

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: P581603

Luminaire Tested: **HC610D010-HM60525835-61WWW**

Issue Date: 9/16/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581603  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-16)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/16/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC610D010-HM60525835-61WWW  
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1097.4 lumens  
Efficiency: N/A  
Efficacy: 110.9 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.06 / 1.14  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

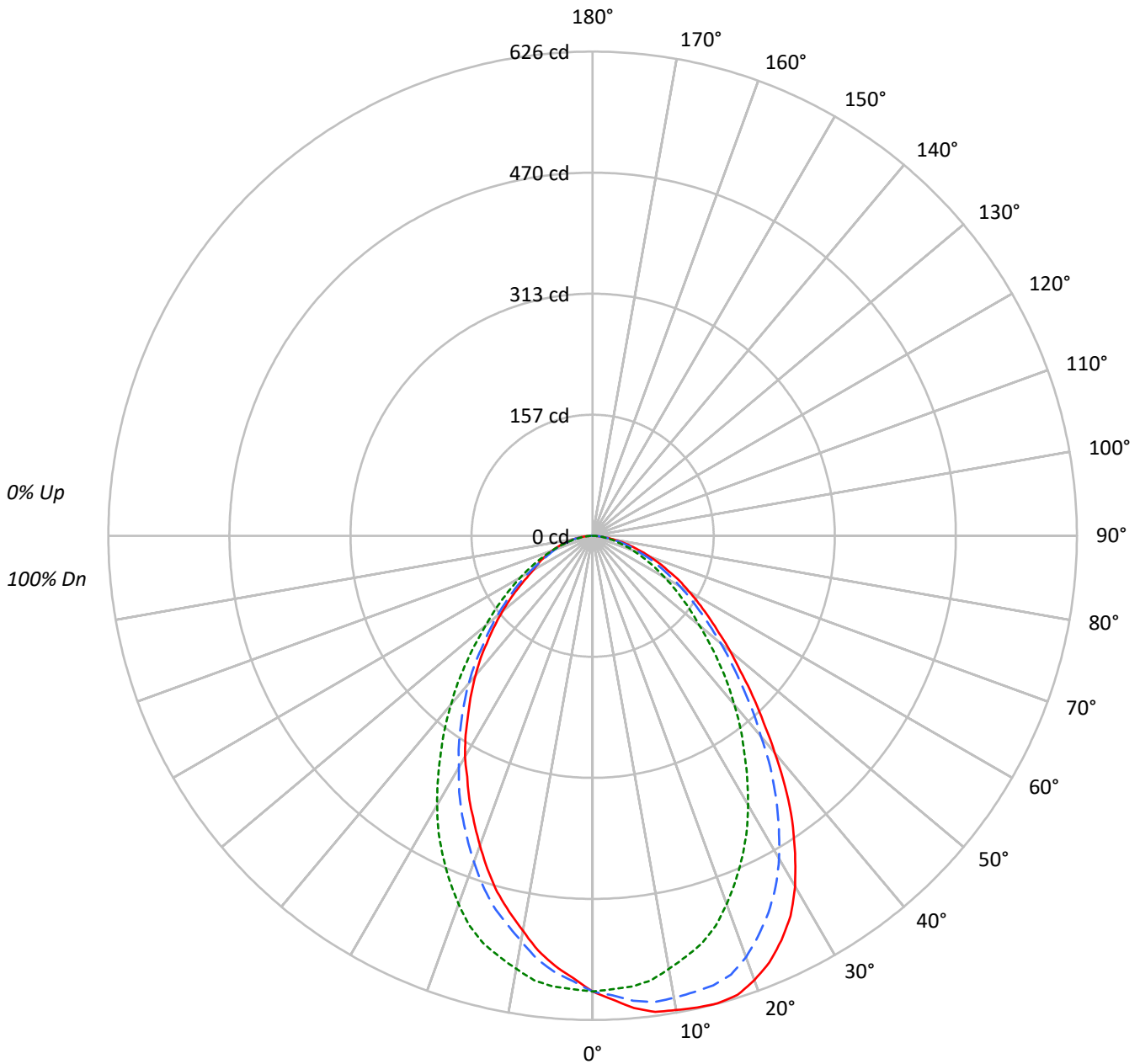
Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	95	89	84	99	93	88	83	90	85	81	86	83	79	83	80	78	76																			
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66																			
4	87	76	69	63	85	75	68	62	73	67	62	71	65	61	69	64	60	58																			
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	51																			
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46																			
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	42																			
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38																			
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34																			
10	58	46	39	34	57	45	38	34	44	38	33	44	38	33	43	37	33	32																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	32300	32300	32300
5°	33733	32198	30718
10°	34652	31646	28868
15°	35511	30959	27049
20°	35668	29560	24846
25°	34913	27679	22780
30°	33125	25447	20883
35°	30089	22874	18732
40°	26213	20374	16853
45°	22685	17824	14815
50°	19812	15351	12989
55°	17510	13495	11144
60°	15733	11830	9659
65°	14100	10273	9352
70°	12566	8768	8768
75°	10908	7392	8218
80°	8745	6251	7514
85°	5975	5472	6479



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.4	5.0
10°-20°	153.9	14.0
20°-30°	214.5	19.5
30°-40°	221.0	20.1
40°-50°	183.2	16.7
50°-60°	131.7	12.0
60°-70°	83.8	7.6
70°-80°	43.0	3.9
80°-90°	10.9	1.0
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°	423.8	38.6
0°-40°	644.8	58.8
0°-60°	959.6	87.4
0°-90°	1097.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1097.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	589	589	589	589	589	
5°	613	604	585	566	558	59
15°	626	602	546	496	477	176
25°	577	538	458	399	377	264
35°	450	413	342	297	280	279
45°	293	272	230	201	191	226
55°	183	168	141	125	117	165
65°	109	97	79	69	72	109
75°	52	44	35	36	39	55
85°	10	9	9	10	10	12
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°	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2
2.5°	600.3	597.9	594.8	591.6	586.7	581.2	576.4	574.8	572.5
5°	613.0	609.8	603.5	595.5	585.1	574.8	566.1	560.6	558.2
7.5°	620.9	616.9	608.2	594.8	579.6	564.5	551.8	543.9	540.8
10°	622.5	618.5	606.6	588.3	568.5	547.9	532.0	522.5	518.6
12.5°	624.9	619.3	604.3	582.8	557.4	533.6	513.8	501.9	498.0
15°	625.7	619.3	601.9	575.6	545.5	517.0	495.6	481.3	476.6
17.5°	622.5	615.4	594.8	562.9	528.9	498.8	473.4	458.3	452.0
20°	611.4	603.5	579.6	543.9	506.7	475.0	448.8	433.0	425.9
22.5°	597.1	586.7	559.8	521.7	482.9	449.6	423.5	407.5	400.4
25°	577.2	567.7	537.6	497.2	457.6	422.7	398.8	382.2	376.6
27.5°	554.2	543.1	512.2	471.8	431.4	396.4	373.4	358.4	351.3
30°	523.3	513.0	482.1	441.7	402.0	369.5	345.7	333.0	329.9
32.5°	486.9	478.2	448.0	409.9	371.9	341.8	321.9	308.5	305.3
35°	449.6	439.3	413.1	377.4	341.8	314.8	296.6	284.7	279.9
37.5°	409.1	399.6	377.4	345.7	314.0	288.7	272.8	262.5	257.8
40°	366.3	359.2	338.6	313.2	284.7	262.5	248.9	240.2	235.5
42.5°	326.7	319.6	305.3	281.5	257.8	237.8	225.9	218.0	214.1
45°	292.6	286.3	272.0	251.3	229.9	213.3	200.6	195.0	191.1
47.5°	258.5	255.4	242.6	223.6	203.8	189.5	180.8	174.4	171.3
50°	232.3	228.3	216.4	196.6	180.0	168.9	161.0	155.4	152.3
52.5°	205.3	201.4	190.3	173.6	160.2	149.9	142.0	137.2	134.0
55°	183.2	180.0	168.1	153.0	141.2	132.4	125.3	119.8	116.6
57.5°	162.6	159.4	148.3	134.0	123.7	115.8	109.5	104.7	100.7
60°	143.5	141.2	130.1	116.6	107.9	100.0	94.4	90.4	88.1
62.5°	126.9	122.1	112.6	100.7	92.8	86.5	80.8	78.4	80.0
65°	108.7	106.3	96.8	86.5	79.2	72.9	68.9	70.5	72.1
67.5°	93.6	90.4	82.4	72.9	66.6	61.8	59.4	62.6	63.4
70°	78.4	75.3	68.1	60.2	54.7	51.5	51.5	53.9	54.7
72.5°	64.2	61.8	55.5	49.1	45.2	42.8	44.4	46.0	46.8
75°	51.5	49.1	44.4	38.8	34.9	34.9	36.5	38.0	38.8
77.5°	39.6	38.0	33.3	29.3	27.7	27.7	29.3	30.1	30.9
80°	27.7	26.1	23.8	21.4	19.8	21.4	23.0	23.0	23.8
82.5°	18.2	17.4	15.8	14.3	14.3	15.1	15.8	16.6	16.6
85°	9.5	9.5	8.7	7.9	8.7	9.5	9.5	10.3	10.3
87.5°	3.2	3.2	3.2	3.2	4.0	4.0	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)