

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: P580162

Luminaire Tested: **HC425D010-HM40525835-41WWBB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580162  
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-HM40525835-41WWBB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2012.2 lumens  
Efficiency: N/A  
Efficacy: 75.1 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

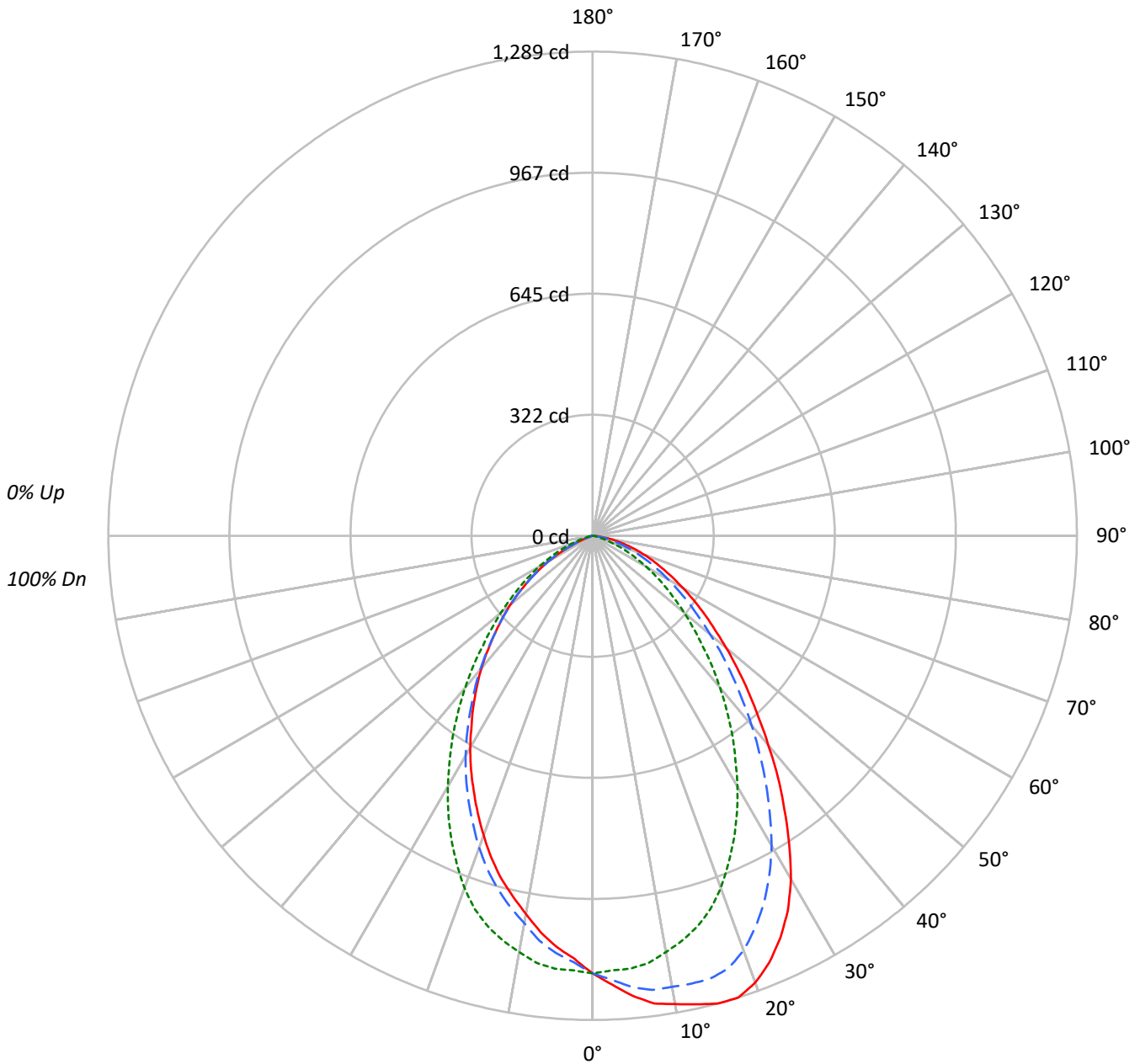
Input Watts (W): 26.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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	42	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°	143685	143685	143685
5°	152233	143219	136025
10°	158552	140930	128054
15°	164627	137542	120393
20°	166164	130947	111362
25°	160798	121113	101937
30°	150332	109740	92749
35°	133999	97559	83329
40°	117123	84839	74164
45°	102028	71973	64158
50°	89038	61060	55015
55°	78040	50600	44558
60°	68259	40877	32687
65°	59481	30470	18387
70°	52004	19691	5987
75°	42653	10294	1573
80°	31751	4759	1208
85°	18681	2406	2406



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.9	5.5
10°-20°	307.7	15.3
20°-30°	425.4	21.1
30°-40°	427.8	21.3
40°-50°	345.2	17.2
50°-60°	233.4	11.6
60°-70°	118.8	5.9
70°-80°	38.0	1.9
80°-90°	5.8	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°	843.1	41.9
0°-40°	1270.9	63.2
0°-60°	1849.5	91.9
0°-90°	2012.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2012.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1165	1165	1165	1165	1165	
5°	1230	1206	1157	1115	1099	118
15°	1289	1220	1077	974	943	363
25°	1182	1079	890	780	749	541
35°	890	804	648	567	553	556
45°	585	524	413	368	368	453
55°	363	313	235	206	207	326
65°	204	166	104	68	63	204
75°	90	63	22	5	3	96
85°	13	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°	1164.9	1164.9	1164.9	1164.9	1164.9	1164.9	1164.9	1164.9	1164.9
2.5°	1196.4	1189.7	1183.1	1171.6	1158.2	1145.0	1136.7	1130.1	1126.7
5°	1229.5	1221.2	1206.3	1181.5	1156.7	1133.4	1115.2	1103.6	1098.6
7.5°	1256.0	1244.5	1219.5	1184.8	1146.7	1110.3	1087.0	1070.4	1063.9
10°	1265.9	1252.7	1219.5	1173.1	1125.2	1080.3	1047.3	1030.7	1022.4
12.5°	1277.6	1262.7	1221.2	1163.2	1103.6	1050.5	1012.5	990.9	982.7
15°	1289.2	1269.3	1219.5	1148.3	1077.1	1015.8	974.3	952.8	942.8
17.5°	1289.2	1265.9	1206.3	1123.5	1042.3	977.6	931.3	906.4	898.1
20°	1265.9	1239.4	1174.8	1083.7	997.6	927.9	883.2	858.4	848.4
22.5°	1229.5	1199.7	1130.1	1035.6	944.5	876.6	831.8	808.6	798.7
25°	1181.5	1151.7	1078.8	981.0	889.9	821.9	780.5	758.9	749.0
27.5°	1125.2	1092.0	1019.0	921.3	831.8	767.2	729.1	709.2	700.9
30°	1055.5	1024.0	952.8	856.7	770.5	710.8	676.0	657.9	651.2
32.5°	974.3	947.8	878.2	788.7	707.5	652.9	621.4	606.5	599.8
35°	889.9	864.9	803.6	720.9	647.9	596.6	566.8	556.8	553.4
37.5°	810.3	788.7	729.1	652.9	586.6	541.8	515.4	508.7	505.5
40°	727.4	712.5	657.9	588.2	526.9	487.2	465.6	460.6	460.6
42.5°	652.9	636.3	588.2	525.3	470.6	430.8	415.9	411.0	412.6
45°	584.9	568.3	523.6	465.6	412.6	379.5	367.8	367.8	367.8
47.5°	521.9	507.0	465.6	406.0	362.9	336.3	324.8	324.8	326.4
50°	464.0	454.1	407.7	356.3	318.2	293.3	285.0	283.4	286.7
52.5°	409.3	397.7	356.3	309.9	273.4	253.6	245.2	243.6	245.2
55°	362.9	349.7	313.2	268.5	235.3	215.4	205.5	203.8	207.2
57.5°	318.2	308.2	270.1	230.3	198.8	178.9	170.7	167.3	169.0
60°	276.7	266.8	232.0	193.8	165.7	145.9	134.2	130.9	132.5
62.5°	238.7	230.3	197.2	160.8	132.5	114.4	102.7	94.5	97.8
65°	203.8	195.5	165.7	129.3	104.4	84.6	68.0	61.3	63.0
67.5°	174.0	164.0	135.9	102.7	77.9	56.3	38.2	34.8	34.8
70°	144.2	134.2	109.4	79.6	54.6	29.8	16.6	16.6	16.6
72.5°	115.9	107.7	84.6	59.6	34.8	13.2	6.7	6.7	6.7
75°	89.5	82.9	63.0	41.4	21.6	6.7	5.0	3.3	3.3
77.5°	66.3	59.6	44.7	28.2	13.2	3.3	3.3	3.3	3.3
80°	44.7	39.7	29.8	16.6	6.7	1.7	1.7	1.7	1.7
82.5°	26.5	23.1	16.6	8.2	3.3	1.7	1.7	1.7	1.7
85°	13.2	9.9	6.7	3.3	1.7	1.7	1.7	1.7	1.7
87.5°	3.3	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)