

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: P580214

Luminaire Tested: **HC425D010-HM40525930-41RWWC**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580214
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-HM40525930-41RWWC
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2166.9 lumens
Efficiency: N/A
Efficacy: 80.9 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

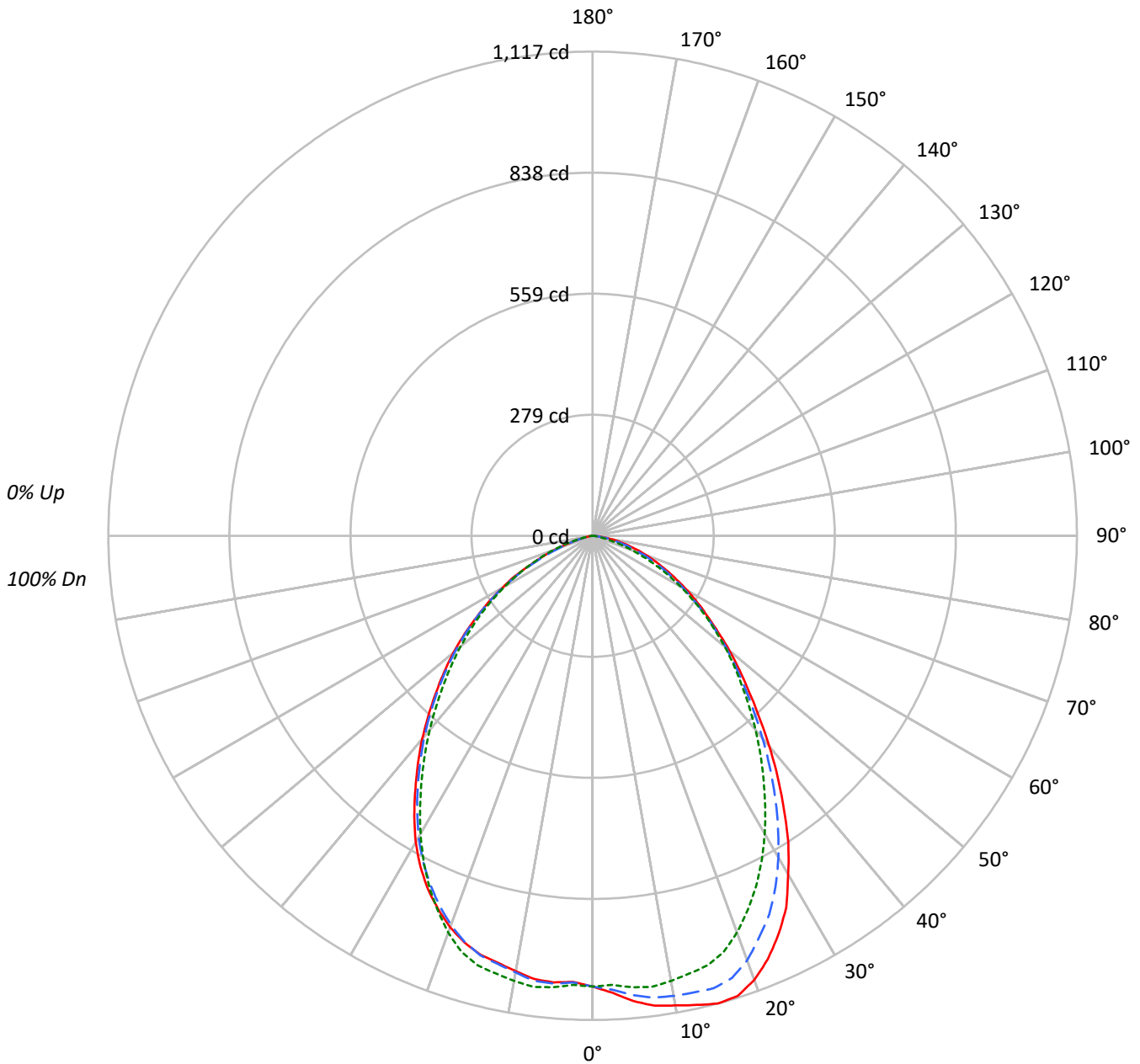
Input Watts (W): 26.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	128255	128255	128255
5°	133437	129450	128051
10°	137798	130584	127778
15°	142650	130991	127761
20°	143128	127823	126156
25°	138070	121426	122405
30°	128498	113073	116278
35°	115734	103462	107271
40°	102036	94130	98413
45°	89207	84794	88980
50°	79002	76296	80345
55°	69503	67396	70127
60°	62043	57553	59280
65°	54520	46756	45939
70°	47640	34441	31448
75°	39508	20778	16728
80°	29904	8027	4972
85°	13869	1981	1981



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.3	4.6
10°-20°	292.7	13.5
20°-30°	423.9	19.6
30°-40°	447.2	20.6
40°-50°	387.0	17.9
50°-60°	286.7	13.2
60°-70°	165.3	7.6
70°-80°	57.7	2.7
80°-90°	6.1	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°	816.9	37.7
0°-40°	1264.1	58.3
0°-60°	1937.8	89.4
0°-90°	2166.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2166.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1040	1040	1040	1040	1040	
5°	1078	1064	1046	1037	1034	104
15°	1117	1081	1026	1002	1000	314
25°	1014	964	892	887	899	464
35°	769	734	687	703	712	480
45°	511	497	486	504	510	397
55°	323	316	313	325	326	291
65°	187	176	160	152	157	187
75°	83	70	44	35	35	89
85°	10	6	1	1	1	15
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°	1039.8	1039.8	1039.8	1039.8	1039.8	1039.8	1039.8	1039.8	1039.8
2.5°	1055.3	1052.5	1048.3	1042.6	1037.0	1032.8	1031.5	1030.0	1030.0
5°	1077.7	1072.2	1063.7	1052.5	1045.5	1041.3	1037.0	1034.2	1034.2
7.5°	1093.2	1087.6	1074.9	1059.5	1049.6	1041.3	1035.6	1031.5	1031.5
10°	1100.2	1093.2	1077.7	1058.1	1042.6	1031.5	1023.0	1020.2	1020.2
12.5°	1108.7	1100.2	1079.2	1053.9	1034.2	1020.2	1011.7	1008.9	1008.9
15°	1117.1	1107.3	1080.6	1051.1	1025.8	1008.9	1001.9	1000.5	1000.5
17.5°	1112.9	1100.2	1069.4	1034.2	1006.2	989.2	982.2	982.2	983.6
20°	1090.4	1077.7	1042.6	1003.3	973.8	961.1	955.5	958.3	961.1
22.5°	1056.7	1041.3	1003.3	965.4	934.5	923.2	923.2	927.5	931.7
25°	1014.5	1000.5	963.9	921.8	892.2	883.9	886.7	893.7	899.4
27.5°	966.8	951.3	913.4	874.1	844.5	840.3	847.3	857.1	860.0
30°	902.2	889.4	857.1	819.2	793.9	792.6	802.4	809.4	816.4
32.5°	840.3	826.2	795.4	758.8	740.5	742.0	753.2	761.6	765.8
35°	768.6	756.0	733.5	704.0	687.1	689.9	702.6	711.0	712.4
37.5°	701.2	692.8	670.3	647.8	635.2	640.8	652.0	661.8	661.8
40°	633.7	626.7	609.9	591.6	584.6	591.6	602.8	611.2	611.2
42.5°	569.1	564.8	550.8	538.2	534.0	543.8	553.7	560.7	559.3
45°	511.4	507.3	497.4	487.6	486.1	496.1	504.4	508.7	510.1
47.5°	459.5	456.7	448.2	441.2	441.2	451.0	458.0	462.3	463.7
50°	411.7	408.9	401.9	396.3	397.6	407.5	413.1	417.4	418.7
52.5°	364.0	362.5	356.9	349.9	354.1	361.2	368.2	371.0	372.3
55°	323.2	323.2	316.1	310.6	313.4	320.4	324.6	326.1	326.1
57.5°	286.7	285.3	276.8	271.2	272.7	279.7	282.5	283.8	283.8
60°	251.5	250.1	241.7	233.3	233.3	237.4	238.9	240.3	240.3
62.5°	217.8	216.4	206.6	199.5	196.7	195.3	195.3	198.1	203.8
65°	186.8	185.5	175.7	164.4	160.2	156.0	151.7	154.6	157.4
67.5°	158.7	156.0	146.1	136.3	126.4	119.4	112.4	116.6	122.3
70°	132.1	129.3	118.0	106.8	95.5	84.3	78.7	84.3	87.2
72.5°	106.8	104.0	92.7	81.5	67.4	56.2	54.8	56.2	57.6
75°	82.9	81.5	70.2	57.6	43.6	35.1	35.1	35.1	35.1
77.5°	61.9	59.0	47.8	36.6	25.3	19.6	18.3	18.3	18.3
80°	42.1	39.3	29.5	21.1	11.3	8.5	8.5	7.0	7.0
82.5°	23.9	22.5	15.5	8.5	4.2	2.8	2.8	2.8	2.8
85°	9.8	8.5	5.6	2.8	1.4	1.4	1.4	1.4	1.4
87.5°	1.4	1.4	1.4	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)