

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P434711

Luminaire Tested: **HCMR1R15927ED010MMS**

Issue Date: 11/24/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P434711  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-933-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/24/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCMR1R15927ED010MMS  
Description: HALO COMMERCIAL 4INCH ADJUSTABLE MULTIPLE, 15 DEG REFLECTOR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1148.0 lumens  
Efficiency: N/A  
Efficacy: 80.3 lumens/watt  
Spacing Criteria (0/90/45): 0.25 / 0.25 / 0.25  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

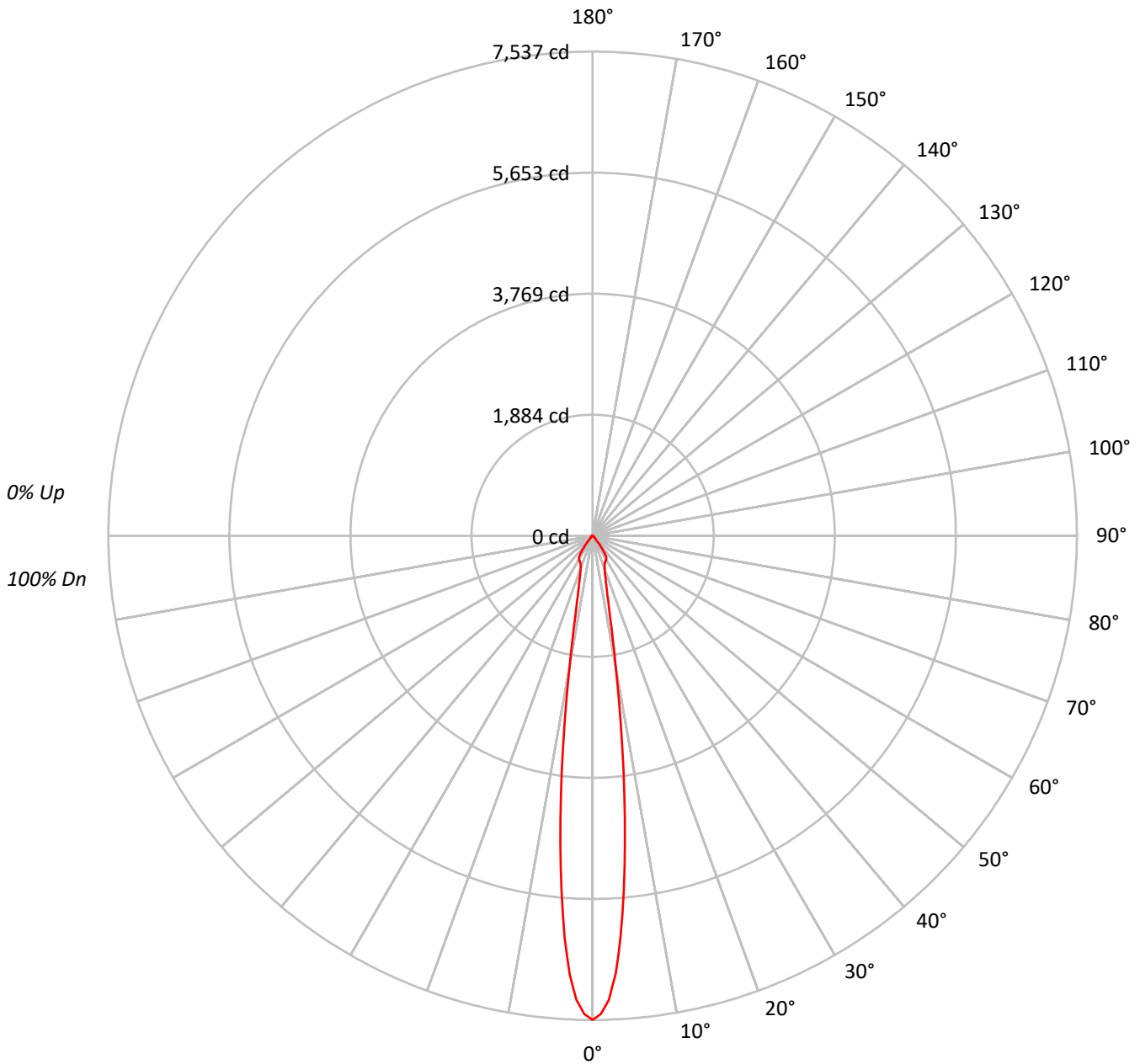
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	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	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	112	109	107	105	105	104	102	102	100	99	98	97	96	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	89
3	105	99	95	91	103	98	94	90	95	92	89	93	90	88	91	88	86	85
4	101	94	89	86	99	93	88	85	91	87	84	89	86	83	87	84	82	81
5	97	90	85	81	95	89	84	81	87	83	80	85	82	79	84	81	79	77
6	93	86	81	77	92	85	80	77	83	79	76	82	79	76	81	78	75	74
7	90	82	77	74	89	82	77	73	80	76	73	79	75	73	78	75	72	71
8	87	79	74	71	86	78	74	70	77	73	70	77	73	70	76	72	70	68
9	84	76	71	68	83	76	71	68	75	71	68	74	70	67	73	70	67	66
10	81	74	69	66	81	73	69	66	72	68	65	72	68	65	71	68	65	64

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

	0°
0°	3718750
5°	2751292
10°	1037602
15°	426505
20°	286149
25°	248784
30°	240985
35°	187919
40°	63118
45°	30701
50°	26865
55°	18924
60°	16775
65°	16344
70°	17311
75°	22875
80°	28413
85°	5661



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	409.2	35.6
10°-20°	257.3	22.4
20°-30°	214.3	18.7
30°-40°	178.9	15.6
40°-50°	38.0	3.3
50°-60°	20.9	1.8
60°-70°	14.0	1.2
70°-80°	12.2	1.1
80°-90°	3.3	0.3
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°	880.8	76.7
0°-40°	1059.7	92.3
0°-60°	1118.6	97.4
0°-90°	1148.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1148.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	7537	
5°	5555	409
15°	835	257
25°	457	214
35°	312	179
45°	44	38
55°	22	21
65°	14	14
75°	12	12
85°	1	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	7537.3
1°	7446.3
2°	7225.3
3°	6830.3
4°	6255.3
5°	5555.2
6°	4806.2
7°	4044.2
8°	3299.1
9°	2640.1
10°	2071.1
11°	1633.1
12°	1323.1
13°	1106.0
14°	951.0
15°	835.0
16°	746.0
17°	677.0
18°	623.0
19°	581.0
20°	545.0
22.5°	484.0
25°	457.0
26°	449.0
27°	443.0
28°	437.0
29°	430.0
30°	423.0
32.5°	395.0
35°	312.0
37.5°	199.0
40°	98.0
42.5°	47.0
45°	44.0
47.5°	41.0
50°	35.0
52.5°	27.0
55°	22.0
57.5°	19.0
60°	17.0
62.5°	15.0
65°	14.0
67.5°	13.0



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**CANDELA DISTRIBUTION (continued):**

	0°
75°	12.0
77.5°	11.0
80°	10.0
82.5°	6.0
85°	1.0
87.5°	0.0
90°	0.0



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— 0°-180°







70°		12.0
72.5°		12.0



(END OF REPORT)