

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: P580231

Luminaire Tested: **HC425D010-HM40525935-41WDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580231  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC425D010-HM40525935-41WDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2205.5 lumens  
Efficiency: N/A  
Efficacy: 82.3 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.07 / 1.04  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

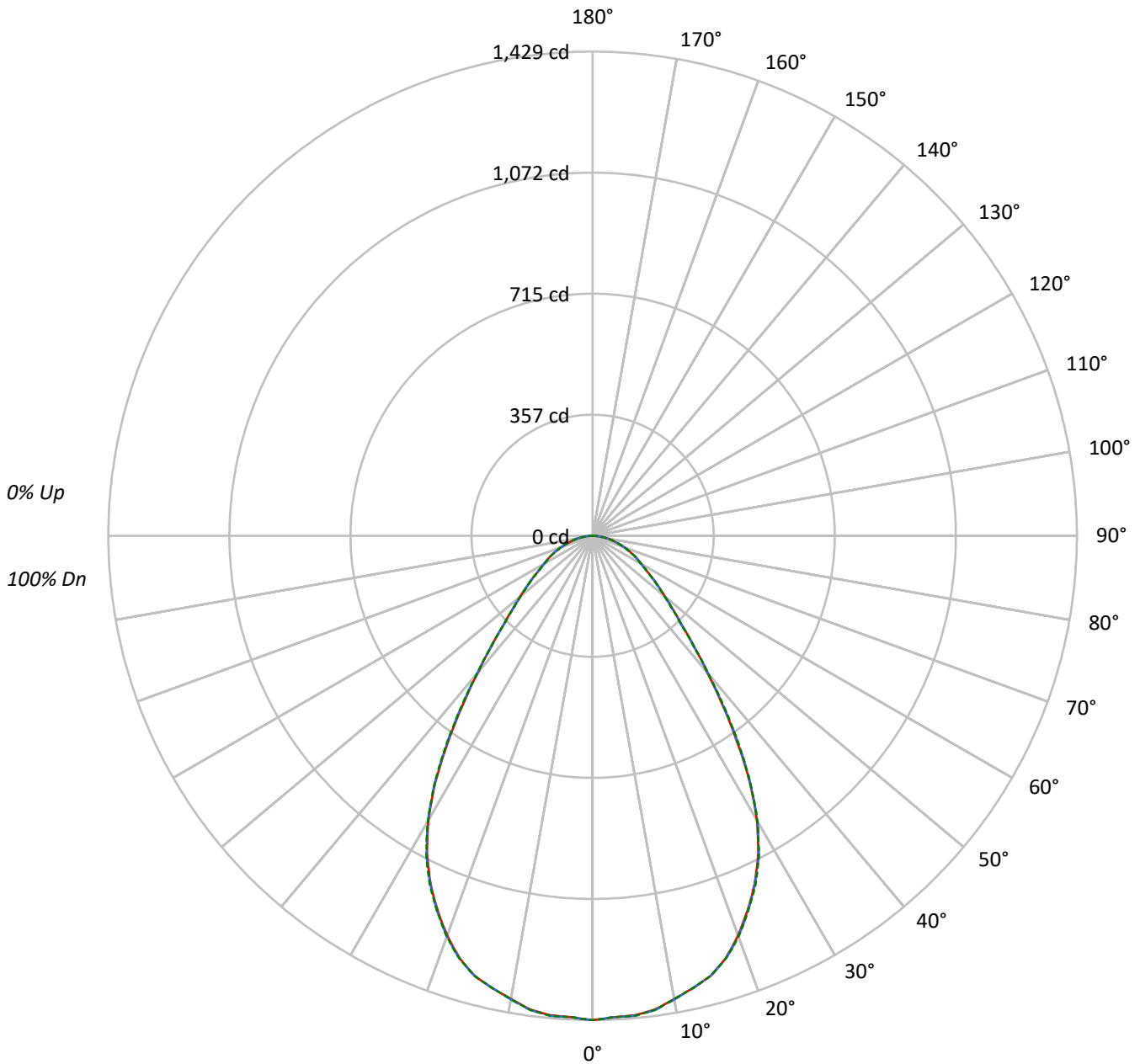
Input Watts (W): 26.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89								
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78								
3	96	87	81	76	94	86	80	75	83	78	74	81	76	72	78	74	71	69								
4	90	80	72	67	87	78	72	66	76	70	66	74	69	65	72	68	64	62								
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56								
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51								
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46								
8	69	57	50	45	68	57	50	45	55	49	45	54	49	44	53	48	44	42								
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39								
10	61	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36								

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

	0°	45°	90°
0°	176310	176310	176310
5°	175894	176080	176080
10°	173845	174045	173845
15°	171765	171765	171765
20°	164720	165101	165298
25°	154062	154266	154674
30°	138041	138468	138468
35°	112075	112963	113189
40°	84582	85065	85290
45°	64786	64542	64542
50°	53384	53096	53096
55°	45805	45504	45504
60°	40877	40531	40531
65°	38467	38467	38467
70°	35739	35739	35739
75°	32454	33122	32454
80°	30473	29407	30473
85°	25050	25050	25050



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.7	6.1
10°-20°	376.9	17.1
20°-30°	517.9	23.5
30°-40°	465.7	21.1
40°-50°	294.3	13.3
50°-60°	192.1	8.7
60°-70°	130.2	5.9
70°-80°	73.3	3.3
80°-90°	20.6	0.9
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°	1029.5	46.7
0°-40°	1495.2	67.8
0°-60°	1981.5	89.8
0°-90°	2205.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2205.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1429	1429	1429	1429	1429	
5°	1421	1421	1422	1422	1422	135
15°	1345	1345	1345	1345	1345	377
25°	1132	1134	1134	1136	1136	517
35°	744	747	750	753	752	463
45°	371	370	370	370	370	295
55°	213	213	212	213	212	193
65°	132	132	132	132	132	131
75°	68	70	70	70	68	73
85°	18	18	18	18	18	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1429.4	1429.4	1429.4	1429.4	1429.4
2.5°	1422.1	1422.1	1422.1	1422.1	1422.1
5°	1420.6	1420.6	1422.1	1422.1	1422.1
7.5°	1410.2	1411.7	1411.7	1411.7	1411.7
10°	1388.0	1388.0	1389.6	1389.6	1388.0
12.5°	1367.3	1367.3	1367.3	1368.8	1367.3
15°	1345.1	1345.1	1345.1	1345.1	1345.1
17.5°	1306.7	1308.2	1308.2	1308.2	1308.2
20°	1254.9	1257.8	1257.8	1259.3	1259.3
22.5°	1195.7	1197.2	1198.7	1200.1	1198.7
25°	1132.0	1133.5	1133.5	1136.5	1136.5
27.5°	1058.1	1059.6	1062.5	1062.5	1062.5
30°	969.2	970.7	972.2	972.2	972.2
32.5°	864.2	864.2	867.2	868.7	867.2
35°	744.3	747.3	750.2	753.3	751.7
37.5°	630.4	633.4	634.8	634.8	636.3
40°	525.3	528.3	528.3	531.2	529.7
42.5°	442.5	441.0	441.0	443.9	442.5
45°	371.4	370.0	370.0	370.0	370.0
47.5°	319.6	318.2	318.2	318.2	318.2
50°	278.2	276.7	276.7	276.7	276.7
52.5°	244.2	242.7	242.7	242.7	241.2
55°	213.0	213.0	211.6	213.0	211.6
57.5°	184.9	184.9	184.9	184.9	184.9
60°	165.7	164.3	164.3	164.3	164.3
62.5°	148.0	148.0	148.0	148.0	148.0
65°	131.8	131.8	131.8	131.8	131.8
67.5°	115.4	113.9	115.4	115.4	113.9
70°	99.1	97.7	99.1	99.1	99.1
72.5°	82.9	82.9	82.9	84.3	82.9
75°	68.1	69.5	69.5	69.5	68.1
77.5°	54.8	56.2	54.8	54.8	54.8
80°	42.9	41.4	41.4	41.4	42.9
82.5°	29.6	29.6	29.6	29.6	29.6
85°	17.7	17.7	17.7	17.7	17.7
87.5°	7.5	7.5	7.5	7.5	7.5
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)