

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: P838474

Luminaire Tested: HCSQ625D010-HM60525927-61SQC

Issue Date: 5/21/2024



**Test Information**

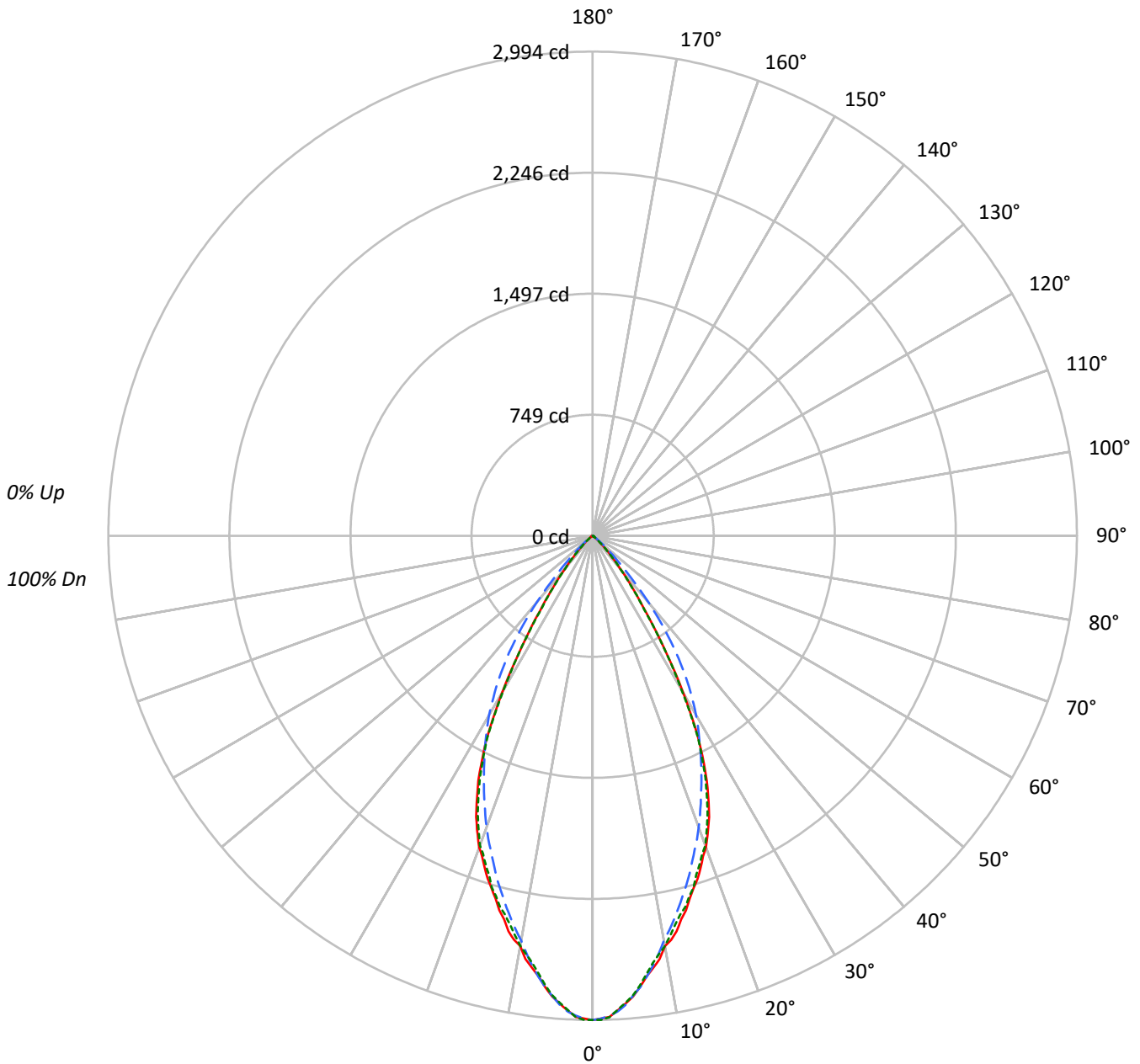
Test Method: LM-79-2019  
Report Number: P838474  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCSQ625D010-HM60525927-61SQC  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2243.0 lumens  
Efficiency: N/A  
Efficacy: 81.0 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): 27.7  
Input Voltage (V): NR  
Input Current (Ain): 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									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	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°	128930	128930	128930
5°	123674	123458	123285
10°	112644	111114	112557
15°	103520	99731	102896
20°	93947	87894	93306
25°	79398	75550	78305
30°	55593	63597	54648
35°	29860	48787	29282
40°	14782	30188	14670
45°	6454	12726	6333
50°	2076	4622	2076
55°	1051	1501	976
60°	689	689	689
65°	509	509	509
70°	378	378	378
75°	333	333	333
80°	248	248	248
85°	494	494	494

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 12726 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	263.0	11.7
10°-20°	635.0	28.3
20°-30°	733.5	32.7
30°-40°	458.1	20.4
40°-50°	127.3	5.7
50°-60°	17.8	0.8
60°-70°	5.2	0.2
70°-80°	2.2	0.1
80°-90°	1.0	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°	1631.4	72.7
0°-40°	2089.5	93.2
0°-60°	2234.6	99.6
0°-90°	2243.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2243.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2994	2994	2994	2994	2994	
5°	2862	2854	2856	2852	2852	264
15°	2322	2278	2237	2272	2308	651
25°	1671	1622	1590	1621	1648	746
35°	568	701	928	693	557	377
45°	106	135	209	134	104	92
55°	14	14	20	14	13	14
65°	5	5	5	5	5	5
75°	2	2	2	2	2	2
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2994.5	2994.5	2994.5	2994.5	2994.5
1°	2985.5	2985.5	2985.5	2993.5	2993.5
2°	2976.5	2974.5	2969.5	2975.5	2978.5
3°	2939.5	2943.5	2945.5	2942.5	2935.5
4°	2901.5	2897.5	2908.5	2901.5	2895.5
5°	2861.5	2853.5	2856.5	2852.5	2852.5
6°	2805.5	2815.5	2807.5	2800.5	2796.5
7°	2744.5	2752.5	2747.5	2737.5	2730.5
8°	2696.5	2691.5	2683.5	2681.5	2669.5
9°	2650.5	2632.5	2614.5	2617.5	2620.5
10°	2576.5	2578.5	2541.5	2569.5	2574.5
11°	2545.5	2534.5	2485.5	2508.5	2516.5
12°	2500.5	2465.4	2423.4	2442.4	2457.4
13°	2435.4	2399.4	2361.4	2390.4	2405.4
14°	2386.4	2345.4	2297.4	2334.4	2365.4
15°	2322.4	2278.4	2237.4	2272.4	2308.4
16°	2266.4	2215.4	2174.4	2208.4	2262.4
17°	2217.4	2154.4	2104.4	2140.4	2192.4
18°	2160.4	2087.4	2041.4	2079.4	2138.4
19°	2097.4	2023.4	1982.4	2013.4	2081.4
20°	2050.4	1967.4	1918.3	1948.4	2036.4
22.5°	1882.3	1795.3	1750.3	1786.3	1856.3
25°	1671.3	1622.3	1590.3	1621.3	1648.3
27.5°	1421.3	1421.3	1432.3	1419.3	1411.3
30°	1118.2	1199.2	1279.2	1195.2	1099.2
32.5°	816.1	946.2	1107.2	963.2	815.1
35°	568.1	701.1	928.2	693.1	557.1
37.5°	395.1	483.1	732.1	488.1	390.1
40°	263.0	324.1	537.1	330.1	261.0
42.5°	172.0	214.0	347.1	215.0	168.0
45°	106.0	135.0	209.0	134.0	104.0
47.5°	62.0	80.0	122.0	81.0	61.0
50°	31.0	47.0	69.0	46.0	31.0
52.5°	18.0	25.0	38.0	24.0	18.0
55°	14.0	14.0	20.0	14.0	13.0
57.5°	11.0	11.0	11.0	11.0	10.0
60°	8.0	9.0	8.0	8.0	8.0
62.5°	7.0	7.0	6.0	7.0	6.0
65°	5.0	5.0	5.0	5.0	5.0
67.5°	4.0	4.0	4.0	4.0	4.0
70°	3.0	3.0	3.0	3.0	3.0
72.5°	2.0	3.0	2.0	3.0	3.0
75°	2.0	2.0	2.0	2.0	2.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
82.5°	1.0	1.0	1.0	1.0	1.0
85°	1.0	1.0	1.0	1.0	1.0
87.5°	1.0	1.0	1.0	1.0	1.0
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°	2.0	2.0	2.0	2.0	1.0
80°	1.0	1.0	1.0	1.0	1.0

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(END OF REPORT)