

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: P580142

Luminaire Tested: **HC425D010-HM40525830-41RWWC**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580142
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-14)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC425D010-HM40525830-41RWWC
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2465.7 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.15 / 1.21
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

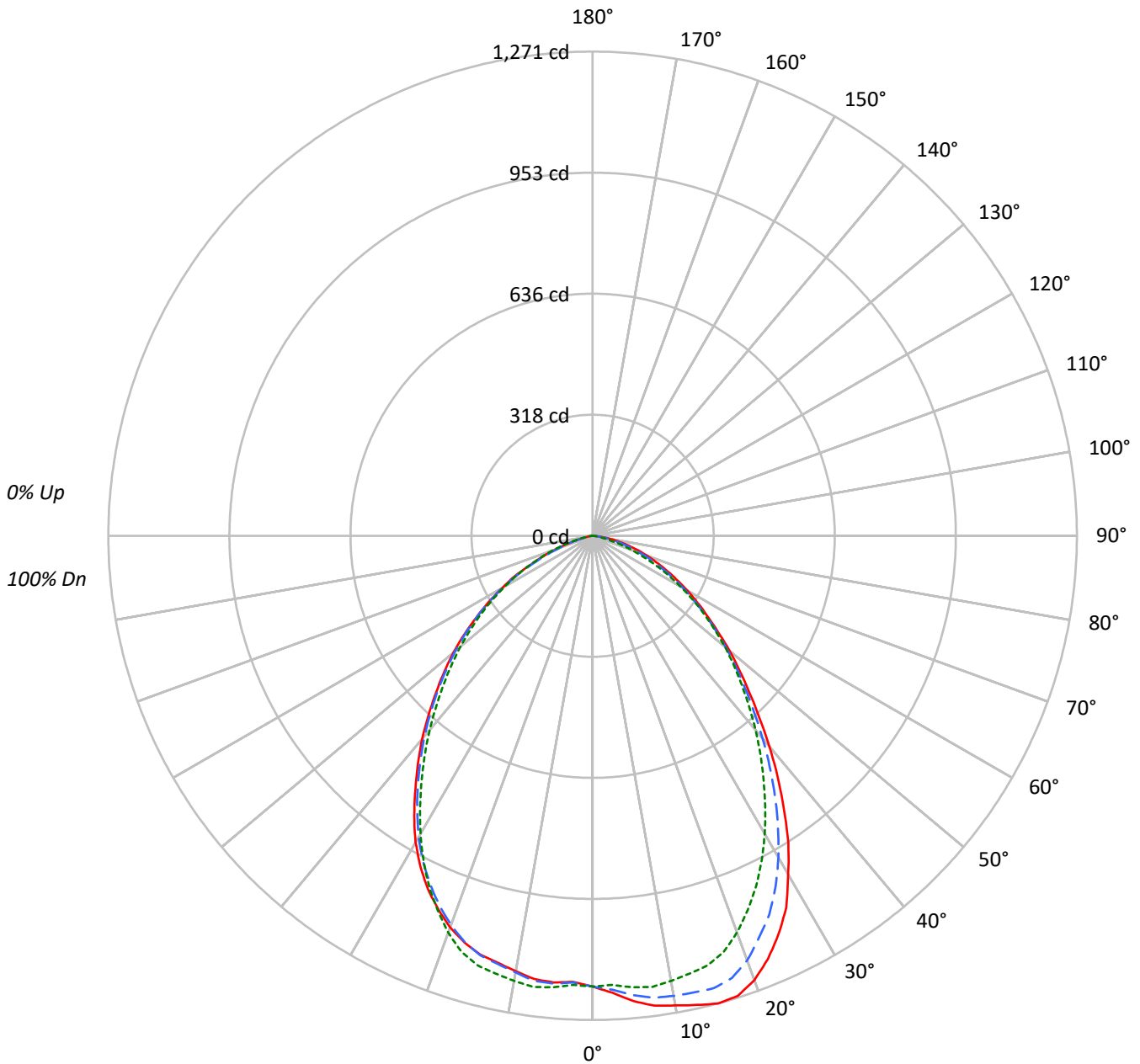
Input Watts (W): 26.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				100				
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88				
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78	76				76				
3	95	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	69	67				67				
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58				58				
5	81	70	61	56	79	68	61	55	66	60	55	65	59	54	63	58	54	52				52				
6	75	63	55	49	74	62	55	49	61	54	49	59	53	48	58	52	48	46				46				
7	70	58	50	44	69	57	49	44	56	49	44	54	48	44	53	47	43	41				41				
8	66	53	45	40	64	53	45	40	51	44	40	50	44	39	49	43	39	37				37				
9	62	49	42	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34				34				
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31				31				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	145943	145943	145943
5°	151849	147292	145720
10°	156799	148607	145388
15°	162315	149060	145383
20°	162869	145451	143561
25°	157110	138179	139268
30°	146202	128669	132329
35°	131695	117736	122058
40°	116109	107108	112003
45°	101522	96499	101243
50°	89901	86831	91417
55°	79073	76664	79782
60°	70603	65472	67445
65°	62079	53206	52272
70°	54204	39201	35739
75°	44988	23638	19063
80°	34095	9092	5683
85°	15851	2264	2264



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.1	4.6
10°-20°	333.1	13.5
20°-30°	482.3	19.6
30°-40°	508.9	20.6
40°-50°	440.4	17.9
50°-60°	326.3	13.2
60°-70°	188.1	7.6
70°-80°	65.7	2.7
80°-90°	6.9	0.3
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°	929.5	37.7
0°-40°	1438.4	58.3
0°-60°	2205.1	89.4
0°-90°	2465.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2465.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1183	1183	1183	1183	1183	
5°	1226	1210	1190	1180	1177	118
15°	1271	1230	1167	1140	1138	358
25°	1154	1097	1015	1009	1023	528
35°	875	835	782	799	811	546
45°	582	566	553	574	580	452
55°	368	360	356	369	371	332
65°	213	200	182	173	179	212
75°	94	80	50	40	40	102
85°	11	6	2	2	2	17
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°	1183.2	1183.2	1183.2	1183.2	1183.2	1183.2	1183.2	1183.2	1183.2
2.5°	1200.8	1197.6	1192.8	1186.5	1180.0	1175.3	1173.6	1172.0	1172.0
5°	1226.4	1220.0	1210.4	1197.6	1189.6	1184.9	1180.0	1176.9	1176.9
7.5°	1244.0	1237.6	1223.2	1205.7	1194.5	1184.9	1178.5	1173.6	1173.6
10°	1251.9	1244.0	1226.4	1204.1	1186.5	1173.6	1164.0	1160.8	1160.8
12.5°	1261.5	1251.9	1228.0	1199.2	1176.9	1160.8	1151.2	1148.1	1148.1
15°	1271.1	1260.0	1229.6	1196.1	1167.3	1148.1	1140.1	1138.5	1138.5
17.5°	1266.4	1251.9	1216.8	1176.9	1144.9	1125.7	1117.7	1117.7	1119.3
20°	1240.8	1226.4	1186.5	1141.6	1108.1	1093.7	1087.3	1090.5	1093.7
22.5°	1202.4	1184.9	1141.6	1098.5	1063.3	1050.5	1050.5	1055.3	1060.1
25°	1154.4	1138.5	1096.9	1049.0	1015.3	1005.7	1009.0	1016.9	1023.3
27.5°	1100.1	1082.5	1039.4	994.5	961.0	956.2	964.2	975.3	978.6
30°	1026.5	1012.1	975.3	932.2	903.4	901.8	913.0	921.0	929.1
32.5°	956.2	940.2	905.0	863.5	842.7	844.3	857.0	866.6	871.5
35°	874.6	860.3	834.7	801.1	781.9	785.1	799.4	809.0	810.6
37.5°	797.9	788.3	762.8	737.1	722.8	729.1	741.9	753.2	753.2
40°	721.1	713.2	694.0	673.2	665.2	673.2	686.0	695.6	695.6
42.5°	647.6	642.7	626.8	612.4	607.6	618.8	630.0	638.0	636.4
45°	582.0	577.3	566.1	554.8	553.2	564.4	574.0	578.8	580.4
47.5°	522.8	519.7	510.1	502.1	502.1	513.2	521.3	526.1	527.7
50°	468.5	465.3	457.4	450.9	452.5	463.7	470.1	474.9	476.4
52.5°	414.1	412.5	406.1	398.2	402.9	411.0	419.0	422.1	423.7
55°	367.7	367.7	359.8	353.4	356.5	364.6	369.4	371.0	371.0
57.5°	326.2	324.6	315.0	308.6	310.2	318.2	321.4	323.0	323.0
60°	286.2	284.6	275.0	265.4	265.4	270.2	271.9	273.4	273.4
62.5°	247.8	246.2	235.1	227.0	223.9	222.3	222.3	225.5	231.9
65°	212.7	211.0	199.8	187.1	182.3	177.5	172.7	175.9	179.1
67.5°	180.6	177.5	166.3	155.1	143.9	135.9	127.9	132.8	139.1
70°	150.3	147.1	134.4	121.5	108.7	96.0	89.5	96.0	99.1
72.5°	121.5	118.3	105.6	92.7	76.8	64.0	62.3	64.0	65.6
75°	94.4	92.7	79.9	65.6	49.6	40.0	40.0	40.0	40.0
77.5°	70.3	67.2	54.4	41.5	28.8	22.4	20.8	20.8	20.8
80°	48.0	44.8	33.5	23.9	12.8	9.6	9.6	8.0	8.0
82.5°	27.2	25.6	17.6	9.6	4.7	3.2	3.2	3.2	3.2
85°	11.2	9.6	6.4	3.2	1.6	1.6	1.6	1.6	1.6
87.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
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)