

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: P434721

Luminaire Tested: **HCMR1R15940ED010MW**

Issue Date: 11/24/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P434721  
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: HCMR1R15940ED010MW  
Description: HALO COMMERCIAL 4INCH ADJUSTABLE MULTIPLE, 15 DEG REFLECTOR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1323.9 lumens  
Efficiency: N/A  
Efficacy: 92.6 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

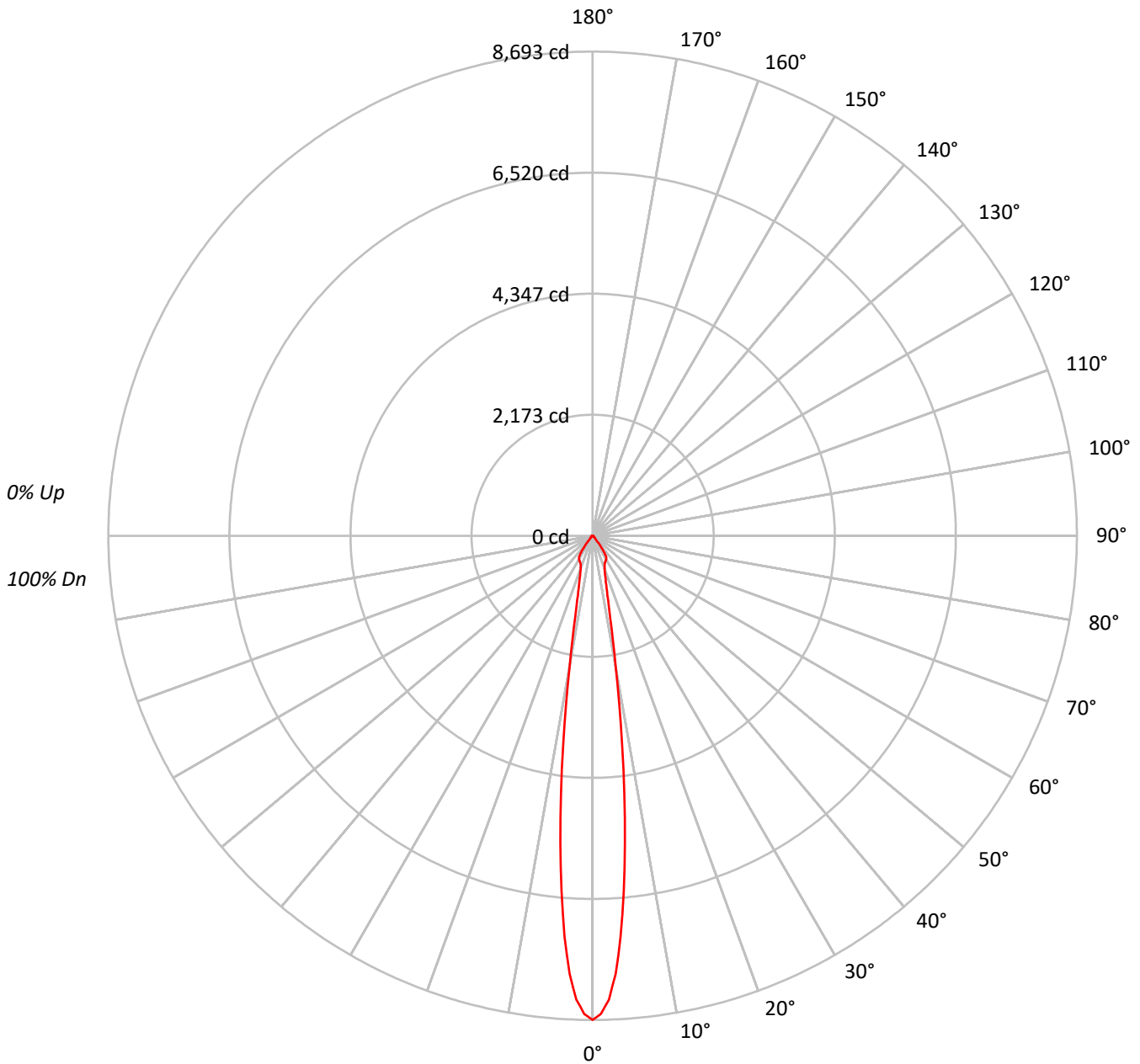
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P434721

CATALOG NUMBER: HCMR1R15940ED010MW

### Luminous Intensity Polar Plot





TEST NUMBER: P434721

CATALOG NUMBER: HCMR1R15940ED010MW

**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	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	69			
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°	4288899
5°	3173108
10°	1196666
15°	491936
20°	330042
25°	286945
30°	277959
35°	216709
40°	72779
45°	35376
50°	31010
55°	21849
60°	19340
65°	18796
70°	19907
75°	26307
80°	32674
85°	6793



TEST NUMBER: P434721

CATALOG NUMBER: HCMR1R15940ED010MW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	471.9	35.6
10°-20°	296.8	22.4
20°-30°	247.1	18.7
30°-40°	206.3	15.6
40°-50°	43.8	3.3
50°-60°	24.1	1.8
60°-70°	16.1	1.2
70°-80°	14.0	1.1
80°-90°	3.8	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°	1015.8	76.7
0°-40°	1222.1	92.3
0°-60°	1290.1	97.4
0°-90°	1323.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1323.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	8693	
5°	6407	472
15°	963	297
25°	527	247
35°	360	206
45°	51	44
55°	25	24
65°	16	16
75°	14	14
85°	1	4
90°	0	



TEST NUMBER: P434721

CATALOG NUMBER: HCMR1R15940ED010MW

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	8692.9
1°	8587.9
2°	8333.0
3°	7877.5
4°	7214.3
5°	6406.9
6°	5543.1
7°	4664.2
8°	3804.9
9°	3044.9
10°	2388.6
11°	1883.4
12°	1525.9
13°	1275.6
14°	1096.8
15°	963.1
16°	860.4
17°	780.8
18°	718.5
19°	670.1
20°	628.6
22.5°	558.2
25°	527.1
26°	517.9
27°	510.9
28°	504.0
29°	495.9
30°	487.9
32.5°	455.6
35°	359.8
37.5°	229.5
40°	113.0
42.5°	54.2
45°	50.7
47.5°	47.3
50°	40.4
52.5°	31.1
55°	25.4
57.5°	21.9
60°	19.6
62.5°	17.3
65°	16.1
67.5°	15.0



TEST NUMBER: P434721

CATALOG NUMBER: HCMR1R15940ED010MW

**CANDELA DISTRIBUTION (continued):**

	0°
75°	13.8
77.5°	12.7
80°	11.5
82.5°	6.9
85°	1.2
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°







70°		13.8
72.5°		13.8



(END OF REPORT)