

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: P580344

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

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580344
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-HM43040927-41WWWB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2368.0 lumens
Efficiency: N/A
Efficacy: 84.6 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

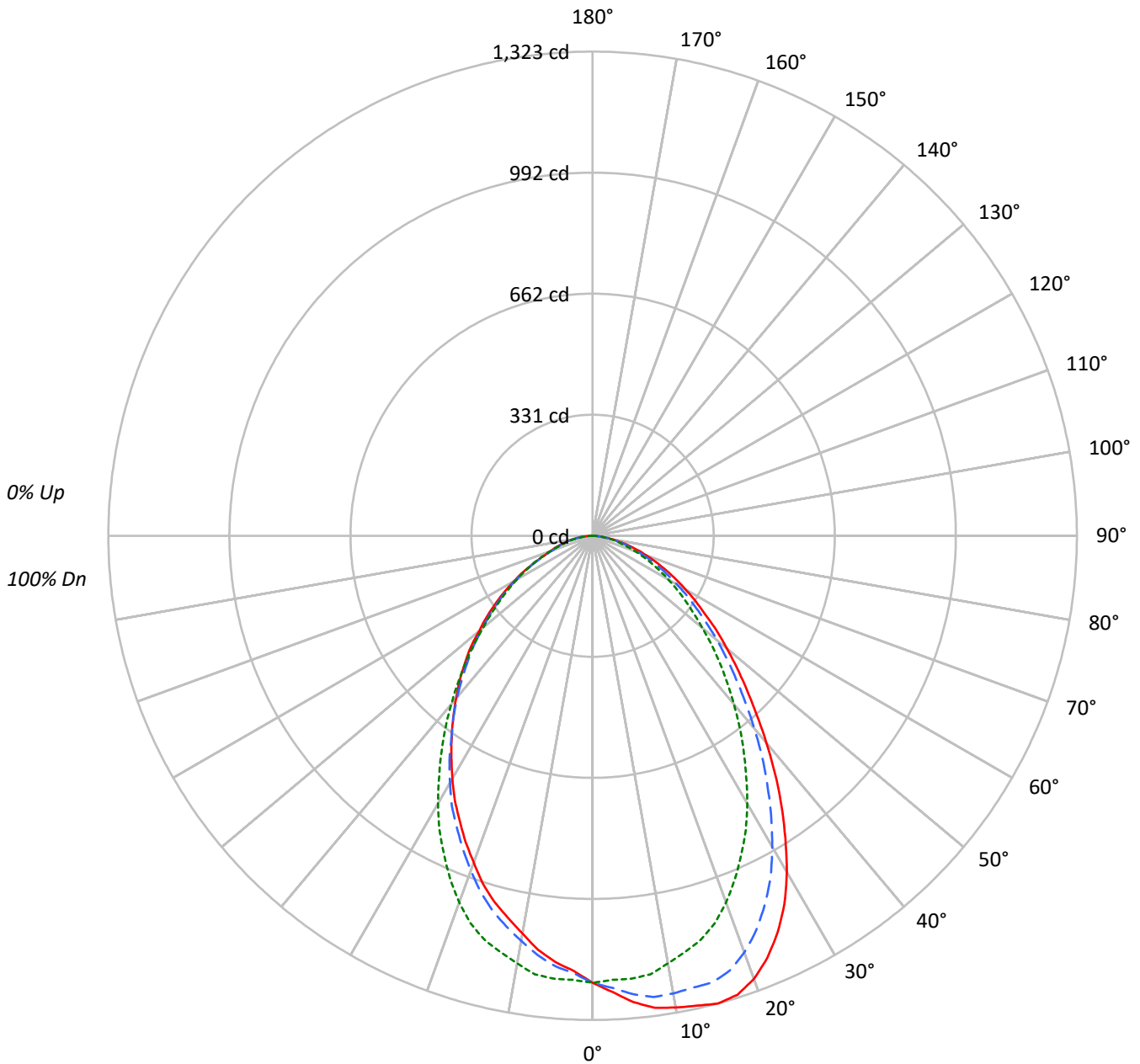
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P580344

CATALOG NUMBER: HC430D010-HM43040927-41WWWB

Luminous Intensity Polar Plot





TEST NUMBER: P580344

CATALOG NUMBER: HC430D010-HM43040927-41WWWB

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°	150617	150617	150617
5°	158362	150400	144779
10°	163925	148607	138212
15°	168930	145919	132307
20°	169118	139899	124685
25°	162772	130762	116907
30°	151144	120337	109170
35°	135474	108325	101007
40°	118878	96658	93373
45°	103895	85579	86120
50°	91724	74895	77601
55°	80901	66385	69761
60°	72330	58762	61105
65°	64034	51689	51689
70°	55971	44106	44106
75°	47800	37363	41843
80°	37789	33385	37789
85°	24484	28871	35381



TEST NUMBER: P580344

CATALOG NUMBER: HC430D010-HM43040927-41WWWB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.7	4.9
10°-20°	325.8	13.8
20°-30°	456.4	19.3
30°-40°	470.2	19.9
40°-50°	400.3	16.9
50°-60°	296.6	12.5
60°-70°	186.2	7.9
70°-80°	92.5	3.9
80°-90°	24.3	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°	897.9	37.9
0°-40°	1368.1	57.8
0°-60°	2065.1	87.2
0°-90°	2368.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2368.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1221	1221	1221	1221	1221	
5°	1279	1257	1215	1180	1169	123
15°	1323	1263	1143	1060	1036	372
25°	1196	1113	961	878	859	547
35°	900	832	719	672	671	561
45°	596	555	491	481	494	462
55°	376	346	309	315	324	340
65°	219	198	177	174	177	219
75°	100	89	78	85	88	107
85°	17	17	20	24	25	22
90°	0	0	0	0	0	



TEST NUMBER: P580344

CATALOG NUMBER: HC430D010-HM43040927-41WWWB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1221.1	1221.1	1221.1	1221.1	1221.1	1221.1	1221.1	1221.1	1221.1
2.5°	1247.7	1242.9	1236.7	1225.8	1214.7	1205.4	1196.0	1191.3	1189.7
5°	1279.0	1269.7	1257.2	1236.7	1214.7	1196.0	1180.3	1172.4	1169.3
7.5°	1301.0	1291.6	1271.3	1239.9	1208.5	1180.3	1155.2	1144.2	1141.1
10°	1308.8	1297.9	1269.7	1227.4	1186.5	1152.1	1123.8	1109.7	1103.5
12.5°	1315.1	1301.0	1264.9	1214.7	1164.7	1122.2	1092.5	1073.7	1069.0
15°	1322.9	1307.2	1263.4	1202.2	1142.7	1092.5	1059.6	1042.4	1036.1
17.5°	1315.1	1297.9	1246.1	1177.2	1109.7	1054.9	1018.8	1003.1	996.9
20°	1288.4	1269.7	1211.7	1137.9	1065.8	1009.4	973.4	957.7	949.9
22.5°	1247.7	1227.4	1167.7	1089.4	1015.8	960.8	926.3	910.7	906.0
25°	1196.0	1175.6	1112.9	1032.9	960.8	907.6	877.8	863.7	859.0
27.5°	1134.9	1114.5	1053.3	974.9	906.0	855.8	832.4	818.3	815.1
30°	1061.2	1040.8	981.2	909.2	844.9	797.8	779.0	768.1	766.5
32.5°	979.7	962.4	907.6	841.7	780.6	741.4	727.3	719.4	717.9
35°	899.7	881.0	832.4	772.8	719.4	685.0	672.4	670.8	670.8
37.5°	818.3	799.4	760.3	705.3	659.9	628.5	623.9	625.4	625.4
40°	738.3	721.0	686.5	641.0	600.3	576.9	575.3	578.4	579.9
42.5°	663.0	648.9	617.6	578.4	543.9	525.1	526.7	533.0	537.6
45°	595.6	583.1	554.9	520.3	490.6	476.5	481.2	489.1	493.7
47.5°	534.6	523.5	496.9	465.5	440.5	431.0	437.3	446.7	453.0
50°	478.0	468.7	443.6	410.7	390.3	384.1	391.9	401.2	404.4
52.5°	428.0	418.5	391.9	363.7	348.0	344.8	352.7	360.5	365.2
55°	376.2	368.4	346.4	321.4	308.7	307.3	315.1	321.4	324.4
57.5°	333.9	326.0	305.7	283.7	272.8	271.2	279.0	283.7	285.3
60°	293.2	285.3	266.4	246.1	238.2	238.2	243.0	246.1	247.7
62.5°	255.5	247.7	230.5	213.2	206.9	206.9	206.9	208.5	213.2
65°	219.4	213.2	197.5	181.8	177.1	173.9	173.9	173.9	177.1
67.5°	186.6	180.3	167.7	153.6	148.9	144.2	142.7	145.7	145.7
70°	155.2	150.5	138.0	127.0	122.3	117.5	116.0	122.3	122.3
72.5°	127.0	122.3	114.4	103.4	98.7	97.2	100.3	103.4	105.0
75°	100.3	95.7	89.3	83.0	78.4	80.0	84.6	86.2	87.8
77.5°	75.2	73.7	67.5	62.7	62.7	64.3	67.5	70.5	72.1
80°	53.2	51.8	48.6	45.5	47.0	50.2	51.8	54.8	53.2
82.5°	32.9	32.9	31.4	31.4	32.9	36.1	37.7	39.1	40.7
85°	17.3	17.3	17.3	18.8	20.4	22.0	23.5	25.0	25.0
87.5°	4.7	6.3	6.3	7.8	9.4	9.4	10.9	10.9	10.9
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)