

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: P838377

Luminaire Tested: HCSQ615D010-HM60525827-61SQMB

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838377
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: HCSQ615D010-HM60525827-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: -

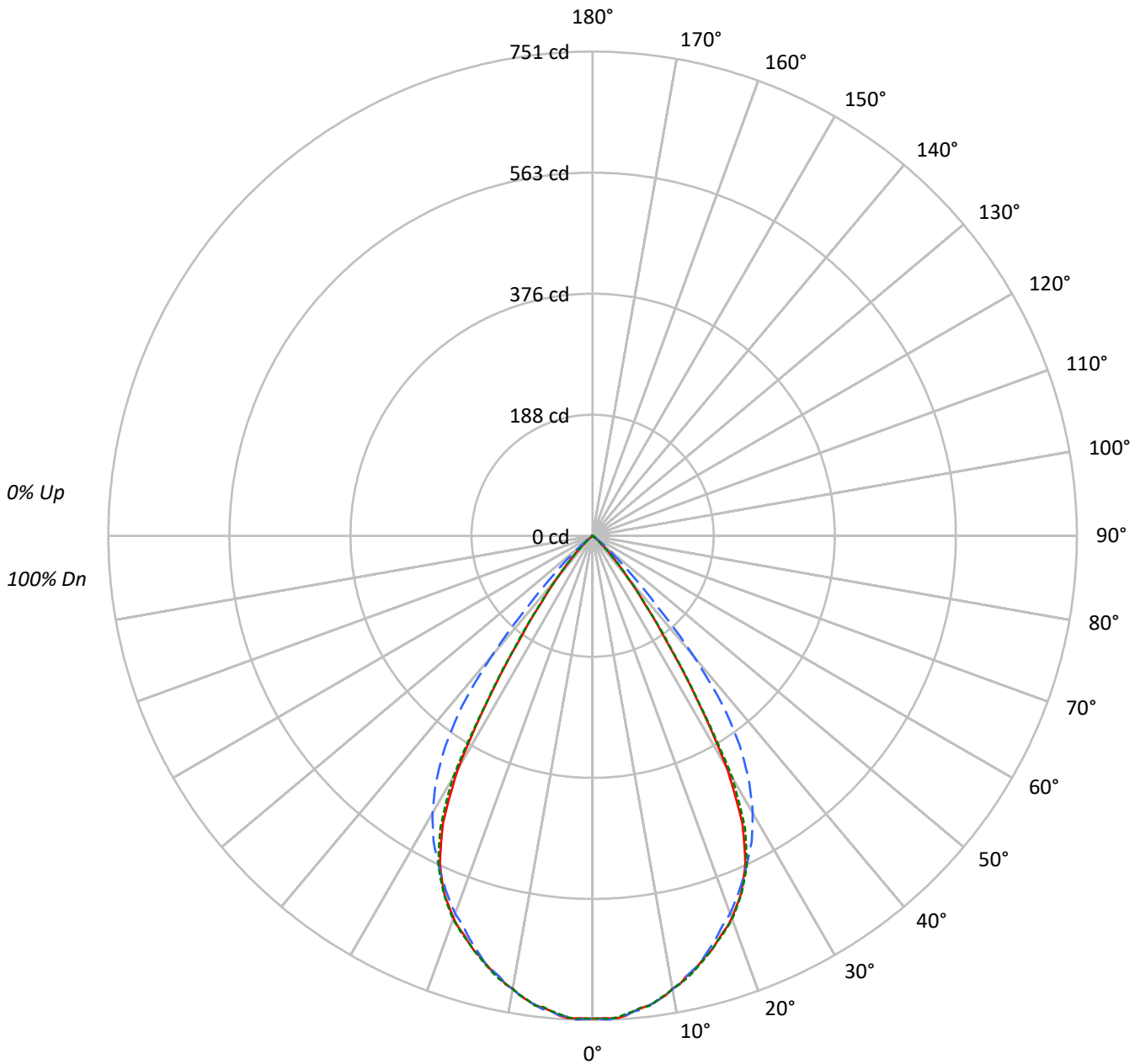
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 744.5 lumens
Efficiency: N/A
Efficacy: 53.2 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): 14
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: HCSQ615D010-HM60525827-61SQMB

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°	32249	32249	32249
5°	31974	32005	31974
10°	31177	31229	31229
15°	30106	30021	30186
20°	28907	28573	28994
25°	26623	26822	26879
30°	20752	24684	21537
35°	10523	20914	10906
40°	4789	13680	4789
45°	1851	5151	1815
50°	288	1628	288
55°	90	323	90
60°	52	52	52
65°	61	0	61
70°	0	0	76
75°	0	0	100
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5151 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.9	9.4
10°-20°	189.7	25.5
20°-30°	255.7	34.3
30°-40°	179.8	24.1
40°-50°	45.9	6.2
50°-60°	3.2	0.4
60°-70°	0.4	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°	515.3	69.2
0°-40°	695.0	93.4
0°-60°	744.1	99.9
0°-90°	744.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	744.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	749	749	749	749	749	
5°	740	741	740	741	740	70
15°	675	674	674	675	677	190
25°	560	562	565	566	566	250
35°	200	265	398	272	208	135
45°	30	46	85	46	30	27
55°	1	1	4	1	1	1
65°	1	1	0	1	1	1
75°	0	0	0	0	1	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°	749.0	749.0	749.0	749.0	749.0
1°	748.4	749.0	749.6	749.6	749.0
2°	749.0	747.1	750.8	749.0	749.6
3°	749.0	745.3	747.1	748.4	747.8
4°	745.9	743.5	745.3	744.7	743.5
5°	739.8	741.1	740.5	741.1	739.8
6°	736.2	737.4	738.6	736.8	735.0
7°	733.2	732.5	733.2	734.4	734.4
8°	727.7	728.9	727.7	728.3	726.5
9°	721.6	721.6	721.6	722.8	721.0
10°	713.1	716.1	714.3	715.5	714.3
11°	708.8	707.6	707.6	708.2	707.6
12°	698.5	699.7	699.1	700.3	702.1
13°	693.0	693.6	691.2	694.2	694.2
14°	684.5	683.9	685.1	684.5	685.7
15°	675.4	674.1	673.5	675.4	677.2
16°	668.7	665.6	663.8	666.2	668.7
17°	658.9	655.9	653.5	658.3	658.9
18°	649.2	648.0	641.9	648.0	651.0
19°	641.3	637.0	631.5	638.2	641.9
20°	630.9	627.3	623.6	627.3	632.8
22.5°	601.1	598.1	595.0	599.3	602.3
25°	560.4	562.2	564.6	566.4	565.8
27.5°	502.6	519.0	534.2	524.5	511.7
30°	417.4	458.8	496.5	465.4	433.2
32.5°	302.4	373.0	451.5	387.0	305.4
35°	200.2	265.3	397.9	272.0	207.5
37.5°	130.2	178.3	332.2	178.9	136.3
40°	85.2	116.2	243.4	118.6	85.2
42.5°	52.3	73.6	147.8	76.7	52.3
45°	30.4	45.6	84.6	46.2	29.8
47.5°	14.0	24.9	48.1	24.3	14.6
50°	4.3	11.0	24.3	11.0	4.3
52.5°	1.8	3.0	11.6	3.0	1.8
55°	1.2	1.2	4.3	1.2	1.2
57.5°	1.2	0.6	1.2	1.2	1.2
60°	0.6	0.6	0.6	0.6	0.6
62.5°	0.6	0.6	0.6	0.6	0.6
65°	0.6	0.6	0.0	0.6	0.6
67.5°	0.6	0.0	0.0	0.0	0.6
70°	0.0	0.0	0.0	0.0	0.6
72.5°	0.0	0.0	0.0	0.0	0.6
75°	0.0	0.0	0.0	0.0	0.6



TEST NUMBER: P838377

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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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