

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: P579986

Luminaire Tested: **HCC4S20D010SL-HM40525827-41RWWH**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P579986
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: HCC4S20D010SL-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

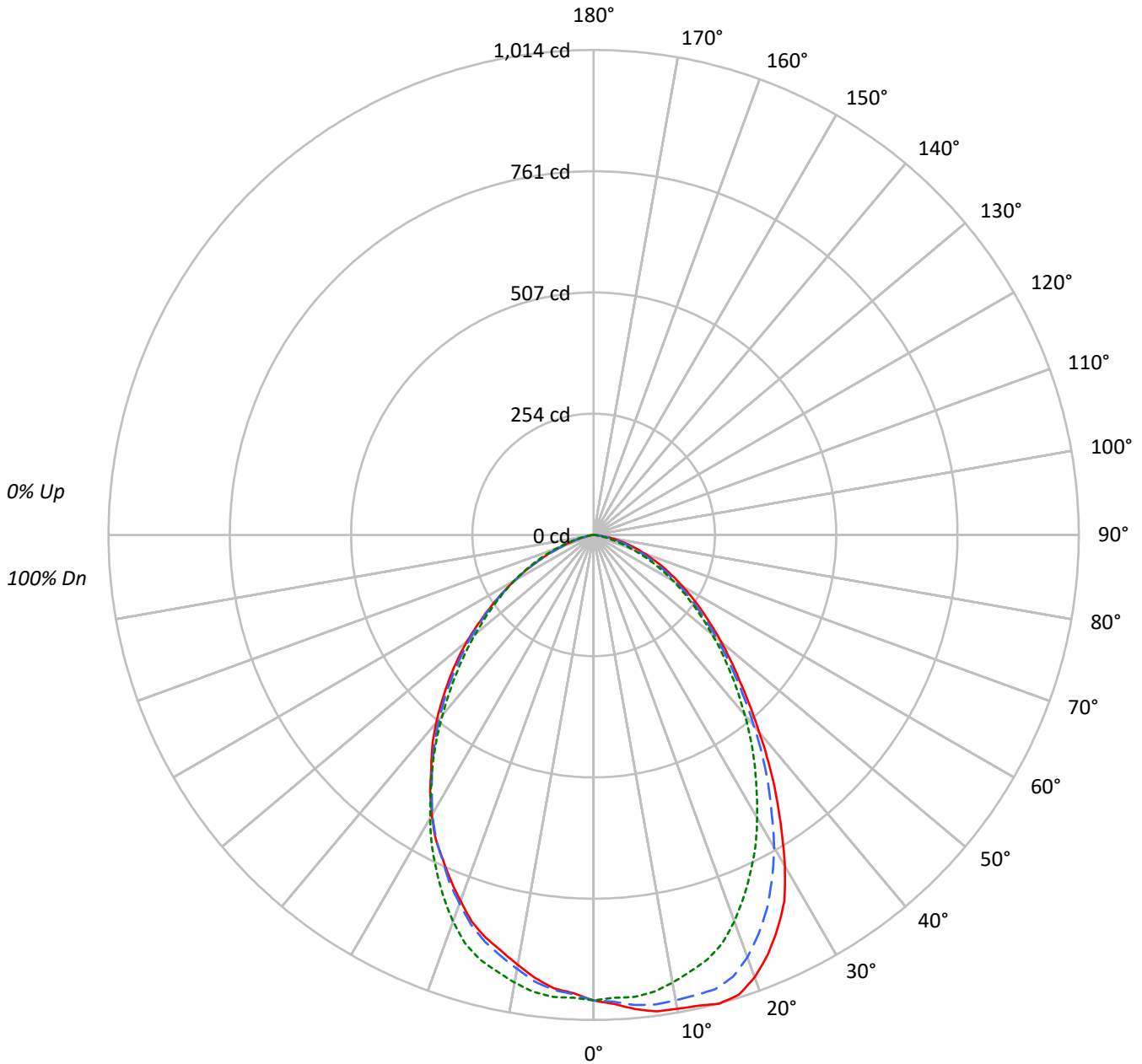
Lumens per Lamp: N/A
Luminaire Lumens: 1855.3 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.08 / 1.16
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P579986
CATALOG NUMBER: HCC4S20D010SL-HM40525827-41RWWH

Luminous Intensity Polar Plot



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



TEST NUMBER: P579986

CATALOG NUMBER: HCC4S20D010SL-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	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°	120052	120052	120052
5°	123210	120065	117824
10°	126000	119036	114339
15°	129536	117353	111326
20°	129188	112846	106821
25°	123739	105652	101705
30°	113828	97306	96267
35°	100134	88314	89036
40°	86643	79043	82344
45°	75287	70228	74450
50°	66817	61962	66126
55°	59267	54342	56686
60°	52792	47143	47143
65°	46931	39168	36687
70°	40536	29644	26146
75°	33980	19587	16108
80°	25714	9447	8524
85°	13586	3397	3397



TEST NUMBER: P579986

CATALOG NUMBER: HCC4S20D010SL-HM40525827-41RWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.2	5.0
10°-20°	261.3	14.1
20°-30°	368.5	19.9
30°-40°	380.7	20.5
40°-50°	322.7	17.4
50°-60°	234.8	12.7
60°-70°	137.2	7.4
70°-80°	51.0	2.7
80°-90°	6.7	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°	722.1	38.9
0°-40°	1102.8	59.4
0°-60°	1660.4	89.5
0°-90°	1855.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1855.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	973	973	973	973	973	
5°	995	987	970	955	952	95
15°	1014	983	919	880	872	285
25°	909	858	776	748	747	416
35°	665	636	586	588	591	415
45°	432	420	403	417	427	336
55°	276	262	253	261	264	248
65°	161	148	134	126	126	160
75°	71	59	41	33	34	77
85°	10	6	2	2	2	13
90°	0	0	0	0	0	



TEST NUMBER: P579986

CATALOG NUMBER: HCC4S20D010SL-HM40525827-41RWWH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	973.3	973.3	973.3	973.3	973.3	973.3	973.3	973.3	973.3
2.5°	981.8	979.4	977.0	973.3	968.5	964.9	961.3	958.9	958.9
5°	995.1	991.5	986.6	978.2	969.7	962.4	955.2	951.6	951.6
7.5°	1004.8	1000.0	990.3	978.2	963.7	952.8	941.9	937.1	934.7
10°	1006.0	1001.1	987.9	969.7	950.4	933.4	921.4	914.0	912.9
12.5°	1008.4	1002.4	985.4	960.0	934.7	914.0	900.9	893.5	891.1
15°	1014.4	1006.0	983.0	950.4	919.0	894.8	880.2	874.2	871.8
17.5°	1008.4	996.3	968.5	929.9	894.8	868.2	853.6	847.6	847.6
20°	984.2	972.1	939.5	897.2	859.7	834.3	819.8	816.2	813.8
22.5°	950.4	937.1	902.0	857.3	819.8	796.8	787.2	782.3	781.1
25°	909.2	895.9	858.5	812.5	776.3	756.9	748.4	748.4	747.3
27.5°	863.3	846.4	807.7	767.8	732.7	718.3	714.6	714.6	715.8
30°	799.2	787.2	754.5	715.8	683.2	673.5	673.5	675.9	675.9
32.5°	730.3	721.8	692.8	659.0	633.6	627.5	629.9	634.7	636.0
35°	665.0	655.4	636.0	605.7	586.5	584.1	587.6	591.3	591.3
37.5°	600.9	591.3	578.0	553.8	539.3	540.5	545.3	550.1	553.8
40°	538.1	530.8	521.1	501.8	490.9	495.7	501.8	506.6	511.4
42.5°	482.4	475.2	468.0	453.4	446.2	452.3	459.5	464.3	469.1
45°	431.6	426.8	419.6	407.5	402.6	408.7	417.2	422.0	426.8
47.5°	388.1	385.7	376.0	365.2	362.7	368.8	376.0	382.1	385.7
50°	348.2	344.6	336.2	325.3	322.9	332.5	337.3	341.0	344.6
52.5°	309.6	305.9	296.3	286.5	286.5	293.9	297.4	298.7	302.2
55°	275.6	272.1	262.4	255.1	252.7	258.8	261.2	261.2	263.6
57.5°	244.2	240.6	230.9	222.5	221.3	224.9	224.9	224.9	226.1
60°	214.0	210.4	200.7	193.5	191.1	192.2	191.1	189.8	191.1
62.5°	186.2	182.6	172.9	164.5	162.1	162.1	158.4	157.1	158.4
65°	160.8	154.7	147.5	139.0	134.2	130.5	125.7	125.7	125.7
67.5°	135.5	130.5	122.2	113.7	107.6	101.5	94.3	96.7	98.0
70°	112.4	108.9	99.1	90.7	82.2	75.0	68.9	71.3	72.5
72.5°	91.9	87.1	78.6	68.9	61.7	52.0	48.4	50.8	50.8
75°	71.3	66.5	59.3	49.6	41.1	32.7	32.7	33.8	33.8
77.5°	53.2	48.4	41.1	32.7	25.3	19.4	20.5	20.5	20.5
80°	36.2	32.7	26.6	19.4	13.3	10.9	10.9	10.9	12.0
82.5°	20.5	18.1	14.5	9.6	6.1	6.1	6.1	6.1	6.1
85°	9.6	7.2	6.1	3.7	2.4	2.4	2.4	2.4	2.4
87.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
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)