

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: P838270

Luminaire Tested: HCSQ605D010-HM60525840-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838270
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ605D010-HM60525840-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: -

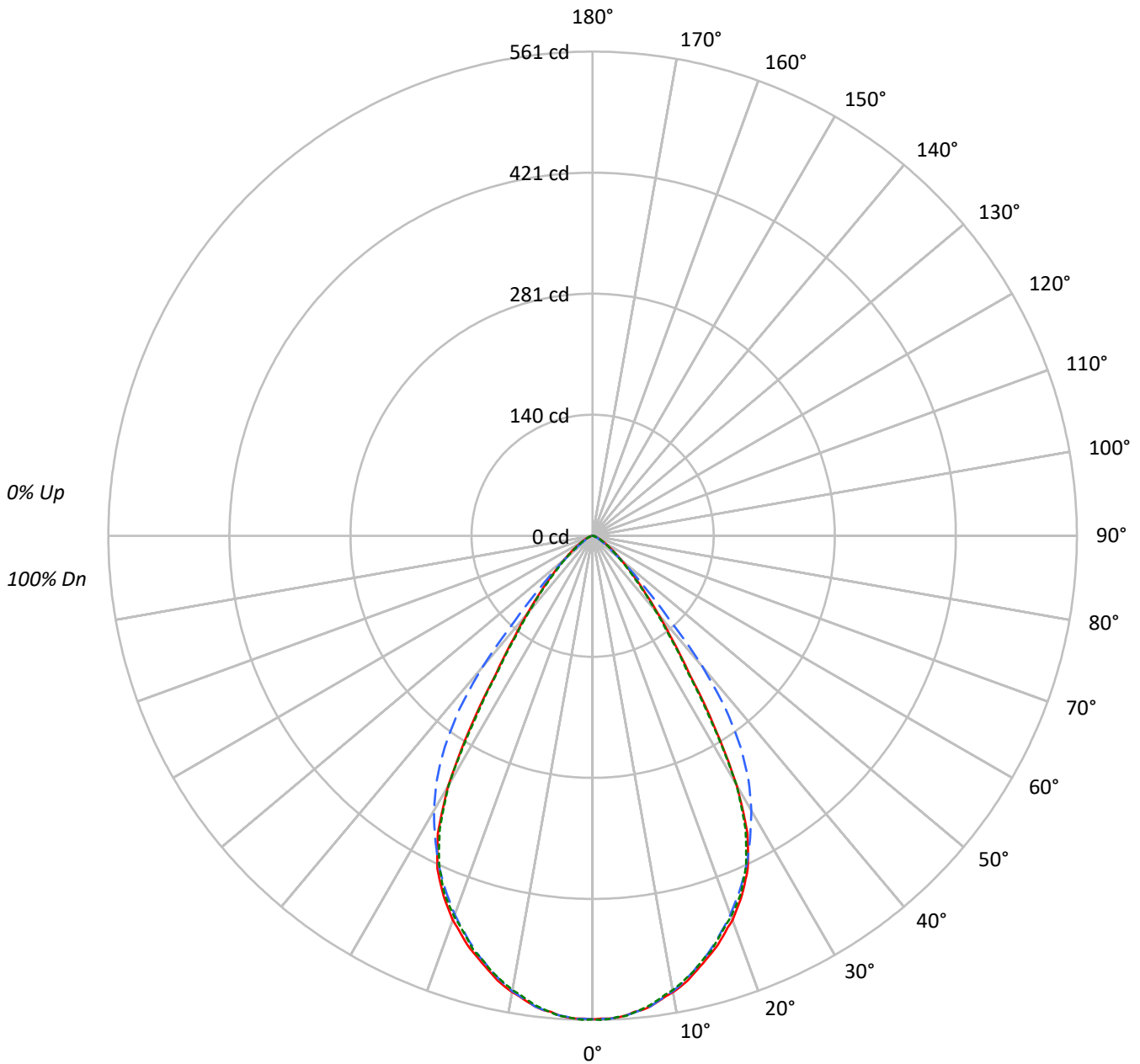
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 630.0 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.01 / 1.04
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 (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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CATALOG NUMBER: HCSQ605D010-HM60525840-61SQH

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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92								
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85								
3	101	94	88	84	99	92	87	83	90	85	82	87	84	81	85	82	79	78								
4	95	87	81	76	93	86	80	76	83	78	75	81	77	74	79	76	73	71								
5	90	80	74	69	88	79	74	69	78	72	68	76	71	68	74	70	67	66								
6	85	75	68	64	83	74	68	63	72	67	63	71	66	63	70	65	62	61								
7	80	70	63	59	79	69	63	59	68	62	58	67	62	58	65	61	58	56								
8	76	65	59	54	74	65	59	54	64	58	54	63	57	54	62	57	54	52								
9	72	61	55	51	70	61	55	50	60	54	50	59	54	50	58	53	50	48								
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24120	24120	24120
5°	23931	23970	23957
10°	23473	23421	23364
15°	22644	22519	22506
20°	21709	21397	21498
25°	20209	20029	19986
30°	16605	18276	16561
35°	10255	15695	10013
40°	6582	11123	6357
45°	4293	5395	4086
50°	2853	2686	2666
55°	1937	1396	1794
60°	1309	853	1206
65°	917	632	825
70°	592	466	541
75°	416	366	366
80°	298	223	223
85°	148	296	148

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5395 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	8.3
10°-20°	142.0	22.5
20°-30°	191.7	30.4
30°-40°	149.6	23.7
40°-50°	62.7	9.9
50°-60°	21.2	3.4
60°-70°	7.6	1.2
70°-80°	2.5	0.4
80°-90°	0.5	0.1
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°	386.0	61.3
0°-40°	535.6	85.0
0°-60°	619.5	98.3
0°-90°	630.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	630.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	560	560	560	560	560	
5°	554	554	555	554	554	52
15°	508	507	505	505	505	143
25°	425	424	422	422	421	191
35°	195	229	299	229	190	128
45°	70	76	89	72	67	57
55°	26	24	19	22	24	24
65°	9	8	6	7	8	9
75°	2	2	2	2	2	3
85°	0	0	1	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	560.2	560.2	560.2	560.2	560.2
1°	559.6	560.5	559.9	560.2	561.1
2°	559.6	559.6	560.2	559.9	560.2
3°	559.0	559.0	558.3	558.3	558.3
4°	557.1	557.1	557.1	556.5	557.7
5°	553.7	554.3	554.6	553.7	554.3
6°	552.4	552.7	552.1	551.8	551.2
7°	549.6	548.7	549.6	547.5	547.8
8°	545.0	545.0	544.4	543.7	543.1
9°	540.6	540.6	540.0	539.1	538.4
10°	536.9	536.0	535.7	534.7	534.4
11°	532.5	530.7	530.4	529.4	529.4
12°	527.3	526.3	524.2	523.8	523.8
13°	520.7	519.8	518.3	517.0	518.3
14°	514.5	513.9	511.1	512.0	511.7
15°	508.0	506.8	505.2	504.6	504.9
16°	502.1	499.9	497.7	498.1	499.9
17°	495.9	492.8	490.6	490.3	491.2
18°	488.1	485.6	482.2	483.5	483.5
19°	480.3	476.9	474.8	474.4	475.7
20°	473.8	468.5	467.0	466.7	469.2
22.5°	451.5	446.2	444.9	446.2	448.7
25°	425.4	423.5	421.6	421.6	420.7
27.5°	388.4	392.7	394.9	390.6	383.4
30°	334.0	352.3	367.6	350.2	333.1
32.5°	263.2	301.1	336.2	300.1	257.0
35°	195.1	229.0	298.6	228.7	190.5
37.5°	150.4	172.1	253.8	169.3	146.0
40°	117.1	129.9	197.9	128.3	113.1
42.5°	91.0	99.1	131.7	97.3	87.9
45°	70.5	75.5	88.6	72.1	67.1
47.5°	55.0	57.2	60.6	54.7	51.9
50°	42.6	42.6	40.1	41.0	39.8
52.5°	32.9	31.7	27.0	29.8	30.4
55°	25.8	23.6	18.6	22.4	23.9
57.5°	19.6	17.4	13.4	16.5	18.0
60°	15.2	13.0	9.9	12.4	14.0
62.5°	11.8	9.9	7.8	9.3	10.6
65°	9.0	7.5	6.2	7.1	8.1
67.5°	6.8	5.6	4.7	5.3	6.2
70°	4.7	4.3	3.7	4.0	4.3
72.5°	3.4	3.1	2.8	2.8	3.1
75°	2.5	2.2	2.2	2.2	2.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.6	0.6	0.6	0.6	0.6
85°	0.3	0.3	0.6	0.3	0.3
87.5°	0.3	0.3	0.3	0.3	0.3
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°	1.6	1.6	1.6	1.6	1.6
80°	1.2	1.2	0.9	0.9	0.9

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Scaled Data Report



(END OF REPORT)