

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: P592656

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

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P592656  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-11)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W20D010MW-HM40525850-41WDBB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

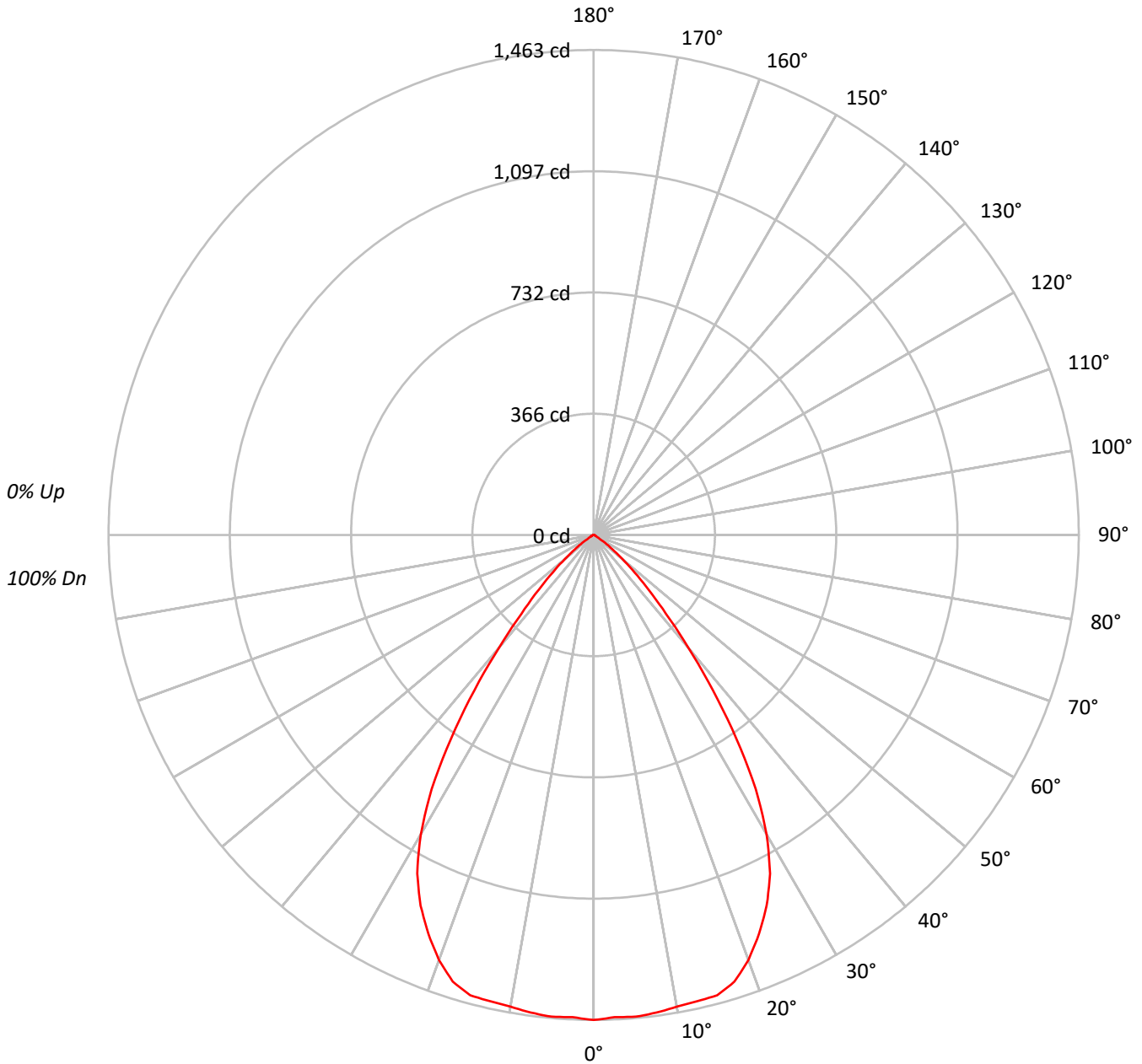
Lumens per Lamp: N/A  
Luminaire Lumens: 1809.7 lumens  
Efficiency: N/A  
Efficacy: 90.5 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.03  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 20  
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: P592656  
CATALOG NUMBER: HCC4W20D010MW-HM40525850-41WDBB

### Luminous Intensity Polar Plot





TEST NUMBER: P592656

CATALOG NUMBER: HCC4W20D010MW-HM40525850-41WDBB

**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	100	100
1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93	93	93	93
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	84	99	93	88	84	90	86	82	87	84	81	85	82	80	78	78	78	78
4	95	87	81	77	93	86	80	76	84	79	75	82	78	74	80	76	73	72	72	72	72
5	90	81	75	70	88	80	74	70	78	73	69	76	72	68	75	71	68	66	66	66	66
6	85	75	69	64	83	74	68	64	73	67	63	71	67	63	70	66	62	61	61	61	61
7	80	70	64	59	79	69	63	59	68	63	59	67	62	58	66	61	58	56	56	56	56
8	76	65	59	55	74	65	59	54	64	58	54	63	58	54	62	57	54	52	52	52	52
9	72	61	55	51	71	61	55	51	60	54	50	59	54	50	58	53	50	49	49	49	49
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45	45	45	45

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

	0°
0°	180479
5°	180649
10°	180984
15°	183641
20°	179054
25°	167998
30°	148594
35°	112993
40°	71201
45°	40871
50°	21684
55°	9010
60°	2393
65°	2043
70°	1479
75°	1334
80°	994
85°	1981



TEST NUMBER: P592656  
 CATALOG NUMBER: HCC4W20D010MW-HM40525850-41WDBB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.8	7.7
10°-20°	402.7	22.3
20°-30°	562.0	31.1
30°-40°	462.5	25.6
40°-50°	190.5	10.5
50°-60°	42.9	2.4
60°-70°	6.9	0.4
70°-80°	2.6	0.1
80°-90°	1.0	0.1
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°	1103.4	61.0
0°-40°	1565.9	86.5
0°-60°	1799.3	99.4
0°-90°	1809.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1809.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1463	
5°	1459	139
15°	1438	403
25°	1234	562
35°	750	462
45°	234	190
55°	42	43
65°	7	7
75°	3	3
85°	1	1
90°	0	



TEST NUMBER: P592656  
CATALOG NUMBER: HCC4W20D010MW-HM40525850-41WDBB

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1463.2
2.5°	1456.2
5°	1459.0
7.5°	1453.4
10°	1445.0
12.5°	1440.9
15°	1438.1
17.5°	1413.0
20°	1364.1
22.5°	1302.8
25°	1234.4
27.5°	1152.2
30°	1043.3
32.5°	909.5
35°	750.4
37.5°	590.0
40°	442.2
42.5°	322.2
45°	234.3
47.5°	167.3
50°	113.0
52.5°	71.1
55°	41.9
57.5°	20.9
60°	9.7
62.5°	8.4
65°	7.0
67.5°	5.6
70°	4.1
72.5°	2.8
75°	2.8
77.5°	1.4
80°	1.4
82.5°	1.4
85°	1.4
87.5°	0.0
90°	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°

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)