

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: P838312

Luminaire Tested: HCSQ607D010-HM60525840-61SQMB

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838312
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-HM60525840-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: -

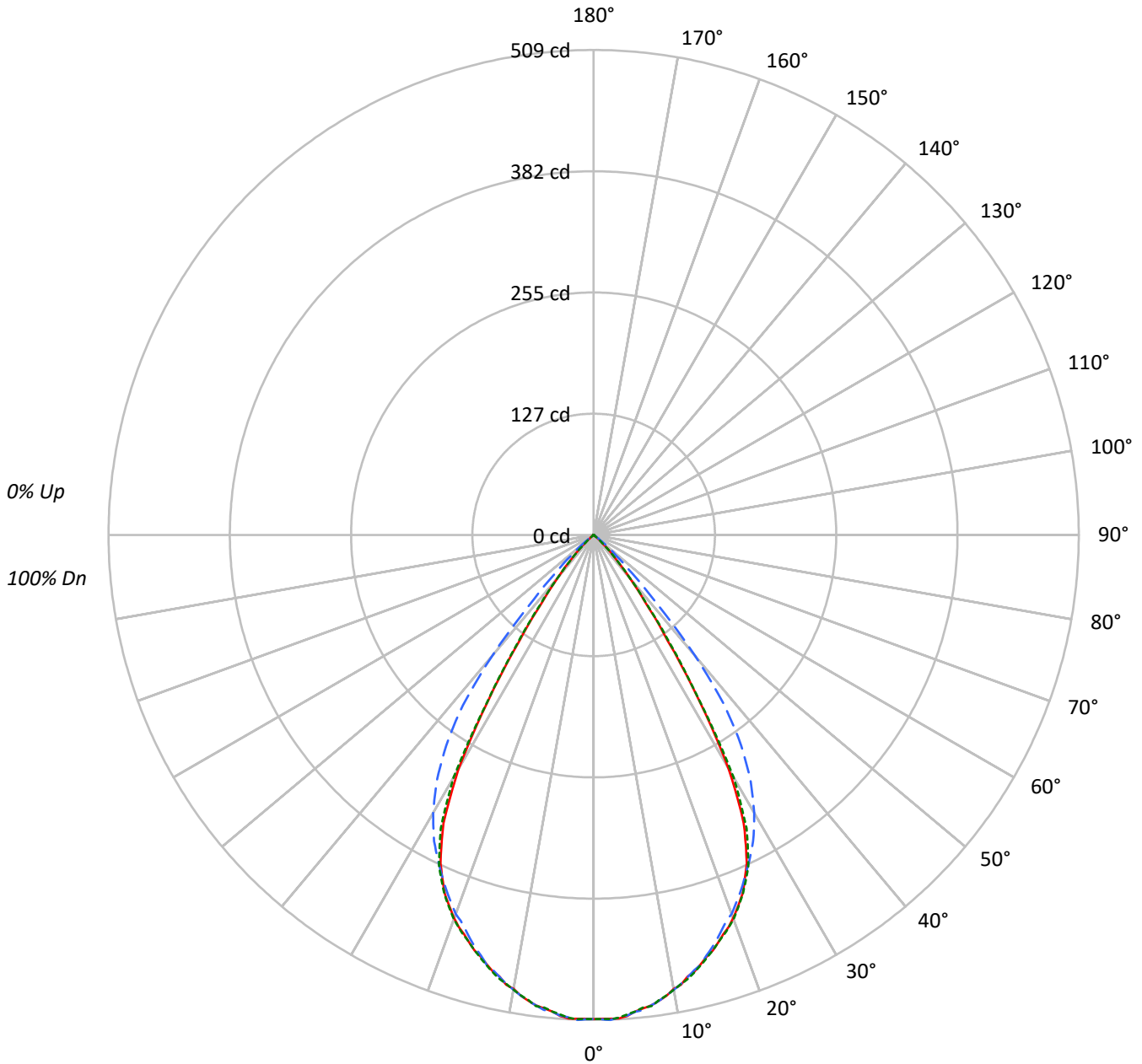
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 505.1 lumens
Efficiency: N/A
Efficacy: 63.1 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					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°	21881	21881	21881
5°	21697	21714	21697
10°	21152	21191	21191
15°	20424	20371	20482
20°	19615	19391	19670
25°	18062	18200	18238
30°	14080	16749	14612
35°	7138	14192	7401
40°	3249	9279	3249
45°	1254	3495	1230
50°	194	1105	194
55°	60	218	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: 3495 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.5	9.4
10°-20°	128.7	25.5
20°-30°	173.5	34.3
30°-40°	122.0	24.1
40°-50°	31.1	6.2
50°-60°	2.1	0.4
60°-70°	0.3	0.0
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°	349.6	69.2
0°-40°	471.6	93.4
0°-60°	504.9	99.9
0°-90°	505.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	505.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	508	508	508	508	508	
5°	502	503	502	503	502	47
15°	458	457	457	458	460	129
25°	380	382	383	384	384	170
35°	136	180	270	184	141	91
45°	21	31	57	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°	508.2	508.2	508.2	508.2	508.2
1°	507.8	508.2	508.6	508.6	508.2
2°	508.2	507.0	509.4	508.2	508.6
3°	508.2	505.7	507.0	507.8	507.4
4°	506.1	504.5	505.7	505.3	504.5
5°	502.0	502.8	502.4	502.8	502.0
6°	499.5	500.4	501.2	499.9	498.7
7°	497.5	497.0	497.5	498.3	498.3
8°	493.7	494.6	493.7	494.2	492.9
9°	489.6	489.6	489.6	490.4	489.2
10°	483.8	485.9	484.7	485.5	484.7
11°	480.9	480.1	480.1	480.5	480.1
12°	473.9	474.8	474.3	475.2	476.4
13°	470.2	470.6	469.0	471.0	471.0
14°	464.4	464.0	464.8	464.4	465.3
15°	458.2	457.4	457.0	458.2	459.5
16°	453.7	451.6	450.4	452.0	453.7
17°	447.1	445.0	443.4	446.7	447.1
18°	440.5	439.7	435.5	439.7	441.7
19°	435.1	432.2	428.5	433.1	435.5
20°	428.1	425.6	423.2	425.6	429.3
22.5°	407.9	405.8	403.7	406.6	408.7
25°	380.2	381.5	383.1	384.3	383.9
27.5°	341.0	352.1	362.5	355.9	347.2
30°	283.2	311.3	336.9	315.8	293.9
32.5°	205.2	253.1	306.3	262.6	207.2
35°	135.8	180.0	270.0	184.5	140.8
37.5°	88.3	121.0	225.4	121.4	92.5
40°	57.8	78.9	165.1	80.5	57.8
42.5°	35.5	50.0	100.3	52.0	35.5
45°	20.6	31.0	57.4	31.4	20.2
47.5°	9.5	16.9	32.6	16.5	9.9
50°	2.9	7.4	16.5	7.4	2.9
52.5°	1.2	2.1	7.8	2.1	1.2
55°	0.8	0.8	2.9	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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