

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: P838308

Luminaire Tested: HCSQ607D010-HM60525835-61SQMW

Issue Date: 5/21/2024

**Test Information**

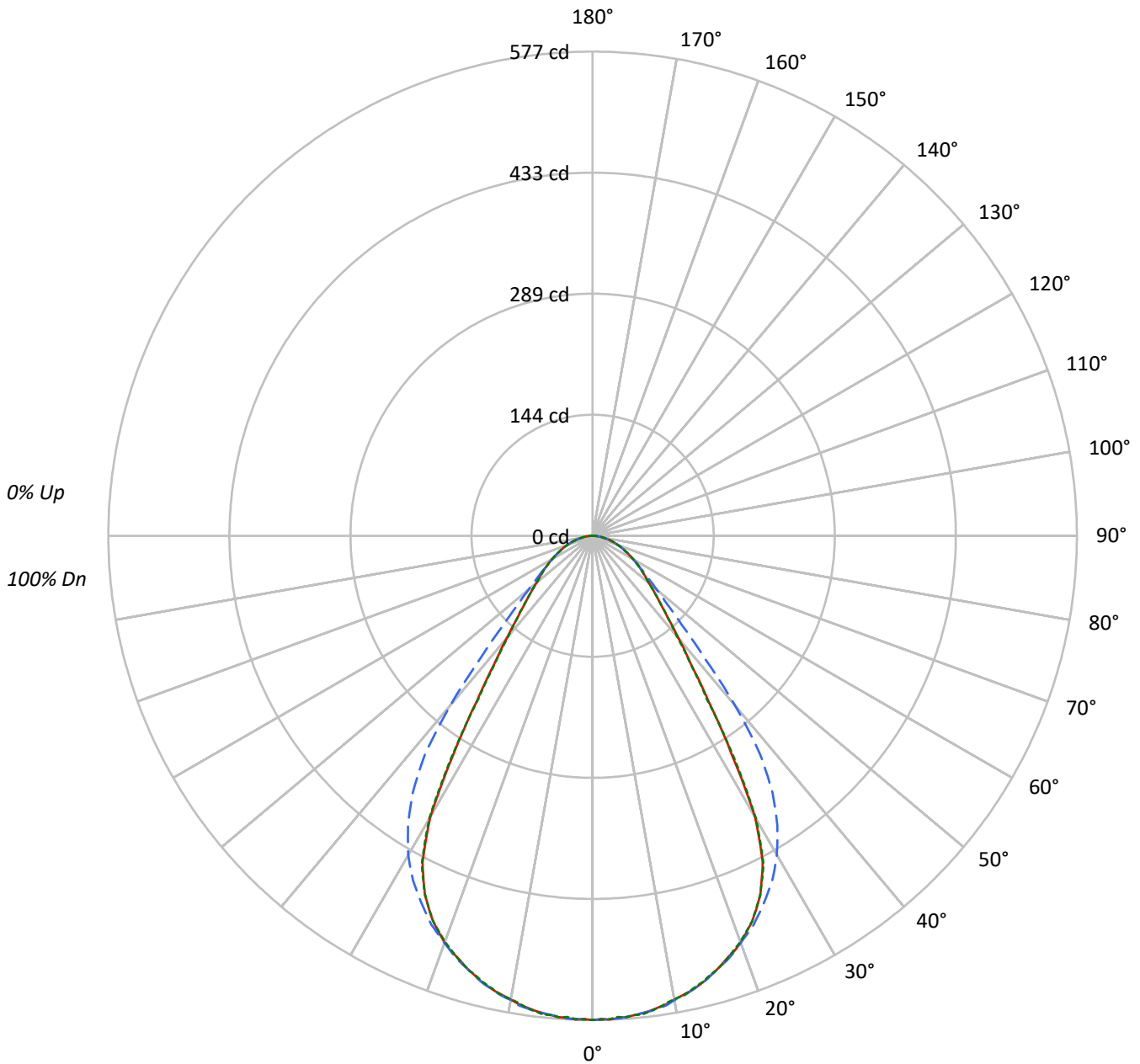
Test Method: LM-79-2019  
Report Number: P838308  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-3)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCSQ607D010-HM60525835-61SQMW  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 851.3 lumens  
Efficiency: N/A  
Efficacy: 106.4 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.11  
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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89								
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79								
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71								
4	91	81	74	69	89	80	73	68	77	72	67	75	70	67	73	69	66	64								
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58								
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53								
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48								
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44								
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41								
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38								

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

	0°	45°	90°
0°	24847	24847	24847
5°	24787	24769	24787
10°	24544	24562	24509
15°	24182	24199	24146
20°	23633	23652	23578
25°	22456	22936	22437
30°	19230	21835	19350
35°	12636	19632	12441
40°	8931	14804	8774
45°	6923	9109	6972
50°	5888	6645	5834
55°	5300	5450	5300
60°	4796	4796	4796
65°	4401	4360	4360
70°	4016	4016	4066
75°	3760	3627	3693
80°	3298	3298	3298
85°	2766	2766	2766

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 9109 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.4	6.4
10°-20°	152.8	17.9
20°-30°	217.7	25.6
30°-40°	185.7	21.8
40°-50°	102.7	12.1
50°-60°	64.7	7.6
60°-70°	43.0	5.0
70°-80°	23.6	2.8
80°-90°	6.7	0.8
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°	425.0	49.9
0°-40°	610.6	71.7
0°-60°	778.0	91.4
0°-90°	851.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	851.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	574	574	573	572	574	54
15°	542	542	543	542	542	153
25°	473	478	483	478	472	214
35°	240	284	374	284	237	156
45°	114	125	150	124	114	90
55°	71	72	73	71	71	63
65°	43	44	43	43	43	43
75°	23	22	22	22	22	24
85°	6	6	6	6	6	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	577.1	577.1	577.1	577.1	577.1
1°	575.9	576.7	576.7	576.3	576.7
2°	577.1	575.9	575.9	575.9	576.3
3°	575.5	576.3	576.3	575.1	574.3
4°	575.1	574.7	574.7	575.9	575.1
5°	573.5	574.3	573.1	572.3	573.5
6°	571.9	572.3	571.9	572.3	573.5
7°	569.9	571.1	570.7	570.3	570.3
8°	567.5	569.1	568.3	568.3	567.9
9°	565.0	565.5	566.3	566.3	563.8
10°	561.4	562.6	561.8	562.2	560.6
11°	558.2	559.8	559.4	558.6	559.0
12°	555.4	556.2	555.8	554.6	555.0
13°	551.7	552.5	552.1	552.1	550.9
14°	547.7	546.9	548.1	547.3	546.9
15°	542.5	542.5	542.9	542.5	541.7
16°	537.6	538.0	538.0	537.6	538.0
17°	532.0	533.6	533.2	532.4	532.8
18°	526.7	527.9	528.3	527.9	526.7
19°	521.9	522.7	522.3	520.7	520.7
20°	515.8	516.2	516.2	515.4	514.6
22.5°	496.9	499.7	501.7	500.1	496.9
25°	472.7	478.3	482.8	477.9	472.3
27.5°	438.8	450.1	463.4	451.3	440.8
30°	386.8	412.6	439.2	415.0	389.2
32.5°	307.7	358.5	409.4	363.4	312.6
35°	240.4	283.5	373.5	283.9	236.7
37.5°	192.0	222.6	327.5	220.6	190.0
40°	158.9	179.5	263.4	178.7	156.1
42.5°	132.7	148.4	197.2	146.8	132.7
45°	113.7	124.6	149.6	123.8	114.5
47.5°	99.6	106.5	119.8	106.1	99.6
50°	87.9	92.0	99.2	91.6	87.1
52.5°	78.6	81.1	83.9	80.3	77.8
55°	70.6	71.8	72.6	71.4	70.6
57.5°	62.9	63.7	63.3	62.9	62.5
60°	55.7	56.1	55.7	56.1	55.7
62.5°	49.2	49.6	48.8	49.2	48.8
65°	43.2	43.6	42.8	43.2	42.8
67.5°	37.5	37.5	37.5	37.5	37.1
70°	31.9	32.3	31.9	32.3	32.3
72.5°	27.0	27.0	26.6	27.0	27.0
75°	22.6	22.2	21.8	22.2	22.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
82.5°	9.7	9.7	9.3	9.7	9.7
85°	5.6	5.6	5.6	6.0	5.6
87.5°	2.8	2.4	2.4	2.8	2.8
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°	17.7	17.7	17.3	17.7	17.7
80°	13.3	13.7	13.3	13.7	13.3

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Scaled Data Report



(END OF REPORT)