

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: P838297

Luminaire Tested: HCSQ607D010-HM60525827-61SQMB

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838297
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ607D010-HM60525827-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: -

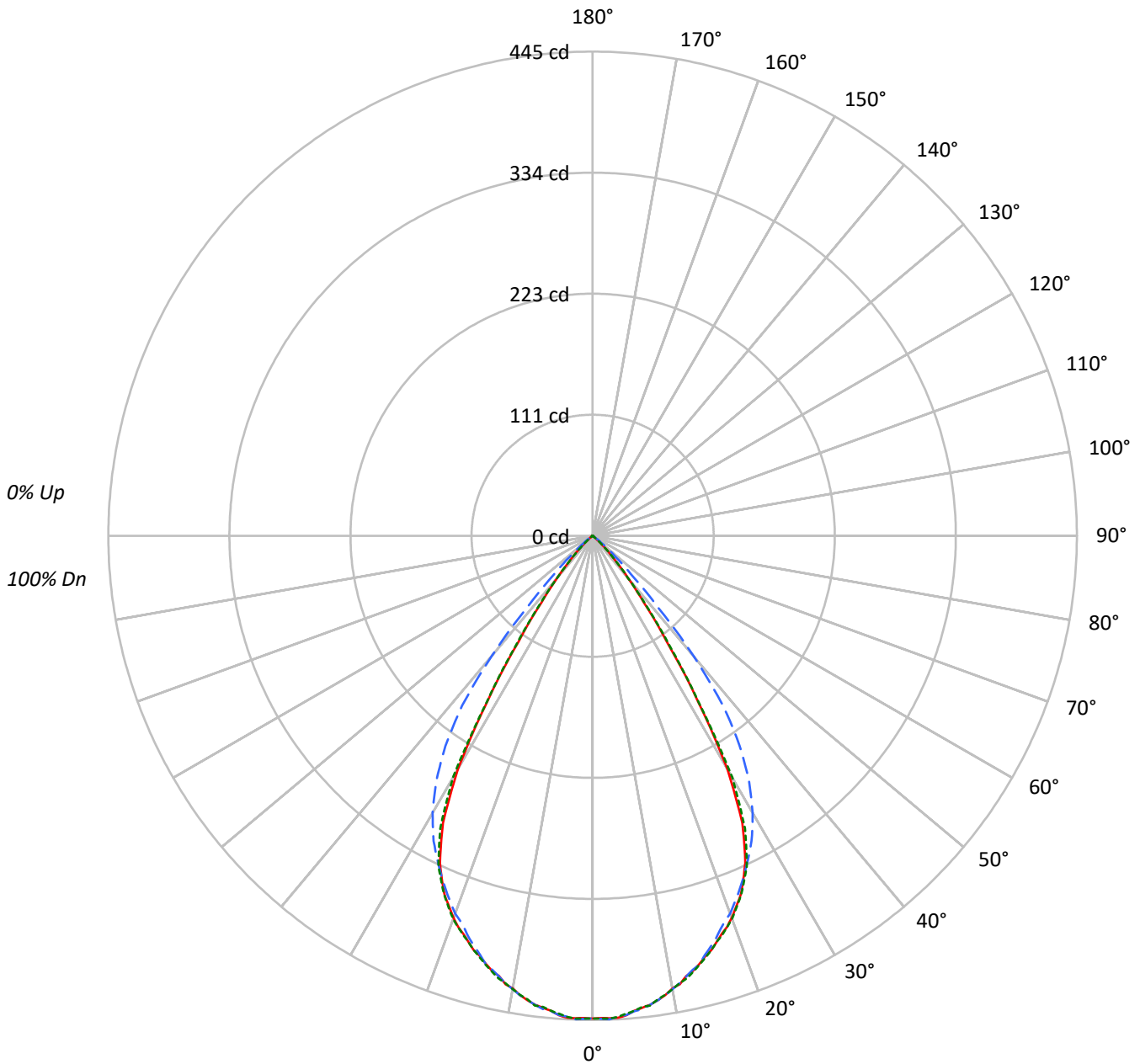
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 441.0 lumens
Efficiency: N/A
Efficacy: 55.1 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.01 / 1.03
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_{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	113	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93																			
2	108	103	99	96	106	101	98	94	98	95	92	95	93	90	92	90	89	87																			
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	85	82	81																			
4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75																			
5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70																			
6	87	78	72	68	86	77	72	68	76	71	67	75	70	67	73	69	66	65																			
7	83	73	67	63	81	73	67	63	71	66	63	70	66	62	69	65	62	60																			
8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56																			
9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53																			
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19104	19104	19104
5°	18943	18956	18943
10°	18467	18498	18498
15°	17830	17785	17879
20°	17123	16925	17173
25°	15767	15891	15924
30°	12290	14622	12757
35°	6234	12389	6460
40°	2838	8105	2838
45°	1096	3051	1078
50°	167	965	167
55°	53	188	53
60°	34	34	34
65°	41	0	41
70°	0	0	50
75°	0	0	67
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 3051 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.4	9.4
10°-20°	112.3	25.5
20°-30°	151.4	34.3
30°-40°	106.5	24.1
40°-50°	27.2	6.2
50°-60°	1.9	0.4
60°-70°	0.3	0.1
70°-80°	0.0	0.0
80°-90°	0.0	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°	305.2	69.2
0°-40°	411.7	93.3
0°-60°	440.8	99.9
0°-90°	441.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	441.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	438	439	439	439	438	41
15°	400	399	399	400	401	113
25°	332	333	334	336	335	148
35°	119	157	236	161	123	80
45°	18	27	50	27	18	16
55°	1	1	2	1	1	1
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
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°	443.7	443.7	443.7	443.7	443.7
1°	443.3	443.7	444.0	444.0	443.7
2°	443.7	442.6	444.7	443.7	444.0
3°	443.7	441.5	442.6	443.3	442.9
4°	441.9	440.4	441.5	441.1	440.4
5°	438.3	439.0	438.6	439.0	438.3
6°	436.1	436.8	437.5	436.4	435.4
7°	434.3	433.9	434.3	435.0	435.0
8°	431.0	431.8	431.0	431.4	430.3
9°	427.4	427.4	427.4	428.2	427.1
10°	422.4	424.2	423.1	423.8	423.1
11°	419.9	419.1	419.1	419.5	419.1
12°	413.7	414.5	414.1	414.8	415.9
13°	410.5	410.9	409.4	411.2	411.2
14°	405.5	405.1	405.8	405.5	406.2
15°	400.0	399.3	399.0	400.0	401.1
16°	396.1	394.3	393.2	394.6	396.1
17°	390.3	388.5	387.1	390.0	390.3
18°	384.6	383.8	380.2	383.8	385.6
19°	379.9	377.3	374.1	378.1	380.2
20°	373.7	371.6	369.4	371.6	374.8
22.5°	356.1	354.3	352.5	355.0	356.8
25°	331.9	333.0	334.5	335.5	335.2
27.5°	297.7	307.4	316.4	310.7	303.1
30°	247.2	271.7	294.1	275.7	256.6
32.5°	179.1	220.9	267.4	229.2	180.9
35°	118.6	157.1	235.7	161.1	122.9
37.5°	77.1	105.6	196.8	106.0	80.7
40°	50.5	68.8	144.2	70.3	50.5
42.5°	31.0	43.6	87.6	45.4	31.0
45°	18.0	27.0	50.1	27.4	17.7
47.5°	8.3	14.8	28.5	14.4	8.6
50°	2.5	6.5	14.4	6.5	2.5
52.5°	1.1	1.8	6.8	1.8	1.1
55°	0.7	0.7	2.5	0.7	0.7
57.5°	0.7	0.4	0.7	0.7	0.7
60°	0.4	0.4	0.4	0.4	0.4
62.5°	0.4	0.4	0.4	0.4	0.4
65°	0.4	0.4	0.0	0.4	0.4
67.5°	0.4	0.0	0.0	0.0	0.4
70°	0.0	0.0	0.0	0.0	0.4
72.5°	0.0	0.0	0.0	0.0	0.4
75°	0.0	0.0	0.0	0.0	0.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0

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Scaled Data Report



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