

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: P580272

Luminaire Tested: **HC430D010-HM43040827-41WWWB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580272  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-18)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC430D010-HM43040827-41WWWB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2740.4 lumens  
Efficiency: N/A  
Efficacy: 97.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.15  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

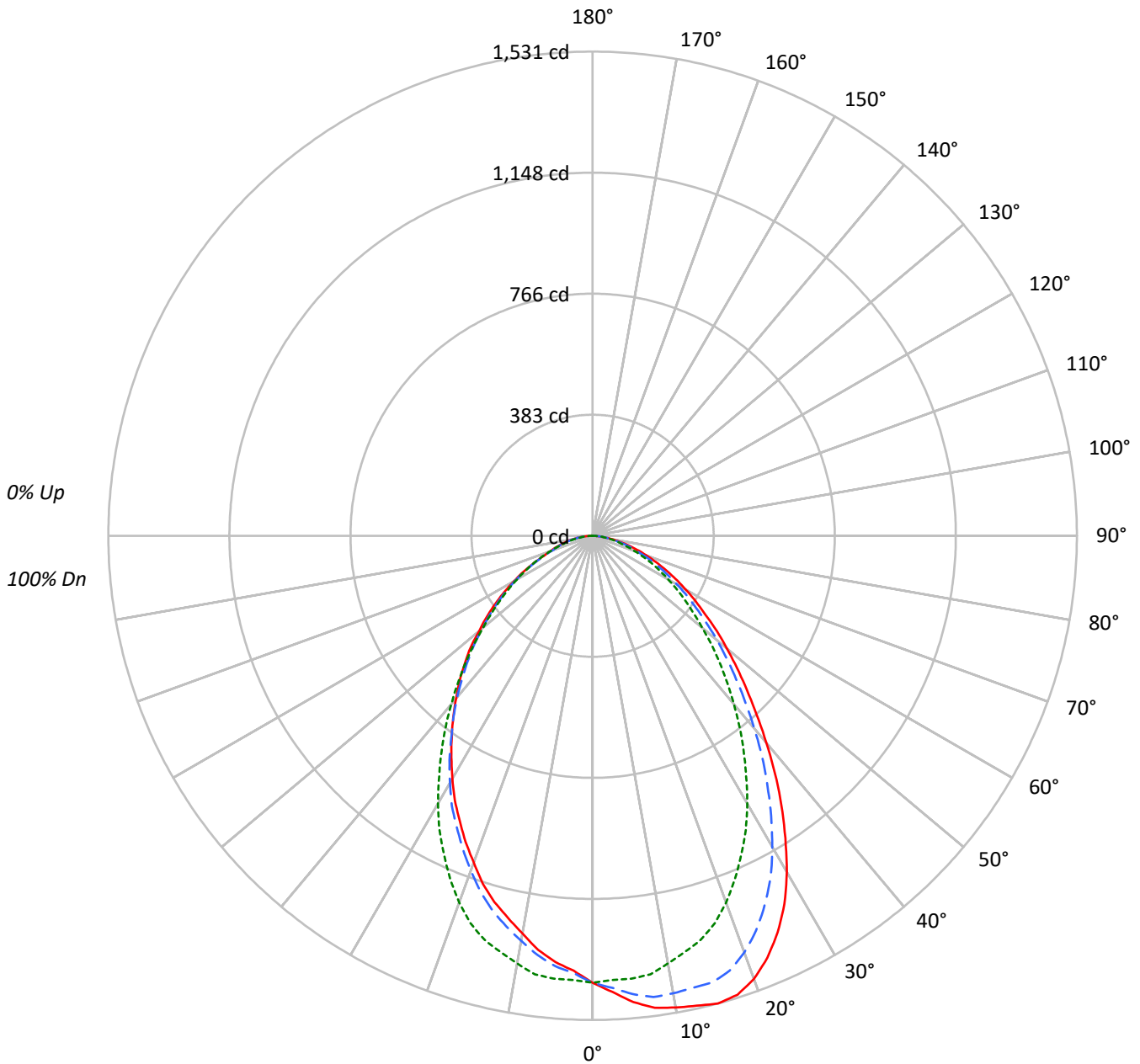
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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								
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87								
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75								
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66								
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	58								
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51								
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47	46								
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41								
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37								
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34								
10	58	45	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31								

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

	0°	90°	180°
0°	174287	174287	174287
5°	183274	174062	167536
10°	189714	171979	159942
15°	195491	168866	153121
20°	195724	161911	144283
25°	188372	151340	135280
30°	174915	139265	126347
35°	156766	125371	116908
40°	137556	111858	108074
45°	120239	99028	99673
50°	106174	86677	89805
55°	93610	76858	80750
60°	83678	68013	70702
65°	74103	59831	59831
70°	64771	51030	51030
75°	55330	43225	48420
80°	43827	38641	43827
85°	28305	33399	41042



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.9	4.9
10°-20°	377.0	13.8
20°-30°	528.2	19.3
30°-40°	544.2	19.9
40°-50°	463.3	16.9
50°-60°	343.3	12.5
60°-70°	215.4	7.9
70°-80°	107.0	3.9
80°-90°	28.1	1.0
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°	1039.1	37.9
0°-40°	1583.3	57.8
0°-60°	2389.9	87.2
0°-90°	2740.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2740.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1413	1413	1413	1413	1413	
5°	1480	1455	1406	1366	1353	142
15°	1531	1462	1322	1226	1199	430
25°	1384	1288	1112	1016	994	633
35°	1041	963	833	778	776	649
45°	689	642	568	557	571	535
55°	435	401	357	365	376	394
65°	254	228	205	201	205	253
75°	116	103	91	98	102	124
85°	20	20	24	27	29	26
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°	1413.0	1413.0	1413.0	1413.0	1413.0	1413.0	1413.0	1413.0	1413.0
2.5°	1443.8	1438.4	1431.2	1418.5	1405.8	1394.9	1384.1	1378.6	1376.7
5°	1480.2	1469.3	1454.8	1431.2	1405.8	1384.1	1365.9	1356.9	1353.1
7.5°	1505.5	1494.7	1471.1	1434.8	1398.5	1365.9	1336.9	1324.2	1320.5
10°	1514.7	1501.9	1469.3	1420.3	1373.1	1333.3	1300.6	1284.2	1277.0
12.5°	1521.9	1505.5	1463.8	1405.8	1347.7	1298.8	1264.3	1242.5	1237.1
15°	1530.9	1512.9	1462.0	1391.3	1322.4	1264.3	1226.2	1206.3	1199.1
17.5°	1521.9	1501.9	1442.0	1362.3	1284.2	1220.8	1179.1	1160.9	1153.7
20°	1491.1	1469.3	1402.2	1316.9	1233.5	1168.2	1126.4	1108.3	1099.2
22.5°	1443.8	1420.3	1351.3	1260.7	1175.4	1112.0	1072.1	1053.9	1048.5
25°	1384.1	1360.5	1288.0	1195.3	1112.0	1050.3	1015.8	999.5	994.0
27.5°	1313.3	1289.8	1218.9	1128.2	1048.5	990.4	963.2	946.8	943.2
30°	1228.1	1204.5	1135.6	1052.1	977.8	923.3	901.5	888.9	887.1
32.5°	1133.8	1113.8	1050.3	974.0	903.3	858.0	841.7	832.6	830.8
35°	1041.1	1019.5	963.2	894.3	832.6	792.6	778.2	776.4	776.4
37.5°	946.8	925.1	879.7	816.2	763.7	727.3	721.9	723.7	723.7
40°	854.3	834.4	794.5	741.9	694.7	667.6	665.7	669.4	671.2
42.5°	767.3	751.0	714.7	669.4	629.4	607.7	609.5	616.8	622.2
45°	689.3	674.8	642.2	602.2	567.7	551.5	556.9	565.9	571.4
47.5°	618.6	605.8	575.1	538.7	509.7	498.8	506.1	517.0	524.2
50°	553.3	542.3	513.4	475.2	451.7	444.4	453.5	464.4	468.0
52.5°	495.2	484.4	453.5	420.9	402.7	399.1	408.1	417.2	422.7
55°	435.3	426.3	400.9	371.9	357.4	355.5	364.6	371.9	375.5
57.5°	386.3	377.3	353.7	328.4	315.6	313.8	322.8	328.4	330.2
60°	339.2	330.2	308.4	284.8	275.7	275.7	281.2	284.8	286.6
62.5°	295.6	286.6	266.7	246.7	239.5	239.5	239.5	241.3	246.7
65°	253.9	246.7	228.5	210.4	205.0	201.3	201.3	201.3	205.0
67.5°	215.9	208.6	194.1	177.8	172.4	166.8	165.0	168.7	168.7
70°	179.6	174.2	159.6	147.0	141.5	136.0	134.2	141.5	141.5
72.5°	147.0	141.5	132.4	119.7	114.3	112.5	116.1	119.7	121.5
75°	116.1	110.7	103.4	96.1	90.7	92.5	97.9	99.7	101.6
77.5°	87.1	85.3	77.9	72.5	72.5	74.3	77.9	81.7	83.5
80°	61.7	59.9	56.3	52.6	54.4	58.1	59.9	63.5	61.7
82.5°	38.1	38.1	36.3	36.3	38.1	41.7	43.5	45.3	47.2
85°	20.0	20.0	20.0	21.8	23.6	25.4	27.2	29.0	29.0
87.5°	5.4	7.2	7.2	9.0	10.8	10.8	12.7	12.7	12.7
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)