

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: P838397

Luminaire Tested: HCSQ615D010-HM60525927-61SQMB

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838397
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-HM60525927-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

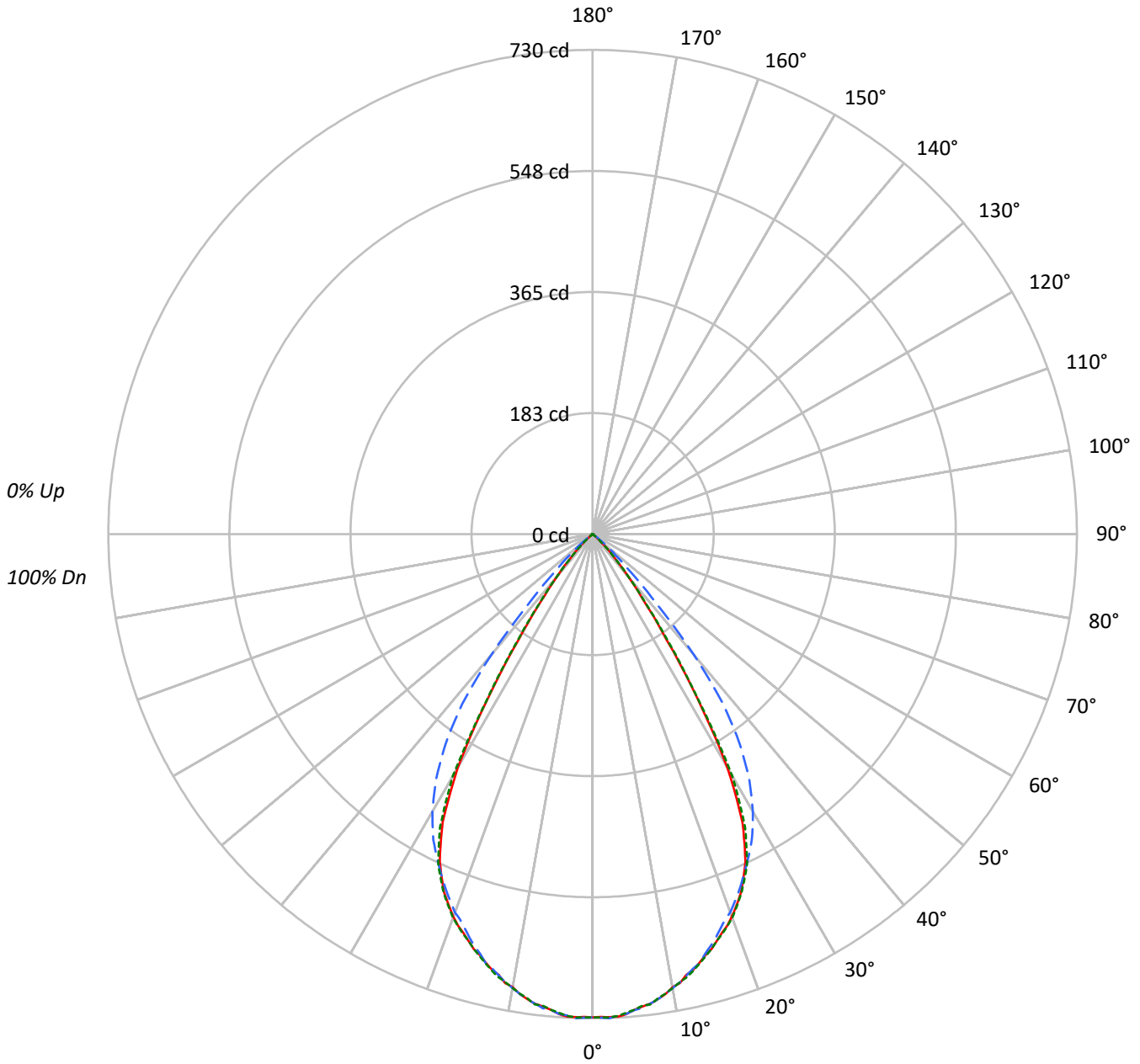
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 724.4 lumens
Efficiency: N/A
Efficacy: 51.7 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 (Ain): 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°	31375	31375	31375
5°	31114	31136	31114
10°	30333	30385	30385
15°	29290	29210	29370
20°	28128	27803	28211
25°	25901	26100	26152
30°	20190	24018	20955
35°	10239	20352	10612
40°	4659	13309	4659
45°	1802	5011	1766
50°	275	1587	275
55°	90	308	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: 5011 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.0	9.4
10°-20°	184.5	25.5
20°-30°	248.8	34.3
30°-40°	174.9	24.1
40°-50°	44.7	6.2
50°-60°	3.1	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°	501.3	69.2
0°-40°	676.3	93.3
0°-60°	724.0	99.9
0°-90°	724.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	724.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	729	729	729	729	729	
5°	720	721	720	721	720	68
15°	657	656	655	657	659	185
25°	545	547	549	551	550	244
35°	195	258	387	265	202	131
45°	30	44	82	45	29	26
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°	728.7	728.7	728.7	728.7	728.7
1°	728.1	728.7	729.3	729.3	728.7
2°	728.7	727.0	730.5	728.7	729.3
3°	728.7	725.2	727.0	728.1	727.5
4°	725.8	723.4	725.2	724.6	723.4
5°	719.9	721.0	720.4	721.0	719.9
6°	716.3	717.5	718.7	716.9	715.1
7°	713.3	712.7	713.3	714.5	714.5
8°	708.0	709.2	708.0	708.6	706.8
9°	702.1	702.1	702.1	703.3	701.5
10°	693.8	696.8	695.0	696.2	695.0
11°	689.7	688.5	688.5	689.1	688.5
12°	679.6	680.8	680.2	681.4	683.1
13°	674.3	674.9	672.5	675.5	675.5
14°	666.0	665.4	666.6	666.0	667.2
15°	657.1	655.9	655.3	657.1	658.9
16°	650.6	647.6	645.9	648.2	650.6
17°	641.1	638.2	635.8	640.5	641.1
18°	631.6	630.5	624.5	630.5	633.4
19°	624.0	619.8	614.5	621.0	624.5
20°	613.9	610.3	606.8	610.3	615.7
22.5°	584.9	581.9	579.0	583.1	586.1
25°	545.2	547.0	549.4	551.1	550.5
27.5°	489.0	505.0	519.8	510.3	497.9
30°	406.1	446.4	483.1	452.9	421.5
32.5°	294.2	362.9	439.3	376.5	297.2
35°	194.8	258.1	387.2	264.6	201.9
37.5°	126.7	173.5	323.2	174.0	132.6
40°	82.9	113.1	236.8	115.4	82.9
42.5°	50.9	71.6	143.9	74.6	50.9
45°	29.6	44.4	82.3	45.0	29.0
47.5°	13.6	24.3	46.8	23.7	14.2
50°	4.1	10.7	23.7	10.7	4.1
52.5°	1.8	3.0	11.2	3.0	1.8
55°	1.2	1.2	4.1	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



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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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