

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: P580252

Luminaire Tested: **HC425D010-HM40525940-41WWBB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580252
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC425D010-HM40525940-41WWBB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1862.0 lumens
Efficiency: N/A
Efficacy: 69.5 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.04 / 1.12
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

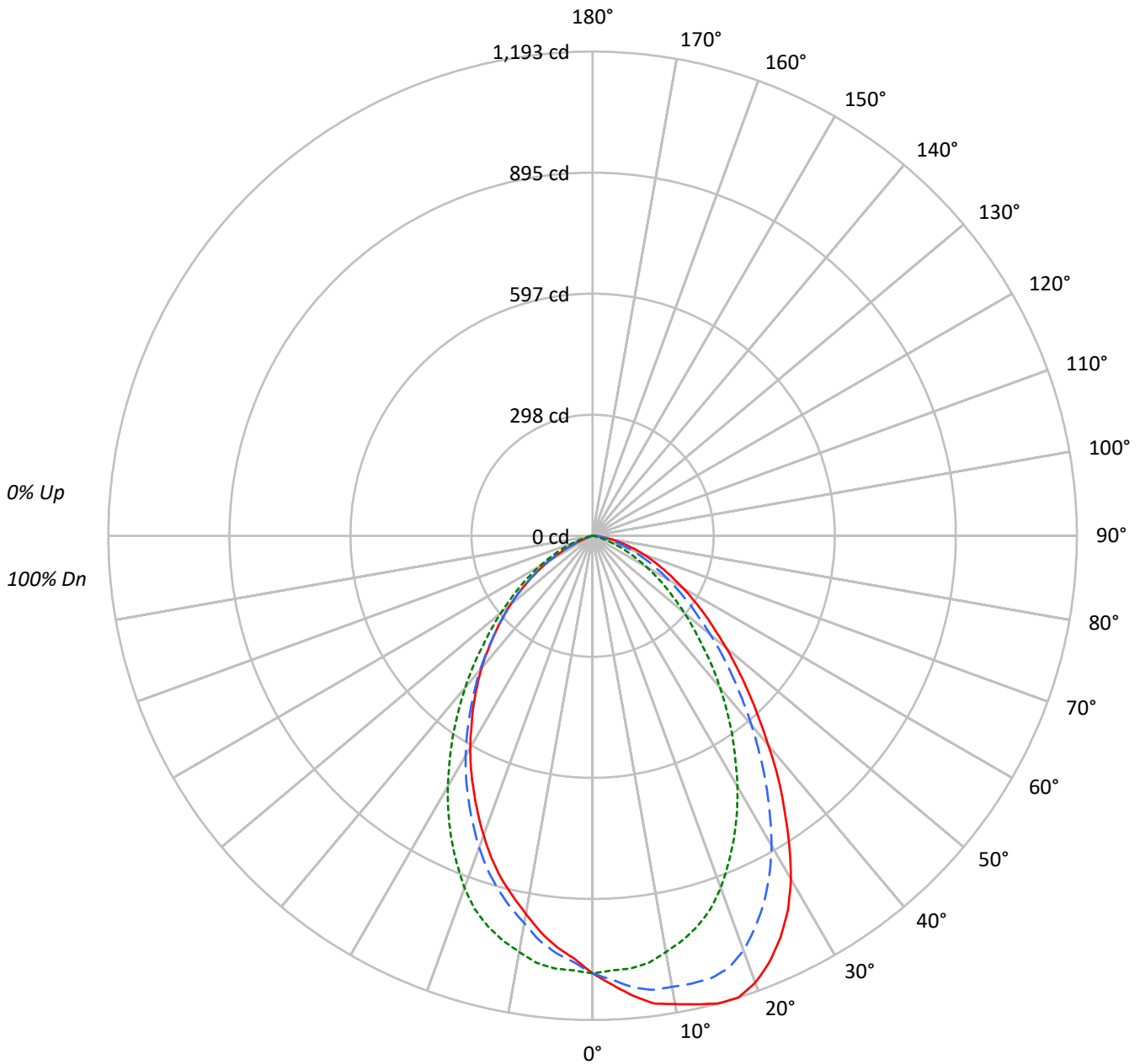
Input Watts (W): 26.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89			89
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	85	83	80	78			78
3	96	87	80	75	94	86	79	74	83	78	73	80	76	72	78	74	71	69			69
4	89	79	72	66	87	78	71	65	75	69	65	73	68	64	71	67	63	61			61
5	83	72	64	58	81	71	64	58	69	62	58	67	61	57	65	60	56	55			55
6	77	66	58	52	75	65	57	52	63	57	52	61	56	51	60	55	51	49			49
7	72	60	53	47	71	59	52	47	58	51	47	57	51	46	55	50	46	44			44
8	68	56	48	43	66	55	48	43	54	47	42	53	47	42	51	46	42	40			40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	43	39	37			37
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	36	34			34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	132967	132967	132967
5°	140879	132521	125885
10°	146741	130409	118498
15°	152342	127275	111415
20°	153786	121168	103054
25°	148795	112062	94329
30°	139123	101565	85841
35°	123985	90286	77111
40°	108380	78512	68641
45°	94405	66600	59378
50°	82398	56493	50909
55°	72213	46837	41224
60°	63178	37818	30269
65°	55074	28194	17015
70°	48109	18248	5554
75°	39460	9531	1430
80°	29407	4333	1137
85°	17407	2264	2264



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.7	5.5
10°-20°	284.7	15.3
20°-30°	393.7	21.1
30°-40°	395.9	21.3
40°-50°	319.4	17.2
50°-60°	216.0	11.6
60°-70°	109.9	5.9
70°-80°	35.2	1.9
80°-90°	5.4	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°	780.2	41.9
0°-40°	1176.1	63.2
0°-60°	1711.5	91.9
0°-90°	1862.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1862.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1078	1078	1078	1078	1078	
5°	1138	1116	1070	1032	1017	110
15°	1193	1128	997	902	872	336
25°	1093	998	823	722	693	500
35°	823	744	600	524	512	515
45°	541	485	382	340	340	419
55°	336	290	218	190	192	302
65°	189	153	97	63	58	189
75°	83	58	20	5	3	89
85°	12	6	2	2	2	16
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°	1078.0	1078.0	1078.0	1078.0	1078.0	1078.0	1078.0	1078.0	1078.0
2.5°	1107.1	1101.0	1094.8	1084.1	1071.9	1059.6	1051.9	1045.8	1042.7
5°	1137.8	1130.1	1116.4	1093.3	1070.3	1048.8	1032.0	1021.3	1016.7
7.5°	1162.3	1151.6	1128.5	1096.4	1061.1	1027.4	1005.9	990.6	984.5
10°	1171.6	1159.3	1128.5	1085.6	1041.2	999.7	969.1	953.8	946.1
12.5°	1182.3	1168.4	1130.1	1076.5	1021.3	972.2	937.0	917.0	909.3
15°	1193.0	1174.6	1128.5	1062.6	996.7	940.0	901.6	881.7	872.5
17.5°	1193.0	1171.6	1116.4	1039.7	964.5	904.7	861.8	838.7	831.1
20°	1171.6	1147.0	1087.2	1002.9	923.1	858.7	817.3	794.3	785.1
22.5°	1137.8	1110.1	1045.8	958.4	874.1	811.2	769.8	748.3	739.0
25°	1093.3	1065.7	998.3	907.7	823.4	760.6	722.2	702.4	693.1
27.5°	1041.2	1010.5	943.1	852.6	769.8	709.9	674.7	656.3	648.6
30°	976.8	947.7	881.7	792.8	713.1	657.9	625.6	608.8	602.7
32.5°	901.6	877.1	812.7	729.9	654.7	604.1	575.0	561.2	555.1
35°	823.4	800.5	743.7	667.0	599.6	552.0	524.4	515.3	512.1
37.5°	749.9	729.9	674.7	604.1	542.8	501.4	476.9	470.8	467.6
40°	673.1	659.3	608.8	544.4	487.6	450.8	430.9	426.3	426.3
42.5°	604.1	588.8	544.4	486.0	435.5	398.6	384.9	380.2	381.8
45°	541.2	526.0	484.6	430.9	381.8	351.1	340.4	340.4	340.4
47.5°	483.0	469.2	430.9	375.7	335.8	311.3	300.5	300.5	302.1
50°	429.4	420.1	377.2	329.7	294.4	271.4	263.7	262.3	265.3
52.5°	378.8	368.1	329.7	286.8	253.0	234.6	226.9	225.5	226.9
55°	335.8	323.6	289.8	248.4	217.8	199.4	190.1	188.7	191.7
57.5°	294.4	285.2	250.0	213.2	184.0	165.6	157.9	154.9	156.4
60°	256.1	246.9	214.6	179.4	153.3	134.9	124.2	121.1	122.7
62.5°	220.8	213.2	182.4	148.7	122.7	105.8	95.1	87.4	90.4
65°	188.7	181.0	153.3	119.6	96.6	78.2	62.9	56.8	58.3
67.5°	161.0	151.9	125.8	95.1	72.0	52.2	35.2	32.2	32.2
70°	133.4	124.2	101.2	73.6	50.6	27.5	15.4	15.4	15.4
72.5°	107.4	99.7	78.2	55.2	32.2	12.3	6.1	6.1	6.1
75°	82.8	76.7	58.3	38.4	20.0	6.1	4.6	3.0	3.0
77.5°	61.3	55.2	41.4	26.1	12.3	3.0	3.0	3.0	3.0
80°	41.4	36.8	27.5	15.4	6.1	1.6	1.6	1.6	1.6
82.5°	24.5	21.5	15.4	7.7	3.0	1.6	1.6	1.6	1.6
85°	12.3	9.1	6.1	3.0	1.6	1.6	1.6	1.6	1.6
87.5°	3.0	1.6	1.6	1.6	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)