

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: P580090

Luminaire Tested: **HCC4W20D010MW-HM40525935-41WWBB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580090
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC4W20D010MW-HM40525935-41WWBB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

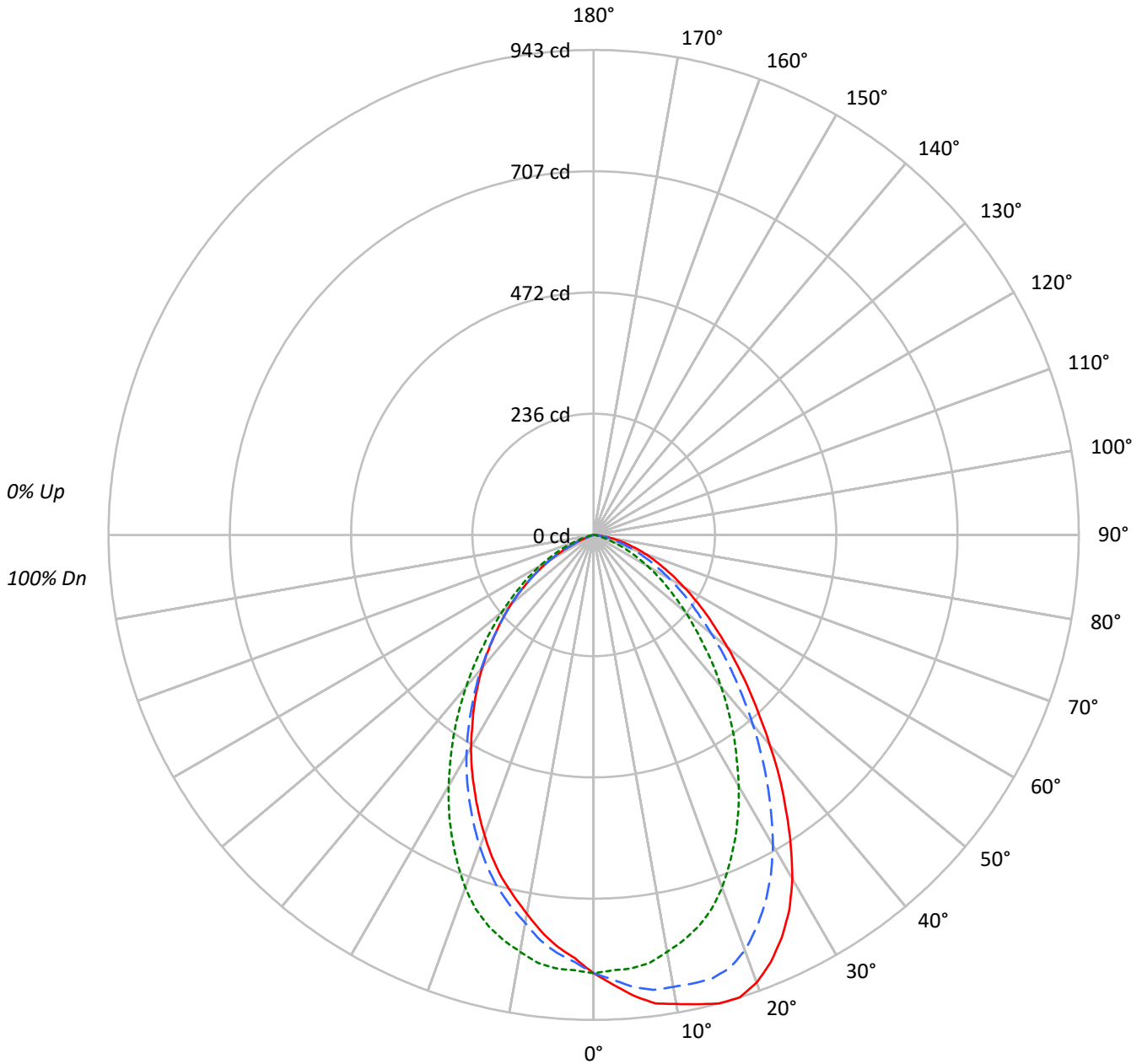
Lumens per Lamp: N/A
Luminaire Lumens: 1472.1 lumens
Efficiency: N/A
Efficacy: 73.6 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.04 / 1.12
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P580090
CATALOG NUMBER: HCC4W20D010MW-HM40525935-41WWBB

Luminous Intensity Polar Plot





TEST NUMBER: P580090

CATALOG NUMBER: HCC4W20D010MW-HM40525935-41WWBB

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	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	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89								
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	85	83	80	78								
3	96	87	80	75	94	86	79	74	83	78	73	80	76	72	78	74	71	69								
4	89	79	72	66	87	78	71	65	75	69	65	73	68	64	71	67	63	61								
5	83	72	64	58	81	71	64	58	69	62	58	67	61	57	65	60	56	55								
6	77	66	58	52	75	65	57	52	63	57	52	61	56	51	60	55	51	49								
7	72	60	53	47	71	59	52	47	58	51	47	57	51	46	55	50	46	44								
8	68	56	48	43	66	55	48	43	54	47	42	53	47	42	51	46	42	40								
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	43	39	37								
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	36	34								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	105115	105115	105115
5°	111373	104761	99512
10°	116005	103092	93686
15°	120444	100625	88085
20°	121575	95795	81461
25°	117642	88599	74567
30°	109997	80300	67867
35°	98026	71389	60969
40°	85693	62072	54262
45°	74642	52663	46941
50°	65128	44653	40240
55°	57095	37031	32580
60°	49930	29899	23929
65°	43516	22298	13455
70°	38047	14426	4400
75°	31215	7482	1144
80°	23227	3410	923
85°	13728	1840	1840



TEST NUMBER: P580090
 CATALOG NUMBER: HCC4W20D010MW-HM40525935-41WWBB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.4	5.5
10°-20°	225.1	15.3
20°-30°	311.3	21.1
30°-40°	313.0	21.3
40°-50°	252.5	17.2
50°-60°	170.8	11.6
60°-70°	86.9	5.9
70°-80°	27.8	1.9
80°-90°	4.3	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°	616.8	41.9
0°-40°	929.8	63.2
0°-60°	1353.1	91.9
0°-90°	1472.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1472.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	852	852	852	852	852	
5°	900	882	846	816	804	87
15°	943	892	788	713	690	266
25°	864	789	651	571	548	396
35°	651	588	474	415	405	407
45°	428	383	302	269	269	332
55°	266	229	172	150	152	239
65°	149	121	76	50	46	150
75°	66	46	16	4	2	71
85°	10	5	1	1	1	13
90°	0	0	0	0	0	

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



TEST NUMBER: P580090

CATALOG NUMBER: HCC4W20D010MW-HM40525935-41WWBB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	852.2	852.2	852.2	852.2	852.2	852.2	852.2	852.2	852.2
2.5°	875.3	870.5	865.5	857.0	847.4	837.7	831.6	826.8	824.3
5°	899.5	893.5	882.5	864.4	846.1	829.2	815.9	807.4	803.7
7.5°	918.9	910.4	892.3	866.8	838.9	812.2	795.2	783.2	778.2
10°	926.2	916.5	892.3	858.3	823.1	790.4	766.2	754.0	748.0
12.5°	934.7	923.8	893.5	851.1	807.4	768.6	740.7	724.9	718.9
15°	943.2	928.6	892.3	840.1	788.0	743.1	712.9	697.0	689.8
17.5°	943.2	926.2	882.5	821.9	762.5	715.3	681.3	663.1	657.1
20°	926.2	906.8	859.6	792.8	729.8	678.9	646.1	628.0	620.6
22.5°	899.5	877.7	826.8	757.7	691.0	641.3	608.6	591.6	584.3
25°	864.4	842.6	789.3	717.7	651.0	601.3	571.0	555.3	547.9
27.5°	823.1	798.9	745.6	674.0	608.6	561.3	533.4	518.9	512.8
30°	772.3	749.2	697.0	626.7	563.8	520.0	494.6	481.3	476.5
32.5°	712.9	693.5	642.5	577.1	517.6	477.6	454.6	443.7	438.8
35°	651.0	632.8	588.0	527.4	474.1	436.4	414.6	407.3	404.9
37.5°	592.8	577.1	533.4	477.6	429.2	396.4	377.0	372.2	369.8
40°	532.2	521.3	481.3	430.4	385.5	356.4	340.7	337.0	337.0
42.5°	477.6	465.6	430.4	384.2	344.3	315.2	304.3	300.6	301.9
45°	427.9	415.8	383.1	340.7	301.9	277.6	269.1	269.1	269.1
47.5°	381.8	370.9	340.7	297.0	265.5	246.1	237.7	237.7	238.8
50°	339.4	332.2	298.2	260.6	232.7	214.6	208.5	207.3	209.7
52.5°	299.5	291.0	260.6	226.6	200.0	185.5	179.4	178.2	179.4
55°	265.5	255.8	229.2	196.4	172.2	157.6	150.4	149.1	151.5
57.5°	232.7	225.5	197.6	168.5	145.4	130.9	124.9	122.4	123.6
60°	202.4	195.2	169.8	141.9	121.2	106.7	98.2	95.8	97.0
62.5°	174.6	168.5	144.3	117.6	97.0	83.6	75.1	69.0	71.6
65°	149.1	143.0	121.2	94.5	76.4	61.8	49.7	44.8	46.1
67.5°	127.3	120.0	99.4	75.1	57.0	41.2	27.9	25.5	25.5
70°	105.5	98.2	80.1	58.2	40.0	21.8	12.2	12.2	12.2
72.5°	84.9	78.8	61.8	43.6	25.5	9.7	4.8	4.8	4.8
75°	65.5	60.6	46.1	30.3	15.7	4.8	3.7	2.4	2.4
77.5°	48.5	43.6	32.7	20.6	9.7	2.4	2.4	2.4	2.4
80°	32.7	29.1	21.8	12.2	4.8	1.3	1.3	1.3	1.3
82.5°	19.4	17.0	12.2	6.1	2.4	1.3	1.3	1.3	1.3
85°	9.7	7.2	4.8	2.4	1.3	1.3	1.3	1.3	1.3
87.5°	2.4	1.3	1.3	1.3	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)