

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: P592657

Luminaire Tested: **HC420D010-HM40525850-41WDWB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P592657  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-10)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC420D010-HM40525850-41WDWB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2252.0 lumens  
Efficiency: N/A  
Efficacy: 112.6 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.14 / 1.07  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

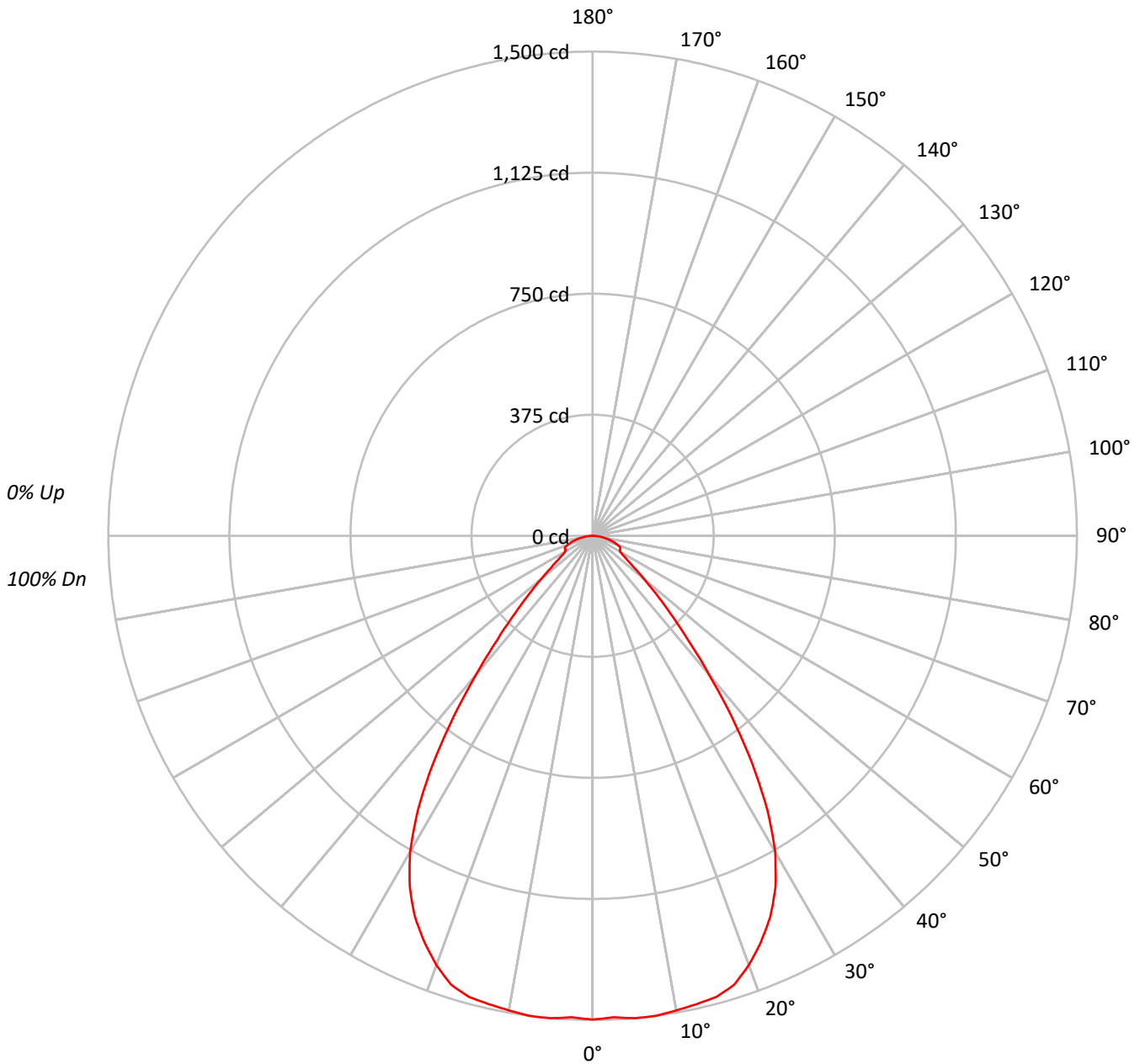
Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72			
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65			
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59			
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54			
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	49			
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42			
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39			

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

	0°
0°	184883
5°	185762
10°	187033
15°	188902
20°	185762
25°	177212
30°	161000
35°	129858
40°	90105
45°	59169
50°	39645
55°	28214
60°	24102
65°	27698
70°	29717
75°	28594
80°	25714
85°	23634



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.0	6.3
10°-20°	415.6	18.5
20°-30°	593.7	26.4
30°-40°	530.4	23.6
40°-50°	272.1	12.1
50°-60°	123.6	5.5
60°-70°	92.2	4.1
70°-80°	62.8	2.8
80°-90°	18.6	0.8
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°	1152.3	51.2
0°-40°	1682.7	74.7
0°-60°	2078.4	92.3
0°-90°	2252.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2252.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1499	
5°	1500	143
15°	1479	416
25°	1302	594
35°	862	530
45°	339	272
55°	131	124
65°	95	92
75°	60	63
85°	17	19
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1498.9
2.5°	1493.3
5°	1500.3
7.5°	1500.3
10°	1493.3
12.5°	1486.3
15°	1479.3
17.5°	1458.4
20°	1415.2
22.5°	1362.1
25°	1302.1
27.5°	1226.7
30°	1130.4
32.5°	1007.6
35°	862.4
37.5°	707.6
40°	559.6
42.5°	436.8
45°	339.2
47.5°	265.2
50°	206.6
52.5°	161.8
55°	131.2
57.5°	110.2
60°	97.7
62.5°	94.9
65°	94.9
67.5°	92.1
70°	82.4
72.5°	71.2
75°	60.0
77.5°	47.5
80°	36.2
82.5°	26.5
85°	16.7
87.5°	7.0
90°	0.0



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— 0°-180°







(END OF REPORT)