

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: P581062

Luminaire Tested: **HCC4W05D010BZ-HM40525927-41WWBB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581062  
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: HCC4W05D010BZ-HM40525927-41WWBB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

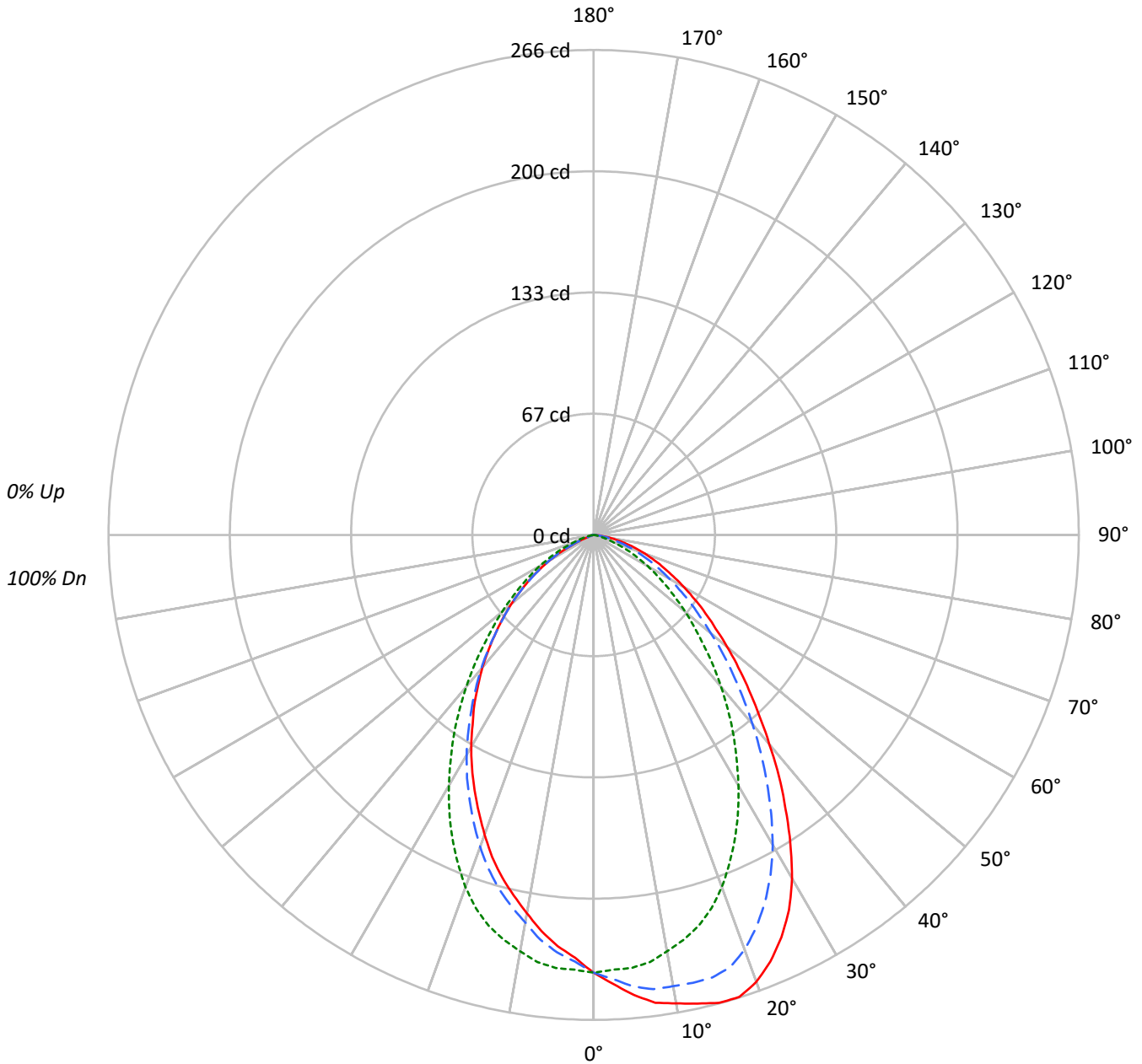
Lumens per Lamp: N/A  
Luminaire Lumens: 414.6 lumens  
Efficiency: N/A  
Efficacy: 69.1 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.04 / 1.12  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 6  
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



TEST NUMBER: P581062  
CATALOG NUMBER: HCC4W05D010BZ-HM40525927-41WWBB

### Luminous Intensity Polar Plot





TEST NUMBER: P581062

CATALOG NUMBER: HCC4W05D010BZ-HM40525927-41WWBB

**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			100
1	111	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89			89
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	85	83	80	78			78
3	96	87	80	75	94	86	79	74	83	78	73	80	76	72	78	74	71	69			69
4	89	79	72	66	87	78	71	65	75	69	65	73	68	64	71	67	63	61			61
5	83	72	64	58	81	71	64	58	69	62	58	67	61	57	65	60	56	55			55
6	77	66	58	52	75	65	57	52	63	57	52	61	56	51	60	55	51	49			49
7	72	60	53	47	71	60	52	47	58	51	47	57	51	46	55	50	46	44			44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	42	51	46	42	40			40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	43	39	37			37
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	36	34			34

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

	0°	90°	180°
0°	29615	29615	29615
5°	31363	29518	28032
10°	32677	29045	26390
15°	33929	28349	24811
20°	34246	26974	22945
25°	33140	24960	21013
30°	30978	22617	19114
35°	27616	20102	17181
40°	24136	17486	15280
45°	21020	14827	13222
50°	18345	12588	11322
55°	16085	10430	9182
60°	14061	8437	6759
65°	12258	6304	3765
70°	10711	4039	1226
75°	8769	2097	334
80°	6535	994	213
85°	3821	425	425



TEST NUMBER: P581062

CATALOG NUMBER: HCC4W05D010BZ-HM40525927-41WWBB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	22.7	5.5
10°-20°	63.4	15.3
20°-30°	87.7	21.1
30°-40°	88.2	21.3
40°-50°	71.1	17.2
50°-60°	48.1	11.6
60°-70°	24.5	5.9
70°-80°	7.8	1.9
80°-90°	1.2	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°	173.7	41.9
0°-40°	261.9	63.2
0°-60°	381.1	91.9
0°-90°	414.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	414.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	240	240	240	240	240	
5°	253	249	238	230	226	24
15°	266	251	222	201	194	75
25°	244	222	183	161	154	111
35°	183	166	134	117	114	115
45°	120	108	85	76	76	93
55°	75	65	48	42	43	67
65°	42	34	22	14	13	42
75°	18	13	4	1	1	20
85°	3	1	0	0	0	4
90°	0	0	0	0	0	



TEST NUMBER: P581062

CATALOG NUMBER: HCC4W05D010BZ-HM40525927-41WWBB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	240.1	240.1	240.1	240.1	240.1	240.1	240.1	240.1	240.1
2.5°	246.5	245.2	243.8	241.4	238.7	236.0	234.3	232.9	232.2
5°	253.3	251.6	248.6	243.5	238.4	233.6	229.8	227.5	226.4
7.5°	258.8	256.4	251.3	244.1	236.3	228.8	224.0	220.5	219.2
10°	260.9	258.1	251.3	241.8	231.9	222.7	215.8	212.4	210.7
12.5°	263.3	260.1	251.6	239.7	227.5	216.4	208.6	204.2	202.5
15°	265.7	261.6	251.3	236.6	222.0	209.3	200.8	196.4	194.3
17.5°	265.7	260.9	248.6	231.5	214.7	201.5	191.9	186.8	185.1
20°	260.9	255.4	242.1	223.4	205.5	191.2	182.1	176.8	174.8
22.5°	253.3	247.2	232.9	213.4	194.7	180.7	171.4	166.6	164.6
25°	243.5	237.3	222.3	202.1	183.4	169.3	160.8	156.4	154.4
27.5°	231.9	225.1	210.0	189.9	171.4	158.1	150.3	146.2	144.5
30°	217.5	211.0	196.4	176.5	158.8	146.5	139.3	135.5	134.2
32.5°	200.8	195.3	181.0	162.5	145.8	134.5	128.0	125.0	123.6
35°	183.4	178.2	165.6	148.6	133.5	122.9	116.8	114.7	114.1
37.5°	167.0	162.5	150.3	134.5	120.9	111.7	106.2	104.9	104.2
40°	149.9	146.9	135.5	121.2	108.6	100.4	95.9	94.9	94.9
42.5°	134.5	131.1	121.2	108.3	96.9	88.8	85.7	84.7	85.0
45°	120.5	117.1	107.9	95.9	85.0	78.2	75.8	75.8	75.8
47.5°	107.6	104.5	95.9	83.6	74.8	69.3	67.0	67.0	67.3
50°	95.6	93.5	84.0	73.4	65.6	60.5	58.7	58.3	59.0
52.5°	84.3	81.9	73.4	63.9	56.3	52.2	50.5	50.2	50.5
55°	74.8	72.1	64.6	55.3	48.5	44.4	42.3	42.0	42.7
57.5°	65.6	63.6	55.6	47.4	41.0	36.9	35.2	34.5	34.8
60°	57.0	54.9	47.8	40.0	34.2	30.1	27.7	27.0	27.4
62.5°	49.1	47.4	40.6	33.1	27.4	23.6	21.2	19.4	20.2
65°	42.0	40.3	34.2	26.7	21.6	17.4	14.0	12.6	12.9
67.5°	35.9	33.8	28.0	21.2	16.0	11.6	7.8	7.2	7.2
70°	29.7	27.7	22.6	16.3	11.2	6.1	3.4	3.4	3.4
72.5°	23.9	22.2	17.4	12.3	7.2	2.7	1.4	1.4	1.4
75°	18.4	17.0	12.9	8.5	4.4	1.4	1.0	0.7	0.7
77.5°	13.6	12.3	9.2	5.8	2.7	0.7	0.7	0.7	0.7
80°	9.2	8.2	6.1	3.4	1.4	0.3	0.3	0.3	0.3
82.5°	5.4	4.8	3.4	1.7	0.7	0.3	0.3	0.3	0.3
85°	2.7	2.0	1.4	0.7	0.3	0.3	0.3	0.3	0.3
87.5°	0.7	0.3	0.3	0.3	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)