

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: P580198

Luminaire Tested: **HC425D010-HM40525927-41WWBB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580198  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-17)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC425D010-HM40525927-41WWBB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1533.3 lumens  
Efficiency: N/A  
Efficacy: 57.2 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.04 / 1.12  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

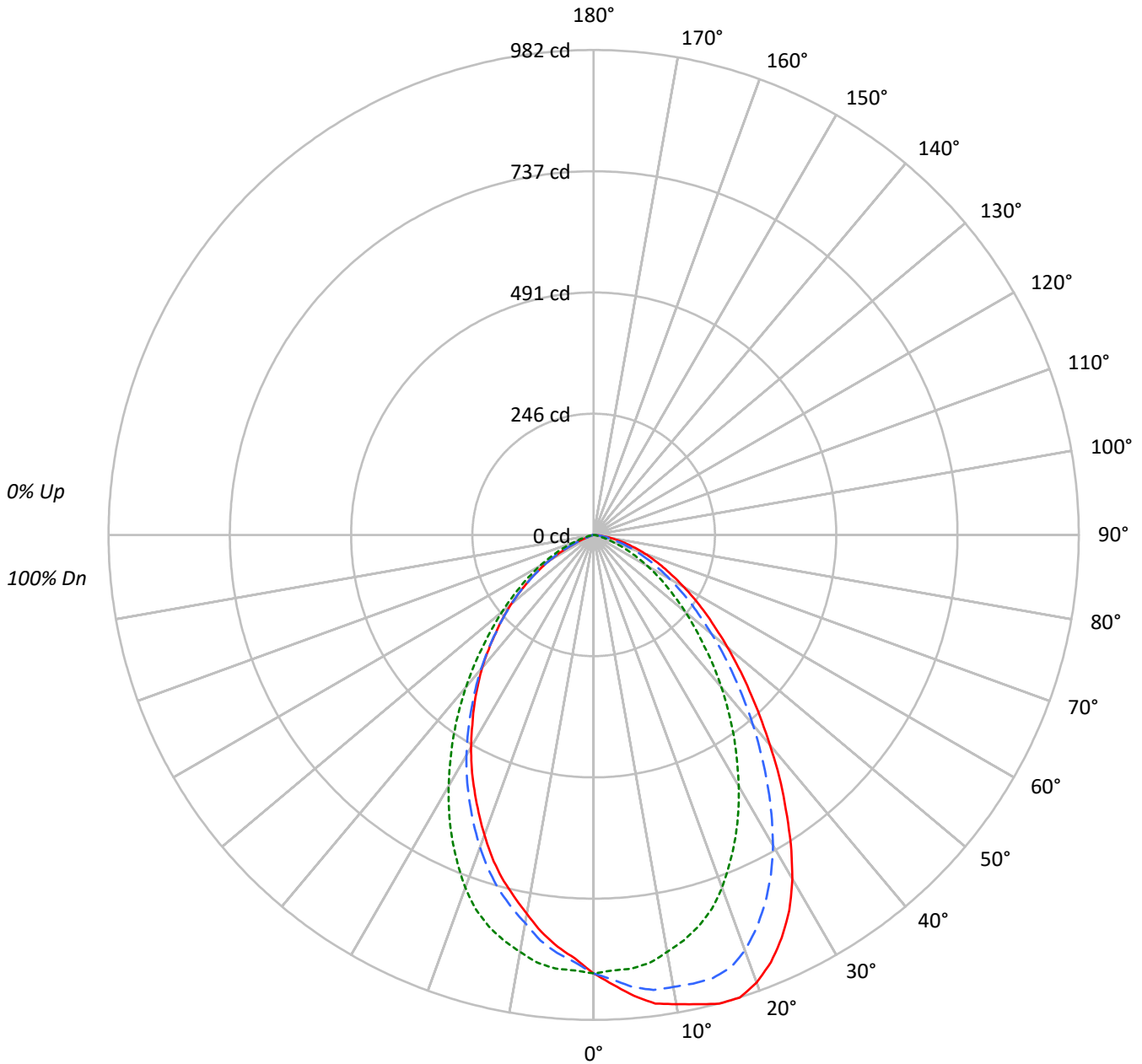
Input Watts (W): 26.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
1	111	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89			89
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	85	83	80	78			78
3	96	87	80	75	94	86	79	74	83	78	73	80	76	72	78	74	71	69			69
4	89	79	72	66	87	78	71	65	75	69	65	73	68	64	71	67	63	61			61
5	83	72	64	58	81	71	64	58	69	62	58	67	61	57	65	60	56	55			55
6	77	66	58	52	75	65	57	52	63	57	52	61	56	51	60	55	51	49			49
7	72	60	53	47	71	59	52	47	58	51	47	57	51	46	55	50	46	44			44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	42	51	46	42	40			40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	43	39	37			37
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	36	34			34

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

	0°	90°	180°
0°	109494	109494	109494
5°	116016	109132	103659
10°	120827	107388	97581
15°	125462	104814	91750
20°	126628	99785	84874
25°	122542	92287	77670
30°	114568	83633	70687
35°	102106	74340	63513
40°	89251	64664	56517
45°	77747	54843	48895
50°	67853	46515	41928
55°	59460	38558	33934
60°	52027	31132	24916
65°	45355	23232	14009
70°	39634	15039	4544
75°	32502	7816	1191
80°	24222	3623	852
85°	14152	1698	1698



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.8	5.5
10°-20°	234.5	15.3
20°-30°	324.2	21.1
30°-40°	326.0	21.3
40°-50°	263.0	17.2
50°-60°	177.9	11.6
60°-70°	90.5	5.9
70°-80°	29.0	1.9
80°-90°	4.4	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°	642.5	41.9
0°-40°	968.5	63.2
0°-60°	1409.4	91.9
0°-90°	1533.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1533.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	888	888	888	888	888	
5°	937	919	881	850	837	90
15°	982	929	821	742	718	277
25°	900	822	678	595	571	412
35°	678	612	494	432	422	424
45°	446	399	314	280	280	345
55°	276	239	179	157	158	248
65°	155	126	80	52	48	156
75°	68	48	16	4	2	74
85°	10	5	1	1	1	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	887.7	887.7	887.7	887.7	887.7	887.7	887.7	887.7	887.7
2.5°	911.7	906.7	901.6	892.8	882.7	872.6	866.3	861.2	858.7
5°	937.0	930.6	919.2	900.4	881.4	863.7	849.8	841.0	837.2
7.5°	957.2	948.4	929.4	902.9	873.8	846.1	828.3	815.7	810.7
10°	964.7	954.7	929.4	894.1	857.4	823.3	798.1	785.4	779.1
12.5°	973.5	962.2	930.6	886.5	841.0	800.6	771.6	755.1	748.8
15°	982.5	967.2	929.4	875.1	820.8	774.0	742.5	726.1	718.5
17.5°	982.5	964.7	919.2	856.1	794.3	745.0	709.7	690.7	684.4
20°	964.7	944.5	895.3	825.9	760.2	707.1	673.0	654.1	646.6
22.5°	937.0	914.3	861.2	789.2	719.7	668.0	633.9	616.2	608.6
25°	900.4	877.6	822.0	747.5	678.1	626.4	594.8	578.4	570.7
27.5°	857.4	832.2	776.6	702.1	633.9	584.6	555.6	540.5	534.1
30°	804.4	780.4	726.1	652.8	587.2	541.7	515.2	501.3	496.3
32.5°	742.5	722.3	669.3	601.1	539.2	497.6	473.5	462.2	457.1
35°	678.1	659.1	612.5	549.3	493.7	454.5	431.8	424.3	421.8
37.5°	617.5	601.1	555.6	497.6	447.0	412.9	392.7	387.7	385.1
40°	554.3	542.9	501.3	448.3	401.6	371.2	354.8	351.0	351.0
42.5°	497.6	484.9	448.3	400.3	358.6	328.3	316.9	313.2	314.4
45°	445.7	433.1	399.0	354.8	314.4	289.1	280.3	280.3	280.3
47.5°	397.7	386.3	354.8	309.3	276.5	256.3	247.5	247.5	248.7
50°	353.6	346.0	310.6	271.5	242.4	223.5	217.2	216.0	218.5
52.5°	311.9	303.0	271.5	236.2	208.3	193.2	186.8	185.6	186.8
55°	276.5	266.4	238.7	204.6	179.3	164.2	156.6	155.4	157.8
57.5°	242.4	234.8	205.8	175.6	151.5	136.4	130.1	127.6	128.8
60°	210.9	203.3	176.8	147.8	126.2	111.1	102.3	99.8	101.0
62.5°	181.9	175.6	150.3	122.5	101.0	87.2	78.2	72.0	74.5
65°	155.4	149.0	126.2	98.4	79.6	64.4	51.8	46.7	48.0
67.5°	132.5	125.0	103.5	78.2	59.4	42.9	29.0	26.5	26.5
70°	109.9	102.3	83.3	60.6	41.7	22.7	12.6	12.6	12.6
72.5°	88.4	82.1	64.4	45.5	26.5	10.0	5.1	5.1	5.1
75°	68.2	63.1	48.0	31.6	16.4	5.1	3.8	2.5	2.5
77.5°	50.5	45.5	34.1	21.5	10.0	2.5	2.5	2.5	2.5
80°	34.1	30.3	22.7	12.6	5.1	1.2	1.2	1.2	1.2
82.5°	20.2	17.7	12.6	6.3	2.5	1.2	1.2	1.2	1.2
85°	10.0	7.6	5.1	2.5	1.2	1.2	1.2	1.2	1.2
87.5°	2.5	1.2	1.2	1.2	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)