

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: P838273

Luminaire Tested: HCSQ605D010-HM60525840-61SQMW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838273
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ605D010-HM60525840-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: -

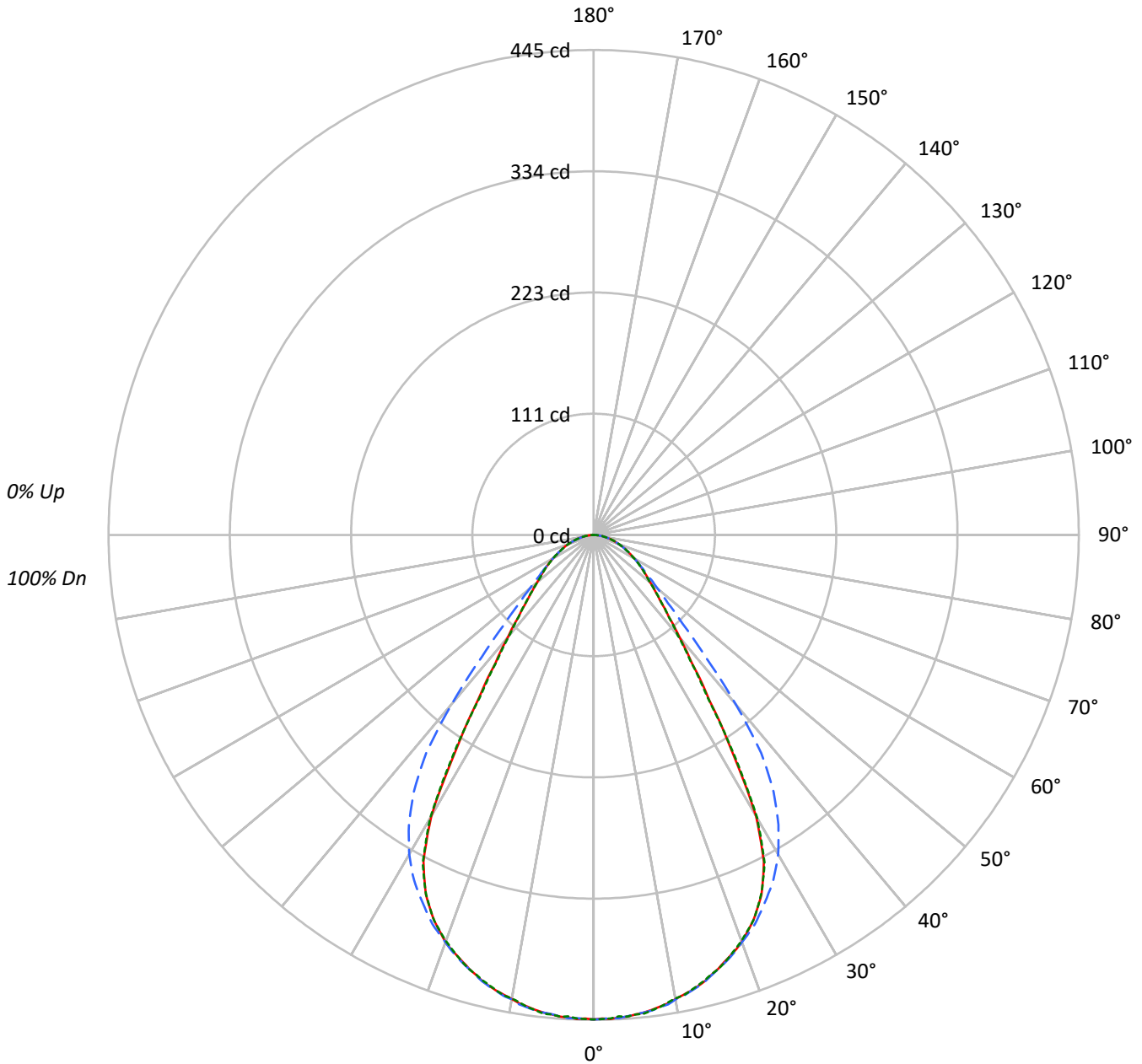
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 655.9 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.11
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 6
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: HCSQ605D010-HM60525840-61SQMW

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89																			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79																			
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71																			
4	91	81	74	69	89	80	73	68	77	72	67	75	70	67	73	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53																			
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48																			
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44																			
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41																			
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19143	19143	19143
5°	19095	19082	19095
10°	18909	18922	18883
15°	18628	18641	18601
20°	18208	18222	18167
25°	17302	17668	17283
30°	14815	16824	14905
35°	9734	15122	9587
40°	6880	11404	6756
45°	5334	7021	5370
50°	4535	5117	4495
55°	4084	4196	4084
60°	3694	3694	3694
65°	3382	3352	3352
70°	3084	3084	3135
75°	2895	2795	2845
80°	2554	2554	2554
85°	2124	2124	2124

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 7021 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.9	6.4
10°-20°	117.7	17.9
20°-30°	167.8	25.6
30°-40°	143.0	21.8
40°-50°	79.1	12.1
50°-60°	49.8	7.6
60°-70°	33.1	5.0
70°-80°	18.2	2.8
80°-90°	5.2	0.8
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°	327.4	49.9
0°-40°	470.4	71.7
0°-60°	599.4	91.4
0°-90°	655.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	655.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	445	445	445	445	445	
5°	442	442	442	441	442	42
15°	418	418	418	418	417	118
25°	364	368	372	368	364	165
35°	185	218	288	219	182	120
45°	88	96	115	95	88	69
55°	54	55	56	55	54	49
65°	33	34	33	33	33	33
75°	17	17	17	17	17	18
85°	4	4	4	5	4	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	444.6	444.6	444.6	444.6	444.6
1°	443.7	444.3	444.3	444.0	444.3
2°	444.6	443.7	443.7	443.7	444.0
3°	443.4	444.0	444.0	443.1	442.4
4°	443.1	442.8	442.8	443.7	443.1
5°	441.8	442.4	441.5	440.9	441.8
6°	440.6	440.9	440.6	440.9	441.8
7°	439.0	440.0	439.7	439.3	439.3
8°	437.2	438.4	437.8	437.8	437.5
9°	435.3	435.6	436.2	436.2	434.4
10°	432.5	433.4	432.8	433.1	431.9
11°	430.0	431.3	431.0	430.3	430.6
12°	427.8	428.5	428.2	427.2	427.5
13°	425.0	425.7	425.4	425.4	424.4
14°	421.9	421.3	422.3	421.6	421.3
15°	417.9	417.9	418.2	417.9	417.3
16°	414.2	414.5	414.5	414.2	414.5
17°	409.8	411.1	410.8	410.1	410.4
18°	405.8	406.7	407.0	406.7	405.8
19°	402.1	402.7	402.4	401.1	401.1
20°	397.4	397.7	397.7	397.1	396.5
22.5°	382.8	385.0	386.5	385.3	382.8
25°	364.2	368.5	371.9	368.2	363.8
27.5°	338.1	346.8	357.0	347.7	339.6
30°	298.0	317.9	338.4	319.7	299.8
32.5°	237.1	276.2	315.4	279.9	240.8
35°	185.2	218.4	287.7	218.7	182.4
37.5°	147.9	171.5	252.3	170.0	146.3
40°	122.4	138.3	202.9	137.6	120.2
42.5°	102.2	114.3	151.9	113.1	102.2
45°	87.6	96.0	115.3	95.4	88.2
47.5°	76.7	82.0	92.3	81.7	76.7
50°	67.7	70.8	76.4	70.5	67.1
52.5°	60.6	62.5	64.6	61.8	60.0
55°	54.4	55.3	55.9	55.0	54.4
57.5°	48.5	49.1	48.8	48.5	48.2
60°	42.9	43.2	42.9	43.2	42.9
62.5°	37.9	38.2	37.6	37.9	37.6
65°	33.2	33.6	32.9	33.2	32.9
67.5°	28.9	28.9	28.9	28.9	28.6
70°	24.5	24.9	24.5	24.9	24.9
72.5°	20.8	20.8	20.5	20.8	20.8
75°	17.4	17.1	16.8	17.1	17.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	7.5	7.5	7.1	7.5	7.5
85°	4.3	4.3	4.3	4.7	4.3
87.5°	2.2	1.9	1.9	2.2	2.2
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

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Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270°

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77.5°	13.7	13.7	13.4	13.7	13.7
80°	10.3	10.6	10.3	10.6	10.3

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(END OF REPORT)