

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: P592681

Luminaire Tested: **HCC4S20D010BZ-HM40525950-41NDC**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P592681
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC4S20D010BZ-HM40525950-41NDC
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

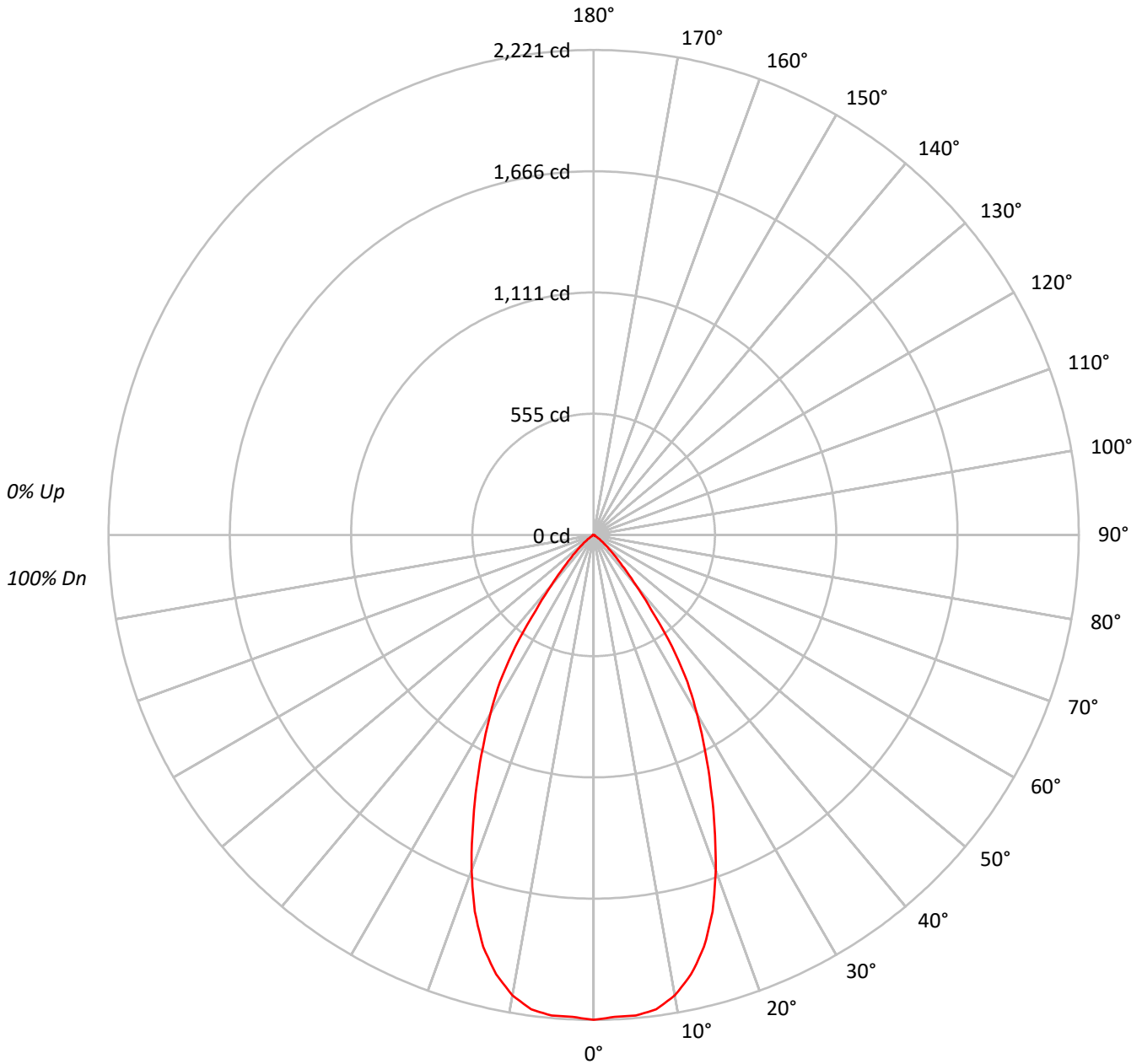
Lumens per Lamp: N/A
Luminaire Lumens: 1859.6 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 0.84 / 0.84 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P592681
CATALOG NUMBER: HCC4S20D010BZ-HM40525950-41NDC

Luminous Intensity Polar Plot





TEST NUMBER: P592681
 CATALOG NUMBER: HCC4S20D010BZ-HM40525950-41NDC

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		0
RCR																			
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102		100
1	114	111	108	106	111	109	106	104	105	103	101	101	100	98	97	96	95		94
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	93	91	89		87
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	88	85	83		81
4	97	90	85	80	96	89	84	80	87	82	79	85	81	78	83	80	77		76
5	93	84	79	74	91	83	78	74	82	77	73	80	76	73	78	75	72		71
6	88	79	73	69	87	78	73	69	77	72	68	75	71	68	74	70	67		66
7	84	75	69	64	82	74	68	64	73	68	64	71	67	64	70	66	63		62
8	80	70	64	60	78	70	64	60	69	64	60	68	63	60	67	62	59		58
9	76	66	61	57	75	66	60	57	65	60	56	64	59	56	63	59	56		55
10	72	63	57	53	71	62	57	53	62	57	53	61	56	53	60	56	53		51

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	273901
5°	273536
10°	268207
15°	249392
20°	214482
25°	172312
30°	134508
35°	94186
40°	48337
45°	24526
50°	12281
55°	4580
60°	1875
65°	1459
70°	902
75°	620
80°	923
85°	0



TEST NUMBER: P592681
 CATALOG NUMBER: HCC4S20D010BZ-HM40525950-41NDC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.9	11.2
10°-20°	539.1	29.0
20°-30°	580.8	31.2
30°-40°	381.6	20.5
40°-50°	118.6	6.4
50°-60°	23.3	1.3
60°-70°	5.0	0.3
70°-80°	1.8	0.1
80°-90°	0.5	0.0
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°	1328.7	71.5
0°-40°	1710.3	92.0
0°-60°	1852.2	99.6
0°-90°	1859.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1859.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2221	
5°	2209	209
15°	1953	539
25°	1266	581
35°	626	382
45°	141	119
55°	21	23
65°	5	5
75°	1	2
85°	0	1
90°	0	



TEST NUMBER: P592681
CATALOG NUMBER: HCC4S20D010BZ-HM40525950-41NDC

CANDELA DISTRIBUTION (FULL):

	0°
0°	2220.6
2.5°	2209.2
5°	2209.2
7.5°	2191.7
10°	2141.4
12.5°	2061.0
15°	1953.0
17.5°	1808.6
20°	1634.0
22.5°	1445.6
25°	1266.1
27.5°	1098.9
30°	944.4
32.5°	798.8
35°	625.5
37.5°	435.9
40°	300.2
42.5°	207.3
45°	140.6
47.5°	95.4
50°	64.0
52.5°	40.1
55°	21.3
57.5°	8.8
60°	7.6
62.5°	6.3
65°	5.0
67.5°	3.8
70°	2.5
72.5°	2.5
75°	1.3
77.5°	1.3
80°	1.3
82.5°	1.3
85°	0.0
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)