

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: P838264

Luminaire Tested: HCSQ605D010-HM60525835-61SQC

Issue Date: 5/21/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P838264  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCSQ605D010-HM60525835-61SQC  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: -

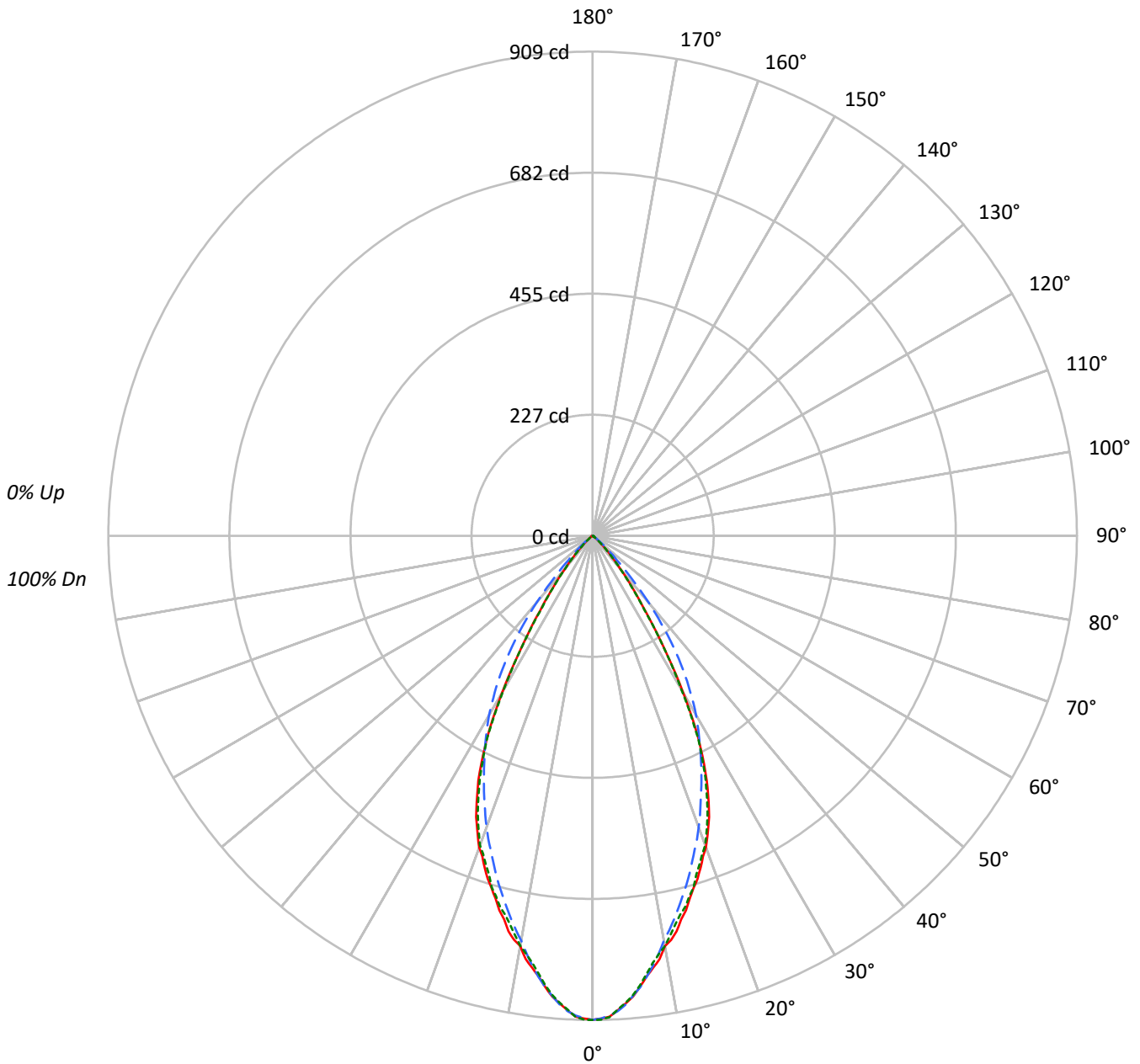
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 680.8 lumens  
Efficiency: N/A  
Efficacy: 113.5 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' 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: 24 FT

TEST NUMBER: P838264

CATALOG NUMBER: HCSQ605D010-HM60525835-61SQC

### Luminous Intensity Polar Plot





TEST NUMBER: P838264  
 CATALOG NUMBER: HCSQ605D010-HM60525835-61SQC

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20				
RC	80					70					50					30				
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	107	105	105	103	101	101	100	98	98	96	95	94		
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87		
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81		
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	78	76		
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71		
6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66		
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62		
8	80	71	65	61	79	70	65	61	69	64	60	68	64	60	67	63	60	59		
9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	56	55		
10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52		

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

	0°	45°	90°
0°	39138	39138	39138
5°	37541	37476	37424
10°	34193	33730	34167
15°	31425	30275	31233
20°	28518	26680	28325
25°	24100	22931	23772
30°	16874	19305	16590
35°	9067	14812	8888
40°	4491	9161	4451
45°	1961	3867	1924
50°	630	1400	630
55°	323	458	293
60°	207	207	207
65°	153	153	153
70°	113	113	113
75°	100	100	100
80°	74	74	74
85°	148	148	148

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 3867 cd/sqm



TEST NUMBER: P838264  
 CATALOG NUMBER: HCSQ605D010-HM60525835-61SQC

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.8	11.7
10°-20°	192.8	28.3
20°-30°	222.7	32.7
30°-40°	139.0	20.4
40°-50°	38.6	5.7
50°-60°	5.4	0.8
60°-70°	1.6	0.2
70°-80°	0.7	0.1
80°-90°	0.3	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°	495.2	72.7
0°-40°	634.3	93.2
0°-60°	678.3	99.6
0°-90°	680.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	680.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	909	909	909	909	909	
5°	869	866	867	866	866	80
15°	705	692	679	690	701	197
25°	507	492	483	492	500	227
35°	172	213	282	210	169	115
45°	32	41	64	41	32	28
55°	4	4	6	4	4	4
65°	2	2	2	2	2	2
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P838264

CATALOG NUMBER: HCSQ605D010-HM60525835-61SQC

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	909.0	909.0	909.0	909.0	909.0
1°	906.3	906.3	906.3	908.7	908.7
2°	903.6	902.9	901.4	903.3	904.2
3°	892.3	893.5	894.1	893.2	891.1
4°	880.8	879.6	882.9	880.8	879.0
5°	868.6	866.2	867.1	865.9	865.9
6°	851.6	854.7	852.2	850.1	848.9
7°	833.1	835.5	834.0	831.0	828.9
8°	818.5	817.0	814.6	814.0	810.3
9°	804.6	799.1	793.6	794.6	795.5
10°	782.1	782.7	771.5	780.0	781.5
11°	772.7	769.4	754.5	761.5	763.9
12°	759.0	748.4	735.7	741.4	746.0
13°	739.3	728.4	716.8	725.6	730.2
14°	724.4	712.0	697.4	708.6	718.0
15°	705.0	691.6	679.2	689.8	700.7
16°	688.0	672.5	660.1	670.4	686.8
17°	673.1	654.0	638.8	649.7	665.5
18°	655.8	633.6	619.7	631.2	649.1
19°	636.7	614.2	601.8	611.2	631.8
20°	622.4	597.2	582.3	591.4	618.2
22.5°	571.4	545.0	531.3	542.3	563.5
25°	507.3	492.5	482.7	492.2	500.4
27.5°	431.4	431.4	434.8	430.8	428.4
30°	339.4	364.0	388.3	362.8	333.7
32.5°	247.7	287.2	336.1	292.4	247.4
35°	172.5	212.8	281.8	210.4	169.1
37.5°	119.9	146.6	222.2	148.2	118.4
40°	79.9	98.4	163.0	100.2	79.2
42.5°	52.2	65.0	105.4	65.3	51.0
45°	32.2	41.0	63.5	40.7	31.6
47.5°	18.8	24.3	37.0	24.6	18.5
50°	9.4	14.3	20.9	14.0	9.4
52.5°	5.5	7.6	11.5	7.3	5.5
55°	4.3	4.3	6.1	4.3	3.9
57.5°	3.3	3.3	3.3	3.3	3.0
60°	2.4	2.7	2.4	2.4	2.4
62.5°	2.1	2.1	1.8	2.1	1.8
65°	1.5	1.5	1.5	1.5	1.5
67.5°	1.2	1.2	1.2	1.2	1.2
70°	0.9	0.9	0.9	0.9	0.9
72.5°	0.6	0.9	0.6	0.9	0.9
75°	0.6	0.6	0.6	0.6	0.6



TEST NUMBER: P838264

CATALOG NUMBER: HCSQ605D010-HM60525835-61SQC

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
82.5°	0.3	0.3	0.3	0.3	0.3
85°	0.3	0.3	0.3	0.3	0.3
87.5°	0.3	0.3	0.3	0.3	0.3
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



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

Scaled Data Report



77.5°	0.6	0.6	0.6	0.6	0.3
80°	0.3	0.3	0.3	0.3	0.3

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

Scaled Data Report



(END OF REPORT)