

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: P580343

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

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580343
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC430D010-HM43040927-41WWW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2379.0 lumens
Efficiency: N/A
Efficacy: 85.0 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.03 / 1.1
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

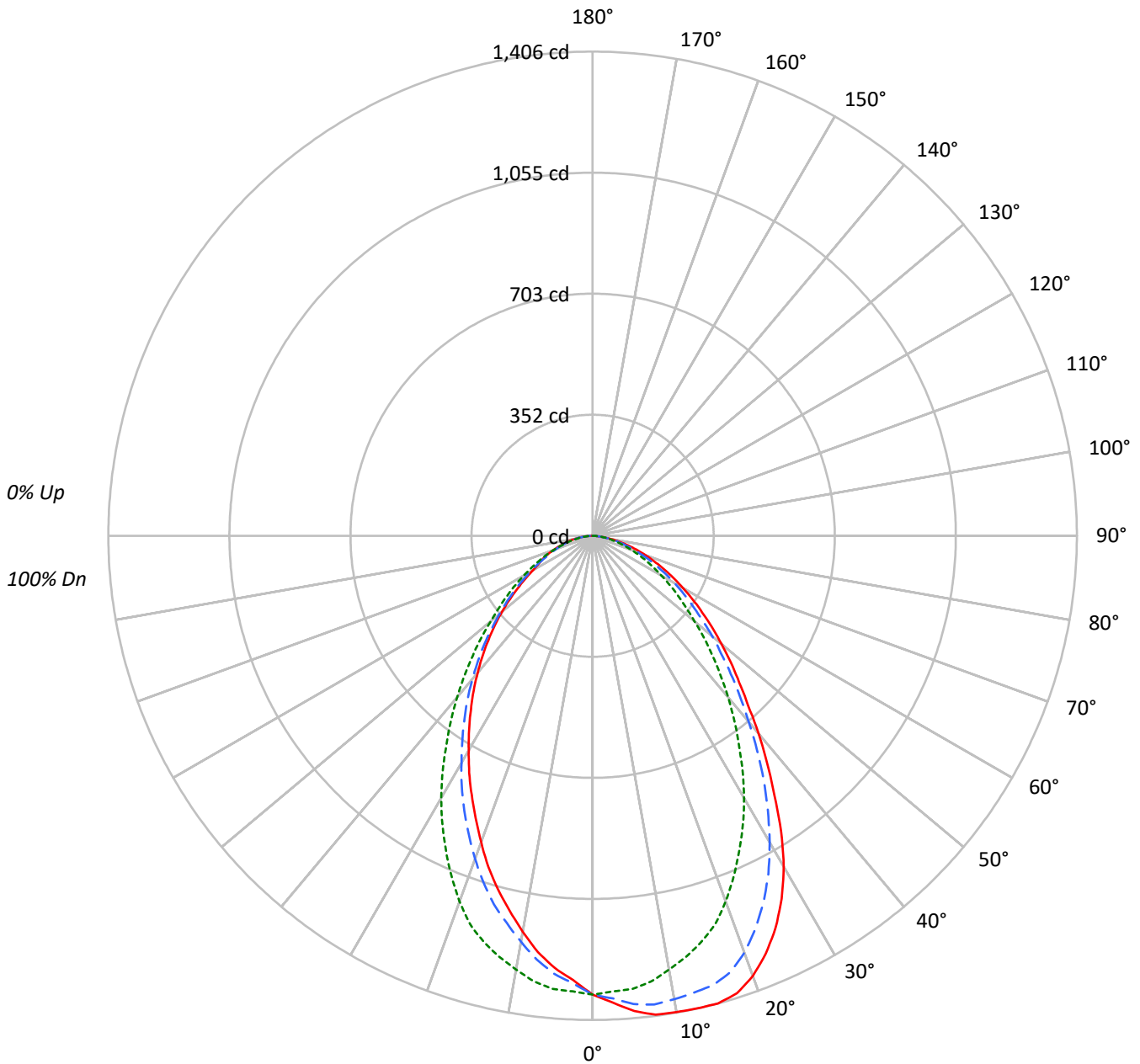
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P580343

CATALOG NUMBER: HC430D010-HM43040927-41WWW

Luminous Intensity Polar Plot





TEST NUMBER: P580343

CATALOG NUMBER: HC430D010-HM43040927-41WWW

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	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87	87	87	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76	76	76	76
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66	66	66	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58	58	58	58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52	52	52	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47	47	47	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42	42	42	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38	38	38	38
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35	35	35	35
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32	32	32	32

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	164321	164321	164321
5°	171548	163587	156022
10°	175874	160180	146240
15°	179516	155905	135691
20°	178568	148326	124252
25°	171060	137158	113056
30°	158037	125236	102448
35°	138531	111382	92741
40°	120617	98429	83535
45°	104976	85840	74642
50°	93528	73993	65876
55°	83589	65052	56966
60°	74624	56813	49116
65°	66340	49850	46639
70°	58207	42952	43529
75°	49277	36601	40318
80°	37789	31183	36795
85°	22219	24484	31135



TEST NUMBER: P580343

CATALOG NUMBER: HC430D010-HM43040927-41WWW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.9	5.2
10°-20°	344.4	14.5
20°-30°	470.6	19.8
30°-40°	472.5	19.9
40°-50°	390.9	16.4
50°-60°	283.3	11.9
60°-70°	179.4	7.5
70°-80°	90.7	3.8
80°-90°	22.2	0.9
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°	939.9	39.5
0°-40°	1412.5	59.4
0°-60°	2086.6	87.7
0°-90°	2379.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2379.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1332	1332	1332	1332	1332	
5°	1386	1365	1321	1277	1260	133
15°	1406	1351	1221	1108	1063	395
25°	1257	1174	1008	881	831	574
35°	920	865	740	649	616	577
45°	602	567	492	444	428	468
55°	389	354	302	276	265	350
65°	227	202	171	154	160	226
75°	103	89	77	80	85	110
85°	16	16	17	20	22	22
90°	0	0	0	0	0	



TEST NUMBER: P580343

CATALOG NUMBER: HC430D010-HM43040927-41WWW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1332.2	1332.2	1332.2	1332.2	1332.2	1332.2	1332.2	1332.2	1332.2
2.5°	1357.2	1352.6	1344.7	1335.3	1324.4	1311.9	1300.8	1294.6	1291.4
5°	1385.5	1379.2	1365.1	1344.7	1321.2	1297.7	1277.3	1264.8	1260.1
7.5°	1402.7	1393.3	1372.9	1341.6	1305.5	1271.0	1241.3	1224.0	1219.4
10°	1404.2	1393.3	1366.7	1324.4	1278.9	1233.5	1197.4	1172.3	1167.6
12.5°	1405.8	1391.7	1358.8	1308.7	1252.3	1195.8	1151.9	1122.1	1114.4
15°	1405.8	1391.7	1351.0	1291.4	1220.9	1156.7	1108.0	1073.6	1062.6
17.5°	1393.3	1377.6	1329.0	1260.1	1183.3	1111.2	1054.8	1018.7	1007.8
20°	1360.4	1343.1	1288.3	1213.1	1130.0	1054.8	998.4	960.7	946.6
22.5°	1313.3	1293.0	1235.0	1153.5	1070.5	993.7	938.8	899.6	887.1
25°	1256.9	1236.6	1173.9	1093.9	1007.8	935.7	880.9	844.8	830.7
27.5°	1188.0	1166.0	1104.9	1025.0	945.0	873.0	822.8	789.9	775.8
30°	1109.6	1086.2	1028.2	951.4	879.3	810.2	761.7	735.0	719.3
32.5°	1018.7	998.4	946.6	877.7	810.2	744.5	703.8	680.2	667.7
35°	920.0	909.1	865.2	805.6	739.7	684.9	648.8	626.9	615.9
37.5°	832.2	821.3	783.6	733.5	675.4	625.4	595.6	576.7	567.4
40°	749.1	739.7	703.8	661.3	611.3	567.4	542.2	528.1	518.8
42.5°	667.7	662.9	633.1	594.0	550.1	512.5	492.1	481.2	473.3
45°	601.8	595.6	567.4	529.7	492.1	460.8	443.5	435.7	427.9
47.5°	543.8	536.0	506.2	473.3	438.8	410.6	394.9	387.1	384.0
50°	487.4	479.6	452.9	420.1	385.6	365.1	352.6	344.8	343.3
52.5°	437.3	429.4	399.7	368.3	341.7	324.4	313.5	305.6	302.5
55°	388.7	379.2	354.2	324.4	302.5	286.9	275.8	268.0	264.9
57.5°	344.8	335.4	313.5	285.3	264.9	250.8	241.4	233.5	230.3
60°	302.5	294.6	274.2	247.6	230.3	217.8	208.5	202.1	199.1
62.5°	263.3	257.1	236.7	213.2	199.1	188.0	180.3	173.9	177.1
65°	227.3	221.0	202.1	181.8	170.8	159.8	153.6	153.6	159.8
67.5°	192.8	186.5	170.8	153.6	144.2	136.4	131.6	136.4	141.0
70°	161.4	155.2	141.0	126.9	119.1	112.8	112.8	117.5	120.7
72.5°	131.6	125.4	114.4	103.4	97.1	92.5	97.1	100.3	103.4
75°	103.4	98.7	89.3	81.6	76.8	75.2	80.0	83.0	84.6
77.5°	76.8	73.7	67.3	61.1	58.0	59.6	64.3	65.9	67.3
80°	53.2	51.8	47.0	43.9	43.9	45.5	48.6	50.2	51.8
82.5°	32.9	32.9	29.8	28.2	29.8	32.9	34.5	36.1	36.1
85°	15.7	17.3	15.7	15.7	17.3	20.4	20.4	22.0	22.0
87.5°	4.7	4.7	6.3	6.3	7.8	7.8	7.8	7.8	9.4
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)