

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: P580234

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

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580234  
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-HM40525935-41WWBB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1797.0 lumens  
Efficiency: N/A  
Efficacy: 67.1 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

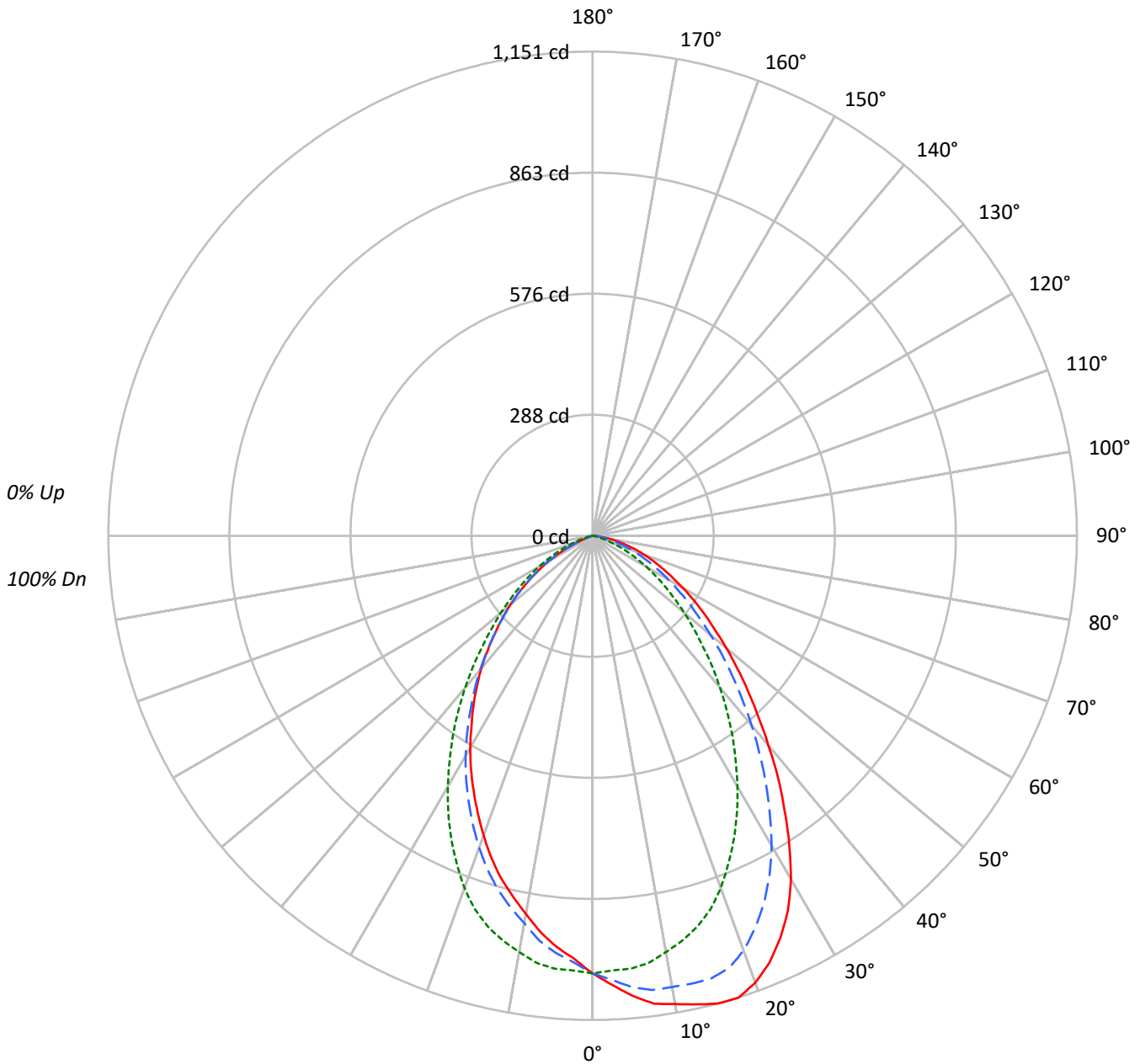
Input Watts (W): 26.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89																			
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	85	83	80	78																			
3	96	87	80	75	94	86	79	74	83	78	73	80	76	72	78	74	71	69																			
4	89	79	72	66	87	78	71	65	75	69	65	73	68	64	71	67	63	61																			
5	83	72	64	58	81	71	64	58	69	62	58	67	61	57	65	60	56	55																			
6	77	66	58	52	75	65	57	52	63	57	52	61	56	51	60	55	51	49																			
7	72	60	53	47	71	59	52	47	58	51	47	57	51	46	55	50	46	44																			
8	68	56	48	43	66	55	48	43	54	47	42	53	47	42	51	46	42	40																			
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	43	39	37																			
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	36	34																			

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

	0°	90°	180°
0°	128329	128329	128329
5°	135963	127890	121477
10°	141606	125850	114352
15°	147030	122832	107521
20°	148404	116941	99457
25°	143609	108156	91035
30°	134266	98004	82821
35°	119664	87124	74430
40°	104596	75774	66242
45°	91126	64280	57303
50°	79501	54536	49143
55°	69697	45181	39762
60°	60957	36510	29208
65°	53119	27231	16403
70°	46414	17635	5337
75°	38078	9150	1382
80°	28413	4191	1065
85°	16841	2123	2123



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.2	5.5
10°-20°	274.8	15.3
20°-30°	379.9	21.1
30°-40°	382.0	21.3
40°-50°	308.3	17.2
50°-60°	208.5	11.6
60°-70°	106.1	5.9
70°-80°	34.0	1.9
80°-90°	5.2	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°	752.9	41.9
0°-40°	1135.0	63.2
0°-60°	1651.7	91.9
0°-90°	1797.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1797.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1040	1040	1040	1040	1040	
5°	1098	1077	1033	996	981	106
15°	1151	1089	962	870	842	324
25°	1055	963	795	697	669	483
35°	795	718	579	506	494	497
45°	522	468	368	328	328	405
55°	324	280	210	184	185	291
65°	182	148	93	61	56	182
75°	80	56	19	4	3	86
85°	12	6	2	2	2	16
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°	1040.4	1040.4	1040.4	1040.4	1040.4	1040.4	1040.4	1040.4	1040.4
2.5°	1068.5	1062.5	1056.6	1046.2	1034.4	1022.5	1015.2	1009.2	1006.3
5°	1098.1	1090.6	1077.3	1055.2	1032.9	1012.3	995.9	985.6	981.1
7.5°	1121.8	1111.4	1089.1	1058.1	1024.0	991.5	970.8	956.0	950.1
10°	1130.6	1118.7	1089.1	1047.7	1004.8	964.8	935.3	920.5	913.0
12.5°	1141.0	1127.6	1090.6	1038.9	985.6	938.2	904.2	884.9	877.6
15°	1151.4	1133.5	1089.1	1025.6	961.9	907.2	870.1	850.9	842.0
17.5°	1151.4	1130.6	1077.3	1003.3	930.9	873.2	831.6	809.5	802.0
20°	1130.6	1107.0	1049.2	967.8	890.9	828.7	788.7	766.6	757.7
22.5°	1098.1	1071.4	1009.2	924.9	843.5	782.8	742.9	722.2	713.3
25°	1055.2	1028.5	963.4	876.1	794.7	734.0	697.0	677.7	668.9
27.5°	1004.8	975.2	910.1	822.8	742.9	685.2	651.1	633.4	626.0
30°	942.7	914.6	850.9	765.1	688.1	634.8	603.8	587.5	581.5
32.5°	870.1	846.5	784.3	704.4	631.9	583.0	554.9	541.6	535.7
35°	794.7	772.5	717.7	643.8	578.6	532.8	506.1	497.2	494.3
37.5°	723.7	704.4	651.1	583.0	523.9	483.9	460.2	454.3	451.4
40°	649.6	636.3	587.5	525.3	470.6	435.1	415.8	411.4	411.4
42.5°	583.0	568.2	525.3	469.1	420.3	384.8	371.4	367.0	368.5
45°	522.4	507.6	467.6	415.8	368.5	338.9	328.5	328.5	328.5
47.5°	466.2	452.8	415.8	362.5	324.1	300.4	290.0	290.0	291.5
50°	414.3	405.4	364.0	318.2	284.2	261.9	254.6	253.0	256.1
52.5°	365.6	355.2	318.2	276.7	244.2	226.4	219.0	217.6	219.0
55°	324.1	312.3	279.7	239.7	210.1	192.4	183.5	182.0	184.9
57.5°	284.2	275.3	241.3	205.7	177.6	159.9	152.4	149.5	150.9
60°	247.1	238.2	207.2	173.2	148.0	130.2	119.9	117.0	118.4
62.5°	213.0	205.7	176.1	143.5	118.4	102.1	91.8	84.3	87.3
65°	182.0	174.7	148.0	115.4	93.3	75.4	60.6	54.8	56.2
67.5°	155.4	146.5	121.4	91.8	69.5	50.4	34.0	31.0	31.0
70°	128.7	119.9	97.7	71.0	48.9	26.6	14.8	14.8	14.8
72.5°	103.6	96.2	75.4	53.3	31.0	11.9	5.9	5.9	5.9
75°	79.9	73.9	56.2	37.0	19.2	5.9	4.4	2.9	2.9
77.5°	59.2	53.3	40.0	25.2	11.9	2.9	2.9	2.9	2.9
80°	40.0	35.6	26.6	14.8	5.9	1.5	1.5	1.5	1.5
82.5°	23.7	20.8	14.8	7.5	2.9	1.5	1.5	1.5	1.5
85°	11.9	8.9	5.9	2.9	1.5	1.5	1.5	1.5	1.5
87.5°	2.9	1.5	1.5	1.5	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



Report Generated By 670245859 / DESKTOP-HRDQ47P







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







(END OF REPORT)