

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: P580180

Luminaire Tested: **HC425D010-HM40525840-41WWBB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580180  
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-HM40525840-41WWBB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2067.7 lumens  
Efficiency: N/A  
Efficacy: 77.2 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

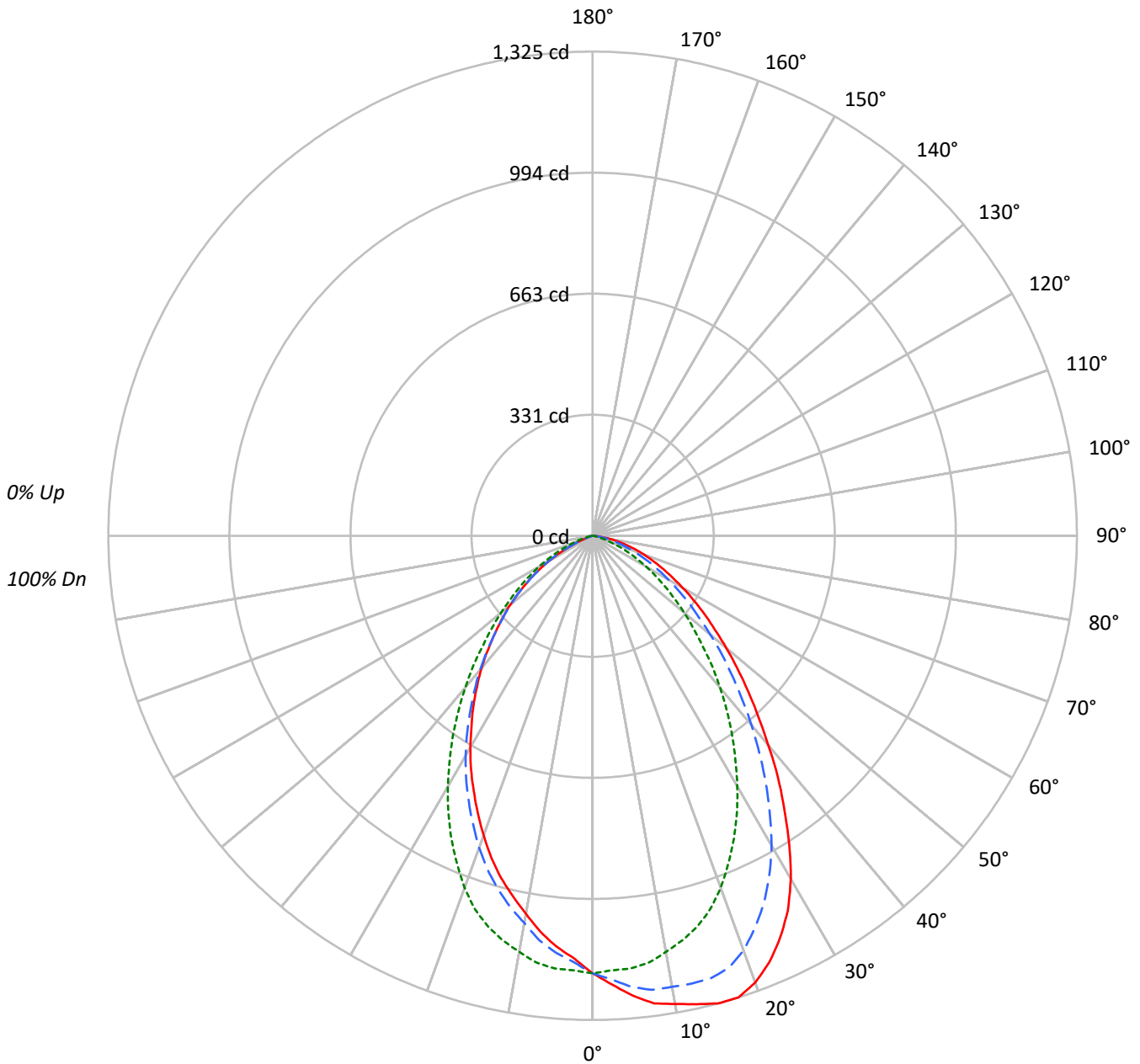
Input Watts (W): 26.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	90°	180°
0°	147657	147657	147657
5°	156443	147169	139789
10°	162936	144812	131586
15°	169173	141348	123725
20°	170758	134556	114434
25°	165235	124447	104740
30°	154477	112774	95312
35°	137688	100254	85648
40°	120360	87190	76225
45°	104854	73979	65937
50°	91494	62749	56531
55°	80191	51998	45762
60°	70159	42012	33624
65°	61116	31317	18883
70°	53411	20268	6131
75°	43797	10532	1620
80°	32675	4830	1208
85°	19389	2406	2406



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.0	5.5
10°-20°	316.2	15.3
20°-30°	437.2	21.1
30°-40°	439.6	21.3
40°-50°	354.7	17.2
50°-60°	239.8	11.6
60°-70°	122.1	5.9
70°-80°	39.1	1.9
80°-90°	6.0	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°	866.4	41.9
0°-40°	1306.0	63.2
0°-60°	1900.5	91.9
0°-90°	2067.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2067.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1197	1197	1197	1197	1197	
5°	1264	1240	1189	1146	1129	122
15°	1325	1253	1107	1001	969	373
25°	1214	1109	914	802	770	556
35°	914	826	666	582	569	571
45°	601	538	424	378	378	466
55°	373	322	242	211	213	335
65°	209	170	107	70	65	210
75°	92	65	22	5	3	99
85°	14	7	2	2	2	18
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°	1197.1	1197.1	1197.1	1197.1	1197.1	1197.1	1197.1	1197.1	1197.1
2.5°	1229.4	1222.6	1215.8	1203.9	1190.3	1176.6	1168.2	1161.3	1157.9
5°	1263.5	1255.0	1239.6	1214.1	1188.6	1164.7	1145.9	1134.1	1129.0
7.5°	1290.7	1278.8	1253.3	1217.5	1178.3	1140.9	1117.0	1100.0	1093.2
10°	1300.9	1287.3	1253.3	1205.5	1156.2	1110.3	1076.2	1059.1	1050.6
12.5°	1312.9	1297.6	1255.0	1195.4	1134.1	1079.5	1040.4	1018.2	1009.8
15°	1324.8	1304.3	1253.3	1180.0	1106.9	1043.9	1001.2	979.1	968.9
17.5°	1324.8	1300.9	1239.6	1154.5	1071.1	1004.7	956.9	931.4	923.0
20°	1300.9	1273.7	1207.2	1113.6	1025.1	953.6	907.6	882.1	871.8
22.5°	1263.5	1232.9	1161.3	1064.2	970.6	900.8	854.8	830.9	820.8
25°	1214.1	1183.4	1108.6	1008.1	914.4	844.6	802.0	779.9	769.6
27.5°	1156.2	1122.1	1047.3	946.8	854.8	788.4	749.2	728.8	720.3
30°	1084.6	1052.3	979.1	880.4	791.8	730.5	694.8	676.0	669.2
32.5°	1001.2	974.0	902.5	810.5	727.1	670.9	638.6	623.2	616.4
35°	914.4	888.9	825.9	740.7	665.8	613.0	582.3	572.2	568.8
37.5°	832.6	810.5	749.2	670.9	602.8	556.8	529.6	522.7	519.3
40°	747.5	732.2	676.0	604.5	541.5	500.6	478.5	473.4	473.4
42.5°	670.9	653.9	604.5	539.8	483.6	442.7	427.4	422.2	424.1
45°	601.1	584.0	538.1	478.5	424.1	390.0	378.0	378.0	378.0
47.5°	536.4	521.0	478.5	417.2	372.9	345.7	333.7	333.7	335.4
50°	476.8	466.6	418.9	366.1	327.0	301.4	292.9	291.2	294.6
52.5°	420.6	408.7	366.1	318.4	281.0	260.6	252.0	250.3	252.0
55°	372.9	359.2	321.9	275.8	241.8	221.4	211.1	209.4	212.8
57.5°	327.0	316.7	277.5	236.6	204.3	183.9	175.3	171.9	173.6
60°	284.4	274.1	238.4	199.3	170.3	149.8	138.0	134.6	136.3
62.5°	245.2	236.6	202.7	165.2	136.3	117.5	105.6	97.1	100.5
65°	209.4	201.0	170.3	132.8	107.3	86.8	69.8	63.0	64.7
67.5°	178.8	168.6	139.7	105.6	80.0	57.9	39.2	35.8	35.8
70°	148.1	138.0	112.3	81.7	56.2	30.6	17.0	17.0	17.0
72.5°	119.2	110.6	86.8	61.3	35.8	13.7	6.8	6.8	6.8
75°	91.9	85.1	64.7	42.6	22.1	6.8	5.1	3.4	3.4
77.5°	68.1	61.3	46.0	28.9	13.7	3.4	3.4	3.4	3.4
80°	46.0	40.9	30.6	17.0	6.8	1.7	1.7	1.7	1.7
82.5°	27.2	23.8	17.0	8.5	3.4	1.7	1.7	1.7	1.7
85°	13.7	10.2	6.8	3.4	1.7	1.7	1.7	1.7	1.7
87.5°	3.4	1.7	1.7	1.7	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)