

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: P838254

Luminaire Tested: HCSQ605D010-HM60525827-61SQC

Issue Date: 5/21/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P838254  
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-HM60525827-61SQC  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: -

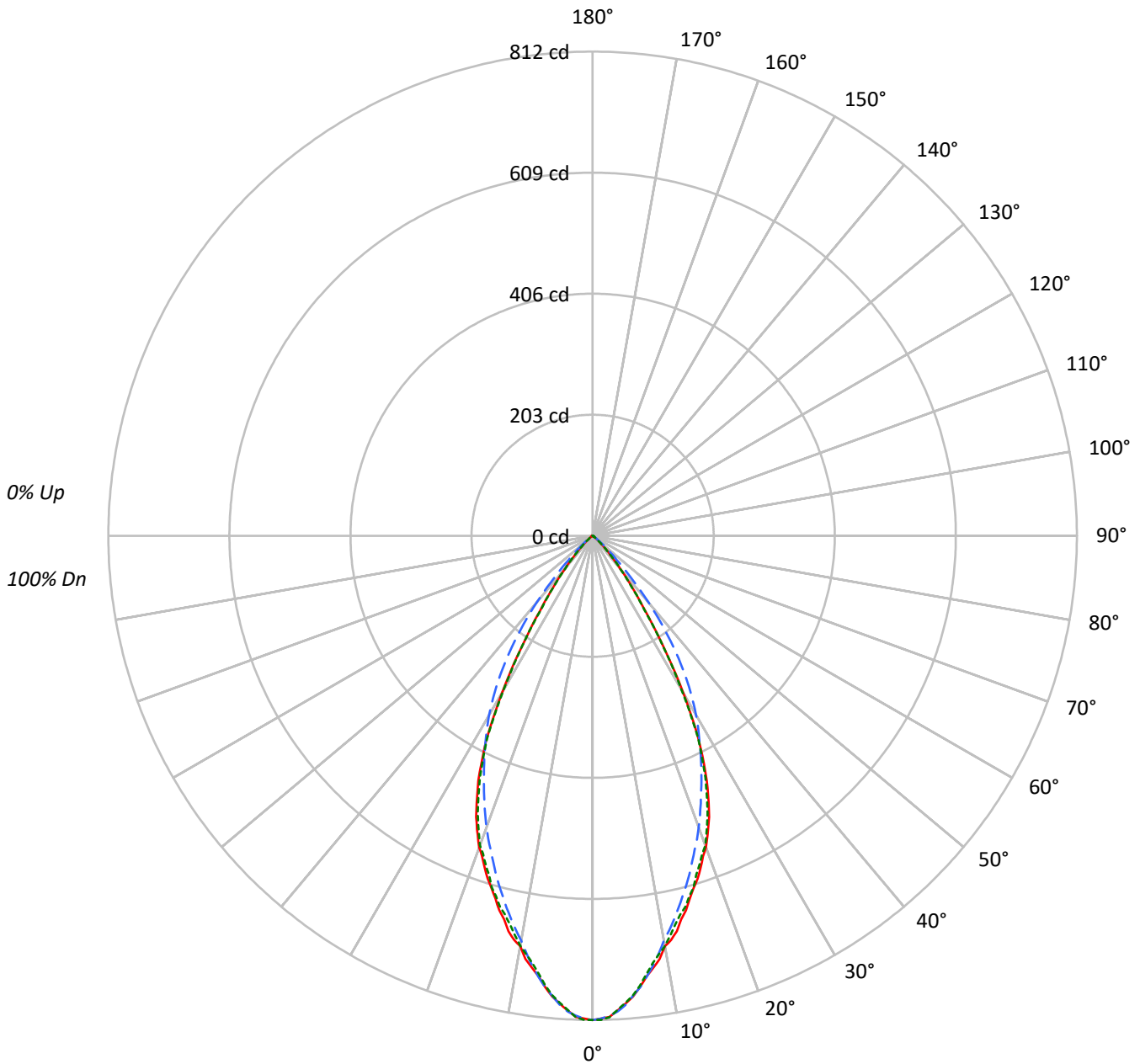
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 608.4 lumens  
Efficiency: N/A  
Efficacy: 101.4 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

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### Luminous Intensity Polar Plot





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**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	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	100	100	100	100		
	1	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95	94	94	94	94	94	94		
	2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87	87	87	87	87	87		
	3	103	96	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81	81	81	81	81	81		
	4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76	76	76	76	76	76		
	5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71	71	71	71	71	71		
	6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66	66	66	66	66	66		
	7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62	62	62	62	62	62		
	8	80	71	65	61	79	70	65	61	69	64	60	68	64	60	67	63	60	59	59	59	59	59	59		
	9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	56	55	55	55	55	55	55		
	10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52	52	52	52	52	52		

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

	0°	45°	90°
0°	34970	34970	34970
5°	33543	33483	33439
10°	30551	30136	30525
15°	28077	27048	27908
20°	25480	23840	25306
25°	21535	20490	21240
30°	15079	17252	14820
35°	8100	13230	7942
40°	4007	8189	3979
45°	1754	3452	1717
50°	563	1253	563
55°	285	405	263
60°	189	189	189
65°	143	143	143
70°	101	101	101
75°	83	83	83
80°	74	74	74
85°	148	148	148

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 3452 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.3	11.7
10°-20°	172.2	28.3
20°-30°	198.9	32.7
30°-40°	124.2	20.4
40°-50°	34.5	5.7
50°-60°	4.8	0.8
60°-70°	1.4	0.2
70°-80°	0.6	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°	442.5	72.7
0°-40°	566.7	93.2
0°-60°	606.1	99.6
0°-90°	608.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	608.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	812	812	812	812	812	
5°	776	774	775	774	774	72
15°	630	618	607	616	626	176
25°	453	440	431	440	447	202
35°	154	190	252	188	151	102
45°	29	37	57	36	28	25
55°	4	4	5	4	4	4
65°	1	1	1	1	1	1
75°	0	0	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	812.2	812.2	812.2	812.2	812.2
1°	809.7	809.7	809.7	811.9	811.9
2°	807.3	806.8	805.4	807.0	807.8
3°	797.3	798.3	798.9	798.1	796.2
4°	786.9	785.9	788.8	786.9	785.3
5°	776.1	773.9	774.7	773.7	773.7
6°	760.9	763.6	761.5	759.6	758.5
7°	744.4	746.5	745.2	742.5	740.6
8°	731.3	730.0	727.8	727.3	724.0
9°	718.9	714.0	709.1	709.9	710.7
10°	698.8	699.3	689.3	696.9	698.2
11°	690.4	687.4	674.1	680.3	682.5
12°	678.2	668.7	657.3	662.4	666.5
13°	660.5	650.8	640.5	648.3	652.4
14°	647.2	636.1	623.1	633.1	641.5
15°	629.9	617.9	606.8	616.3	626.1
16°	614.7	600.9	589.7	599.0	613.6
17°	601.4	584.3	570.7	580.5	594.6
18°	585.9	566.1	553.7	564.0	580.0
19°	568.8	548.8	537.7	546.1	564.5
20°	556.1	533.6	520.3	528.4	552.3
22.5°	510.5	486.9	474.7	484.5	503.5
25°	453.3	440.0	431.3	439.7	447.1
27.5°	385.5	385.5	388.5	384.9	382.8
30°	303.3	325.3	347.0	324.2	298.1
32.5°	221.4	256.6	300.3	261.2	221.1
35°	154.1	190.2	251.7	188.0	151.1
37.5°	107.2	131.0	198.6	132.4	105.8
40°	71.3	87.9	145.7	89.5	70.8
42.5°	46.7	58.1	94.1	58.3	45.6
45°	28.8	36.6	56.7	36.3	28.2
47.5°	16.8	21.7	33.1	22.0	16.5
50°	8.4	12.7	18.7	12.5	8.4
52.5°	4.9	6.8	10.3	6.5	4.9
55°	3.8	3.8	5.4	3.8	3.5
57.5°	3.0	3.0	3.0	3.0	2.7
60°	2.2	2.4	2.2	2.2	2.2
62.5°	1.9	1.9	1.6	1.9	1.6
65°	1.4	1.4	1.4	1.4	1.4
67.5°	1.1	1.1	1.1	1.1	1.1
70°	0.8	0.8	0.8	0.8	0.8
72.5°	0.5	0.8	0.5	0.8	0.8
75°	0.5	0.5	0.5	0.5	0.5



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**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



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Scaled Data Report





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

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Scaled Data Report



77.5°	0.5	0.5	0.5	0.5	0.3
80°	0.3	0.3	0.3	0.3	0.3

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Scaled Data Report



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