

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: P580235

Luminaire Tested: **HC425D010-HM40525935-41WWW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580235
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-HM40525935-41WWW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2246.9 lumens
Efficiency: N/A
Efficacy: 83.8 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

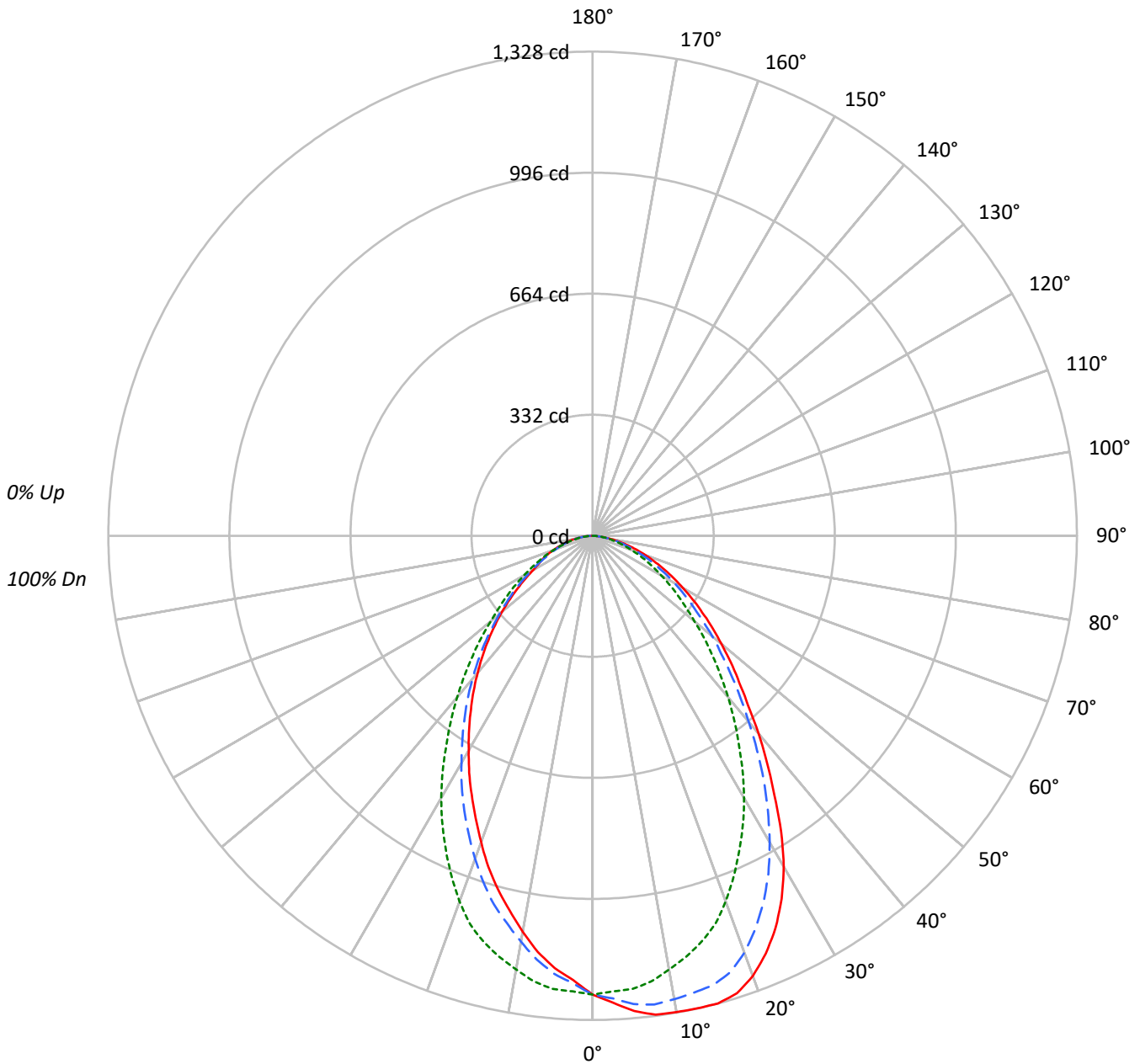
Input Watts (W): 26.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	155206	155206	155206
5°	162027	154511	147367
10°	166117	151288	138124
15°	169556	147260	128169
20°	168658	140082	117361
25°	161561	129551	106768
30°	149278	118286	96765
35°	130837	105208	87606
40°	113919	92955	78898
45°	99167	81078	70490
50°	88347	69868	62192
55°	78965	61439	53805
60°	70480	53680	46378
65°	62633	47077	44042
70°	54961	40536	41113
75°	46561	34551	38078
80°	35800	29407	34735
85°	20945	23068	29437



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.9	5.2
10°-20°	325.3	14.5
20°-30°	444.5	19.8
30°-40°	446.3	19.9
40°-50°	369.2	16.4
50°-60°	267.6	11.9
60°-70°	169.5	7.5
70°-80°	85.7	3.8
80°-90°	21.0	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°	887.7	39.5
0°-40°	1334.1	59.4
0°-60°	1970.8	87.7
0°-90°	2246.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2246.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1258	1258	1258	1258	1258	
5°	1309	1289	1248	1206	1190	125
15°	1328	1276	1153	1047	1004	373
25°	1187	1109	952	832	784	543
35°	869	817	699	613	582	545
45°	568	536	465	419	404	442
55°	367	334	286	261	250	330
65°	215	191	161	145	151	214
75°	98	84	72	76	80	104
85°	15	15	16	19	21	20
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°	1258.3	1258.3	1258.3	1258.3	1258.3	1258.3	1258.3	1258.3	1258.3
2.5°	1282.0	1277.5	1270.1	1261.2	1250.8	1239.0	1228.7	1222.7	1219.8
5°	1308.6	1302.6	1289.3	1270.1	1247.9	1225.6	1206.4	1194.6	1190.2
7.5°	1324.9	1316.0	1296.8	1267.1	1233.1	1200.5	1172.4	1156.1	1151.7
10°	1326.3	1316.0	1290.8	1250.8	1207.9	1165.0	1130.9	1107.2	1102.8
12.5°	1327.8	1314.5	1283.4	1236.0	1182.7	1129.5	1088.0	1059.9	1052.5
15°	1327.8	1314.5	1276.0	1219.8	1153.2	1092.4	1046.6	1014.0	1003.7
17.5°	1316.0	1301.2	1255.3	1190.2	1117.6	1049.5	996.2	962.1	951.9
20°	1284.9	1268.7	1216.8	1145.7	1067.2	996.2	942.9	907.4	894.1
22.5°	1240.4	1221.2	1166.5	1089.5	1011.0	938.5	886.7	849.7	837.8
25°	1187.1	1168.0	1108.8	1033.3	951.9	883.8	832.0	797.9	784.5
27.5°	1122.1	1101.3	1043.6	968.1	892.6	824.5	777.2	746.0	732.7
30°	1048.1	1025.8	971.1	898.6	830.5	765.3	719.4	694.2	679.4
32.5°	962.1	942.9	894.1	828.9	765.3	703.1	664.6	642.4	630.5
35°	868.9	858.6	817.2	760.8	698.7	646.9	612.8	592.2	581.8
37.5°	786.0	775.6	740.2	692.8	638.0	590.6	562.5	544.7	535.8
40°	707.5	698.7	664.6	624.7	577.3	535.8	512.2	498.9	490.0
42.5°	630.5	626.1	598.0	561.0	519.6	484.0	464.8	454.4	447.1
45°	568.5	562.5	535.8	500.4	464.8	435.2	419.0	411.5	404.1
47.5°	513.7	506.2	478.1	447.1	414.5	387.8	373.0	365.7	362.6
50°	460.4	453.0	427.8	396.7	364.1	344.9	333.1	325.7	324.1
52.5°	413.0	405.6	377.4	347.8	322.7	306.4	296.0	288.7	285.7
55°	367.2	358.2	334.5	306.4	285.7	270.8	260.6	253.1	250.2
57.5°	325.7	316.8	296.0	269.4	250.2	236.9	227.9	220.6	217.6
60°	285.7	278.3	259.1	233.9	217.6	205.7	196.9	190.9	188.0
62.5°	248.7	242.7	223.5	201.3	188.0	177.6	170.3	164.3	167.3
65°	214.6	208.8	190.9	171.7	161.3	150.9	145.1	145.1	150.9
67.5°	182.1	176.1	161.3	145.1	136.2	128.8	124.3	128.8	133.2
70°	152.4	146.5	133.2	119.9	112.4	106.6	106.6	111.0	114.0
72.5°	124.3	118.4	108.0	97.7	91.8	87.4	91.8	94.7	97.7
75°	97.7	93.3	84.3	77.0	72.5	71.0	75.5	78.5	79.9
77.5°	72.5	69.5	63.7	57.7	54.8	56.2	60.7	62.2	63.7
80°	50.4	48.9	44.4	41.4	41.4	42.9	45.8	47.4	48.9
82.5°	31.0	31.0	28.1	26.6	28.1	31.0	32.5	34.1	34.1
85°	14.8	16.3	14.8	14.8	16.3	19.2	19.2	20.8	20.8
87.5°	4.4	4.4	5.9	5.9	7.5	7.5	7.5	7.5	8.9
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)