

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: P580627

Luminaire Tested: **HCC4W40D010SL-HM43040927-41WDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580627  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W40D010SL-HM43040927-41WDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

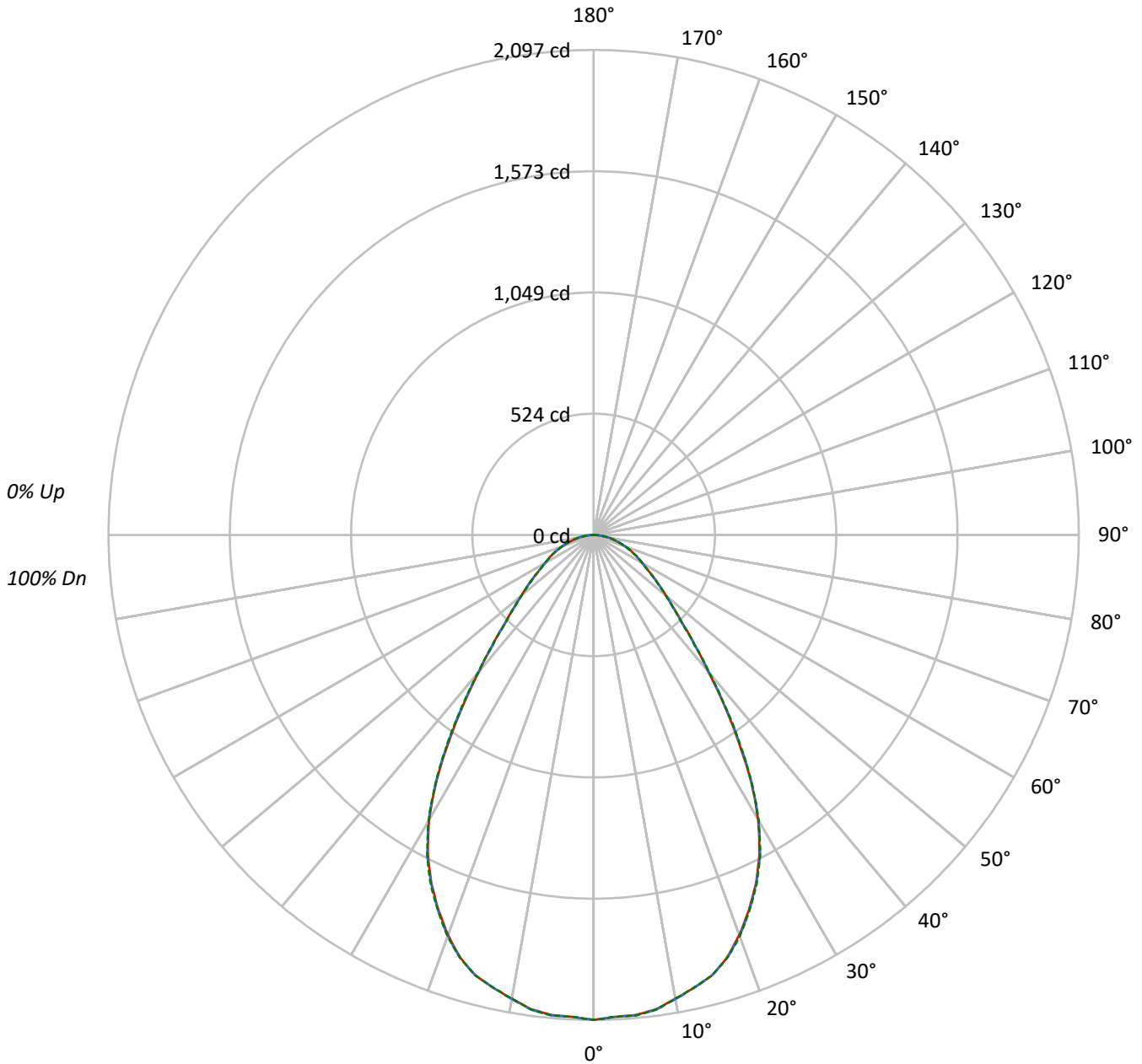
Lumens per Lamp: N/A  
Luminaire Lumens: 3234.9 lumens  
Efficiency: N/A  
Efficacy: 78.9 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.07 / 1.04  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89																			
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78																			
3	96	87	81	76	94	86	80	75	83	78	74	81	76	72	78	74	71	69																			
4	90	80	72	67	87	78	72	66	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51																			
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46																			
8	69	57	50	45	68	57	50	45	55	49	45	54	49	44	53	48	44	42																			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39																			
10	61	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36																			

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

	0°	45°	90°
0°	258619	258619	258619
5°	257997	258257	258257
10°	255006	255269	255006
15°	251946	251946	251946
20°	241600	242165	242453
25°	225975	226275	226860
30°	202489	203101	203101
35°	164385	165710	166026
40°	124079	124755	125126
45°	95033	94667	94667
50°	78292	77889	77889
55°	67202	66750	66750
60°	59971	59428	59428
65°	56358	56358	56358
70°	52437	52437	52437
75°	47609	48610	47609
80°	44750	43187	44750
85°	36796	36796	36796



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.5	6.1
10°-20°	552.8	17.1
20°-30°	759.6	23.5
30°-40°	683.0	21.1
40°-50°	431.6	13.3
50°-60°	281.8	8.7
60°-70°	190.9	5.9
70°-80°	107.5	3.3
80°-90°	30.2	0.9
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°	1510.0	46.7
0°-40°	2193.1	67.8
0°-60°	2906.4	89.8
0°-90°	3234.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3234.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2097	2097	2097	2097	2097	
5°	2084	2084	2086	2086	2086	197
15°	1973	1973	1973	1973	1973	552
25°	1660	1663	1663	1667	1667	758
35°	1092	1096	1100	1105	1103	680
45°	545	543	543	543	543	432
55°	312	312	310	312	310	283
65°	193	193	193	193	193	191
75°	100	102	102	102	100	107
85°	26	26	26	26	26	30
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2096.7	2096.7	2096.7	2096.7	2096.7
2.5°	2085.8	2085.8	2085.8	2085.8	2085.8
5°	2083.7	2083.7	2085.8	2085.8	2085.8
7.5°	2068.5	2070.7	2070.7	2070.7	2070.7
10°	2036.0	2036.0	2038.1	2038.1	2036.0
12.5°	2005.6	2005.6	2005.6	2007.7	2005.6
15°	1973.0	1973.0	1973.0	1973.0	1973.0
17.5°	1916.6	1918.7	1918.7	1918.7	1918.7
20°	1840.6	1844.9	1844.9	1847.1	1847.1
22.5°	1753.8	1755.9	1758.1	1760.3	1758.1
25°	1660.4	1662.6	1662.6	1666.9	1666.9
27.5°	1551.9	1554.0	1558.4	1558.4	1558.4
30°	1421.7	1423.9	1426.0	1426.0	1426.0
32.5°	1267.6	1267.6	1271.9	1274.1	1271.9
35°	1091.7	1096.1	1100.5	1104.7	1102.6
37.5°	924.6	929.0	931.1	931.1	933.3
40°	770.6	774.8	774.8	779.2	777.1
42.5°	648.9	646.8	646.8	651.2	648.9
45°	544.8	542.7	542.7	542.7	542.7
47.5°	468.8	466.7	466.7	466.7	466.7
50°	408.0	405.9	405.9	405.9	405.9
52.5°	358.2	355.9	355.9	355.9	353.8
55°	312.5	312.5	310.4	312.5	310.4
57.5°	271.3	271.3	271.3	271.3	271.3
60°	243.1	240.9	240.9	240.9	240.9
62.5°	217.0	217.0	217.0	217.0	217.0
65°	193.1	193.1	193.1	193.1	193.1
67.5°	169.3	167.1	169.3	169.3	167.1
70°	145.4	143.3	145.4	145.4	145.4
72.5°	121.5	121.5	121.5	123.8	121.5
75°	99.9	102.0	102.0	102.0	99.9
77.5°	80.3	82.5	80.3	80.3	80.3
80°	63.0	60.8	60.8	60.8	63.0
82.5°	43.4	43.4	43.4	43.4	43.4
85°	26.0	26.0	26.0	26.0	26.0
87.5°	10.9	10.9	10.9	10.9	10.9
90°	0.0	0.0	0.0	0.0	0.0

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Scaled Data Report



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Scaled Data Report



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

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