

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: P434592

Luminaire Tested: **HCM1R40927ED010MW**

Issue Date: 11/24/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P434592  
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: HCM1R40927ED010MW  
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: 1120.0 lumens  
Efficiency: N/A  
Efficacy: 78.3 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

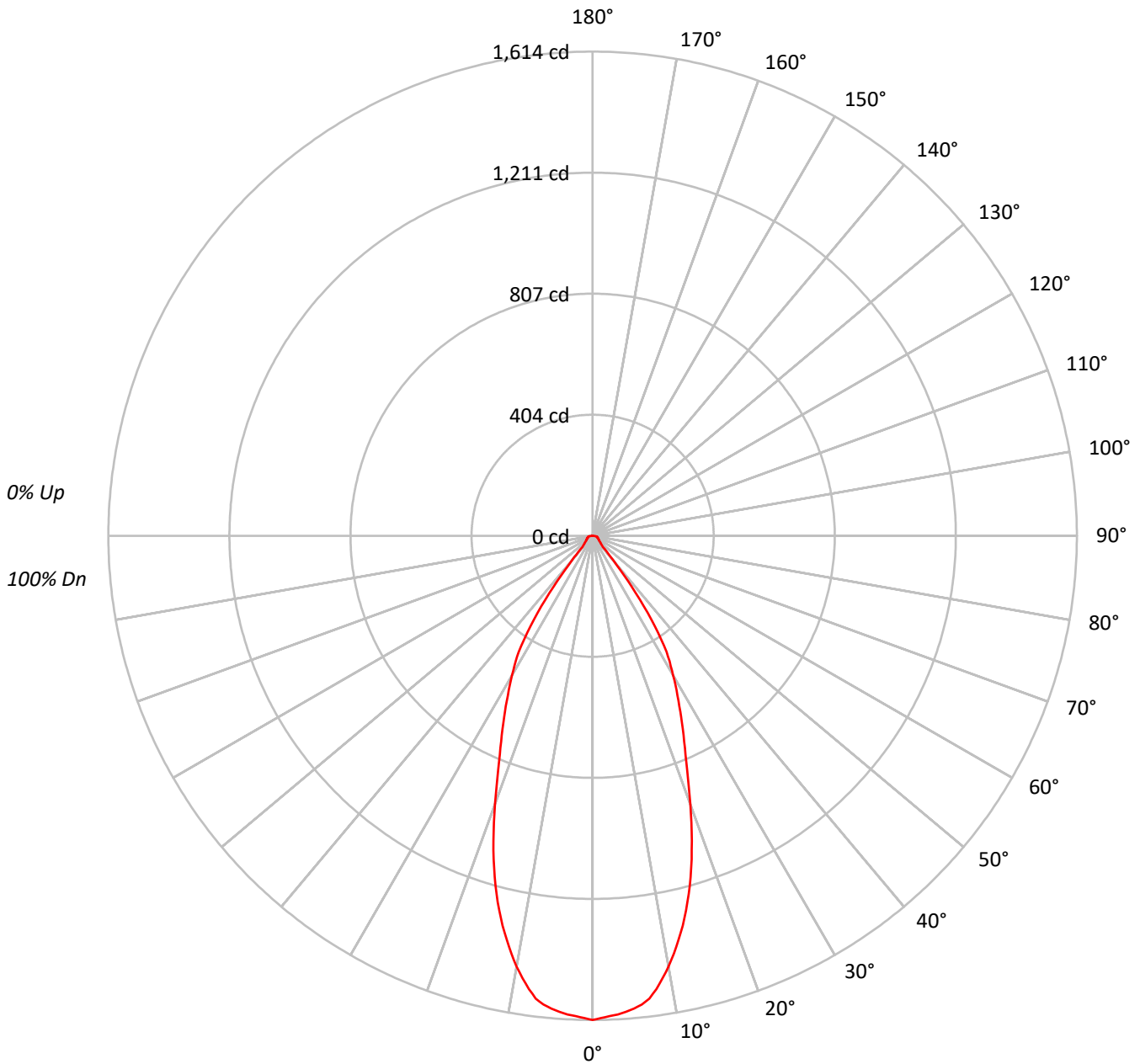
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°
0°	796364
5°	783557
10°	730495
15°	631891
20°	499369
25°	386513
30°	305932
35°	205988
40°	67626
45°	28608
50°	24562
55°	22365
60°	21709
65°	23349
70°	24523
75°	30500
80°	36936
85°	5661



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.3	13.2
10°-20°	339.5	30.3
20°-30°	328.0	29.3
30°-40°	204.1	18.2
40°-50°	37.3	3.3
50°-60°	23.5	2.1
60°-70°	19.4	1.7
70°-80°	16.6	1.5
80°-90°	4.2	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°	814.9	72.8
0°-40°	1018.9	91.0
0°-60°	1079.7	96.4
0°-90°	1120.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1120.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1614	
5°	1582	147
15°	1237	340
25°	710	328
35°	342	204
45°	41	37
55°	26	23
65°	20	19
75°	16	17
85°	1	4
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1614.1
1°	1608.1
2°	1602.1
3°	1598.1
4°	1591.1
5°	1582.1
6°	1571.1
7°	1554.1
8°	1526.1
9°	1493.1
10°	1458.1
11°	1419.1
12°	1377.1
13°	1334.1
14°	1287.1
15°	1237.1
16°	1184.1
17°	1128.1
18°	1070.1
19°	1011.1
20°	951.1
21°	894.0
22°	840.0
23°	792.0
24°	750.0
25°	710.0
26°	673.0
27°	637.0
28°	602.0
29°	569.0
30°	537.0
32.5°	459.0
35°	342.0
37.5°	213.0
40°	105.0
42.5°	50.0
45°	41.0
47.5°	36.0
50°	32.0
52.5°	28.0
55°	26.0
57.5°	24.0
60°	22.0



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**CANDELA DISTRIBUTION (continued):**

	0°
67.5°	18.0
70°	17.0
72.5°	17.0
75°	16.0
77.5°	15.0
80°	13.0
82.5°	8.0
85°	1.0
87.5°	0.0
90°	0.0



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— 0°-180°







62.5°		21.0
65°		20.0



(END OF REPORT)