

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: P580003

Luminaire Tested: **HCC4S20D010BZ-HM40525830-41RWWC**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580003
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-14)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC4S20D010BZ-HM40525830-41RWWC
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

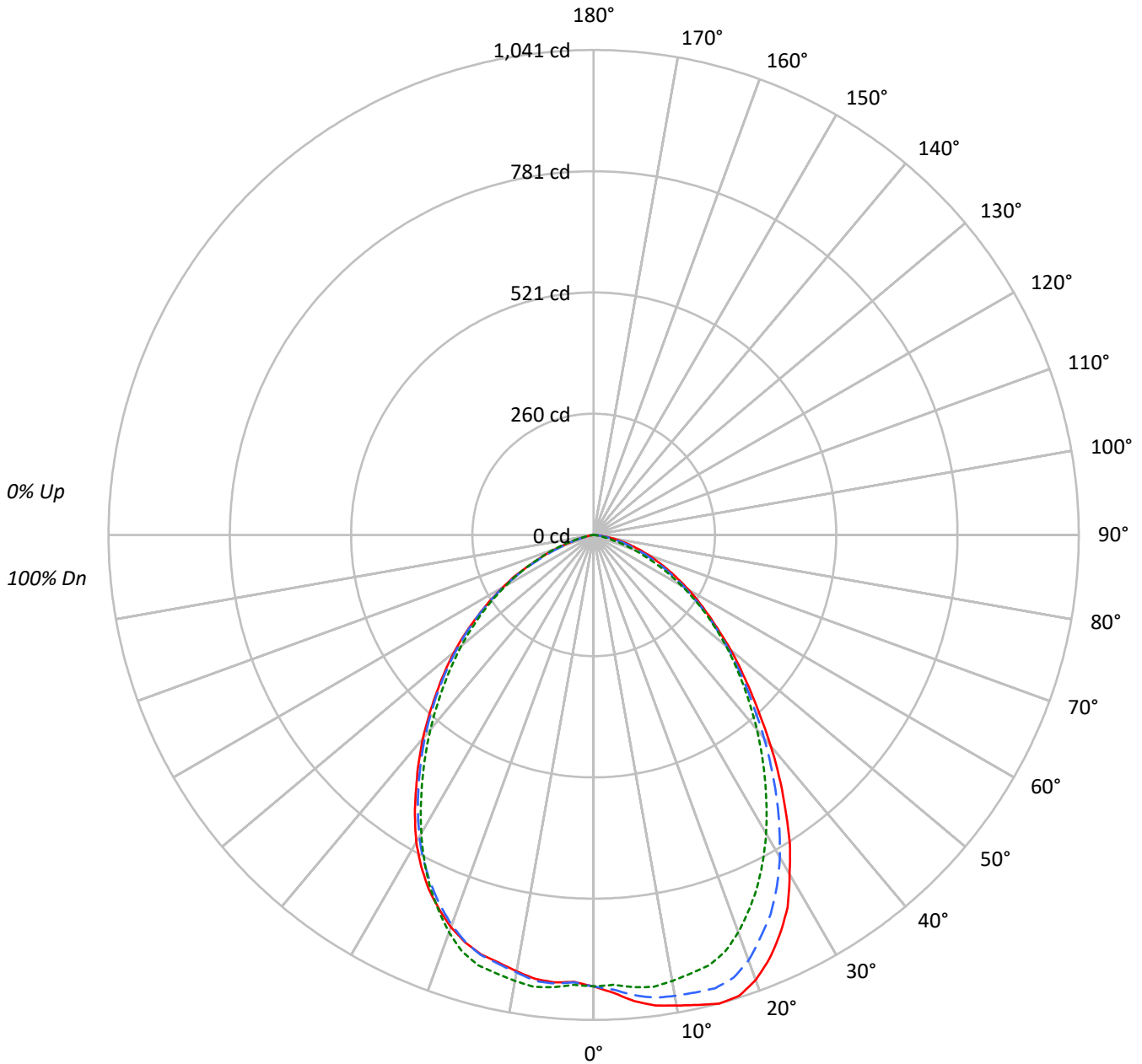
Lumens per Lamp: N/A
Luminaire Lumens: 2019.9 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.15 / 1.21
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P580003
CATALOG NUMBER: HCC4S20D010BZ-HM40525830-41RWWC

Luminous Intensity Polar Plot





TEST NUMBER: P580003

CATALOG NUMBER: HCC4S20D010BZ-HM40525830-41RWWC

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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78	76								
3	95	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	69	67								
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58								
5	81	70	61	56	79	68	61	55	66	60	55	65	59	54	63	58	54	52								
6	75	63	55	49	74	62	55	49	61	54	49	59	53	48	58	52	48	46								
7	70	58	50	44	69	57	49	44	56	49	44	54	48	44	53	47	43	41								
8	66	53	45	40	64	53	45	40	51	44	40	50	44	39	49	43	39	37								
9	62	49	42	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34								
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	119559	119559	119559
5°	124399	120659	119372
10°	128455	121741	119111
15°	132983	122116	119090
20°	133427	119146	117597
25°	128707	113205	114090
30°	119781	105396	108387
35°	107889	96445	99998
40°	95112	87738	91747
45°	83172	79055	82927
50°	73648	71134	74895
55°	64794	62815	65331
60°	57824	53655	55259
65°	50842	43575	42816
70°	44395	32133	29284
75°	36839	19349	15584
80°	27916	7387	4617
85°	13020	1840	1840



TEST NUMBER: P580003
 CATALOG NUMBER: HCC4S20D010BZ-HM40525830-41RWWC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.5	4.6
10°-20°	272.8	13.5
20°-30°	395.1	19.6
30°-40°	416.9	20.6
40°-50°	360.8	17.9
50°-60°	267.3	13.2
60°-70°	154.1	7.6
70°-80°	53.8	2.7
80°-90°	5.7	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°	761.5	37.7
0°-40°	1178.3	58.3
0°-60°	1806.4	89.4
0°-90°	2019.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2019.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	969	969	969	969	969	
5°	1005	992	974	967	964	96
15°	1041	1007	956	934	933	293
25°	946	899	832	826	838	433
35°	716	684	640	655	664	448
45°	477	464	453	470	475	370
55°	301	295	292	303	304	272
65°	174	164	149	141	147	174
75°	77	66	41	33	33	83
85°	9	5	1	1	1	14
90°	0	0	0	0	0	

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



TEST NUMBER: P580003

CATALOG NUMBER: HCC4S20D010BZ-HM40525830-41RWWC

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	969.3	969.3	969.3	969.3	969.3	969.3	969.3	969.3	969.3
2.5°	983.7	981.1	977.1	972.0	966.7	962.8	961.4	960.2	960.2
5°	1004.7	999.4	991.6	981.1	974.5	970.6	966.7	964.1	964.1
7.5°	1019.1	1013.8	1002.0	987.7	978.5	970.6	965.4	961.4	961.4
10°	1025.6	1019.1	1004.7	986.3	972.0	961.4	953.6	951.0	951.0
12.5°	1033.4	1025.6	1006.0	982.4	964.1	951.0	943.1	940.5	940.5
15°	1041.4	1032.2	1007.3	979.8	956.3	940.5	933.9	932.6	932.6
17.5°	1037.5	1025.6	996.9	964.1	937.9	922.2	915.7	915.7	916.9
20°	1016.5	1004.7	972.0	935.3	907.7	895.9	890.8	893.3	895.9
22.5°	985.0	970.6	935.3	899.9	871.0	860.6	860.6	864.5	868.4
25°	945.7	932.6	898.6	859.2	831.8	823.9	826.5	833.1	838.3
27.5°	901.2	886.7	851.4	814.7	787.2	783.3	789.8	799.0	801.6
30°	841.0	829.2	799.0	763.7	740.0	738.8	748.0	754.5	761.0
32.5°	783.3	770.2	741.4	707.4	690.3	691.6	702.1	710.0	713.9
35°	716.5	704.7	683.7	656.2	640.5	643.1	654.9	662.9	664.1
37.5°	653.7	645.8	624.8	603.9	592.1	597.4	607.8	617.0	617.0
40°	590.7	584.2	568.5	551.5	544.9	551.5	561.9	569.8	569.8
42.5°	530.5	526.6	513.5	501.7	497.8	507.0	516.0	522.7	521.3
45°	476.8	472.9	463.7	454.6	453.2	462.4	470.3	474.2	475.4
47.5°	428.3	425.7	417.9	411.3	411.3	420.5	427.0	430.9	432.3
50°	383.8	381.1	374.6	369.3	370.7	379.9	385.0	389.1	390.3
52.5°	339.3	337.9	332.7	326.2	330.1	336.6	343.2	345.8	347.1
55°	301.3	301.3	294.7	289.5	292.1	298.7	302.6	303.8	303.8
57.5°	267.3	265.9	258.1	252.8	254.1	260.7	263.2	264.6	264.6
60°	234.4	233.2	225.3	217.5	217.5	221.4	222.6	224.0	224.0
62.5°	203.0	201.8	192.6	186.0	183.4	182.0	182.0	184.7	189.9
65°	174.2	172.9	163.7	153.2	149.3	145.4	141.4	144.1	146.7
67.5°	148.0	145.4	136.3	127.1	117.9	111.4	104.8	108.7	114.0
70°	123.1	120.5	110.0	99.6	89.1	78.6	73.4	78.6	81.2
72.5°	99.6	96.9	86.5	75.9	62.9	52.4	51.0	52.4	53.7
75°	77.3	75.9	65.5	53.7	40.6	32.7	32.7	32.7	32.7
77.5°	57.6	55.1	44.5	34.1	23.6	18.4	17.0	17.0	17.0
80°	39.3	36.7	27.5	19.6	10.4	7.9	7.9	6.5	6.5
82.5°	22.3	21.0	14.5	7.9	3.9	2.6	2.6	2.6	2.6
85°	9.2	7.9	5.3	2.6	1.3	1.3	1.3	1.3	1.3
87.5°	1.3	1.3	1.3	0.0	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)