

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: P580217

Luminaire Tested: **HC425D010-HM40525930-41WWW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580217
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: HC425D010-HM40525930-41WWW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2133.1 lumens
Efficiency: N/A
Efficacy: 79.6 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

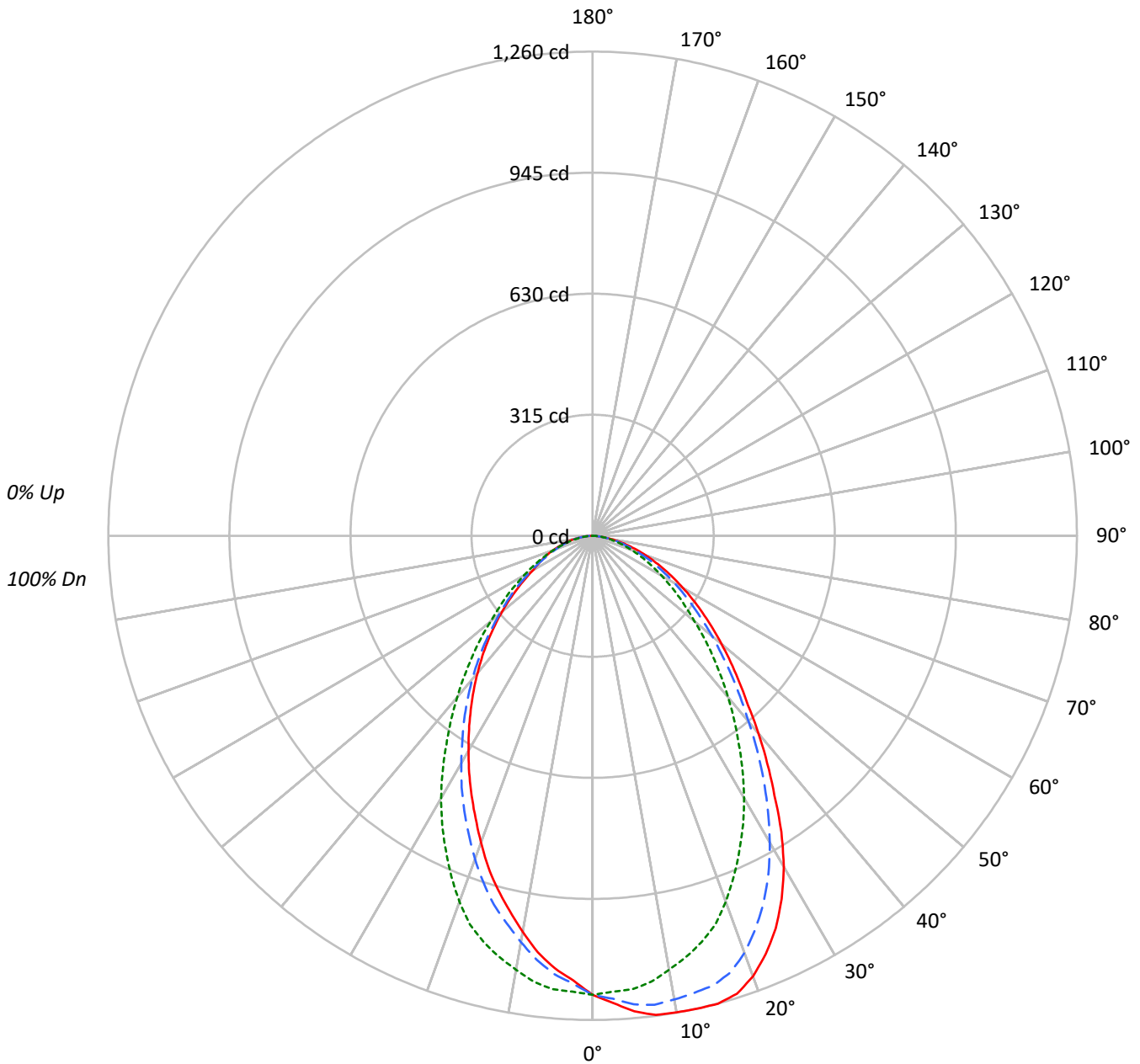
Input Watts (W): 26.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76																			
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66																			
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58																			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52																			
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47																			
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42																			
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38																			
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35																			
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	147336	147336	147336
5°	153805	146686	139901
10°	157713	143622	131123
15°	160962	139790	121670
20°	160113	133007	111415
25°	153395	122991	101365
30°	141715	112290	91866
35°	124226	99878	83164
40°	108171	88237	74889
45°	94144	76962	66914
50°	83857	66337	59064
55°	74944	58321	51074
60°	66903	50966	44034
65°	59481	44713	41853
70°	52184	38516	39021
75°	44226	32836	36172
80°	33953	27987	32959
85°	19813	21936	27739



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.0	5.2
10°-20°	308.8	14.5
20°-30°	422.0	19.8
30°-40°	423.7	19.9
40°-50°	350.5	16.4
50°-60°	254.0	11.9
60°-70°	160.9	7.5
70°-80°	81.3	3.8
80°-90°	19.9	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°	842.8	39.5
0°-40°	1266.5	59.4
0°-60°	1871.0	87.7
0°-90°	2133.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2133.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1194	1194	1194	1194	1194	
5°	1242	1224	1185	1145	1130	119
15°	1260	1211	1095	994	953	355
25°	1127	1053	904	790	745	515
35°	825	776	663	582	552	517
45°	540	509	441	398	384	420
55°	348	318	271	247	238	313
65°	204	181	153	138	143	203
75°	93	80	69	72	76	99
85°	14	14	16	18	20	19
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°	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5
2.5°	1216.9	1212.8	1205.8	1197.3	1187.5	1176.2	1166.4	1160.7	1158.0
5°	1242.2	1236.7	1224.1	1205.8	1184.7	1163.5	1145.4	1134.1	1129.9
7.5°	1257.7	1249.4	1231.1	1202.9	1170.7	1139.7	1113.0	1097.5	1093.3
10°	1259.2	1249.4	1225.4	1187.5	1146.7	1106.0	1073.7	1051.2	1046.9
12.5°	1260.5	1247.9	1218.4	1173.4	1122.8	1072.2	1032.9	1006.2	999.2
15°	1260.5	1247.9	1211.4	1158.0	1094.7	1037.1	993.5	962.6	952.8
17.5°	1249.4	1235.2	1191.7	1129.9	1061.0	996.3	945.8	913.5	903.7
20°	1219.8	1204.3	1155.2	1087.7	1013.3	945.8	895.2	861.4	848.8
22.5°	1177.7	1159.4	1107.3	1034.3	959.9	891.0	841.8	806.7	795.4
25°	1127.1	1108.8	1052.6	980.9	903.7	839.0	789.7	757.4	744.8
27.5°	1065.2	1045.6	990.7	919.1	847.4	782.7	737.8	708.2	695.6
30°	995.0	973.9	921.8	853.1	788.4	726.5	682.9	659.1	645.0
32.5°	913.5	895.2	848.8	786.9	726.5	667.5	631.0	609.9	598.7
35°	825.0	815.0	775.7	722.3	663.3	614.1	581.8	562.1	552.3
37.5°	746.3	736.3	702.7	657.6	605.7	560.7	534.0	517.2	508.7
40°	671.8	663.3	631.0	593.1	548.0	508.7	486.3	473.6	465.1
42.5°	598.7	594.4	567.8	532.7	493.3	459.5	441.2	431.4	424.4
45°	539.7	534.0	508.7	475.0	441.2	413.2	397.7	390.6	383.6
47.5°	487.6	480.6	453.9	424.4	393.5	368.2	354.2	347.1	344.3
50°	437.0	430.0	406.1	376.6	345.7	327.4	316.2	309.1	307.8
52.5°	392.1	385.1	358.3	330.2	306.4	290.9	281.0	274.0	271.2
55°	348.5	340.1	317.6	290.9	271.2	257.2	247.4	240.3	237.5
57.5°	309.1	300.8	281.0	255.7	237.5	224.9	216.4	209.4	206.6
60°	271.2	264.2	245.9	222.1	206.6	195.3	186.8	181.3	178.5
62.5°	236.1	230.4	212.3	191.1	178.5	168.7	161.6	156.0	158.9
65°	203.8	198.1	181.3	163.0	153.2	143.4	137.7	137.7	143.4
67.5°	172.8	167.2	153.2	137.7	129.3	122.3	118.1	122.3	126.4
70°	144.7	139.1	126.4	113.8	106.8	101.2	101.2	105.4	108.2
72.5°	118.1	112.4	102.6	92.8	87.2	82.9	87.2	90.0	92.8
75°	92.8	88.5	80.0	73.0	68.9	67.4	71.7	74.5	75.9
77.5°	68.9	66.0	60.4	54.8	52.0	53.4	57.6	59.0	60.4
80°	47.8	46.4	42.1	39.4	39.4	40.8	43.6	44.9	46.4
82.5°	29.5	29.5	26.6	25.3	26.6	29.5	30.9	32.3	32.3
85°	14.0	15.5	14.0	14.0	15.5	18.3	18.3	19.6	19.6
87.5°	4.2	4.2	5.6	5.6	7.0	7.0	7.0	7.0	8.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)