

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: P838392

Luminaire Tested: HCSQ615D010-HM60525840-61SQMB

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838392
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-HM60525840-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: -

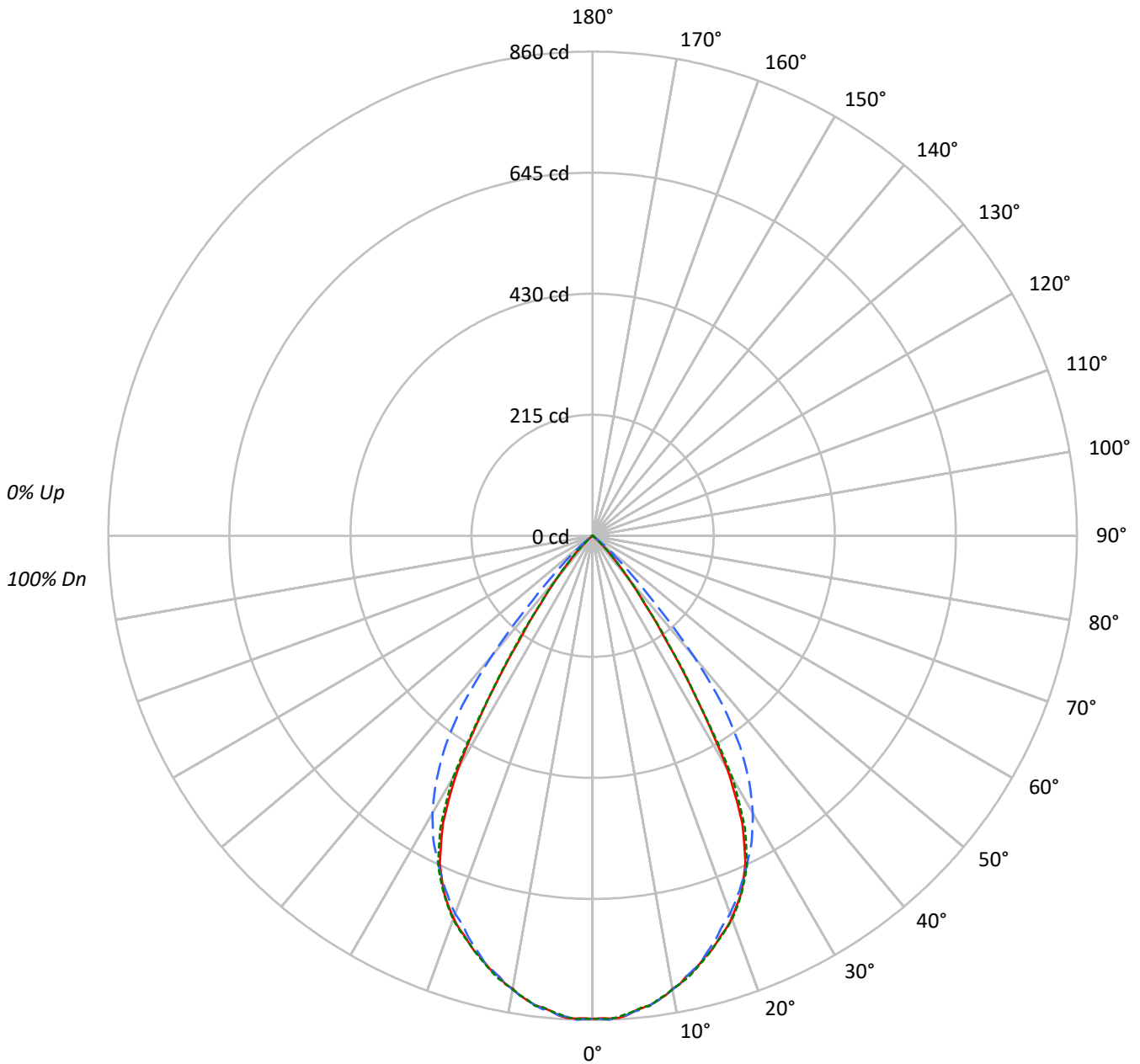
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 852.8 lumens
Efficiency: N/A
Efficacy: 60.9 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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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	100	100	100	100	100		
	1	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93	93	93	93	93	93		
	2	108	103	99	96	106	101	98	94	98	95	92	95	93	90	92	90	89	87	87	87	87	87	87		
	3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	85	82	81	81	81	81	81	81		
	4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75	75	75	75	75	75		
	5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70	70	70	70	70	70		
	6	87	78	72	68	86	77	72	68	76	71	67	75	70	67	73	69	66	65	65	65	65	65	65		
	7	83	73	67	63	81	73	67	63	71	66	63	70	66	62	69	65	62	60	60	60	60	60	60		
	8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56	56	56	56	56	56		
	9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53	53	53	53	53	53		
	10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50	50	50	50	50	50		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	36937	36937	36937
5°	36629	36659	36629
10°	35710	35772	35772
15°	34483	34389	34576
20°	33113	32733	33210
25°	30495	30727	30789
30°	23769	28274	24669
35°	12052	23957	12494
40°	5486	15670	5486
45°	2119	5900	2076
50°	328	1869	328
55°	105	368	105
60°	60	60	60
65°	71	0	71
70°	0	0	88
75°	0	0	116
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5900 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.1	9.4
10°-20°	217.3	25.5
20°-30°	292.9	34.3
30°-40°	205.9	24.1
40°-50°	52.6	6.2
50°-60°	3.6	0.4
60°-70°	0.4	0.1
70°-80°	0.1	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°	590.2	69.2
0°-40°	796.1	93.4
0°-60°	852.3	99.9
0°-90°	852.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	852.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	858	858	858	858	858	
5°	848	849	848	849	848	80
15°	774	772	772	774	776	218
25°	642	644	647	649	648	287
35°	229	304	456	312	238	154
45°	35	52	97	53	34	30
55°	1	1	5	1	1	2
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°	857.9	857.9	857.9	857.9	857.9
1°	857.2	857.9	858.6	858.6	857.9
2°	857.9	855.8	860.0	857.9	858.6
3°	857.9	853.7	855.8	857.2	856.5
4°	854.4	851.7	853.7	853.0	851.7
5°	847.5	848.9	848.2	848.9	847.5
6°	843.3	844.7	846.1	844.0	841.9
7°	839.8	839.1	839.8	841.2	841.2
8°	833.5	834.9	833.5	834.2	832.1
9°	826.6	826.6	826.6	828.0	825.9
10°	816.8	820.3	818.2	819.6	818.2
11°	811.9	810.5	810.5	811.2	810.5
12°	800.1	801.5	800.8	802.2	804.3
13°	793.8	794.5	791.7	795.2	795.2
14°	784.1	783.4	784.7	784.1	785.4
15°	773.6	772.2	771.5	773.6	775.7
16°	765.9	762.4	760.4	763.1	765.9
17°	754.8	751.3	748.5	754.1	754.8
18°	743.6	742.2	735.3	742.2	745.7
19°	734.6	729.7	723.4	731.1	735.3
20°	722.7	718.5	714.4	718.5	724.8
22.5°	688.6	685.1	681.6	686.5	690.0
25°	641.9	644.0	646.8	648.8	648.1
27.5°	575.7	594.5	611.9	600.8	586.1
30°	478.1	525.5	568.7	533.2	496.2
32.5°	346.4	427.2	517.1	443.3	349.9
35°	229.3	303.9	455.8	311.5	237.7
37.5°	149.1	204.2	380.5	204.9	156.1
40°	97.6	133.1	278.8	135.9	97.6
42.5°	59.9	84.3	169.4	87.8	59.9
45°	34.8	52.3	96.9	53.0	34.1
47.5°	16.0	28.6	55.1	27.9	16.7
50°	4.9	12.5	27.9	12.5	4.9
52.5°	2.1	3.5	13.2	3.5	2.1
55°	1.4	1.4	4.9	1.4	1.4
57.5°	1.4	0.7	1.4	1.4	1.4
60°	0.7	0.7	0.7	0.7	0.7
62.5°	0.7	0.7	0.7	0.7	0.7
65°	0.7	0.7	0.0	0.7	0.7
67.5°	0.7	0.0	0.0	0.0	0.7
70°	0.0	0.0	0.0	0.0	0.7
72.5°	0.0	0.0	0.0	0.0	0.7
75°	0.0	0.0	0.0	0.0	0.7



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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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