

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: P838332

Luminaire Tested: HCSQ607D010-HM60525940-61SQMB

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838332
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-HM60525940-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

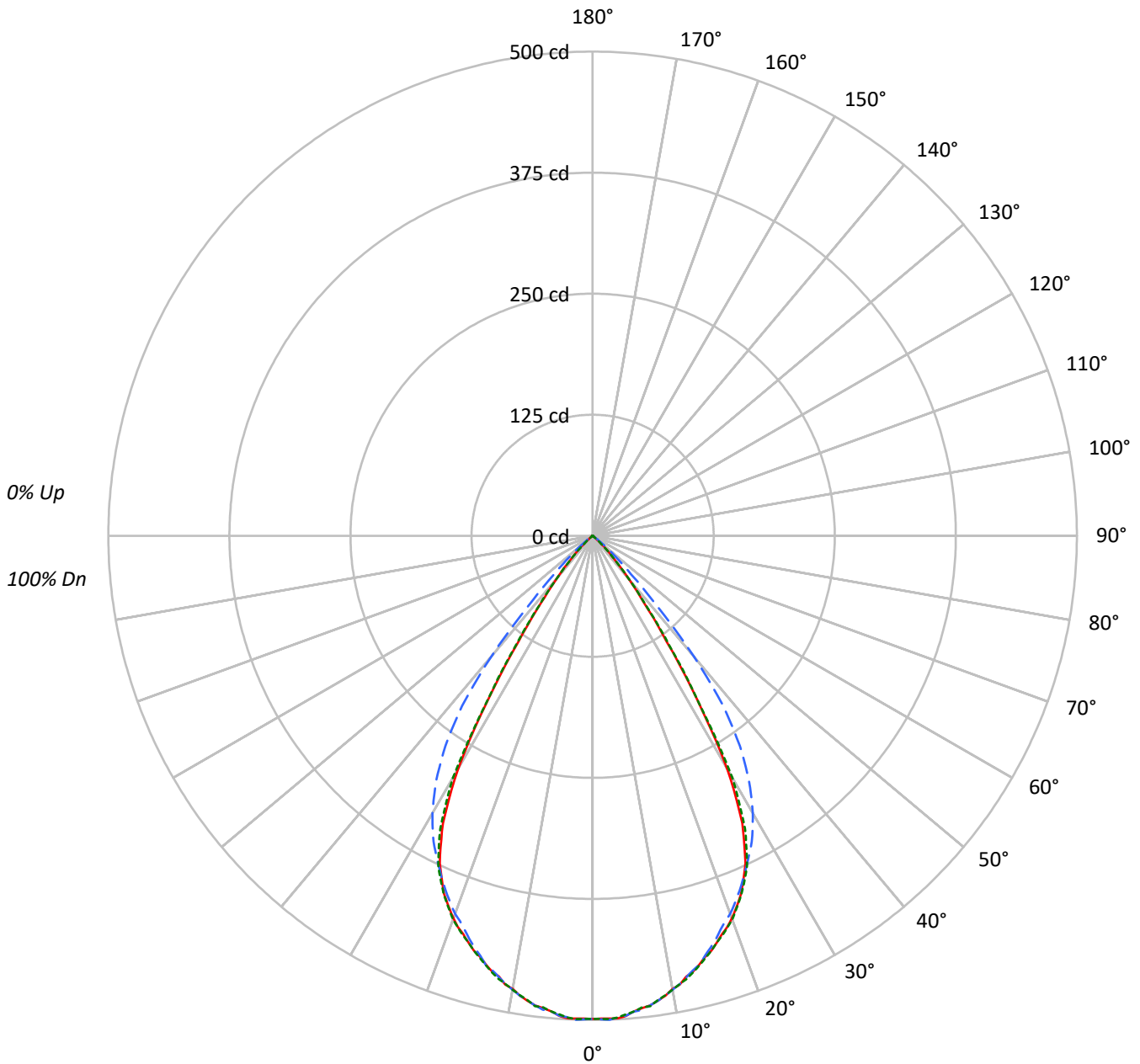
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 496.0 lumens
Efficiency: N/A
Efficacy: 62.0 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					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	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	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°	21485	21485	21485
5°	21303	21320	21303
10°	20771	20806	20806
15°	20059	20005	20112
20°	19262	19038	19317
25°	17739	17872	17910
30°	13826	16446	14348
35°	7012	13934	7264
40°	3192	9116	3192
45°	1236	3428	1212
50°	188	1085	188
55°	60	210	60
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: 3428 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.6	9.4
10°-20°	126.4	25.5
20°-30°	170.3	34.3
30°-40°	119.8	24.1
40°-50°	30.6	6.2
50°-60°	2.1	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°	343.3	69.2
0°-40°	463.1	93.4
0°-60°	495.8	99.9
0°-90°	496.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	496.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	499	499	499	499	499	
5°	493	494	493	494	493	47
15°	450	449	449	450	451	127
25°	373	375	376	377	377	167
35°	133	177	265	181	138	90
45°	20	30	56	31	20	18
55°	1	1	3	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°	499.0	499.0	499.0	499.0	499.0
1°	498.6	499.0	499.4	499.4	499.0
2°	499.0	497.8	500.2	499.0	499.4
3°	499.0	496.6	497.8	498.6	498.2
4°	497.0	495.4	496.6	496.2	495.4
5°	492.9	493.8	493.3	493.8	492.9
6°	490.5	491.3	492.1	490.9	489.7
7°	488.5	488.1	488.5	489.3	489.3
8°	484.8	485.6	484.8	485.2	484.0
9°	480.8	480.8	480.8	481.6	480.4
10°	475.1	477.1	475.9	476.7	475.9
11°	472.3	471.5	471.5	471.9	471.5
12°	465.4	466.2	465.8	466.6	467.8
13°	461.7	462.1	460.5	462.5	462.5
14°	456.1	455.6	456.5	456.1	456.9
15°	450.0	449.2	448.8	450.0	451.2
16°	445.5	443.5	442.3	443.9	445.5
17°	439.0	437.0	435.4	438.6	439.0
18°	432.5	431.7	427.7	431.7	433.8
19°	427.3	424.4	420.8	425.2	427.7
20°	420.4	417.9	415.5	417.9	421.6
22.5°	400.5	398.5	396.5	399.3	401.3
25°	373.4	374.6	376.2	377.4	377.0
27.5°	334.8	345.8	355.9	349.4	340.9
30°	278.1	305.7	330.8	310.1	288.6
32.5°	201.5	248.5	300.8	257.8	203.5
35°	133.4	176.7	265.1	181.2	138.2
37.5°	86.8	118.8	221.3	119.2	90.8
40°	56.8	77.4	162.2	79.0	56.8
42.5°	34.9	49.1	98.5	51.1	34.9
45°	20.3	30.4	56.3	30.8	19.9
47.5°	9.3	16.6	32.0	16.2	9.7
50°	2.8	7.3	16.2	7.3	2.8
52.5°	1.2	2.0	7.7	2.0	1.2
55°	0.8	0.8	2.8	0.8	0.8
57.5°	0.8	0.4	0.8	0.8	0.8
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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