	61	61	61
9	78	69	63	60	77	69	63	60	68	63	59	67	62	59	66	62	59	58	58	58	58
10	75	66	60	56	74	65	60	56	64	59	56	64	59	56	63	59	56	55	55	55	55

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

	0°
0°	437903
5°	437928
10°	431993
15°	416803
20°	378471
25°	313567
30°	212534
35°	103963
40°	46661
45°	17059
50°	7123
55°	2918
60°	821
65°	0
70°	0
75°	0
80°	0
85°	0

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.6	11.8
10°-20°	353.6	31.8
20°-30°	401.3	36.1
30°-40°	183.4	16.5
40°-50°	36.8	3.3
50°-60°	5.5	0.5
60°-70°	0.5	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°	885.6	79.7
0°-40°	1069.0	96.2
0°-60°	1111.3	100.0
0°-90°	1111.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1111.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1387	
5°	1382	131
15°	1275	354
25°	900	401
35°	270	183
45°	38	37
55°	5	5
65°	0	0
75°	0	0
85°	0	0
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1386.8
2.5°	1380.2
5°	1381.6
7.5°	1367.1
10°	1347.3
12.5°	1315.8
15°	1275.0
17.5°	1206.6
20°	1126.3
22.5°	1026.3
25°	900.0
27.5°	751.3
30°	582.9
32.5°	410.5
35°	269.7
37.5°	176.3
40°	113.2
42.5°	71.1
45°	38.2
47.5°	22.4
50°	14.5
52.5°	9.2
55°	5.3
57.5°	2.6
60°	1.3
62.5°	1.3
65°	0.0
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)