

Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P580305

Luminaire Tested: **HCC4W30D010MW-HM43040835-41RWWH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580305  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-15)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W30D010MW-HM43040835-41RWWH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

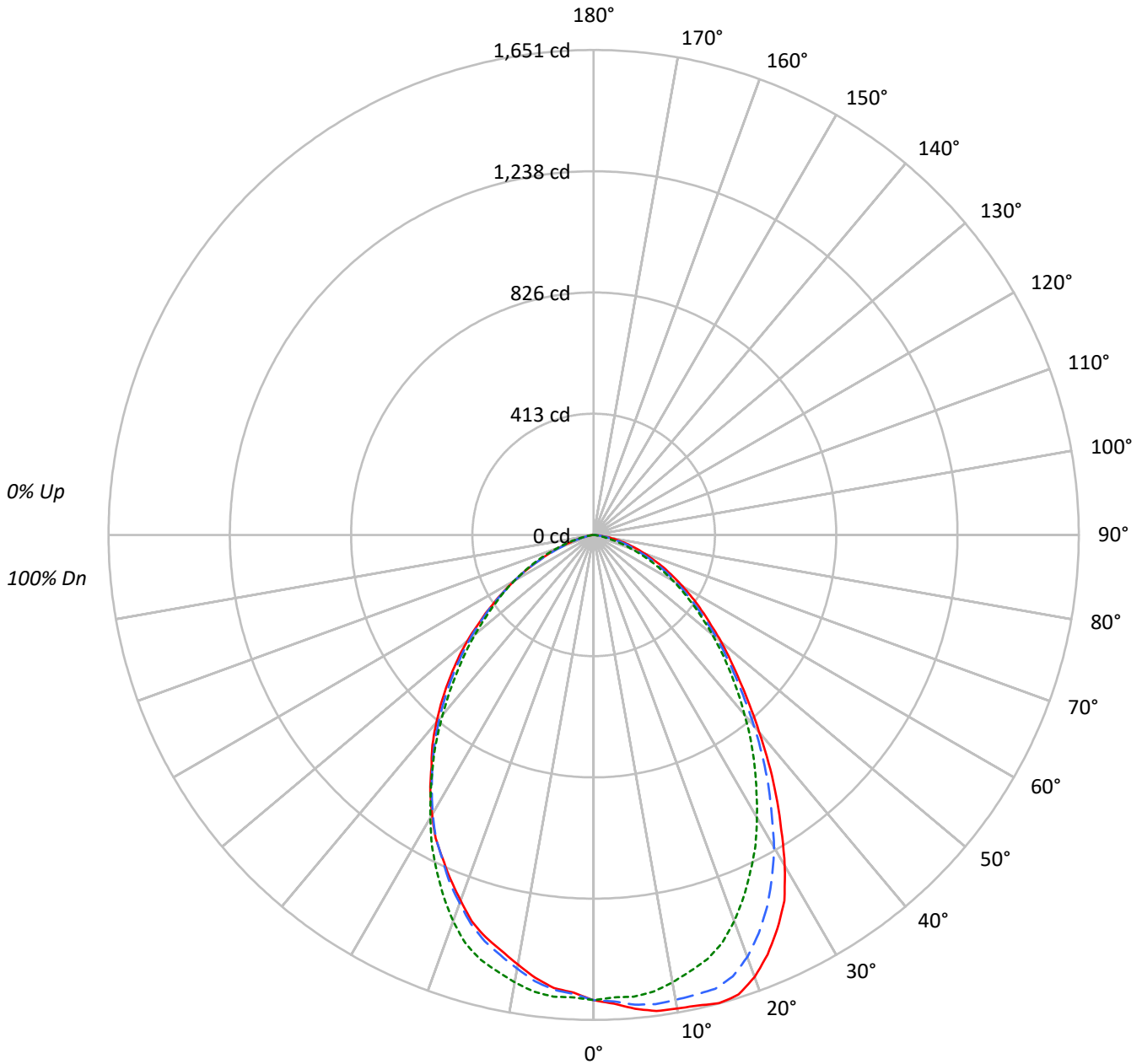
Lumens per Lamp: N/A  
Luminaire Lumens: 3018.5 lumens  
Efficiency: N/A  
Efficacy: 107.8 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.08 / 1.16  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 28  
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					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	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77								
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67								
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59								
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52								
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47								
7	71	58	51	45	69	58	50	45	56	49	45	55	49	44	54	48	44	42								
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38								
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35								
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32								

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

	0°	90°	180°
0°	195342	195342	195342
5°	200472	195346	191706
10°	205007	193672	186044
15°	210776	190932	181138
20°	210202	183596	173777
25°	201342	171890	165467
30°	185212	158308	156627
35°	162925	143681	144855
40°	140954	128604	133982
45°	122507	114274	121147
50°	108726	100801	107594
55°	96448	88427	92233
60°	85898	76696	76696
65°	76380	63742	59715
70°	65997	48253	42555
75°	55330	31883	26211
80°	41909	15414	13922
85°	22361	5519	5519



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.0	5.0
10°-20°	425.2	14.1
20°-30°	599.6	19.9
30°-40°	619.4	20.5
40°-50°	525.1	17.4
50°-60°	382.1	12.7
60°-70°	223.2	7.4
70°-80°	83.0	2.7
80°-90°	10.8	0.4
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°	1174.8	38.9
0°-40°	1794.3	59.4
0°-60°	2701.4	89.5
0°-90°	3018.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3018.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1584	1584	1584	1584	1584	
5°	1619	1605	1578	1554	1548	155
15°	1651	1599	1495	1432	1418	464
25°	1479	1397	1263	1218	1216	677
35°	1082	1035	954	956	962	676
45°	702	683	655	679	694	547
55°	448	427	411	425	429	403
65°	262	240	218	205	205	260
75°	116	96	67	53	55	125
85°	16	10	4	4	4	22
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°	1583.7	1583.7	1583.7	1583.7	1583.7	1583.7	1583.7	1583.7	1583.7
2.5°	1597.5	1593.5	1589.6	1583.7	1575.8	1570.0	1564.0	1560.0	1560.0
5°	1619.1	1613.2	1605.3	1591.5	1577.7	1566.0	1554.2	1548.3	1548.3
7.5°	1634.8	1626.9	1611.2	1591.5	1567.9	1550.2	1532.5	1524.6	1520.8
10°	1636.8	1628.9	1607.3	1577.7	1546.3	1518.7	1499.1	1487.3	1485.4
12.5°	1640.7	1630.9	1603.3	1562.1	1520.8	1487.3	1465.6	1453.9	1449.9
15°	1650.6	1636.8	1599.4	1546.3	1495.2	1455.8	1432.2	1422.3	1418.5
17.5°	1640.7	1621.0	1575.8	1512.9	1455.8	1412.5	1388.9	1379.1	1379.1
20°	1601.4	1581.7	1528.6	1459.7	1398.7	1357.4	1333.9	1327.9	1323.9
22.5°	1546.3	1524.6	1467.6	1394.8	1333.9	1296.4	1280.7	1272.8	1270.9
25°	1479.4	1457.7	1396.8	1322.0	1263.0	1231.6	1217.8	1217.8	1215.8
27.5°	1404.7	1377.1	1314.1	1249.3	1192.2	1168.6	1162.6	1162.6	1164.7
30°	1300.4	1280.7	1227.6	1164.7	1111.5	1095.7	1095.7	1099.7	1099.7
32.5°	1188.2	1174.5	1127.2	1072.2	1030.9	1021.1	1025.0	1032.8	1034.8
35°	1082.0	1066.3	1034.8	985.6	954.2	950.2	956.1	962.0	962.0
37.5°	977.8	962.0	940.4	901.0	877.4	879.4	887.3	895.1	901.0
40°	875.4	863.6	847.9	816.4	798.7	806.6	816.4	824.3	832.1
42.5°	785.0	773.1	761.3	737.7	726.0	735.8	747.5	755.4	763.3
45°	702.3	694.5	682.7	662.9	655.1	665.0	678.7	686.6	694.5
47.5°	631.5	627.6	611.8	594.1	590.2	600.0	611.8	621.6	627.6
50°	566.6	560.7	546.9	529.1	525.3	541.0	548.9	554.8	560.7
52.5°	503.7	497.7	482.0	466.2	466.2	478.0	483.9	485.9	491.8
55°	448.5	442.6	426.9	415.1	411.2	421.0	424.9	424.9	428.9
57.5°	397.4	391.5	375.7	362.0	360.1	365.9	365.9	365.9	367.8
60°	348.2	342.3	326.6	314.7	310.9	312.8	310.9	308.8	310.9
62.5°	303.0	297.1	281.3	267.6	263.6	263.6	257.7	255.7	257.7
65°	261.7	251.8	240.0	226.3	218.4	212.5	204.6	204.6	204.6
67.5°	220.3	212.5	198.6	184.9	175.1	165.3	153.4	157.4	159.4
70°	183.0	177.1	161.3	147.5	133.8	121.9	112.1	116.1	118.0
72.5°	149.5	141.7	127.9	112.1	100.3	84.6	78.7	82.7	82.7
75°	116.1	108.2	96.4	80.7	66.9	53.1	53.1	55.0	55.0
77.5°	86.5	78.7	66.9	53.1	41.3	31.5	33.4	33.4	33.4
80°	59.0	53.1	43.3	31.5	21.7	17.7	17.7	17.7	19.6
82.5°	33.4	29.6	23.6	15.8	9.8	9.8	9.8	9.8	9.8
85°	15.8	11.8	9.8	5.9	3.9	3.9	3.9	3.9	3.9
87.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Scaled Data Report



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

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