

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: P838293

Luminaire Tested: HCSQ605D010-HM60525940-61SQMW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838293
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: HCSQ605D010-HM60525940-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

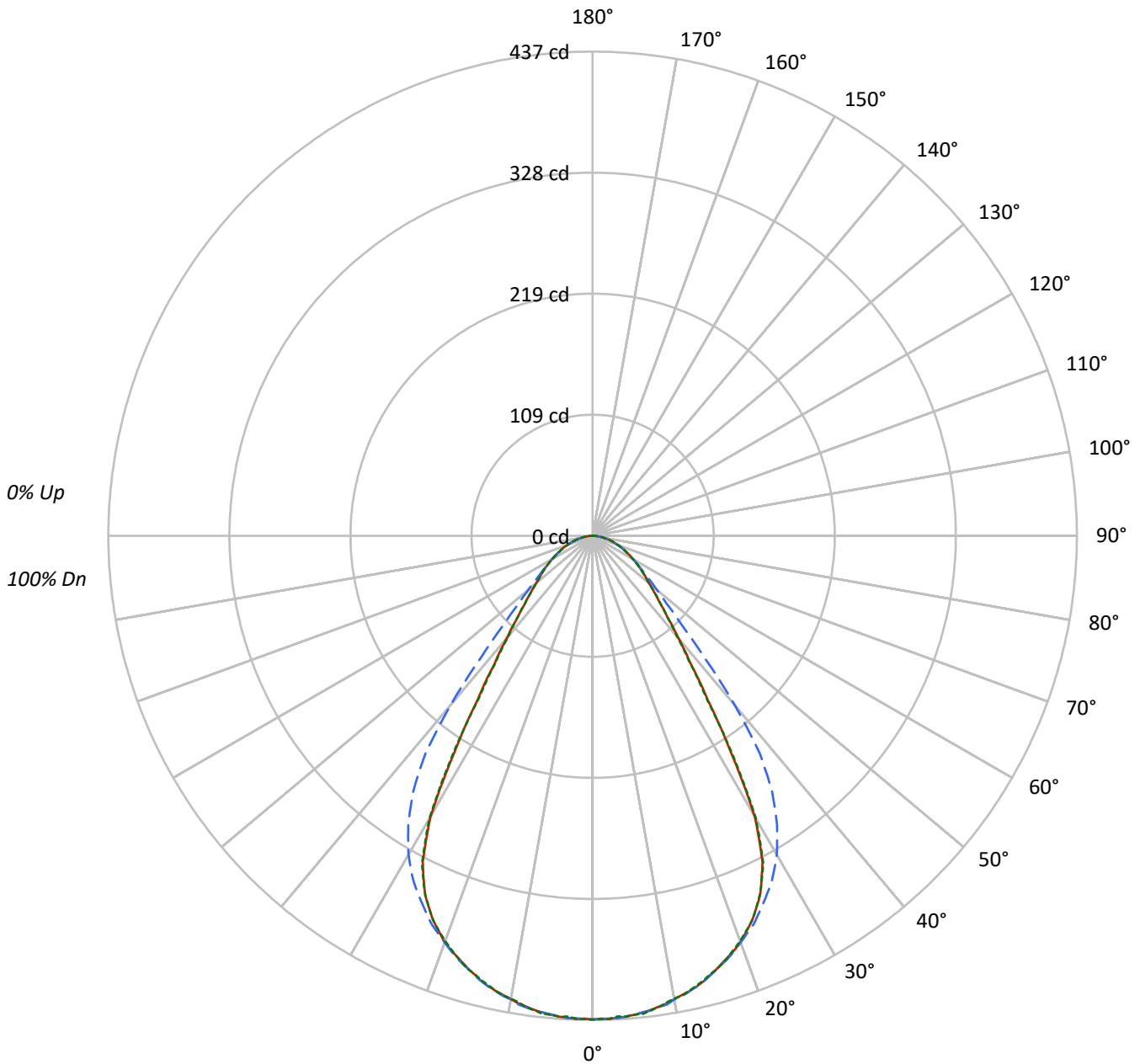
Lumens per Lamp: N/A
Luminaire Lumens: 644.0 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.11
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 6
Input Voltage (V): NR
Input Current (A_{in}): 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	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°	18798	18798	18798
5°	18753	18740	18753
10°	18568	18581	18542
15°	18293	18307	18267
20°	17879	17892	17837
25°	16988	17349	16974
30°	14547	16521	14637
35°	9556	14849	9414
40°	6756	11196	6638
45°	5237	6893	5273
50°	4454	5030	4414
55°	4008	4121	4008
60°	3625	3625	3625
65°	3321	3291	3291
70°	3034	3034	3072
75°	2845	2745	2795
80°	2504	2504	2504
85°	2124	2124	2124

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6893 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.2	6.4
10°-20°	115.6	17.9
20°-30°	164.7	25.6
30°-40°	140.4	21.8
40°-50°	77.7	12.1
50°-60°	48.9	7.6
60°-70°	32.5	5.0
70°-80°	17.8	2.8
80°-90°	5.1	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°	321.5	49.9
0°-40°	461.9	71.7
0°-60°	588.6	91.4
0°-90°	644.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	644.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	437	437	437	437	437	
5°	434	434	434	433	434	41
15°	410	410	411	410	410	116
25°	358	362	365	362	357	162
35°	182	214	282	215	179	118
45°	86	94	113	94	87	68
55°	53	54	55	54	53	48
65°	33	33	32	33	32	32
75°	17	17	16	17	17	18
85°	4	4	4	5	4	5
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	436.6	436.6	436.6	436.6	436.6
1°	435.7	436.3	436.3	436.0	436.3
2°	436.6	435.7	435.7	435.7	436.0
3°	435.4	436.0	436.0	435.1	434.5
4°	435.1	434.8	434.8	435.7	435.1
5°	433.9	434.5	433.6	432.9	433.9
6°	432.6	432.9	432.6	432.9	433.9
7°	431.1	432.0	431.7	431.4	431.4
8°	429.3	430.5	429.9	429.9	429.6
9°	427.4	427.8	428.4	428.4	426.5
10°	424.7	425.6	425.0	425.3	424.1
11°	422.3	423.5	423.2	422.6	422.9
12°	420.1	420.7	420.4	419.5	419.8
13°	417.4	418.0	417.7	417.7	416.8
14°	414.3	413.7	414.6	414.0	413.7
15°	410.4	410.4	410.7	410.4	409.8
16°	406.7	407.0	407.0	406.7	407.0
17°	402.4	403.7	403.3	402.7	403.0
18°	398.5	399.4	399.7	399.4	398.5
19°	394.8	395.4	395.1	393.9	393.9
20°	390.2	390.5	390.5	389.9	389.3
22.5°	375.9	378.0	379.5	378.3	375.9
25°	357.6	361.9	365.2	361.5	357.3
27.5°	332.0	340.5	350.6	341.4	333.5
30°	292.6	312.1	332.3	314.0	294.4
32.5°	232.8	271.2	309.7	274.9	236.5
35°	181.8	214.5	282.5	214.8	179.1
37.5°	145.2	168.4	247.7	166.9	143.7
40°	120.2	135.8	199.2	135.2	118.1
42.5°	100.4	112.3	149.2	111.1	100.4
45°	86.0	94.3	113.2	93.7	86.6
47.5°	75.4	80.5	90.6	80.2	75.4
50°	66.5	69.6	75.1	69.3	65.9
52.5°	59.5	61.3	63.5	60.7	58.9
55°	53.4	54.3	54.9	54.0	53.4
57.5°	47.6	48.2	47.9	47.6	47.3
60°	42.1	42.4	42.1	42.4	42.1
62.5°	37.2	37.5	36.9	37.2	36.9
65°	32.6	33.0	32.3	32.6	32.3
67.5°	28.4	28.4	28.4	28.4	28.1
70°	24.1	24.4	24.1	24.4	24.4
72.5°	20.4	20.4	20.1	20.4	20.4
75°	17.1	16.8	16.5	16.8	16.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	7.3	7.3	7.0	7.3	7.3
85°	4.3	4.3	4.3	4.6	4.3
87.5°	2.1	1.8	1.8	2.1	2.1
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°	13.4	13.4	13.1	13.4	13.4
80°	10.1	10.4	10.1	10.4	10.1

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(END OF REPORT)