

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: P434797

Luminaire Tested: **HCMR3R25930ED010MB**

Issue Date: 11/24/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P434797  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-933-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/24/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCMR3R25930ED010MB  
Description: HALO COMMERCIAL 4INCH ADJUSTABLE MULTIPLE, 25 DEG REFLECTOR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3636.0 lumens  
Efficiency: N/A  
Efficacy: 88.9 lumens/watt  
Spacing Criteria (0/90/45): 0.39 / 0.39 / 0.39  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

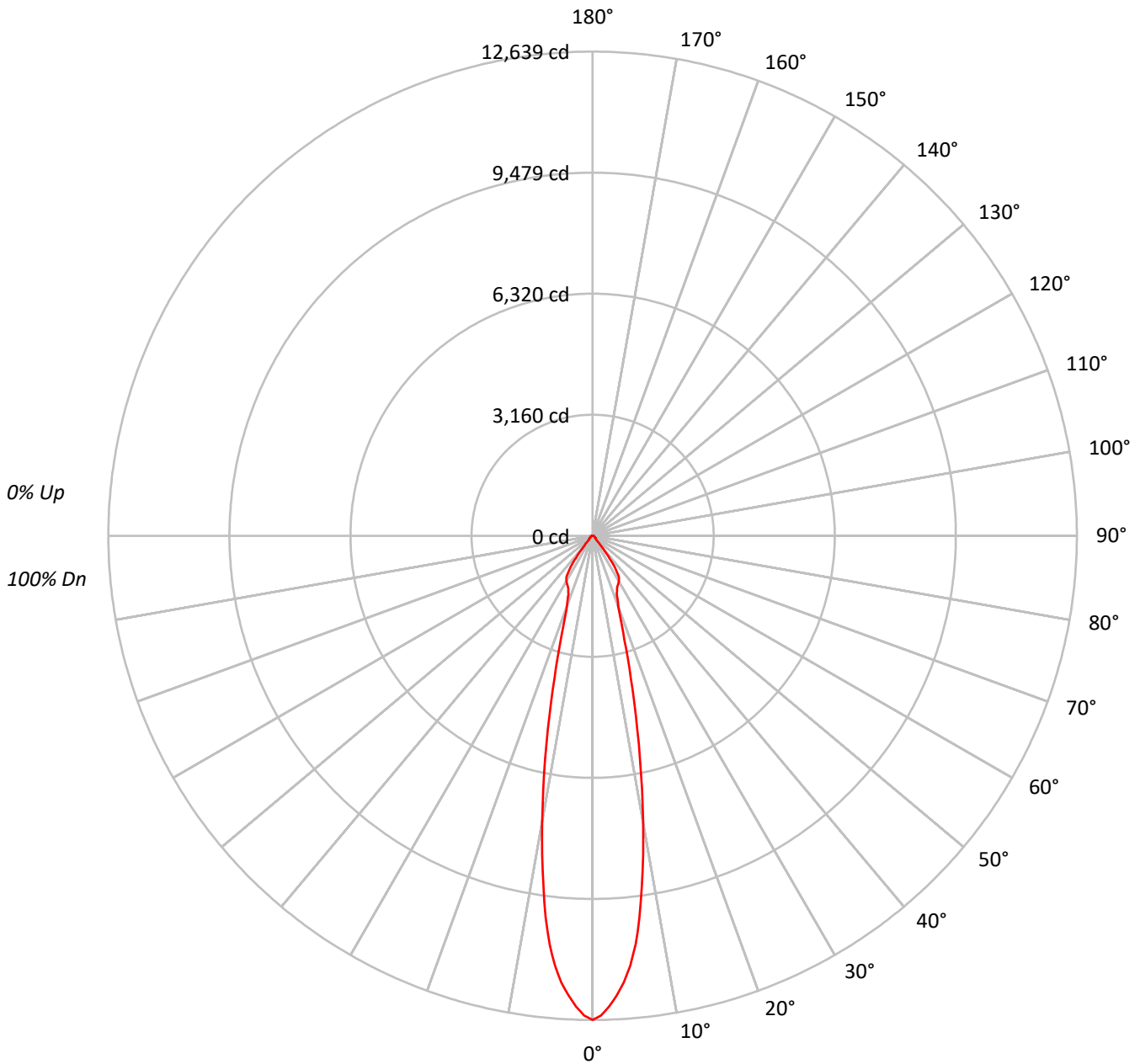
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P434797

CATALOG NUMBER: HCMR3R25930ED010MB

### Luminous Intensity Polar Plot





TEST NUMBER: P434797

CATALOG NUMBER: HCMR3R25930ED010MB

**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	111	109	107	105	105	103	102	101	100	99	98	97	96	94			
2	109	104	100	97	107	102	99	96	99	96	94	96	94	92	94	92	90	88			
3	104	98	93	90	102	97	92	89	94	91	88	92	89	86	89	87	85	83			
4	100	93	88	84	98	92	87	83	89	85	82	88	84	81	86	83	80	79			
5	95	88	83	79	94	87	82	78	85	81	78	84	80	77	82	79	76	75			
6	92	84	78	75	90	83	78	74	81	77	74	80	76	73	79	76	73	72			
7	88	80	75	71	87	79	74	71	78	74	70	77	73	70	76	72	70	68			
8	85	76	71	68	84	76	71	67	75	70	67	74	70	67	73	69	67	65			
9	82	73	68	65	81	73	68	65	72	68	64	71	67	64	70	67	64	63			
10	79	70	65	62	78	70	65	62	69	65	62	69	65	62	68	64	62	60			

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

	0°
0°	6235627
5°	5580983
10°	3799413
15°	1963761
20°	1024360
25°	822238
30°	780440
35°	607726
40°	209771
45°	91335
50°	78445
55°	68642
60°	59896
65°	55920
70°	59866
75°	73010
80°	90636
85°	18115



TEST NUMBER: P434797

CATALOG NUMBER: HCMR3R25930ED010MB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	954.3	26.2
10°-20°	1096.9	30.2
20°-30°	716.3	19.7
30°-40°	579.7	15.9
40°-50°	117.5	3.2
50°-60°	70.9	1.9
60°-70°	49.0	1.3
70°-80°	40.9	1.1
80°-90°	10.4	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°	2767.5	76.1
0°-40°	3347.2	92.1
0°-60°	3535.7	97.2
0°-90°	3636.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3636.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	12639	
5°	11269	954
15°	3845	1097
25°	1510	716
35°	1009	580
45°	131	118
55°	80	71
65°	48	49
75°	38	41
85°	3	10
90°	0	



TEST NUMBER: P434797

CATALOG NUMBER: HCMR3R25930ED010MB

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	12638.6
1°	12526.8
2°	12300.1
3°	12015.9
4°	11687.0
5°	11268.7
6°	10725.9
7°	10039.3
8°	9237.8
9°	8420.4
10°	7583.8
11°	6750.4
12°	5952.1
13°	5188.9
14°	4489.6
15°	3844.6
16°	3320.9
17°	2838.7
18°	2461.9
19°	2168.2
20°	1951.0
22.5°	1647.7
25°	1510.4
26°	1475.2
27°	1449.7
28°	1424.2
29°	1395.4
30°	1369.9
32.5°	1274.1
35°	1009.0
37.5°	648.2
40°	325.7
42.5°	156.5
45°	130.9
47.5°	115.0
50°	102.2
52.5°	89.4
55°	79.8
57.5°	67.1
60°	60.7
62.5°	54.3
65°	47.9
67.5°	44.7



TEST NUMBER: P434797

CATALOG NUMBER: HCMR3R25930ED010MB

**CANDELA DISTRIBUTION (continued):**

	0°
75°	38.3
77.5°	38.3
80°	31.9
82.5°	19.2
85°	3.2
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°







70°	41.5
72.5°	41.5



(END OF REPORT)