

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO COMMERCIAL

Report Number: P838393

Luminaire Tested: HCSQ615D010-HM60525840-61SQMW

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838393
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ615D010-HM60525840-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: -

Summary

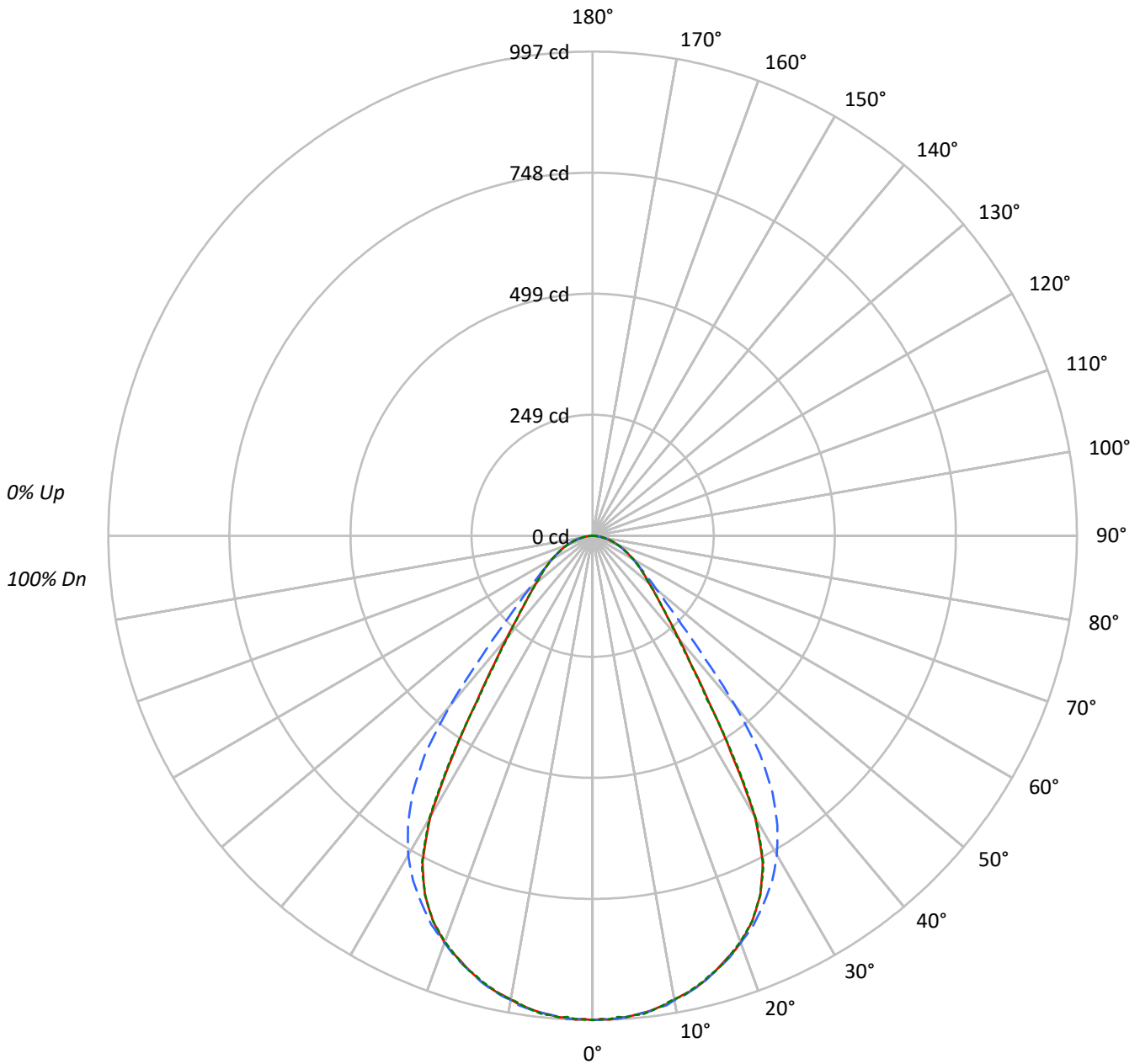
Lumens per Lamp: N/A
Luminaire Lumens: 1470.9 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.11
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 14
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: 24 FT

TEST NUMBER: P838393

CATALOG NUMBER: HCSQ615D010-HM60525840-61SQMW

Luminous Intensity Polar Plot





TEST NUMBER: P838393

CATALOG NUMBER: HCSQ615D010-HM60525840-61SQMW

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	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89								
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79								
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71								
4	91	81	74	69	89	80	73	68	77	72	67	75	70	67	73	69	66	64								
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58								
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53								
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48								
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44								
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41								
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	42935	42935	42935
5°	42827	42797	42827
10°	42408	42439	42347
15°	41775	41806	41713
20°	40834	40866	40742
25°	38799	39625	38765
30°	33225	37730	33429
35°	21829	33918	21498
40°	15434	25573	15159
45°	11965	15740	12050
50°	10175	11481	10081
55°	9150	9413	9150
60°	8284	8284	8284
65°	7600	7529	7529
70°	6924	6924	7012
75°	6488	6255	6371
80°	5703	5703	5703
85°	4841	4841	4841

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15740 cd/sqm



TEST NUMBER: P838393

CATALOG NUMBER: HCSQ615D010-HM60525840-61SQMW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.0	6.4
10°-20°	264.0	17.9
20°-30°	376.2	25.6
30°-40°	320.8	21.8
40°-50°	177.5	12.1
50°-60°	111.8	7.6
60°-70°	74.2	5.0
70°-80°	40.8	2.8
80°-90°	11.6	0.8
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°	734.2	49.9
0°-40°	1055.0	71.7
0°-60°	1344.2	91.4
0°-90°	1470.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1470.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	997	997	997	997	997	
5°	991	992	990	989	991	94
15°	937	937	938	937	936	264
25°	817	826	834	826	816	369
35°	415	490	645	491	409	270
45°	196	215	258	214	198	156
55°	122	124	125	123	122	110
65°	75	75	74	75	74	74
75°	39	38	38	38	38	41
85°	10	10	10	10	10	12
90°	0	0	0	0	0	

TEST NUMBER: P838393

CATALOG NUMBER: HCSQ615D010-HM60525840-61SQMW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	997.2	997.2	997.2	997.2	997.2
1°	995.1	996.5	996.5	995.8	996.5
2°	997.2	995.1	995.1	995.1	995.8
3°	994.4	995.8	995.8	993.7	992.3
4°	993.7	993.0	993.0	995.1	993.7
5°	990.9	992.3	990.2	988.8	990.9
6°	988.1	988.8	988.1	988.8	990.9
7°	984.6	986.7	986.0	985.3	985.3
8°	980.4	983.2	981.8	981.8	981.1
9°	976.3	977.0	978.4	978.4	974.2
10°	970.0	972.1	970.7	971.4	968.6
11°	964.4	967.2	966.5	965.1	965.8
12°	959.5	960.9	960.2	958.1	958.8
13°	953.3	954.7	954.0	954.0	951.9
14°	946.3	944.9	947.0	945.6	944.9
15°	937.2	937.2	937.9	937.2	935.8
16°	928.9	929.6	929.6	928.9	929.6
17°	919.1	921.9	921.2	919.8	920.5
18°	910.1	912.2	912.9	912.2	910.1
19°	901.7	903.1	902.4	899.6	899.6
20°	891.2	891.9	891.9	890.6	889.2
22.5°	858.5	863.4	866.9	864.1	858.5
25°	816.7	826.4	834.1	825.7	816.0
27.5°	758.2	777.7	800.7	779.8	761.6
30°	668.3	712.9	758.9	717.0	672.4
32.5°	531.7	619.5	707.3	627.8	540.0
35°	415.3	489.9	645.3	490.6	409.0
37.5°	331.7	384.7	565.8	381.2	328.2
40°	274.6	310.1	455.0	308.7	269.7
42.5°	229.3	256.4	340.8	253.6	229.3
45°	196.5	215.3	258.5	213.9	197.9
47.5°	172.1	184.0	207.0	183.3	172.1
50°	151.9	158.9	171.4	158.2	150.5
52.5°	135.9	140.1	144.9	138.7	134.5
55°	121.9	124.0	125.4	123.3	121.9
57.5°	108.7	110.1	109.4	108.7	108.0
60°	96.2	96.9	96.2	96.9	96.2
62.5°	85.0	85.7	84.3	85.0	84.3
65°	74.6	75.3	73.9	74.6	73.9
67.5°	64.8	64.8	64.8	64.8	64.1
70°	55.0	55.7	55.0	55.7	55.7
72.5°	46.7	46.7	46.0	46.7	46.7
75°	39.0	38.3	37.6	38.3	38.3



TEST NUMBER: P838393

CATALOG NUMBER: HCSQ615D010-HM60525840-61SQMW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	16.7	16.7	16.0	16.7	16.7
85°	9.8	9.8	9.8	10.5	9.8
87.5°	4.9	4.2	4.2	4.9	4.9
90°	0.0	0.0	0.0	0.0	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270°

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





77.5°	30.7	30.7	30.0	30.7	30.7
80°	23.0	23.7	23.0	23.7	23.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)