

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: P593158

Luminaire Tested: **HC620D010-HM60525950-61WWW**

Issue Date: 9/16/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593158  
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: HC620D010-HM60525950-61WWW  
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1820.5 lumens  
Efficiency: N/A  
Efficacy: 91.0 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

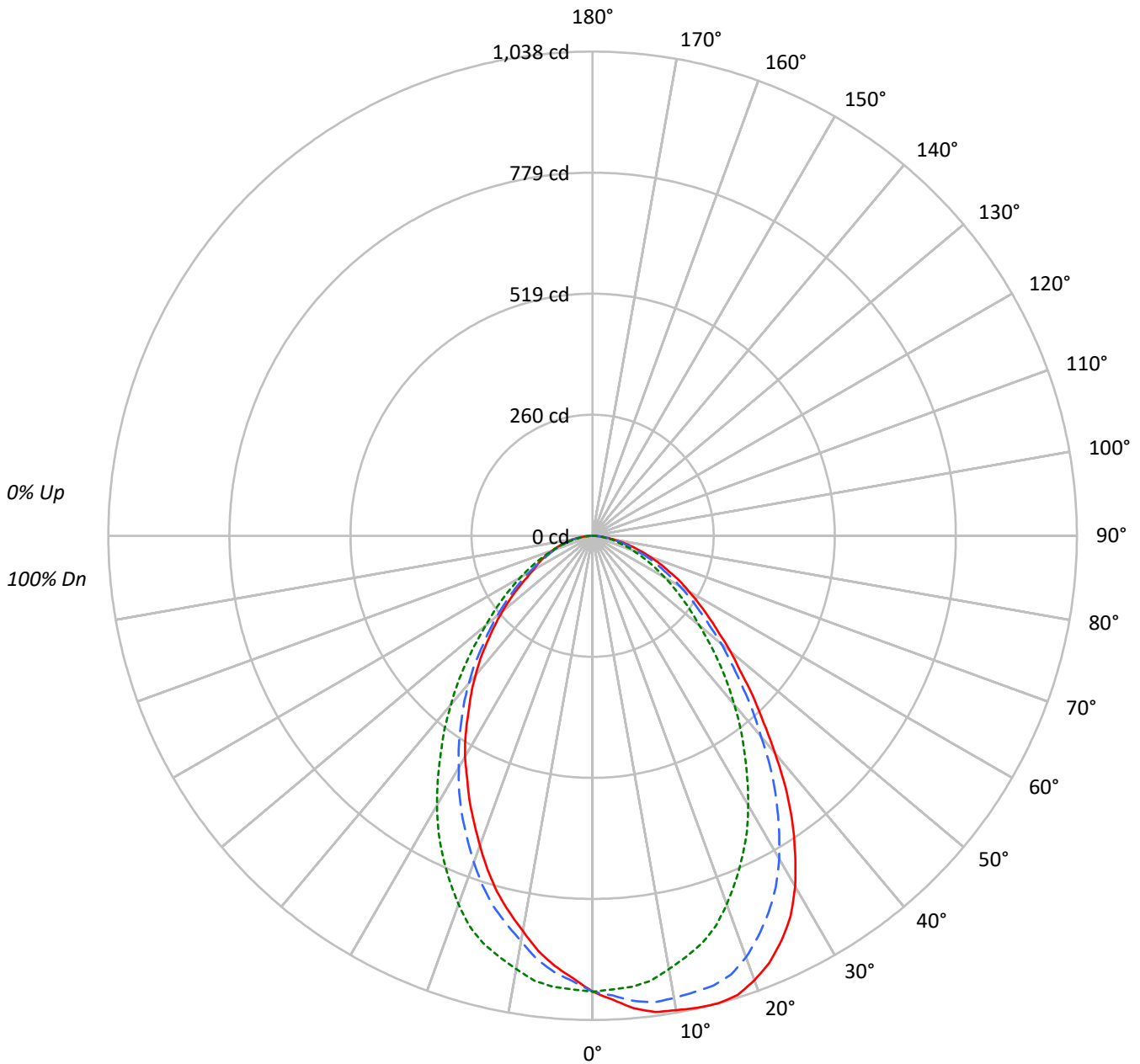
Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					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								
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°	53576	53576	53576
5°	55954	53423	50957
10°	57481	52498	47889
15°	58899	51357	44864
20°	59161	49039	41204
25°	57923	45910	37793
30°	54951	42215	34638
35°	49918	37945	31072
40°	43489	33792	27960
45°	37632	29577	24576
50°	32869	25458	21534
55°	29046	22384	18484
60°	26094	19615	16007
65°	23388	17058	15514
70°	20869	14554	14554
75°	18110	12264	13662
80°	14522	10386	12438
85°	9875	9120	10756



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.9	5.0
10°-20°	255.3	14.0
20°-30°	355.8	19.5
30°-40°	366.6	20.1
40°-50°	303.9	16.7
50°-60°	218.4	12.0
60°-70°	139.1	7.6
70°-80°	71.4	3.9
80°-90°	18.2	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°	703.0	38.6
0°-40°	1069.7	58.8
0°-60°	1591.9	87.4
0°-90°	1820.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1820.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	977	977	977	977	977	
5°	1017	1001	971	939	926	97
15°	1038	998	905	822	790	292
25°	958	892	759	662	625	439
35°	746	685	567	492	464	463
45°	485	451	382	333	317	376
55°	304	279	234	208	193	274
65°	180	160	132	114	120	180
75°	86	74	58	60	64	91
85°	16	14	14	16	17	20
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°	977.3	977.3	977.3	977.3	977.3	977.3	977.3	977.3	977.3
2.5°	995.7	991.8	986.5	981.3	973.4	964.2	956.3	953.6	949.7
5°	1016.8	1011.5	1001.0	987.9	970.8	953.6	939.1	930.0	926.0
7.5°	1029.9	1023.3	1008.9	986.5	961.6	936.5	915.5	902.3	897.1
10°	1032.6	1025.9	1006.2	976.0	943.1	908.9	882.6	866.9	860.3
12.5°	1036.5	1027.3	1002.3	966.8	924.8	885.2	852.4	832.6	826.1
15°	1037.8	1027.3	998.4	955.0	904.9	857.6	822.1	798.4	790.5
17.5°	1032.6	1020.7	986.5	933.9	877.4	827.3	785.3	760.2	749.7
20°	1014.1	1001.0	961.6	902.3	840.6	787.9	744.5	718.2	706.3
22.5°	990.5	973.4	928.6	865.5	801.0	745.9	702.5	676.1	664.3
25°	957.6	941.7	891.8	824.7	759.0	701.1	661.7	634.0	624.8
27.5°	919.4	901.1	849.8	782.7	715.6	657.7	619.5	594.6	582.7
30°	868.1	851.0	799.8	732.7	666.9	613.0	573.5	552.5	547.2
32.5°	807.6	793.2	743.1	680.0	616.9	567.0	534.0	511.7	506.5
35°	745.9	728.7	685.4	626.1	567.0	522.2	491.9	472.2	464.3
37.5°	678.8	662.9	626.1	573.5	520.8	478.8	452.5	435.4	427.5
40°	607.7	595.8	561.6	519.6	472.2	435.4	413.0	398.6	390.7
42.5°	541.9	530.1	506.5	466.9	427.5	394.6	374.9	361.8	355.2
45°	485.4	474.8	451.2	416.9	381.5	353.8	332.8	323.6	317.0
47.5°	428.8	423.5	402.6	370.9	338.1	314.4	299.9	289.4	284.2
50°	385.4	378.9	359.0	326.2	298.5	280.2	267.0	257.8	252.5
52.5°	340.7	334.1	315.7	288.0	265.7	248.6	235.4	227.5	222.3
55°	303.9	298.5	278.8	253.9	234.2	219.7	207.8	198.6	193.4
57.5°	269.7	264.4	246.0	222.3	205.2	192.0	181.5	173.6	167.0
60°	238.0	234.2	215.7	193.4	178.9	165.8	156.6	149.9	146.0
62.5°	210.5	202.6	186.8	167.0	153.9	143.3	134.1	130.2	132.9
65°	180.3	176.3	160.4	143.3	131.5	121.0	114.4	117.0	119.6
67.5°	155.2	149.9	136.8	121.0	110.5	102.6	98.7	103.9	105.3
70°	130.2	125.0	113.1	99.9	90.8	85.5	85.5	89.4	90.8
72.5°	106.5	102.6	92.1	81.6	75.0	71.0	73.6	76.3	77.6
75°	85.5	81.6	73.6	64.5	57.9	57.9	60.5	63.1	64.5
77.5°	65.7	63.1	55.3	48.7	46.0	46.0	48.7	50.0	51.3
80°	46.0	43.4	39.4	35.5	32.9	35.5	38.2	38.2	39.4
82.5°	30.3	28.9	26.3	23.7	23.7	25.0	26.3	27.6	27.6
85°	15.7	15.7	14.5	13.1	14.5	15.7	15.7	17.1	17.1
87.5°	5.2	5.2	5.2	5.2	6.6	6.6	6.6	6.6	6.6
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)