

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: P434778

Luminaire Tested: **HCMR2R40935ED010MW**

Issue Date: 11/24/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P434778  
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: HCMR2R40935ED010MW  
Description: HALO COMMERCIAL 4INCH ADJUSTABLE MULTIPLE, 40 DEG REFLECTOR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2338.8 lumens  
Efficiency: N/A  
Efficacy: 82.4 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

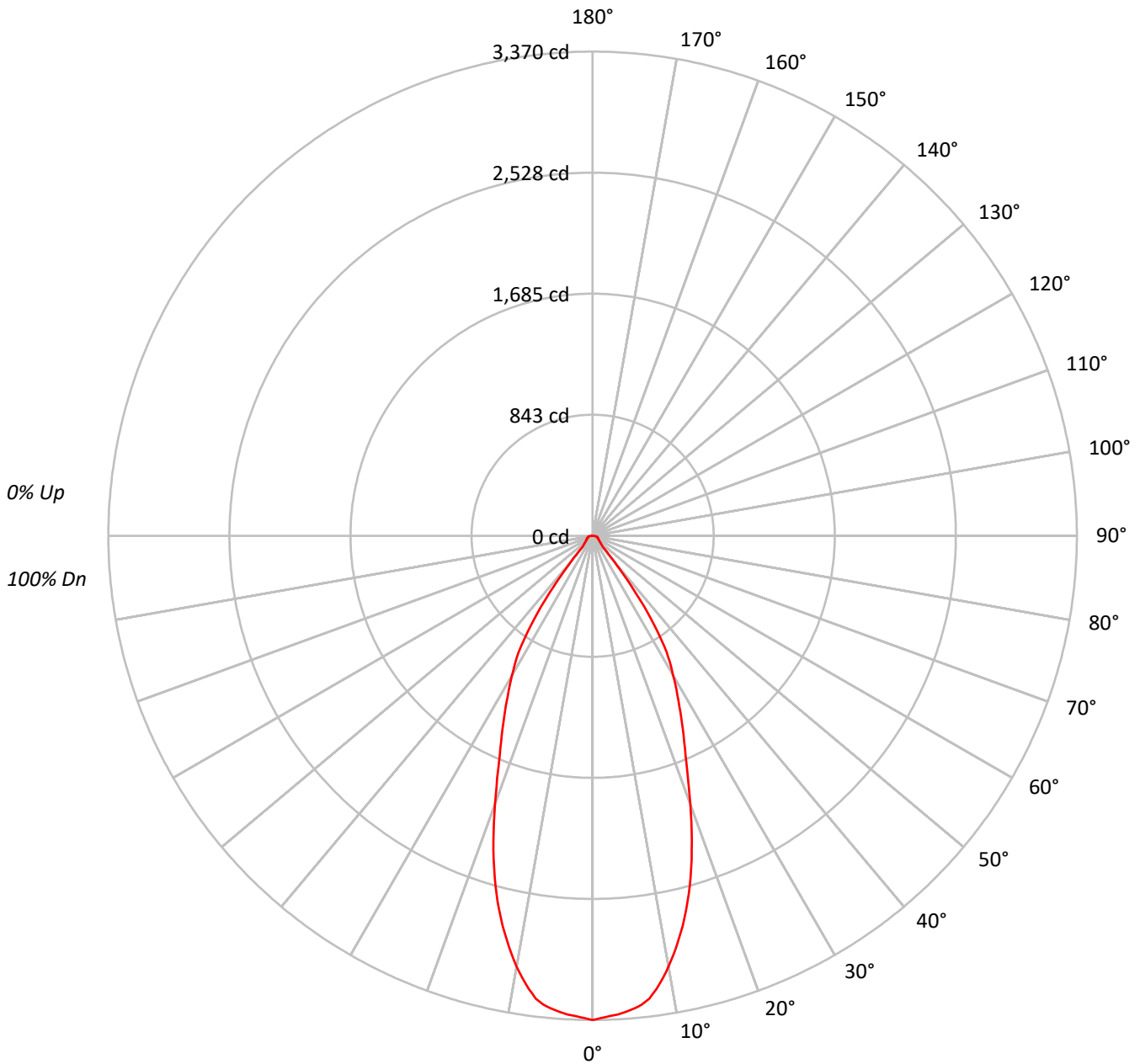
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P434778

CATALOG NUMBER: HCMR2R40935ED010MW

### Luminous Intensity Polar Plot





TEST NUMBER: P434778

CATALOG NUMBER: HCMR2R40935ED010MW

**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°	1662936
5°	1636204
10°	1525417
15°	1319457
20°	1042736
25°	807158
30°	638868
35°	430166
40°	141243
45°	59727
50°	51273
55°	46708
60°	45292
65°	48799
70°	51210
75°	63669
80°	76998
85°	11888



TEST NUMBER: P434778

CATALOG NUMBER: HCMR2R40935ED010MW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	307.6	13.2
10°-20°	709.0	30.3
20°-30°	684.9	29.3
30°-40°	426.2	18.2
40°-50°	77.8	3.3
50°-60°	49.0	2.1
60°-70°	40.6	1.7
70°-80°	34.7	1.5
80°-90°	8.8	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°	1701.6	72.8
0°-40°	2127.8	91.0
0°-60°	2254.6	96.4
0°-90°	2338.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2338.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3370	
5°	3304	308
15°	2583	709
25°	1483	685
35°	714	426
45°	86	78
55°	54	49
65°	42	41
75°	33	35
85°	2	9
90°	0	



TEST NUMBER: P434778

CATALOG NUMBER: HCMR2R40935ED010MW

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3370.5
1°	3358.0
2°	3345.5
3°	3337.1
4°	3322.5
5°	3303.7
6°	3280.7
7°	3245.2
8°	3186.8
9°	3117.8
10°	3044.8
11°	2963.3
12°	2875.6
13°	2785.8
14°	2687.7
15°	2583.2
16°	2472.6
17°	2355.6
18°	2234.5
19°	2111.3
20°	1986.0
21°	1867.0
22°	1754.2
23°	1653.9
24°	1566.2
25°	1482.7
26°	1405.4
27°	1330.3
28°	1257.2
29°	1188.2
30°	1121.4
32.5°	958.5
35°	714.2
37.5°	444.8
40°	219.3
42.5°	104.4
45°	85.6
47.5°	75.2
50°	66.8
52.5°	58.5
55°	54.3
57.5°	50.1
60°	45.9



TEST NUMBER: P434778

CATALOG NUMBER: HCMR2R40935ED010MW

**CANDELA DISTRIBUTION (continued):**

	0°
67.5°	37.6
70°	35.5
72.5°	35.5
75°	33.4
77.5°	31.3
80°	27.1
82.5°	16.7
85°	2.1
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°







62.5°		43.9
65°		41.8



(END OF REPORT)