

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: P434772

Luminaire Tested: **HCMR2R40927ED010MW**

Issue Date: 11/24/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P434772  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-933-3)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/24/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCMR2R40927ED010MW  
Description: HALO COMMERCIAL 4INCH ADJUSTABLE MULTIPLE, 40 DEG REFLECTOR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2087.8 lumens  
Efficiency: N/A  
Efficacy: 73.5 lumens/watt  
Spacing Criteria (0/90/45): 0.72 / 0.72 / 0.76  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

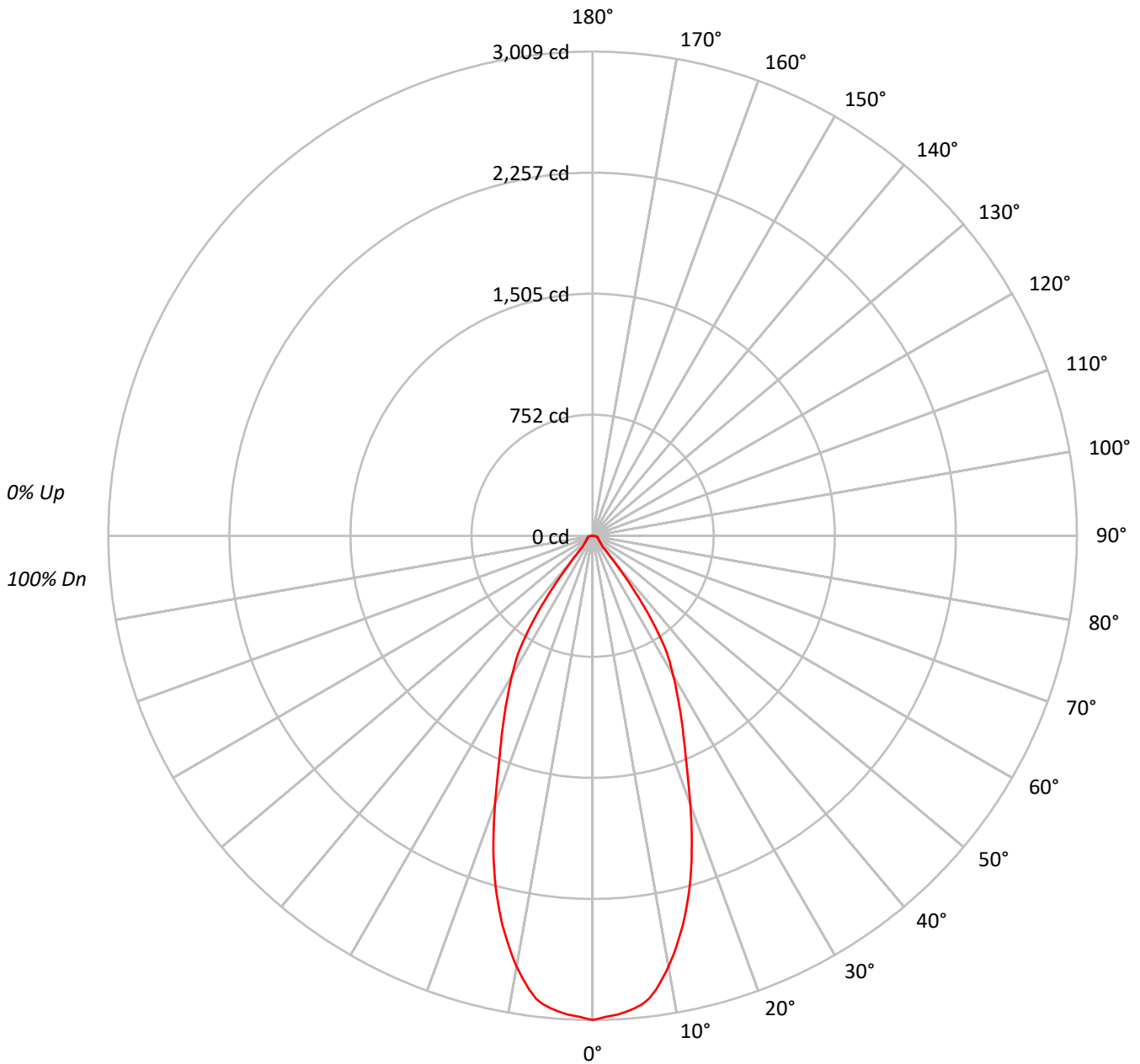
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P434772

CATALOG NUMBER: HCMR2R40927ED010MW

### Luminous Intensity Polar Plot





TEST NUMBER: P434772

CATALOG NUMBER: HCMR2R40927ED010MW

**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	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86
3	102	95	90	86	100	94	89	86	91	88	84	89	86	83	87	84	82	80
4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75
5	92	84	78	74	91	83	78	73	81	76	73	80	75	72	78	74	72	70
6	88	79	73	69	86	78	73	69	77	72	68	75	71	68	74	70	67	66
7	84	75	69	65	82	74	68	64	73	68	64	72	67	64	70	66	63	62
8	80	71	65	61	79	70	64	61	69	64	60	68	63	60	67	63	60	58
9	76	67	61	57	75	66	61	57	66	61	57	65	60	57	64	60	57	55
10	73	64	58	54	72	63	58	54	62	57	54	62	57	54	61	57	54	52

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

	0°
0°	1484480
5°	1460633
10°	1361693
15°	1177868
20°	930850
25°	720547
30°	570332
35°	384030
40°	126043
45°	53308
50°	45823
55°	41719
60°	40457
65°	43545
70°	45729
75°	56807
80°	68758
85°	10756



TEST NUMBER: P434772

CATALOG NUMBER: HCMR2R40927ED010MW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	274.6	13.2
10°-20°	632.9	30.3
20°-30°	611.4	29.3
30°-40°	380.5	18.2
40°-50°	69.5	3.3
50°-60°	43.8	2.1
60°-70°	36.3	1.7
70°-80°	31.0	1.5
80°-90°	7.8	0.4
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°	1519.0	72.8
0°-40°	1899.5	91.0
0°-60°	2012.7	96.4
0°-90°	2087.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2087.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3009	
5°	2949	275
15°	2306	633
25°	1324	611
35°	638	380
45°	76	69
55°	48	44
65°	37	36
75°	30	31
85°	2	8
90°	0	



TEST NUMBER: P434772

CATALOG NUMBER: HCMR2R40927ED010MW

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3008.8
1°	2997.7
2°	2986.5
3°	2979.0
4°	2966.0
5°	2949.2
6°	2928.7
7°	2897.0
8°	2844.8
9°	2783.3
10°	2718.0
11°	2645.3
12°	2567.0
13°	2486.9
14°	2399.2
15°	2306.0
16°	2207.2
17°	2102.8
18°	1994.7
19°	1884.7
20°	1772.9
21°	1666.6
22°	1565.9
23°	1476.5
24°	1398.2
25°	1323.6
26°	1254.6
27°	1187.5
28°	1122.3
29°	1060.7
30°	1001.1
32.5°	855.7
35°	637.6
37.5°	397.1
40°	195.7
42.5°	93.2
45°	76.4
47.5°	67.1
50°	59.7
52.5°	52.2
55°	48.5
57.5°	44.7
60°	41.0



TEST NUMBER: P434772

CATALOG NUMBER: HCMR2R40927ED010MW

**CANDELA DISTRIBUTION (continued):**

	0°
67.5°	33.6
70°	31.7
72.5°	31.7
75°	29.8
77.5°	28.0
80°	24.2
82.5°	14.9
85°	1.9
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°







62.5°		39.1
65°		37.3



(END OF REPORT)