

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: P580160

Luminaire Tested: **HC425D010-HM40525835-41RWWC**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580160
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-HM40525835-41RWWC
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2555.8 lumens
Efficiency: N/A
Efficacy: 95.4 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

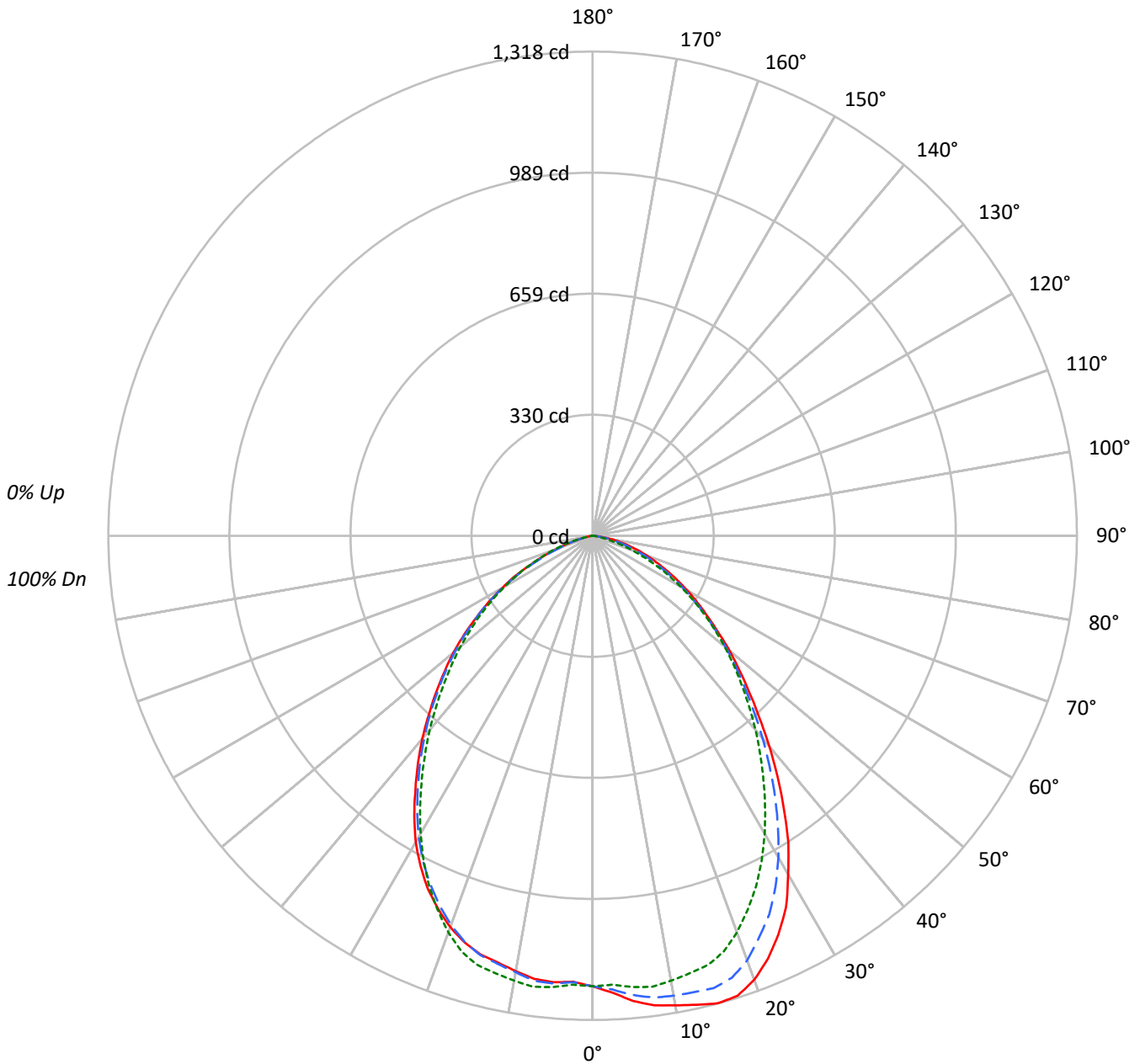
Input Watts (W): 26.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	151271	151271	151271
5°	157408	152678	151044
10°	162547	154031	150711
15°	168266	154500	150682
20°	168829	150754	148798
25°	162853	143242	144358
30°	151557	133369	137143
35°	136513	122043	126530
40°	120360	111021	116093
45°	105238	100022	104941
50°	93183	90016	94775
55°	81976	79481	82685
60°	73193	67865	69912
65°	64326	55162	54169
70°	56187	40644	37038
75°	46609	24496	19730
80°	35303	9376	5825
85°	16417	2406	2406



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.3	4.6
10°-20°	345.2	13.5
20°-30°	500.0	19.6
30°-40°	527.5	20.6
40°-50°	456.5	17.9
50°-60°	338.2	13.2
60°-70°	194.9	7.6
70°-80°	68.1	2.7
80°-90°	7.2	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°	963.5	37.7
0°-40°	1490.9	58.3
0°-60°	2285.6	89.4
0°-90°	2555.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2555.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1226	1226	1226	1226	1226	
5°	1271	1255	1233	1223	1220	122
15°	1318	1274	1210	1182	1180	371
25°	1197	1137	1052	1046	1061	548
35°	907	865	810	829	840	566
45°	603	587	573	595	602	468
55°	381	373	370	383	384	344
65°	220	207	189	179	186	220
75°	98	83	51	41	41	105
85°	12	7	2	2	2	18
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°	1226.4	1226.4	1226.4	1226.4	1226.4	1226.4	1226.4	1226.4	1226.4
2.5°	1244.7	1241.3	1236.4	1229.8	1223.2	1218.2	1216.5	1214.9	1214.9
5°	1271.3	1264.6	1254.7	1241.3	1233.1	1228.1	1223.2	1219.9	1219.9
7.5°	1289.4	1282.8	1267.9	1249.7	1238.1	1228.1	1221.5	1216.5	1216.5
10°	1297.8	1289.4	1271.3	1248.0	1229.8	1216.5	1206.6	1203.3	1203.3
12.5°	1307.7	1297.8	1272.8	1243.0	1219.9	1203.3	1193.4	1190.0	1190.0
15°	1317.7	1306.0	1274.5	1239.8	1209.9	1190.0	1181.7	1180.0	1180.0
17.5°	1312.7	1297.8	1261.3	1219.9	1186.7	1166.8	1158.5	1158.5	1160.2
20°	1286.2	1271.3	1229.8	1183.4	1148.5	1133.6	1127.1	1130.4	1133.6
22.5°	1246.4	1228.1	1183.4	1138.6	1102.1	1088.9	1088.9	1093.9	1098.9
25°	1196.6	1180.0	1137.0	1087.2	1052.5	1042.5	1045.8	1054.1	1060.7
27.5°	1140.3	1122.1	1077.3	1030.9	996.1	991.1	999.4	1011.0	1014.3
30°	1064.1	1049.2	1011.0	966.3	936.4	934.8	946.3	954.7	962.9
32.5°	991.1	974.6	938.1	895.0	873.4	875.1	888.4	898.3	903.3
35°	906.6	891.7	865.2	830.4	810.5	813.8	828.7	838.6	840.3
37.5°	827.0	817.1	790.5	764.1	749.1	755.8	769.1	780.6	780.6
40°	747.5	739.2	719.3	697.7	689.5	697.7	711.0	721.0	721.0
42.5°	671.2	666.2	649.7	634.8	629.8	641.4	653.0	661.3	659.7
45°	603.3	598.4	586.7	575.1	573.4	585.0	595.0	600.0	601.6
47.5°	541.9	538.6	528.7	520.5	520.5	532.0	540.3	545.3	546.9
50°	485.6	482.3	474.1	467.4	469.1	480.6	487.3	492.2	493.9
52.5°	429.2	427.6	421.0	412.6	417.6	426.0	434.2	437.6	439.2
55°	381.2	381.2	372.9	366.2	369.6	377.9	382.8	384.5	384.5
57.5°	338.1	336.4	326.5	319.8	321.5	329.8	333.2	334.7	334.7
60°	296.7	295.0	285.1	275.1	275.1	280.1	281.8	283.4	283.4
62.5°	256.8	255.3	243.6	235.4	232.0	230.4	230.4	233.7	240.4
65°	220.4	218.8	207.2	194.0	189.0	184.0	178.9	182.3	185.6
67.5°	187.3	184.0	172.4	160.8	149.1	140.9	132.5	137.5	144.2
70°	155.8	152.5	139.2	126.0	112.7	99.5	92.8	99.5	102.7
72.5°	126.0	122.6	109.4	96.1	79.6	66.3	64.7	66.3	68.0
75°	97.8	96.1	82.9	68.0	51.4	41.4	41.4	41.4	41.4
77.5°	72.9	69.7	56.3	43.1	29.8	23.3	21.6	21.6	21.6
80°	49.7	46.4	34.8	24.8	13.2	9.9	9.9	8.2	8.2
82.5°	28.2	26.5	18.2	9.9	5.0	3.3	3.3	3.3	3.3
85°	11.6	9.9	6.7	3.3	1.7	1.7	1.7	1.7	1.7
87.5°	1.7	1.7	1.7	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)