

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: P579733

Luminaire Tested: **HC410D010-HM40525835-41RWWC**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P579733
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: HC410D010-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: 1132.2 lumens
Efficiency: N/A
Efficacy: 114.4 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

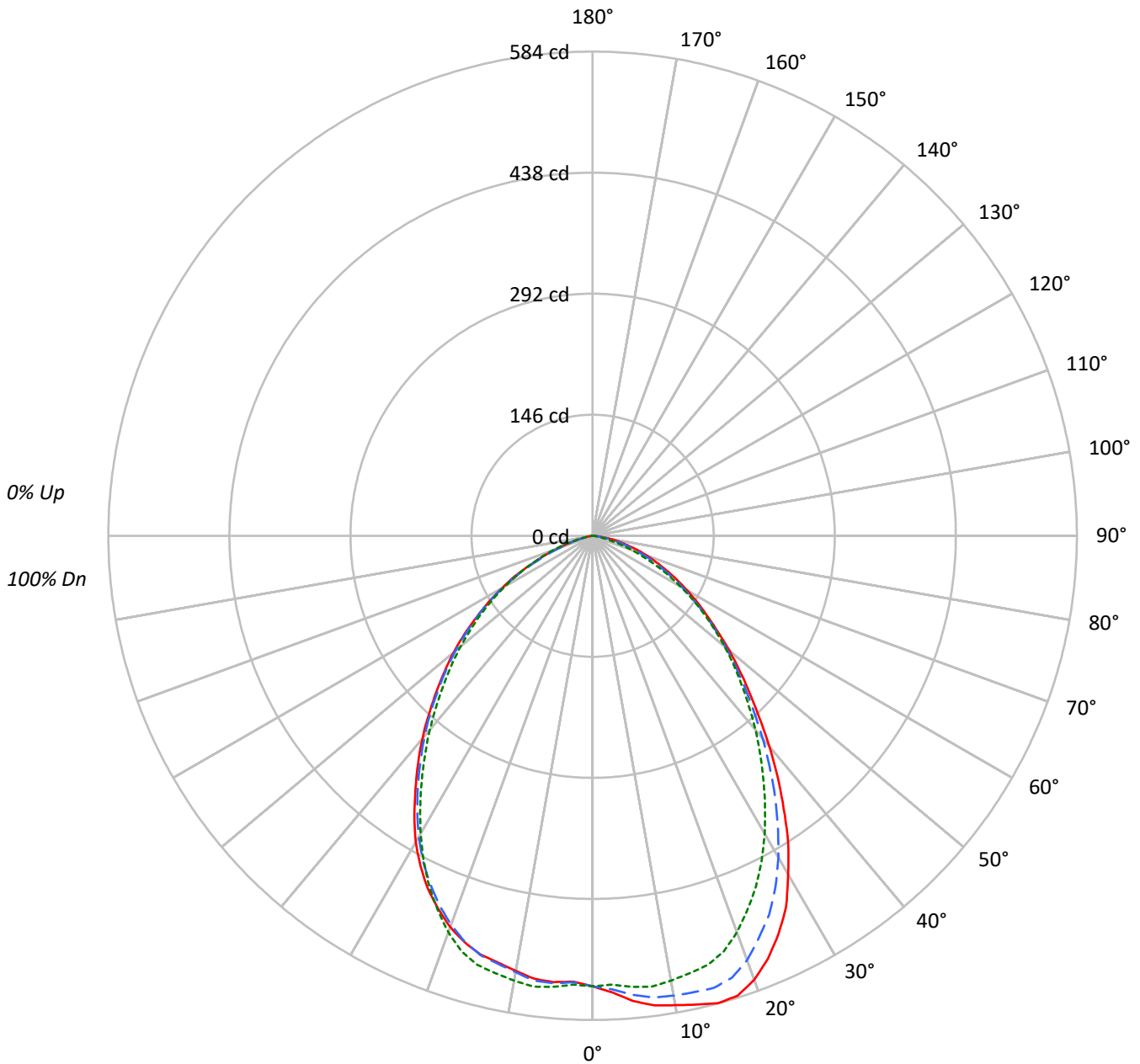
Input Watts (W): 9.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	67014	67014	67014
5°	69734	67629	66911
10°	72005	68235	66757
15°	74537	68445	66760
20°	74793	66786	65920
25°	72145	63448	63952
30°	67140	59079	60759
35°	60472	54057	56045
40°	53329	49174	51429
45°	46610	44307	46487
50°	41276	39875	41986
55°	36321	35225	36644
60°	32415	30072	30960
65°	28486	24458	24020
70°	24884	18032	16409
75°	20683	10866	8721
80°	15698	4191	2557
85°	7218	991	991



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.4	4.6
10°-20°	152.9	13.5
20°-30°	221.5	19.6
30°-40°	233.7	20.6
40°-50°	202.2	17.9
50°-60°	149.8	13.2
60°-70°	86.4	7.6
70°-80°	30.2	2.7
80°-90°	3.2	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°	426.8	37.7
0°-40°	660.5	58.3
0°-60°	1012.5	89.4
0°-90°	1132.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1132.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	543	543	543	543	543	
5°	563	556	546	542	540	54
15°	584	565	536	524	523	164
25°	530	504	466	463	470	243
35°	402	383	359	367	372	251
45°	267	260	254	264	266	207
55°	169	165	164	170	170	152
65°	98	92	84	79	82	98
75°	43	37	23	18	18	47
85°	5	3	1	1	1	8
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°	543.3	543.3	543.3	543.3	543.3	543.3	543.3	543.3	543.3
2.5°	551.4	549.9	547.7	544.8	541.8	539.6	539.0	538.2	538.2
5°	563.2	560.2	555.8	549.9	546.2	544.1	541.8	540.4	540.4
7.5°	571.3	568.3	561.7	553.6	548.5	544.1	541.1	539.0	539.0
10°	574.9	571.3	563.2	552.8	544.8	539.0	534.5	533.0	533.0
12.5°	579.2	574.9	563.9	550.7	540.4	533.0	528.6	527.1	527.1
15°	583.7	578.6	564.6	549.2	536.0	527.1	523.5	522.8	522.8
17.5°	581.5	574.9	558.8	540.4	525.6	516.9	513.2	513.2	513.9
20°	569.8	563.2	544.8	524.3	508.8	502.2	499.2	500.7	502.2
22.5°	552.2	544.1	524.3	504.4	488.2	482.4	482.4	484.6	486.8
25°	530.1	522.8	503.7	481.6	466.2	461.8	463.3	466.9	469.9
27.5°	505.2	497.1	477.3	456.7	441.3	439.0	442.7	447.9	449.4
30°	471.4	464.8	447.9	428.0	414.8	414.1	419.2	422.9	426.6
32.5°	439.0	431.8	415.6	396.5	386.9	387.7	393.5	398.0	400.1
35°	401.6	395.0	383.3	367.8	359.0	360.5	367.1	371.6	372.2
37.5°	366.3	362.0	350.3	338.4	331.8	334.8	340.7	345.8	345.8
40°	331.2	327.5	318.6	309.1	305.4	309.1	315.0	319.4	319.4
42.5°	297.4	295.2	287.8	281.2	279.0	284.2	289.3	292.9	292.2
45°	267.2	265.0	259.9	254.8	254.0	259.1	263.6	265.8	266.5
47.5°	240.1	238.6	234.2	230.6	230.6	235.7	239.3	241.6	242.3
50°	215.1	213.6	210.0	207.0	207.8	212.9	215.9	218.0	218.8
52.5°	190.2	189.5	186.5	182.9	185.0	188.7	192.3	193.8	194.6
55°	168.9	168.9	165.2	162.3	163.8	167.4	169.6	170.4	170.4
57.5°	149.8	149.1	144.6	141.7	142.5	146.1	147.6	148.3	148.3
60°	131.4	130.6	126.3	121.9	121.9	124.0	124.8	125.5	125.5
62.5°	113.8	113.1	107.9	104.2	102.8	102.1	102.1	103.6	106.5
65°	97.6	97.0	91.7	85.9	83.8	81.5	79.3	80.8	82.3
67.5°	83.0	81.5	76.4	71.2	66.1	62.4	58.7	61.0	63.8
70°	69.0	67.6	61.7	55.8	50.0	44.0	41.1	44.0	45.5
72.5°	55.8	54.3	48.5	42.6	35.3	29.4	28.7	29.4	30.2
75°	43.4	42.6	36.8	30.2	22.8	18.3	18.3	18.3	18.3
77.5°	32.3	30.8	24.9	19.1	13.2	10.2	9.6	9.6	9.6
80°	22.1	20.6	15.4	11.0	5.9	4.4	4.4	3.6	3.6
82.5°	12.5	11.7	8.1	4.4	2.2	1.5	1.5	1.5	1.5
85°	5.1	4.4	3.0	1.5	0.7	0.7	0.7	0.7	0.7
87.5°	0.7	0.7	0.7	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)