

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: P580989

Luminaire Tested: **HCC4S05D010MB-HM40525827-41RWWH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580989  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-15)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S05D010MB-HM40525827-41RWWH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

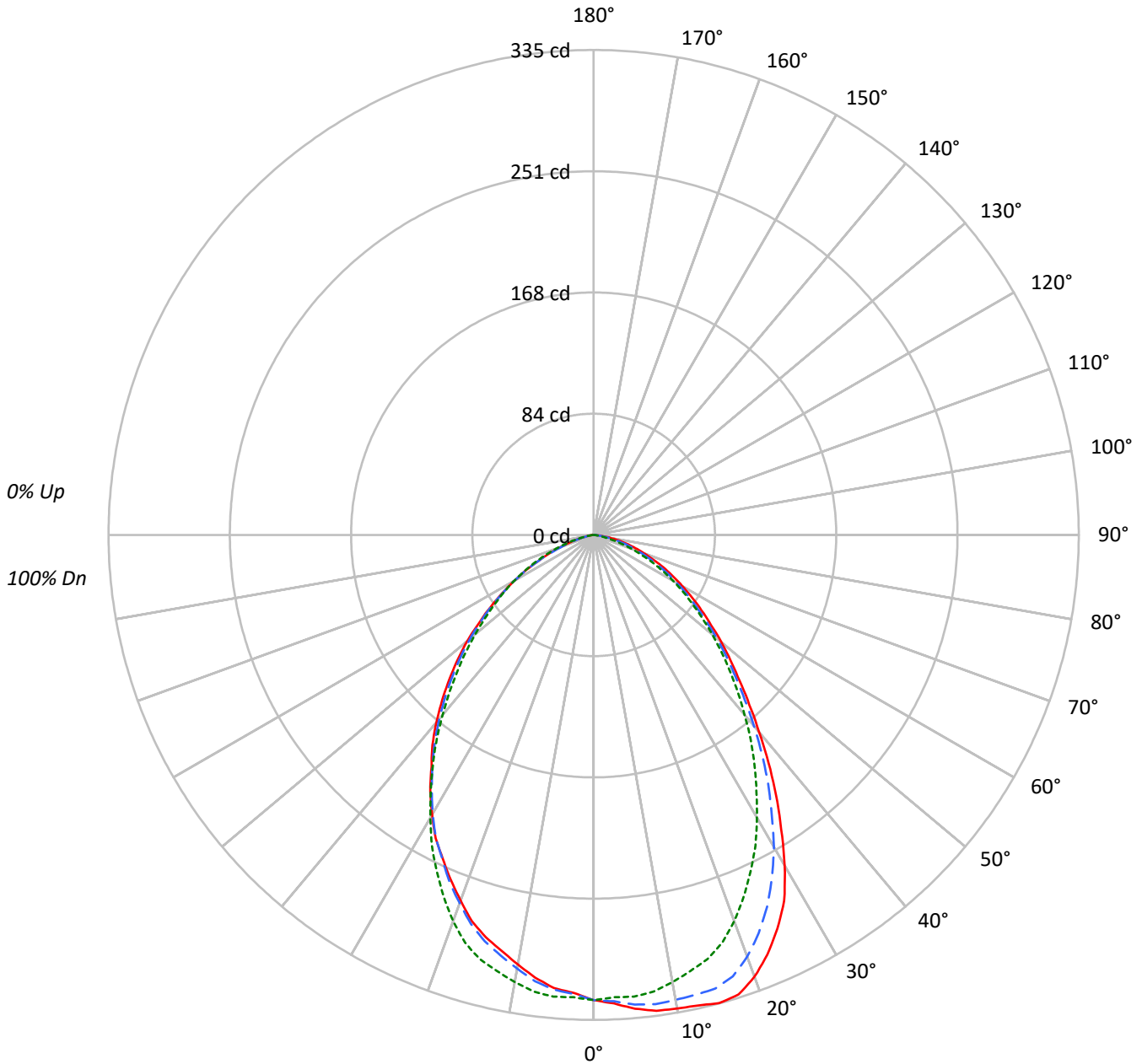
Lumens per Lamp: N/A  
Luminaire Lumens: 612.4 lumens  
Efficiency: N/A  
Efficacy: 102.1 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.08 / 1.16  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P580989  
CATALOG NUMBER: HCC4S05D010MB-HM40525827-41RWWH

### Luminous Intensity Polar Plot



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



TEST NUMBER: P580989

CATALOG NUMBER: HCC4S05D010MB-HM40525827-41RWWH

**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	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	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77					77			
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67					67			
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59					59			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52					52			
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47					47			
7	71	58	51	45	69	58	50	45	56	49	45	55	49	44	54	48	44	42					42			
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38					38			
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35					35			
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32					32			

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

	0°	90°	180°
0°	39631	39631	39631
5°	40674	39634	38903
10°	41595	39290	37737
15°	42753	38743	36738
20°	42634	37252	35270
25°	40843	34882	33561
30°	37572	32117	31776
35°	33052	29152	29393
40°	28596	26101	27196
45°	24840	23183	24578
50°	22068	20456	21818
55°	19569	17935	18731
60°	17416	15566	15566
65°	15498	12929	12112
70°	13380	9773	8619
75°	11199	6481	5290
80°	8453	3125	2841
85°	4529	1132	1132



TEST NUMBER: P580989  
 CATALOG NUMBER: HCC4S05D010MB-HM40525827-41RWWH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.4	5.0
10°-20°	86.3	14.1
20°-30°	121.7	19.9
30°-40°	125.7	20.5
40°-50°	106.5	17.4
50°-60°	77.5	12.7
60°-70°	45.3	7.4
70°-80°	16.8	2.7
80°-90°	2.2	0.4
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°	238.3	38.9
0°-40°	364.0	59.4
0°-60°	548.1	89.5
0°-90°	612.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	612.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	321	321	321	321	321	
5°	328	326	320	315	314	31
15°	335	324	303	291	288	94
25°	300	283	256	247	247	137
35°	220	210	194	194	195	137
45°	142	138	133	138	141	111
55°	91	87	83	86	87	82
65°	53	49	44	42	42	53
75°	24	20	14	11	11	25
85°	3	2	1	1	1	4
90°	0	0	0	0	0	



TEST NUMBER: P580989

CATALOG NUMBER: HCC4S05D010MB-HM40525827-41RWWH

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	321.3	321.3	321.3	321.3	321.3	321.3	321.3	321.3	321.3
2.5°	324.0	323.2	322.5	321.3	319.7	318.5	317.3	316.6	316.6
5°	328.5	327.3	325.7	322.9	320.1	317.7	315.3	314.2	314.2
7.5°	331.6	330.1	326.9	322.9	318.1	314.5	310.9	309.3	308.5
10°	332.1	330.5	326.1	320.1	313.7	308.2	304.2	301.8	301.3
12.5°	332.9	330.9	325.3	316.9	308.5	301.8	297.4	295.0	294.2
15°	334.8	332.1	324.5	313.7	303.4	295.3	290.6	288.5	287.7
17.5°	332.9	328.9	319.7	306.9	295.3	286.6	281.8	279.8	279.8
20°	324.8	320.9	310.1	296.1	283.8	275.4	270.6	269.4	268.7
22.5°	313.7	309.3	297.7	283.0	270.6	263.0	259.8	258.2	257.9
25°	300.1	295.8	283.4	268.2	256.3	249.8	247.1	247.1	246.6
27.5°	285.0	279.4	266.6	253.4	241.9	237.1	235.9	235.9	236.3
30°	263.8	259.8	249.0	236.3	225.5	222.3	222.3	223.1	223.1
32.5°	241.1	238.2	228.7	217.6	209.2	207.1	207.9	209.5	210.0
35°	219.5	216.3	210.0	200.0	193.6	192.8	194.0	195.2	195.2
37.5°	198.4	195.2	190.8	182.8	178.0	178.4	180.0	181.6	182.8
40°	177.6	175.2	172.1	165.6	162.1	163.7	165.6	167.2	168.9
42.5°	159.2	156.9	154.5	149.7	147.3	149.3	151.6	153.2	154.8
45°	142.4	140.9	138.5	134.5	132.9	135.0	137.7	139.3	140.9
47.5°	128.1	127.3	124.2	120.5	119.7	121.8	124.2	126.1	127.3
50°	115.0	113.7	111.0	107.4	106.6	109.8	111.3	112.6	113.7
52.5°	102.2	101.0	97.8	94.5	94.5	97.0	98.2	98.6	99.8
55°	91.0	89.8	86.6	84.2	83.4	85.5	86.3	86.3	87.1
57.5°	80.6	79.4	76.3	73.4	73.1	74.2	74.2	74.2	74.7
60°	70.6	69.5	66.3	63.9	63.1	63.4	63.1	62.7	63.1
62.5°	61.5	60.3	57.1	54.3	53.5	53.5	52.3	51.9	52.3
65°	53.1	51.1	48.7	45.9	44.3	43.1	41.5	41.5	41.5
67.5°	44.7	43.1	40.3	37.6	35.5	33.5	31.1	31.9	32.3
70°	37.1	35.9	32.7	30.0	27.1	24.7	22.7	23.5	23.9
72.5°	30.3	28.7	26.0	22.7	20.3	17.1	16.0	16.8	16.8
75°	23.5	21.9	19.5	16.3	13.6	10.8	10.8	11.1	11.1
77.5°	17.6	16.0	13.6	10.8	8.4	6.4	6.8	6.8	6.8
80°	11.9	10.8	8.7	6.4	4.4	3.6	3.6	3.6	4.0
82.5°	6.8	6.0	4.8	3.2	2.0	2.0	2.0	2.0	2.0
85°	3.2	2.4	2.0	1.2	0.8	0.8	0.8	0.8	0.8
87.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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)