

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: P580342

Luminaire Tested: **HC430D010-HM43040927-41WWBB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580342  
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: HC430D010-HM43040927-41WWBB  
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: 1902.6 lumens  
Efficiency: N/A  
Efficacy: 67.9 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

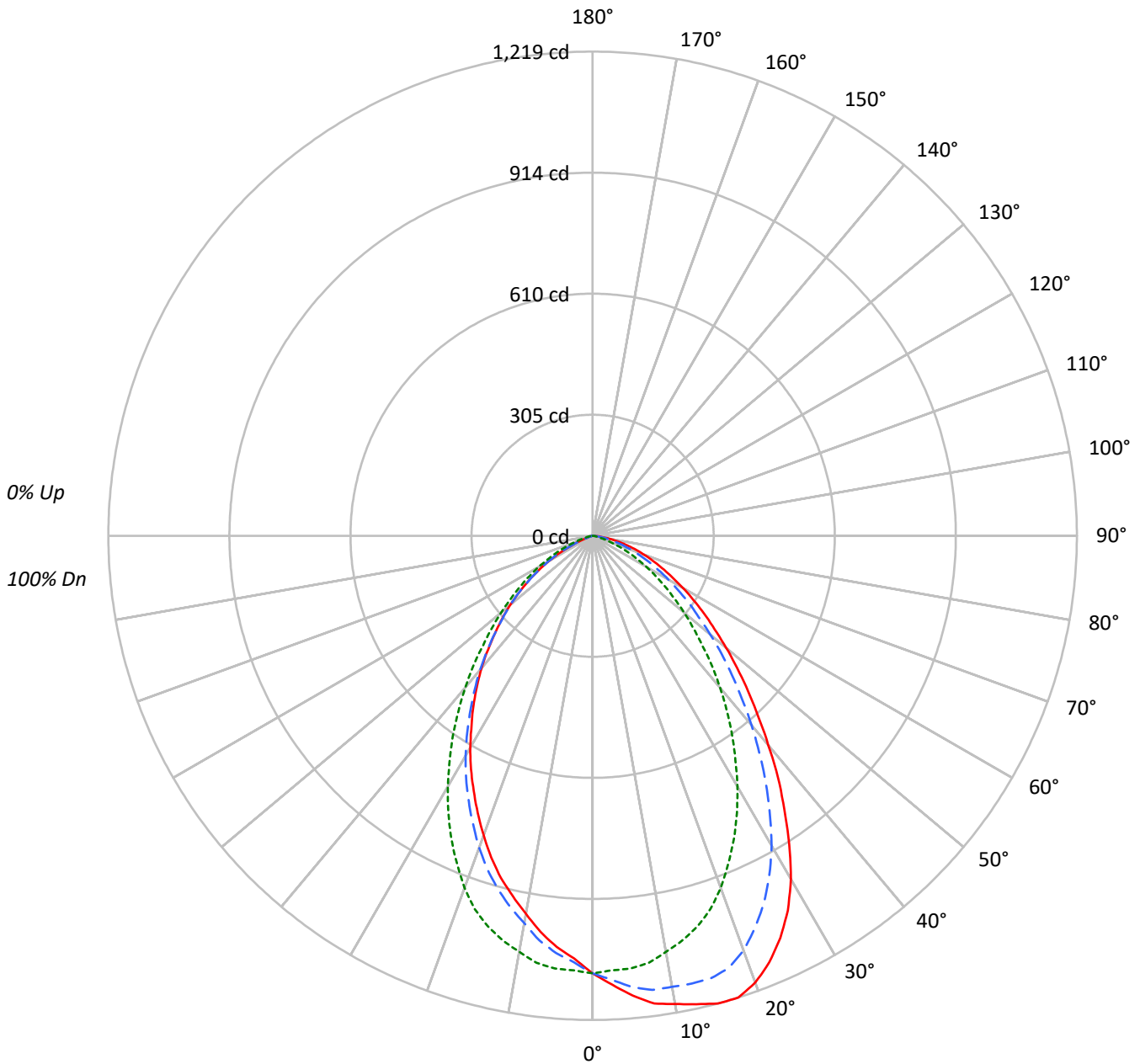
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	135865	135865	135865
5°	143949	135406	128621
10°	149922	133239	121078
15°	155662	130059	113854
20°	157120	123806	105298
25°	152047	114512	96384
30°	142157	103773	87707
35°	126696	92244	78797
40°	110763	80218	70123
45°	96481	68065	60687
50°	84183	57721	52022
55°	73782	47826	42106
60°	64559	38657	30910
65°	56242	28807	17395
70°	49155	18645	5662
75°	40318	9722	1525
80°	30047	4475	1137
85°	17690	2264	2264



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.0	5.5
10°-20°	290.9	15.3
20°-30°	402.3	21.1
30°-40°	404.5	21.3
40°-50°	326.4	17.2
50°-60°	220.7	11.6
60°-70°	112.3	5.9
70°-80°	36.0	1.9
80°-90°	5.5	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°	797.2	41.9
0°-40°	1201.7	63.2
0°-60°	1748.8	91.9
0°-90°	1902.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1902.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1102	1102	1102	1102	1102	
5°	1163	1141	1094	1054	1039	112
15°	1219	1153	1018	921	892	343
25°	1117	1020	841	738	708	511
35°	841	760	613	536	523	526
45°	553	495	390	348	348	429
55°	343	296	222	194	196	308
65°	193	157	99	64	60	193
75°	85	60	20	5	3	91
85°	12	6	2	2	2	17
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°	1101.5	1101.5	1101.5	1101.5	1101.5	1101.5	1101.5	1101.5	1101.5
2.5°	1131.3	1125.0	1118.8	1107.7	1095.2	1082.7	1074.9	1068.6	1065.4
5°	1162.6	1154.7	1140.6	1117.2	1093.6	1071.7	1054.5	1043.5	1038.8
7.5°	1187.7	1176.7	1153.2	1120.2	1084.2	1049.7	1027.8	1012.2	1005.8
10°	1197.0	1184.5	1153.2	1109.3	1063.8	1021.5	990.3	974.6	966.7
12.5°	1208.0	1193.9	1154.7	1099.9	1043.5	993.3	957.3	936.9	929.1
15°	1219.0	1200.2	1153.2	1085.8	1018.5	960.5	921.2	900.9	891.6
17.5°	1219.0	1197.0	1140.6	1062.4	985.5	924.4	880.5	857.1	849.2
20°	1197.0	1172.0	1110.9	1024.7	943.2	877.5	835.1	811.6	802.2
22.5°	1162.6	1134.3	1068.6	979.2	893.0	828.9	786.6	764.6	755.2
25°	1117.2	1089.0	1020.1	927.6	841.4	777.2	737.9	717.6	708.2
27.5°	1063.8	1032.6	963.5	871.2	786.6	725.4	689.4	670.6	662.8
30°	998.1	968.3	900.9	810.0	728.6	672.2	639.2	622.0	615.8
32.5°	921.2	896.2	830.4	745.8	669.0	617.4	587.6	573.5	567.2
35°	841.4	817.9	759.9	681.5	612.6	564.0	535.8	526.4	523.3
37.5°	766.1	745.8	689.4	617.4	554.6	512.3	487.3	481.0	477.9
40°	687.9	673.8	622.0	556.2	498.2	460.7	440.3	435.5	435.5
42.5°	617.4	601.7	556.2	496.7	445.0	407.3	393.2	388.6	390.2
45°	553.1	537.4	495.1	440.3	390.2	358.8	347.9	347.9	347.9
47.5°	493.5	479.4	440.3	383.9	343.1	318.1	307.0	307.0	308.6
50°	438.7	429.3	385.4	336.8	300.8	277.4	269.5	267.9	271.1
52.5°	387.0	376.1	336.8	292.9	258.5	239.7	231.9	230.3	231.9
55°	343.1	330.6	296.1	253.8	222.4	203.7	194.2	192.7	195.8
57.5°	300.8	291.5	255.4	217.8	188.0	169.2	161.4	158.3	159.8
60°	261.7	252.2	219.4	183.3	156.7	137.8	126.9	123.7	125.3
62.5°	225.6	217.8	186.5	151.9	125.3	108.1	97.1	89.3	92.5
65°	192.7	184.9	156.7	122.2	98.7	79.9	64.2	58.0	59.6
67.5°	164.5	155.1	128.5	97.1	73.7	53.2	36.0	32.9	32.9
70°	136.3	126.9	103.4	75.2	51.7	28.2	15.7	15.7	15.7
72.5°	109.6	101.9	79.9	56.4	32.9	12.5	6.3	6.3	6.3
75°	84.6	78.4	59.6	39.1	20.4	6.3	4.7	3.2	3.2
77.5°	62.7	56.4	42.3	26.6	12.5	3.2	3.2	3.2	3.2
80°	42.3	37.6	28.2	15.7	6.3	1.6	1.6	1.6	1.6
82.5°	25.0	21.9	15.7	7.8	3.2	1.6	1.6	1.6	1.6
85°	12.5	9.4	6.3	3.2	1.6	1.6	1.6	1.6	1.6
87.5°	3.2	1.6	1.6	1.6	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)