

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: P580074

Luminaire Tested: **HCC4W20D010MB-HM40525930-41WWWB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580074
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-18)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC4W20D010MB-HM40525930-41WWWB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

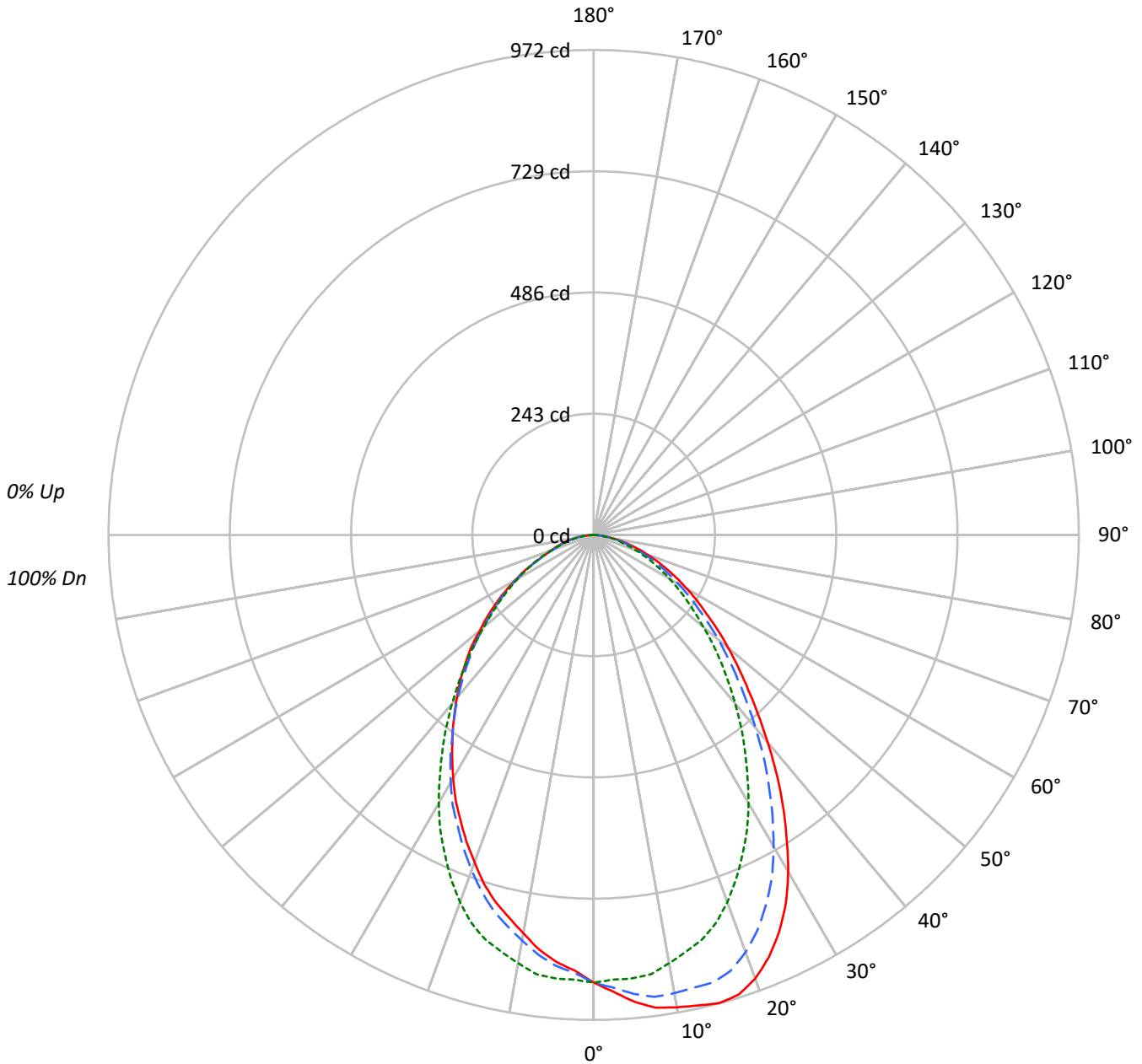
Lumens per Lamp: N/A
Luminaire Lumens: 1739.4 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P580074
CATALOG NUMBER: HCC4W20D010MB-HM40525930-41WWWB

Luminous Intensity Polar Plot



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



TEST NUMBER: P580074

CATALOG NUMBER: HCC4W20D010MB-HM40525930-41WWWB

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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87								
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75								
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66								
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	58								
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51								
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47	46								
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41								
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37								
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34								
10	58	45	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	110641	110641	110641
5°	116326	110482	106346
10°	120414	109167	101526
15°	124083	107189	97177
20°	124226	102765	91581
25°	119561	96044	85877
30°	111022	88376	80201
35°	99516	79565	74204
40°	87319	71008	68593
45°	76316	62867	63268
50°	67392	54996	57011
55°	59417	48773	51246
60°	53113	43171	44873
65°	47048	37971	37971
70°	41113	32385	32385
75°	35076	27450	30739
80°	27773	24506	27773
85°	17832	21087	26182



TEST NUMBER: P580074
 CATALOG NUMBER: HCC4W20D010MB-HM40525930-41WWWB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.0	4.9
10°-20°	239.3	13.8
20°-30°	335.3	19.3
30°-40°	345.4	19.9
40°-50°	294.1	16.9
50°-60°	217.9	12.5
60°-70°	136.7	7.9
70°-80°	67.9	3.9
80°-90°	17.8	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°	659.5	37.9
0°-40°	1004.9	57.8
0°-60°	1516.9	87.2
0°-90°	1739.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1739.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	897	897	897	897	897	
5°	940	923	892	867	859	90
15°	972	928	839	778	761	273
25°	878	818	706	645	631	402
35°	661	611	528	494	493	412
45°	438	408	360	354	363	339
55°	276	254	227	232	238	250
65°	161	145	130	128	130	161
75°	74	66	58	62	64	79
85°	13	13	15	17	18	16
90°	0	0	0	0	0	

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



TEST NUMBER: P580074

CATALOG NUMBER: HCC4W20D010MB-HM40525930-41WWWB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	897.0	897.0	897.0	897.0	897.0	897.0	897.0	897.0	897.0
2.5°	916.5	913.0	908.4	900.4	892.3	885.4	878.5	875.0	873.9
5°	939.5	932.6	923.3	908.4	892.3	878.5	867.0	861.2	858.9
7.5°	955.6	948.7	933.8	910.7	887.7	867.0	848.6	840.5	838.2
10°	961.4	953.3	932.6	901.5	871.6	846.3	825.5	815.2	810.6
12.5°	966.0	955.6	929.2	892.3	855.4	824.3	802.4	788.7	785.2
15°	971.7	960.3	928.0	883.1	839.4	802.4	778.4	765.6	761.0
17.5°	966.0	953.3	915.3	864.7	815.2	774.9	748.4	736.8	732.2
20°	946.4	932.6	890.0	835.9	782.9	741.4	715.0	703.5	697.7
22.5°	916.5	901.5	857.7	800.1	746.1	705.7	680.4	668.9	665.5
25°	878.5	863.5	817.5	758.7	705.7	666.6	644.7	634.4	631.0
27.5°	833.5	818.6	773.8	716.2	665.5	628.7	611.4	601.0	598.7
30°	779.5	764.5	720.8	667.8	620.5	586.0	572.2	564.2	563.1
32.5°	719.6	706.9	666.6	618.2	573.4	544.6	534.3	528.4	527.3
35°	660.9	647.0	611.4	567.7	528.4	503.2	493.9	492.8	492.8
37.5°	601.0	587.1	558.4	518.1	484.7	461.7	458.2	459.4	459.4
40°	542.3	529.6	504.3	471.0	441.0	423.7	422.6	424.8	426.0
42.5°	487.0	476.7	453.6	424.8	399.5	385.7	386.9	391.5	394.9
45°	437.5	428.3	407.5	382.3	360.4	350.1	353.5	359.2	362.7
47.5°	392.6	384.6	365.0	341.9	323.6	316.6	321.3	328.2	332.7
50°	351.2	344.2	325.9	301.7	286.6	282.0	287.8	294.8	297.1
52.5°	314.3	307.4	287.8	267.1	255.6	253.3	259.1	264.8	268.3
55°	276.3	270.6	254.4	236.1	226.8	225.6	231.5	236.1	238.3
57.5°	245.2	239.5	224.5	208.4	200.4	199.2	205.0	208.4	209.6
60°	215.3	209.6	195.7	180.8	175.0	175.0	178.5	180.8	181.9
62.5°	187.6	181.9	169.3	156.6	152.0	152.0	152.0	153.1	156.6
65°	161.2	156.6	145.1	133.5	130.1	127.8	127.8	127.8	130.1
67.5°	137.1	132.4	123.2	112.9	109.4	105.9	104.7	107.1	107.1
70°	114.0	110.6	101.3	93.3	89.8	86.4	85.2	89.8	89.8
72.5°	93.3	89.8	84.1	76.0	72.5	71.3	73.6	76.0	77.2
75°	73.6	70.2	65.6	61.0	57.6	58.7	62.2	63.3	64.5
77.5°	55.3	54.1	49.6	46.1	46.1	47.3	49.6	51.8	53.0
80°	39.1	38.0	35.7	33.4	34.5	36.8	38.0	40.3	39.1
82.5°	24.2	24.2	23.1	23.1	24.2	26.5	27.6	28.8	29.9
85°	12.6	12.6	12.6	13.8	14.9	16.2	17.3	18.5	18.5
87.5°	3.4	4.6	4.6	5.7	6.9	6.9	8.0	8.0	8.0
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)