

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: P592709

Luminaire Tested: **HC425D010-HM40525850-41WWWB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P592709
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: HC425D010-HM40525850-41WWWB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2573.6 lumens
Efficiency: N/A
Efficacy: 96.0 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

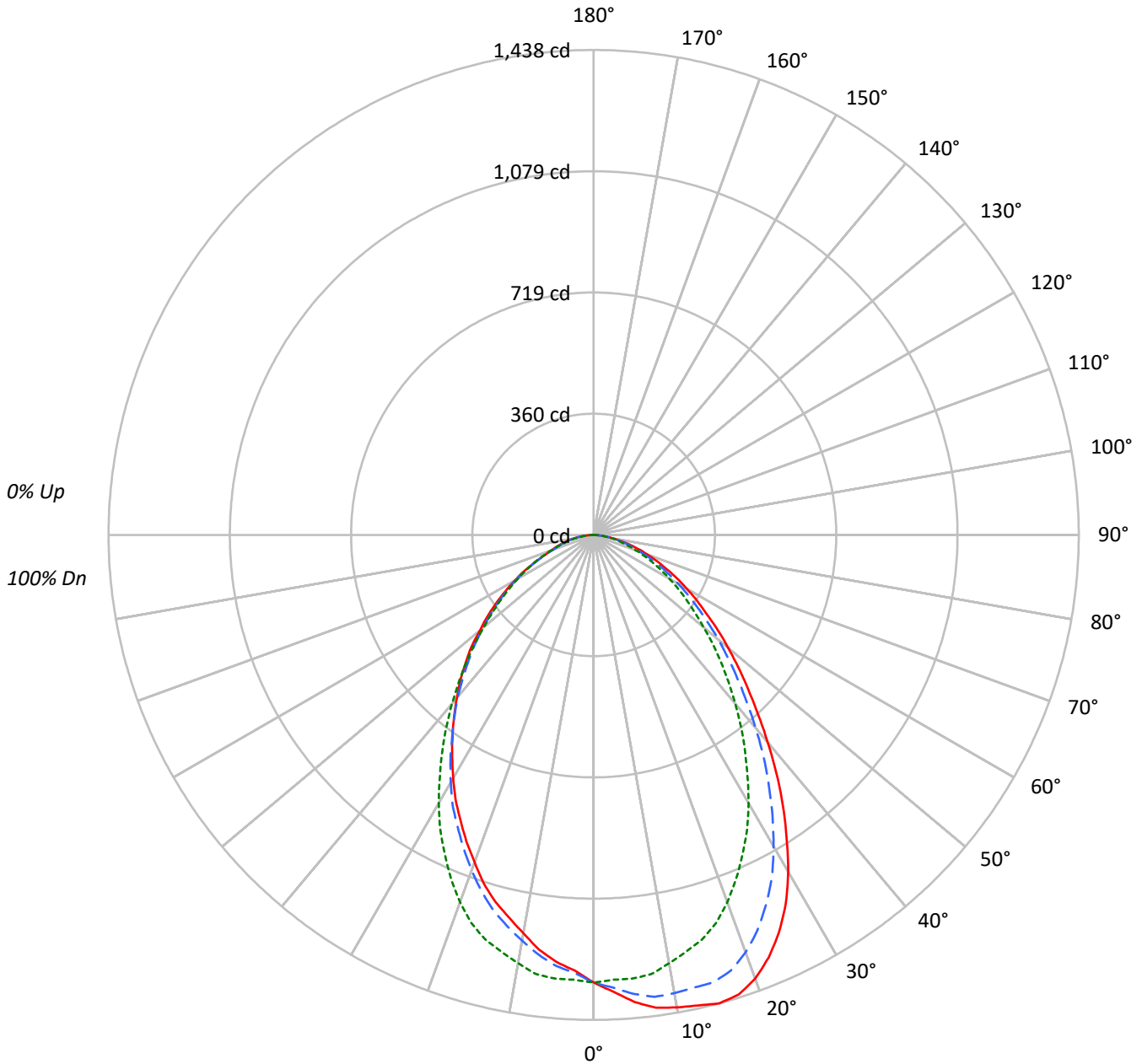
Input Watts (W): 26.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87					87			
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75					75			
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66					66			
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	58					58			
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51					51			
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47	46					46			
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41					41			
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37					37			
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34					34			
10	58	45	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°	163680	163680	163680
5°	172105	163475	157346
10°	178153	161508	150198
15°	183602	158587	143799
20°	183806	152054	135515
25°	176899	142112	127060
30°	164261	130777	118642
35°	147234	117736	109786
40°	129199	105047	101489
45°	112931	93010	93603
50°	99707	81400	84336
55°	87911	72148	75825
60°	78596	63868	66409
65°	69580	56183	56183
70°	60840	47929	47929
75°	51994	40556	45465
80°	41127	36297	41127
85°	26465	31277	38494



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.7	4.9
10°-20°	354.1	13.8
20°-30°	496.0	19.3
30°-40°	511.1	19.9
40°-50°	435.1	16.9
50°-60°	322.4	12.5
60°-70°	202.3	7.9
70°-80°	100.5	3.9
80°-90°	26.4	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°	975.8	37.9
0°-40°	1486.9	57.8
0°-60°	2244.4	87.2
0°-90°	2573.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2573.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1327	1327	1327	1327	1327	
5°	1390	1366	1320	1283	1271	134
15°	1438	1373	1242	1152	1126	404
25°	1300	1210	1044	954	934	594
35°	978	905	782	731	729	610
45°	647	603	533	523	537	502
55°	409	376	336	342	353	370
65°	238	215	192	189	192	238
75°	109	97	85	92	95	116
85°	19	19	22	26	27	24
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°	1327.0	1327.0	1327.0	1327.0	1327.0	1327.0	1327.0	1327.0	1327.0
2.5°	1356.0	1350.8	1344.1	1332.1	1320.3	1310.0	1299.8	1294.6	1292.9
5°	1390.0	1379.9	1366.2	1344.1	1320.3	1299.8	1282.8	1274.2	1270.8
7.5°	1414.0	1403.7	1381.6	1347.5	1313.4	1282.8	1255.4	1243.6	1240.2
10°	1422.4	1410.5	1379.9	1333.8	1289.5	1252.1	1221.5	1206.1	1199.2
12.5°	1429.2	1414.0	1374.8	1320.3	1265.7	1219.7	1187.4	1166.9	1161.7
15°	1437.8	1420.7	1373.0	1306.6	1241.9	1187.4	1151.6	1132.8	1126.1
17.5°	1429.2	1410.5	1354.2	1279.4	1206.1	1146.5	1107.3	1090.3	1083.4
20°	1400.3	1379.9	1316.9	1236.7	1158.4	1097.0	1057.9	1040.8	1032.4
22.5°	1356.0	1333.8	1269.1	1184.0	1103.8	1044.2	1006.7	989.7	984.6
25°	1299.8	1277.6	1209.5	1122.6	1044.2	986.3	954.0	938.7	933.6
27.5°	1233.3	1211.2	1144.8	1059.6	984.6	930.1	904.6	889.2	885.8
30°	1153.3	1131.1	1066.3	988.0	918.2	867.1	846.6	834.7	833.0
32.5°	1064.6	1045.9	986.3	914.8	848.3	805.8	790.4	781.9	780.3
35°	977.8	957.4	904.6	839.9	781.9	744.5	730.8	729.1	729.1
37.5°	889.2	868.8	826.2	766.6	717.1	683.2	678.0	679.7	679.7
40°	802.4	783.6	746.2	696.7	652.4	626.9	625.2	628.6	630.3
42.5°	720.5	705.3	671.2	628.6	591.1	570.7	572.4	579.2	584.3
45°	647.4	633.7	603.0	565.5	533.2	517.9	523.0	531.5	536.6
47.5°	580.9	569.0	540.0	505.9	478.7	468.4	475.3	485.5	492.4
50°	519.6	509.4	482.1	446.3	424.2	417.4	425.9	436.1	439.5
52.5°	465.0	454.9	425.9	395.3	378.2	374.8	383.3	391.8	397.0
55°	408.8	400.3	376.5	349.2	335.5	333.8	342.4	349.2	352.6
57.5°	362.9	354.3	332.2	308.3	296.4	294.7	303.2	308.3	310.0
60°	318.6	310.0	289.6	267.5	258.9	258.9	264.1	267.5	269.2
62.5°	277.6	269.2	250.4	231.7	224.9	224.9	224.9	226.6	231.7
65°	238.4	231.7	214.6	197.6	192.5	189.1	189.1	189.1	192.5
67.5°	202.8	195.9	182.2	167.0	161.8	156.7	155.0	158.4	158.4
70°	168.7	163.6	149.9	138.0	132.9	127.8	126.1	132.9	132.9
72.5°	138.0	132.9	124.3	112.4	107.4	105.6	109.1	112.4	114.1
75°	109.1	103.9	97.1	90.3	85.1	86.9	92.0	93.7	95.4
77.5°	81.7	80.0	73.3	68.2	68.2	69.9	73.3	76.7	78.4
80°	57.9	56.2	52.8	49.5	51.1	54.5	56.2	59.6	57.9
82.5°	35.8	35.8	34.1	34.1	35.8	39.2	40.9	42.6	44.3
85°	18.7	18.7	18.7	20.4	22.1	23.8	25.5	27.2	27.2
87.5°	5.1	6.8	6.8	8.5	10.3	10.3	12.0	12.0	12.0
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)