

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: P838317

Luminaire Tested: HCSQ607D010-HM60525927-61SQMB

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838317
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-HM60525927-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

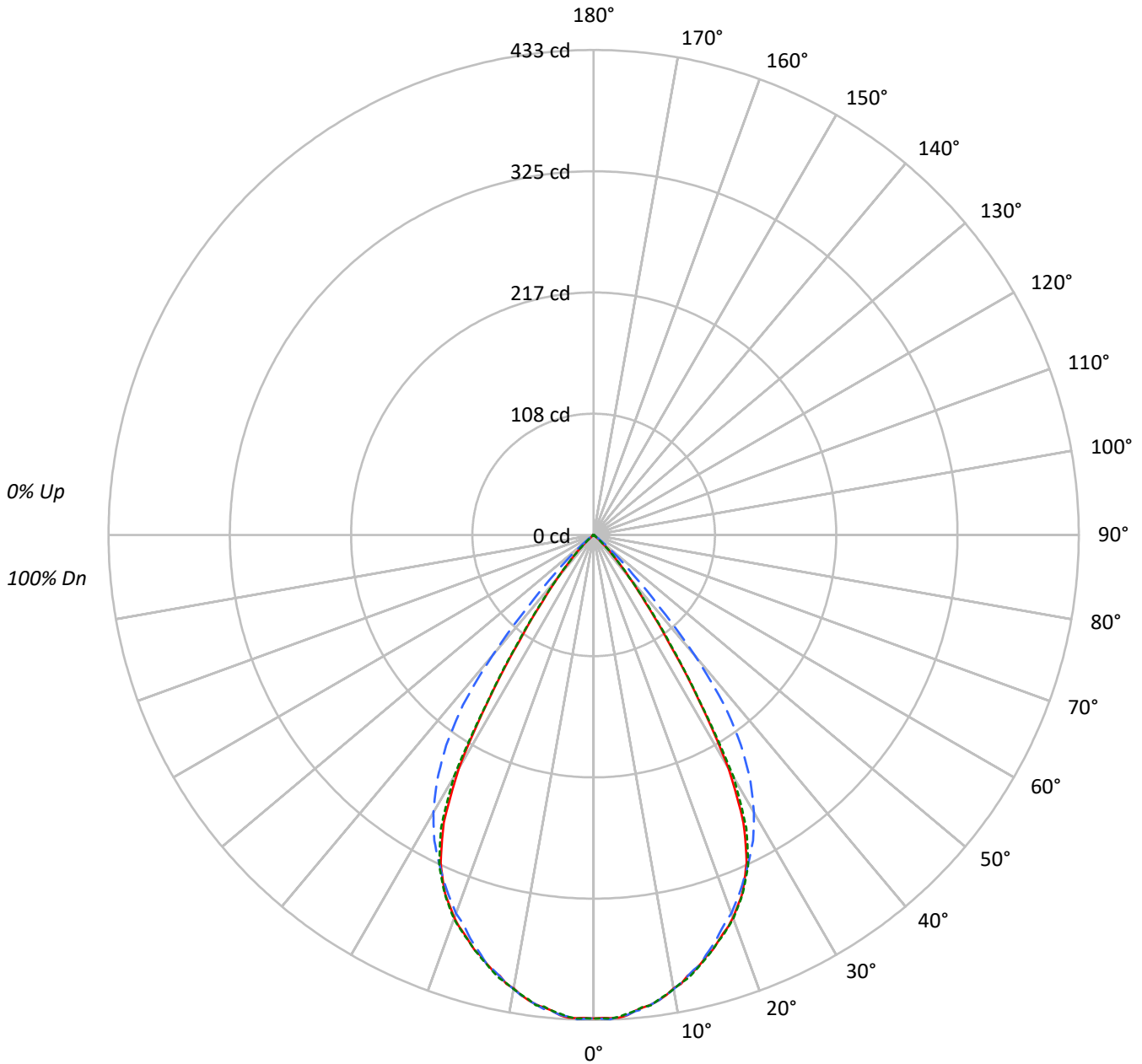
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 429.2 lumens
Efficiency: N/A
Efficacy: 53.6 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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CATALOG NUMBER: HCSQ607D010-HM60525927-61SQMB

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°	18587	18587	18587
5°	18429	18446	18429
10°	17969	17999	17999
15°	17348	17304	17397
20°	16660	16467	16710
25°	15345	15459	15492
30°	11962	14224	12414
35°	6066	12052	6286
40°	2760	7886	2760
45°	1066	2965	1047
50°	167	938	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: 2965 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.3	9.4
10°-20°	109.3	25.5
20°-30°	147.4	34.3
30°-40°	103.6	24.1
40°-50°	26.5	6.2
50°-60°	1.8	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°	297.0	69.2
0°-40°	400.6	93.3
0°-60°	428.9	99.9
0°-90°	429.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	429.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	432	432	432	432	432	
5°	426	427	427	427	426	40
15°	389	388	388	389	390	110
25°	323	324	325	326	326	144
35°	115	153	229	157	120	78
45°	18	26	49	27	17	15
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°	431.7	431.7	431.7	431.7	431.7
1°	431.3	431.7	432.0	432.0	431.7
2°	431.7	430.6	432.7	431.7	432.0
3°	431.7	429.6	430.6	431.3	431.0
4°	429.9	428.5	429.6	429.2	428.5
5°	426.4	427.1	426.8	427.1	426.4
6°	424.3	425.0	425.7	424.7	423.6
7°	422.5	422.2	422.5	423.2	423.2
8°	419.4	420.1	419.4	419.7	418.7
9°	415.9	415.9	415.9	416.6	415.5
10°	411.0	412.7	411.7	412.4	411.7
11°	408.5	407.8	407.8	408.2	407.8
12°	402.6	403.3	402.9	403.6	404.7
13°	399.4	399.8	398.4	400.1	400.1
14°	394.5	394.1	394.8	394.5	395.2
15°	389.2	388.5	388.2	389.2	390.3
16°	385.4	383.6	382.6	384.0	385.4
17°	379.8	378.0	376.6	379.4	379.8
18°	374.2	373.5	369.9	373.5	375.2
19°	369.6	367.1	364.0	367.8	369.9
20°	363.6	361.5	359.4	361.5	364.7
22.5°	346.5	344.7	342.9	345.4	347.2
25°	323.0	324.0	325.4	326.5	326.1
27.5°	289.6	299.1	307.9	302.3	294.9
30°	240.6	264.4	286.1	268.3	249.7
32.5°	174.3	215.0	260.2	223.0	176.0
35°	115.4	152.9	229.3	156.7	119.6
37.5°	75.0	102.7	191.5	103.1	78.5
40°	49.1	67.0	140.3	68.4	49.1
42.5°	30.2	42.4	85.2	44.2	30.2
45°	17.5	26.3	48.7	26.7	17.2
47.5°	8.1	14.4	27.7	14.0	8.4
50°	2.5	6.3	14.0	6.3	2.5
52.5°	1.1	1.8	6.7	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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