

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: P580196

Luminaire Tested: **HC425D010-HM40525927-41RWWC**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580196
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-HM40525927-41RWWC
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1947.6 lumens
Efficiency: N/A
Efficacy: 72.7 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

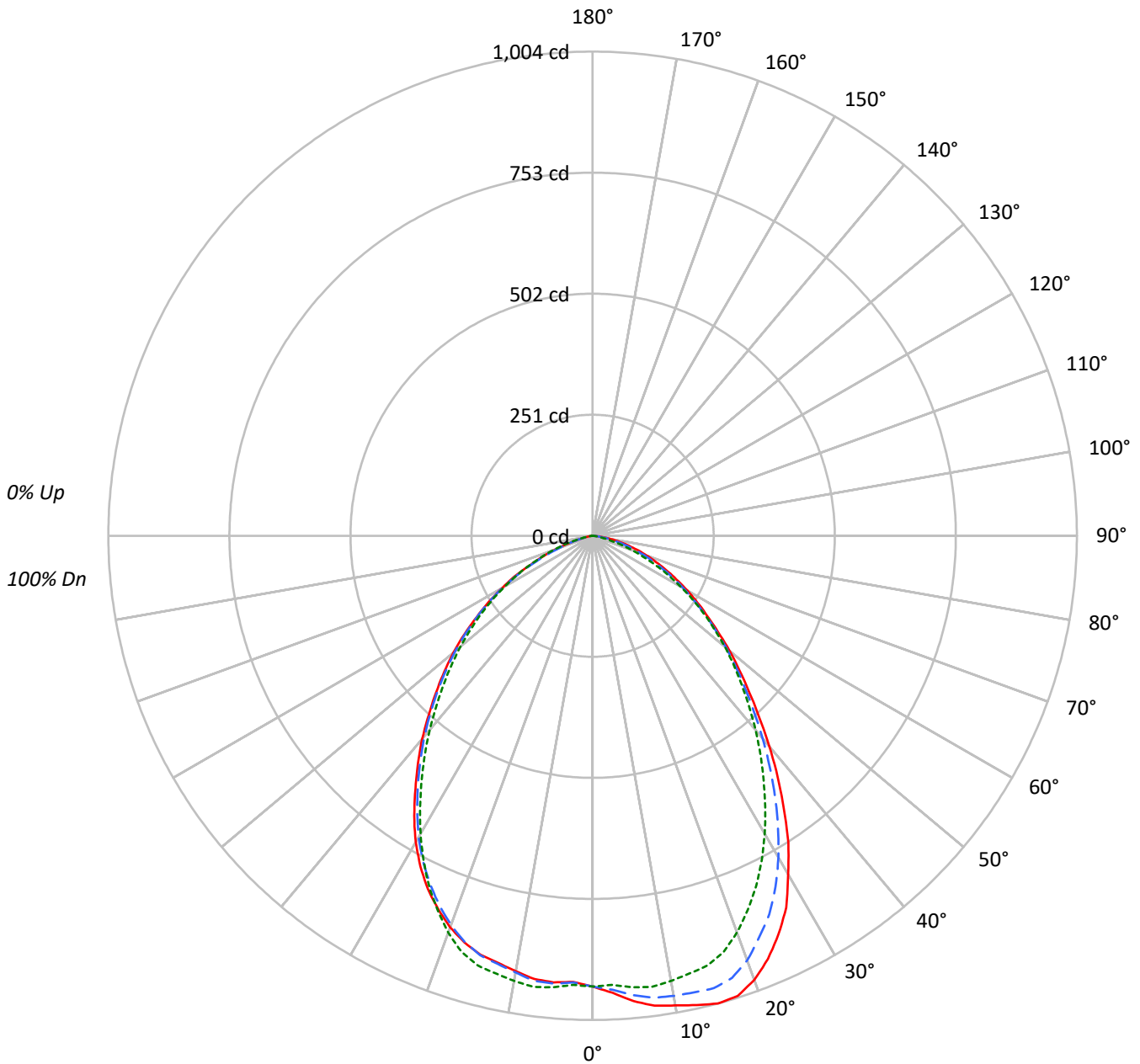
Input Watts (W): 26.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	62	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°	115279	115279	115279
5°	119941	116351	115100
10°	123858	117383	114853
15°	128220	117749	114825
20°	128650	114893	113397
25°	124107	109150	110021
30°	115480	101636	104513
35°	104019	92996	96430
40°	91715	84598	88462
45°	80189	76229	79979
50°	71019	68582	72228
55°	62471	60579	63009
60°	55752	51731	53285
65°	49033	41999	41298
70°	42844	30979	28274
75°	35505	18682	15060
80°	26921	7103	4475
85°	12454	1698	1698



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.1	4.6
10°-20°	263.1	13.5
20°-30°	381.0	19.6
30°-40°	402.0	20.6
40°-50°	347.9	17.9
50°-60°	257.7	13.2
60°-70°	148.6	7.6
70°-80°	51.9	2.7
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°	734.2	37.7
0°-40°	1136.2	58.3
0°-60°	1741.7	89.4
0°-90°	1947.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1947.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	935	935	935	935	935	
5°	969	956	940	932	930	93
15°	1004	971	922	900	899	282
25°	912	866	802	797	808	417
35°	691	659	618	631	640	431
45°	460	447	437	453	458	357
55°	290	284	282	292	293	262
65°	168	158	144	136	142	168
75°	74	63	39	32	32	80
85°	9	5	1	1	1	14
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°	934.6	934.6	934.6	934.6	934.6	934.6	934.6	934.6	934.6
2.5°	948.5	946.0	942.2	937.2	932.1	928.3	927.0	925.8	925.8
5°	968.7	963.7	956.2	946.0	939.7	935.9	932.1	929.6	929.6
7.5°	982.6	977.6	966.2	952.3	943.5	935.9	930.9	927.0	927.0
10°	988.9	982.6	968.7	951.1	937.2	927.0	919.5	917.0	917.0
12.5°	996.6	988.9	970.0	947.2	929.6	917.0	909.4	906.8	906.8
15°	1004.1	995.2	971.3	944.7	922.1	906.8	900.5	899.2	899.2
17.5°	1000.3	988.9	961.1	929.6	904.3	889.2	882.9	882.9	884.1
20°	980.1	968.7	937.2	901.8	875.3	863.9	858.8	861.4	863.9
22.5°	949.8	935.9	901.8	867.6	839.9	829.8	829.8	833.5	837.4
25°	911.9	899.2	866.4	828.6	802.0	794.5	797.0	803.3	808.4
27.5°	869.0	855.1	821.0	785.6	759.0	755.3	761.6	770.4	772.9
30°	810.8	799.4	770.4	736.3	713.6	712.3	721.2	727.5	733.8
32.5°	755.3	742.7	714.9	682.0	665.7	666.9	676.9	684.5	688.4
35°	690.8	679.5	659.3	632.8	617.6	620.2	631.4	639.1	640.4
37.5°	630.2	622.6	602.4	582.2	570.9	575.9	586.1	594.9	594.9
40°	569.6	563.3	548.1	531.8	525.4	531.8	541.8	549.4	549.4
42.5°	511.5	507.7	495.1	483.8	479.9	488.7	497.7	504.0	502.6
45°	459.7	456.0	447.1	438.3	437.0	445.8	453.4	457.2	458.5
47.5°	413.0	410.5	402.9	396.6	396.6	405.4	411.7	415.6	416.8
50°	370.1	367.5	361.2	356.2	357.4	366.2	371.3	375.2	376.4
52.5°	327.1	325.8	320.7	314.5	318.3	324.6	330.9	333.4	334.7
55°	290.5	290.5	284.2	279.1	281.7	288.0	291.7	293.0	293.0
57.5°	257.6	256.4	248.8	243.8	245.0	251.3	253.9	255.2	255.2
60°	226.0	224.8	217.2	209.7	209.7	213.5	214.7	216.0	216.0
62.5°	195.8	194.5	185.6	179.4	176.8	175.6	175.6	178.0	183.1
65°	168.0	166.8	157.8	147.8	143.9	140.2	136.4	139.0	141.5
67.5°	142.7	140.2	131.3	122.5	113.7	107.4	101.0	104.9	109.9
70°	118.8	116.2	106.1	96.0	85.9	75.8	70.7	75.8	78.4
72.5°	96.0	93.5	83.3	73.3	60.6	50.5	49.2	50.5	51.8
75°	74.5	73.3	63.1	51.8	39.2	31.6	31.6	31.6	31.6
77.5°	55.5	53.1	42.9	32.9	22.7	17.7	16.4	16.4	16.4
80°	37.9	35.3	26.5	19.0	10.0	7.6	7.6	6.3	6.3
82.5°	21.5	20.2	13.9	7.6	3.8	2.5	2.5	2.5	2.5
85°	8.8	7.6	5.1	2.5	1.2	1.2	1.2	1.2	1.2
87.5°	1.2	1.2	1.2	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)