

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: P592669

Luminaire Tested: **HCC4W20D010MW-HM40525850-41RWWC**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P592669
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: HCC4W20D010MW-HM40525850-41RWWC
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

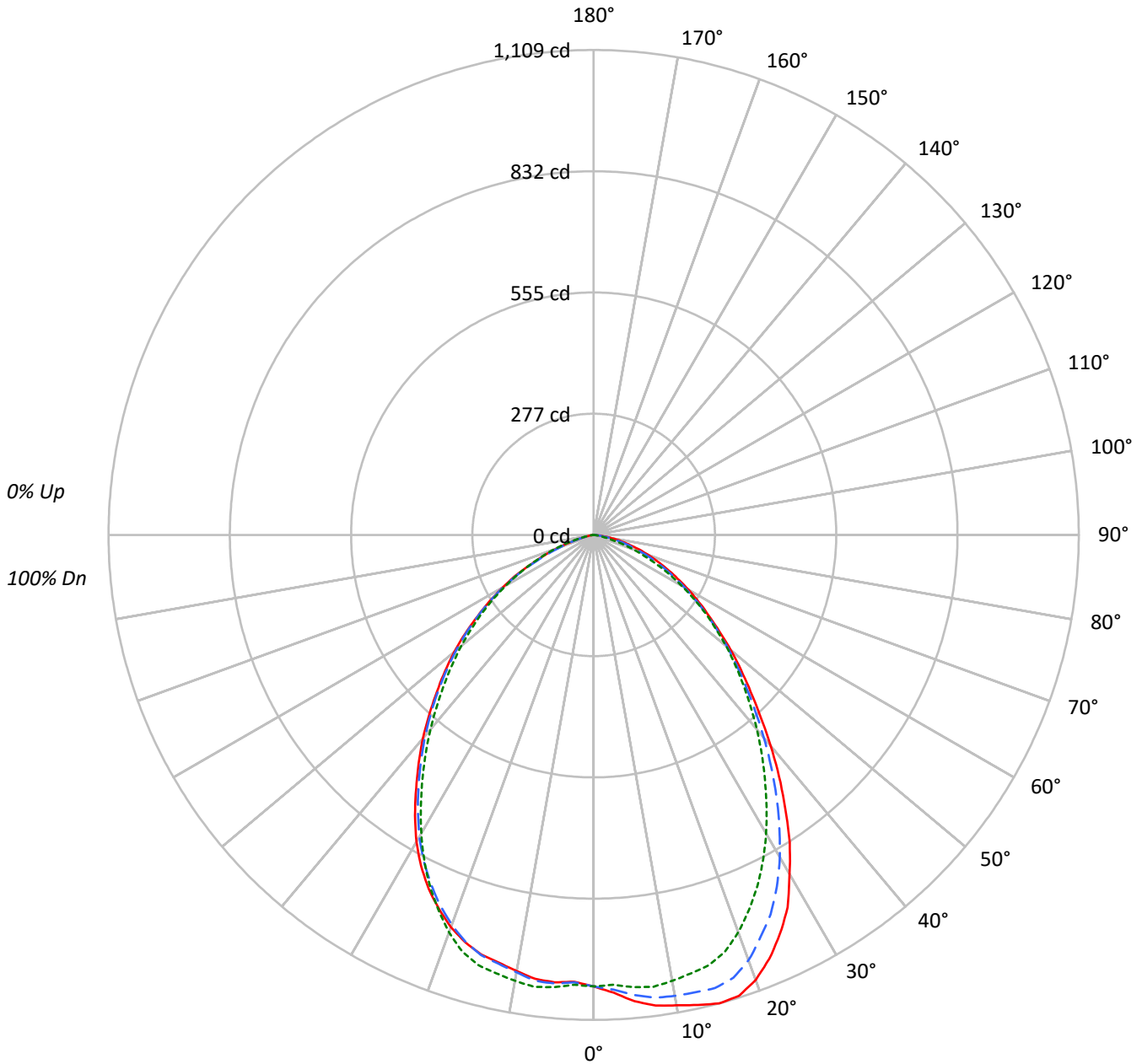
Lumens per Lamp: N/A
Luminaire Lumens: 2151.5 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.15 / 1.21
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 20
Input Voltage (V): NR
Input Current (A_{in}): 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



TEST NUMBER: P592669
CATALOG NUMBER: HCC4W20D010MW-HM40525850-41RWWC

Luminous Intensity Polar Plot



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



TEST NUMBER: P592669

CATALOG NUMBER: HCC4W20D010MW-HM40525850-41RWWC

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	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°	127342	127342	127342
5°	132509	128522	127147
10°	136834	129670	126864
15°	141629	130059	126854
20°	142117	126917	125263
25°	137104	120568	121521
30°	127572	112275	115452
35°	114921	102724	106518
40°	101311	93454	97721
45°	88597	84218	88352
50°	78445	75759	79789
55°	69008	66922	69611
60°	61599	57134	58861
65°	54169	46435	45589
70°	47280	34225	31195
75°	39269	20588	16632
80°	29762	7885	4972
85°	13728	1981	1981



TEST NUMBER: P592669
 CATALOG NUMBER: HCC4W20D010MW-HM40525850-41RWWC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.6	4.6
10°-20°	290.6	13.5
20°-30°	420.9	19.6
30°-40°	444.0	20.6
40°-50°	384.3	17.9
50°-60°	284.7	13.2
60°-70°	164.1	7.6
70°-80°	57.3	2.7
80°-90°	6.0	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°	811.1	37.7
0°-40°	1255.1	58.3
0°-60°	1924.1	89.4
0°-90°	2151.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2151.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1032	1032	1032	1032	1032	
5°	1070	1056	1038	1030	1027	103
15°	1109	1073	1018	995	993	312
25°	1007	957	886	880	893	461
35°	763	728	682	698	707	477
45°	508	494	483	501	506	394
55°	321	314	311	322	324	289
65°	186	174	159	151	156	185
75°	82	70	43	35	35	89
85°	10	6	1	1	1	15
90°	0	0	0	0	0	

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



TEST NUMBER: P592669

CATALOG NUMBER: HCC4W20D010MW-HM40525850-41RWWC

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4
2.5°	1047.8	1045.0	1040.8	1035.3	1029.7	1025.5	1024.0	1022.7	1022.7
5°	1070.2	1064.5	1056.2	1045.0	1038.0	1033.9	1029.7	1026.9	1026.9
7.5°	1085.5	1079.9	1067.4	1052.0	1042.3	1033.9	1028.3	1024.0	1024.0
10°	1092.5	1085.5	1070.2	1050.7	1035.3	1024.0	1015.7	1012.9	1012.9
12.5°	1100.9	1092.5	1071.5	1046.4	1026.9	1012.9	1004.5	1001.8	1001.8
15°	1109.1	1099.4	1072.9	1043.7	1018.5	1001.8	994.8	993.4	993.4
17.5°	1105.0	1092.5	1061.8	1026.9	999.0	982.3	975.3	975.3	976.7
20°	1082.7	1070.2	1035.3	996.2	966.9	954.3	948.8	951.6	954.3
22.5°	1049.2	1033.9	996.2	958.5	927.8	916.7	916.7	920.8	925.1
25°	1007.4	993.4	957.2	915.3	885.9	877.6	880.4	887.3	892.9
27.5°	959.9	944.6	906.9	867.8	838.6	834.3	841.3	851.1	853.8
30°	895.7	883.2	851.1	813.5	788.3	787.0	796.7	803.7	810.6
32.5°	834.3	820.4	789.7	753.5	735.3	736.7	747.8	756.2	760.3
35°	763.2	750.6	728.3	699.0	682.2	685.1	697.6	706.0	707.4
37.5°	696.2	687.9	665.5	643.2	630.6	636.2	647.4	657.1	657.1
40°	629.2	622.2	605.5	587.4	580.4	587.4	598.5	606.9	606.9
42.5°	565.0	560.9	546.9	534.4	530.1	540.0	549.8	556.6	555.3
45°	507.9	503.6	493.9	484.1	482.8	492.5	500.9	505.0	506.5
47.5°	456.3	453.4	445.0	438.2	438.2	447.9	454.9	459.0	460.4
50°	408.8	406.0	399.0	393.4	394.8	404.7	410.2	414.4	415.8
52.5°	361.4	359.9	354.4	347.4	351.6	358.6	365.5	368.3	369.7
55°	320.9	320.9	313.9	308.3	311.2	318.1	322.3	323.7	323.7
57.5°	284.6	283.2	274.8	269.3	270.7	277.7	280.4	281.8	281.8
60°	249.7	248.3	240.0	231.6	231.6	235.8	237.2	238.6	238.6
62.5°	216.2	214.8	205.1	198.1	195.3	194.0	194.0	196.7	202.3
65°	185.6	184.2	174.5	163.2	159.1	154.8	150.7	153.5	156.2
67.5°	157.7	154.8	145.1	135.3	125.6	118.6	111.6	115.8	121.4
70°	131.1	128.3	117.2	106.0	94.9	83.7	78.1	83.7	86.5
72.5°	106.0	103.2	92.1	81.0	67.0	55.9	54.4	55.9	57.2
75°	82.4	81.0	69.7	57.2	43.2	34.9	34.9	34.9	34.9
77.5°	61.4	58.6	47.5	36.2	25.1	19.5	18.1	18.1	18.1
80°	41.9	39.1	29.2	20.9	11.1	8.4	8.4	7.0	7.0
82.5°	23.7	22.4	15.4	8.4	4.1	2.8	2.8	2.8	2.8
85°	9.7	8.4	5.6	2.8	1.4	1.4	1.4	1.4	1.4
87.5°	1.4	1.4	1.4	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

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

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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

Scaled Data Report



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

Scaled Data Report



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

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

Scaled Data Report



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

Scaled Data Report



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

Scaled Data Report



(END OF REPORT)