

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: P838324

Luminaire Tested: HCSQ607D010-HM60525935-61SQC

Issue Date: 5/21/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P838324  
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: HCSQ607D010-HM60525935-61SQC  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

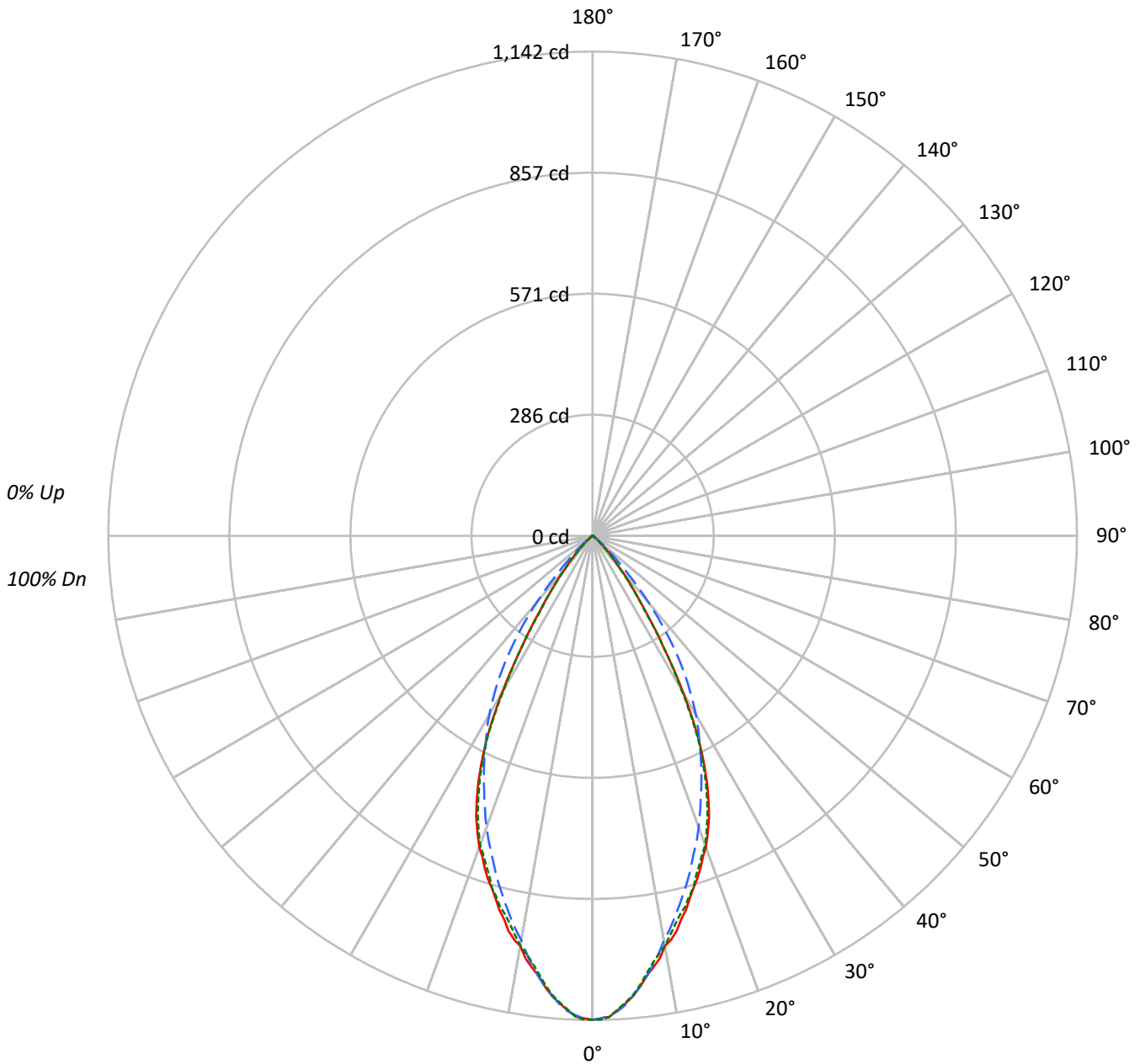
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 855.1 lumens  
Efficiency: N/A  
Efficacy: 106.9 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): 8  
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								
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	96	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	77	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°	49152	49152	49152
5°	47149	47067	46998
10°	42942	42360	42907
15°	39462	38018	39226
20°	35812	33507	35569
25°	30266	28799	29853
30°	21194	24247	20831
35°	11385	18596	11164
40°	5637	11511	5592
45°	2460	4853	2417
50°	790	1762	790
55°	398	570	375
60°	267	267	267
65°	194	194	194
70°	138	138	138
75°	133	133	133
80°	99	99	99
85°	198	198	198

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 4853 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.2	11.7
10°-20°	242.1	28.3
20°-30°	279.6	32.7
30°-40°	174.6	20.4
40°-50°	48.5	5.7
50°-60°	6.8	0.8
60°-70°	2.0	0.2
70°-80°	0.9	0.1
80°-90°	0.4	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°	621.9	72.7
0°-40°	796.6	93.2
0°-60°	851.9	99.6
0°-90°	855.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	855.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1142	1142	1142	1142	1142	
5°	1091	1088	1089	1087	1087	101
15°	885	869	853	866	880	248
25°	637	618	606	618	628	285
35°	217	267	354	264	212	144
45°	40	52	80	51	40	35
55°	5	5	8	5	5	5
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	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1141.6	1141.6	1141.6	1141.6	1141.6
1°	1138.1	1138.1	1138.1	1141.2	1141.2
2°	1134.7	1133.9	1132.0	1134.3	1135.5
3°	1120.6	1122.1	1122.9	1121.7	1119.1
4°	1106.1	1104.6	1108.8	1106.1	1103.8
5°	1090.9	1087.8	1089.0	1087.4	1087.4
6°	1069.5	1073.3	1070.3	1067.6	1066.1
7°	1046.3	1049.3	1047.4	1043.6	1040.9
8°	1028.0	1026.0	1023.0	1022.2	1017.7
9°	1010.4	1003.5	996.7	997.8	999.0
10°	982.2	983.0	968.9	979.5	981.4
11°	970.4	966.2	947.5	956.3	959.3
12°	953.2	939.9	923.9	931.1	936.8
13°	928.4	914.7	900.2	911.3	917.0
14°	909.8	894.1	875.8	889.9	901.7
15°	885.3	868.6	852.9	866.3	880.0
16°	864.0	844.6	828.9	841.9	862.5
17°	845.3	821.3	802.2	816.0	835.8
18°	823.6	795.7	778.2	792.7	815.2
19°	799.6	771.3	755.7	767.5	793.5
20°	781.6	750.0	731.3	742.7	776.3
22.5°	717.6	684.4	667.3	681.0	707.7
25°	637.1	618.4	606.2	618.1	628.4
27.5°	541.8	541.8	546.0	541.0	538.0
30°	426.3	457.2	487.7	455.6	419.0
32.5°	311.1	360.7	422.1	367.2	310.7
35°	216.6	267.3	353.8	264.2	212.4
37.5°	150.6	184.2	279.1	186.1	148.7
40°	100.3	123.5	204.8	125.8	99.5
42.5°	65.6	81.6	132.3	82.0	64.1
45°	40.4	51.5	79.7	51.1	39.7
47.5°	23.6	30.5	46.5	30.9	23.3
50°	11.8	17.9	26.3	17.5	11.8
52.5°	6.9	9.5	14.5	9.2	6.9
55°	5.3	5.3	7.6	5.3	5.0
57.5°	4.2	4.2	4.2	4.2	3.8
60°	3.1	3.4	3.1	3.1	3.1
62.5°	2.7	2.7	2.3	2.7	2.3
65°	1.9	1.9	1.9	1.9	1.9
67.5°	1.5	1.5	1.5	1.5	1.5
70°	1.1	1.1	1.1	1.1	1.1
72.5°	0.8	1.1	0.8	1.1	1.1
75°	0.8	0.8	0.8	0.8	0.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
82.5°	0.4	0.4	0.4	0.4	0.4
85°	0.4	0.4	0.4	0.4	0.4
87.5°	0.4	0.4	0.4	0.4	0.4
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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77.5°	0.8	0.8	0.8	0.8	0.4
80°	0.4	0.4	0.4	0.4	0.4

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Scaled Data Report



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