

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: P838279

Luminaire Tested: HCSQ605D010-HM60525930-61SQC

Issue Date: 5/21/2024

**Test Information**

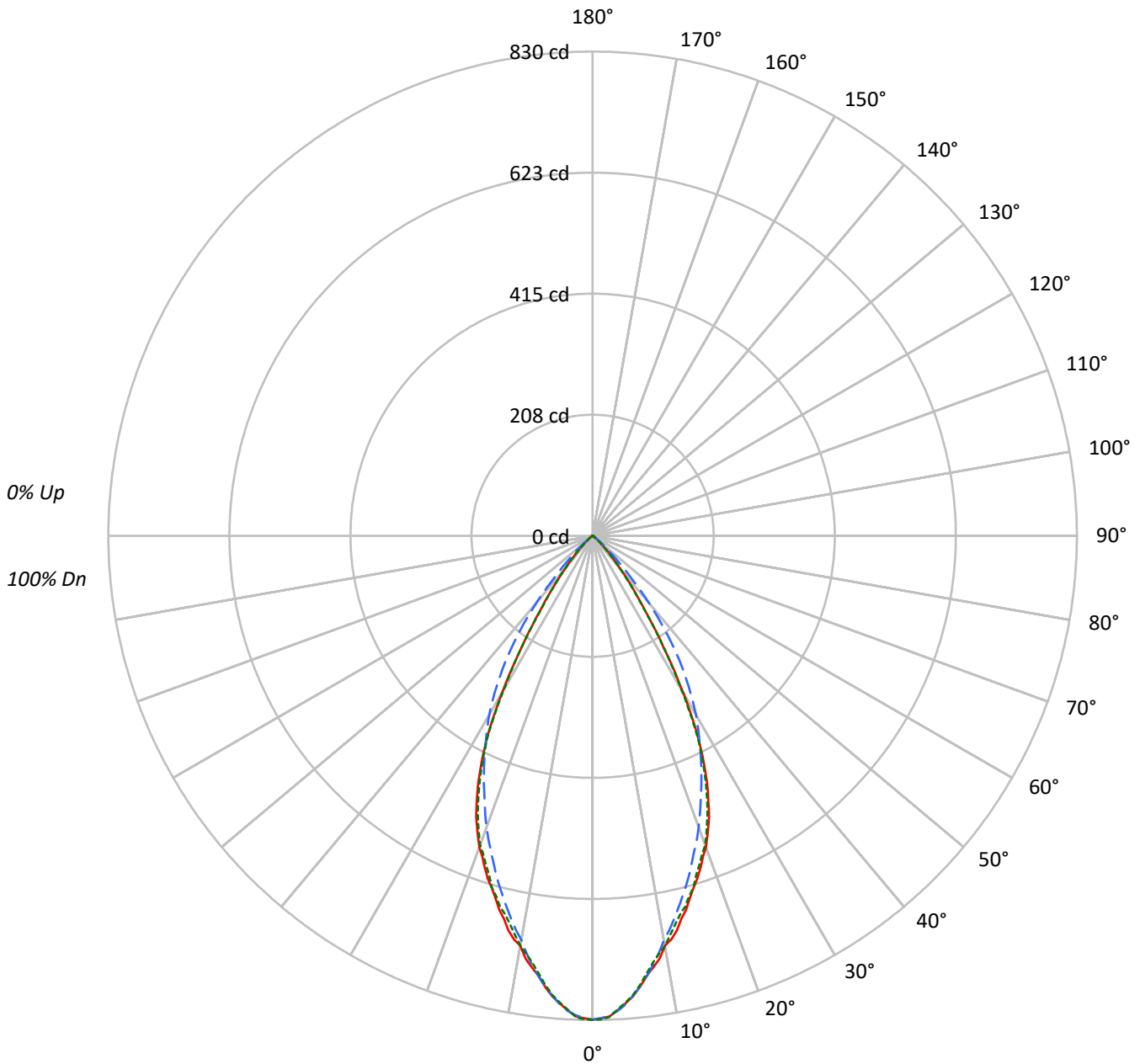
Test Method: LM-79-2019  
Report Number: P838279  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCSQ605D010-HM60525930-61SQC  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 621.4 lumens  
Efficiency: N/A  
Efficacy: 103.6 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 (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	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°	35719	35719	35719
5°	34265	34204	34157
10°	31207	30783	31181
15°	28679	27632	28505
20°	26025	24353	25851
25°	21996	20931	21692
30°	15402	17619	15139
35°	8273	13513	8110
40°	4097	8363	4064
45°	1790	3526	1754
50°	576	1279	576
55°	293	413	270
60°	189	189	189
65°	143	143	143
70°	101	101	101
75°	100	100	100
80°	74	74	74
85°	148	148	148

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 3526 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.9	11.7
10°-20°	175.9	28.3
20°-30°	203.2	32.7
30°-40°	126.9	20.4
40°-50°	35.3	5.7
50°-60°	4.9	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°	452.0	72.7
0°-40°	578.9	93.2
0°-60°	619.0	99.6
0°-90°	621.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	621.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	830	830	830	830	830	
5°	793	790	791	790	790	73
15°	643	631	620	630	640	180
25°	463	449	441	449	457	207
35°	157	194	257	192	154	105
45°	29	37	58	37	29	25
55°	4	4	6	4	4	4
65°	1	1	1	1	1	1
75°	1	1	1	1	1	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°	829.6	829.6	829.6	829.6	829.6
1°	827.1	827.1	827.1	829.3	829.3
2°	824.6	824.1	822.7	824.3	825.2
3°	814.4	815.5	816.0	815.2	813.3
4°	803.8	802.7	805.8	803.8	802.2
5°	792.8	790.5	791.4	790.3	790.3
6°	777.2	780.0	777.8	775.9	774.7
7°	760.3	762.6	761.2	758.4	756.5
8°	747.0	745.7	743.4	742.9	739.6
9°	734.3	729.3	724.3	725.1	726.0
10°	713.8	714.3	704.1	711.8	713.2
11°	705.2	702.1	688.6	694.9	697.2
12°	692.7	683.0	671.4	676.7	680.8
13°	674.7	664.7	654.2	662.2	666.4
14°	661.1	649.8	636.5	646.7	655.3
15°	643.4	631.2	619.9	629.5	639.5
16°	627.9	613.8	602.4	611.8	626.8
17°	614.3	596.9	583.0	593.0	607.4
18°	598.5	578.3	565.5	576.1	592.4
19°	581.1	560.6	549.2	557.8	576.6
20°	568.0	545.0	531.5	539.8	564.2
22.5°	521.5	497.4	484.9	494.9	514.3
25°	463.0	449.4	440.6	449.2	456.6
27.5°	393.7	393.7	396.8	393.2	391.0
30°	309.8	332.2	354.4	331.1	304.5
32.5°	226.1	262.1	306.7	266.8	225.8
35°	157.4	194.2	257.1	192.0	154.3
37.5°	109.5	133.8	202.8	135.2	108.1
40°	72.9	89.8	148.8	91.4	72.3
42.5°	47.7	59.3	96.2	59.6	46.6
45°	29.4	37.4	57.9	37.1	28.8
47.5°	17.2	22.2	33.8	22.4	16.9
50°	8.6	13.0	19.1	12.7	8.6
52.5°	5.0	6.9	10.5	6.7	5.0
55°	3.9	3.9	5.5	3.9	3.6
57.5°	3.0	3.0	3.0	3.0	2.8
60°	2.2	2.5	2.2	2.2	2.2
62.5°	1.9	1.9	1.7	1.9	1.7
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°	0.6	0.8	0.6	0.8	0.8
75°	0.6	0.6	0.6	0.6	0.6



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

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Scaled Data Report



(END OF REPORT)