

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: P838418

Luminaire Tested: HCSQ620D010-HM60525827-61SQMW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838418
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: HCSQ620D010-HM60525827-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: -

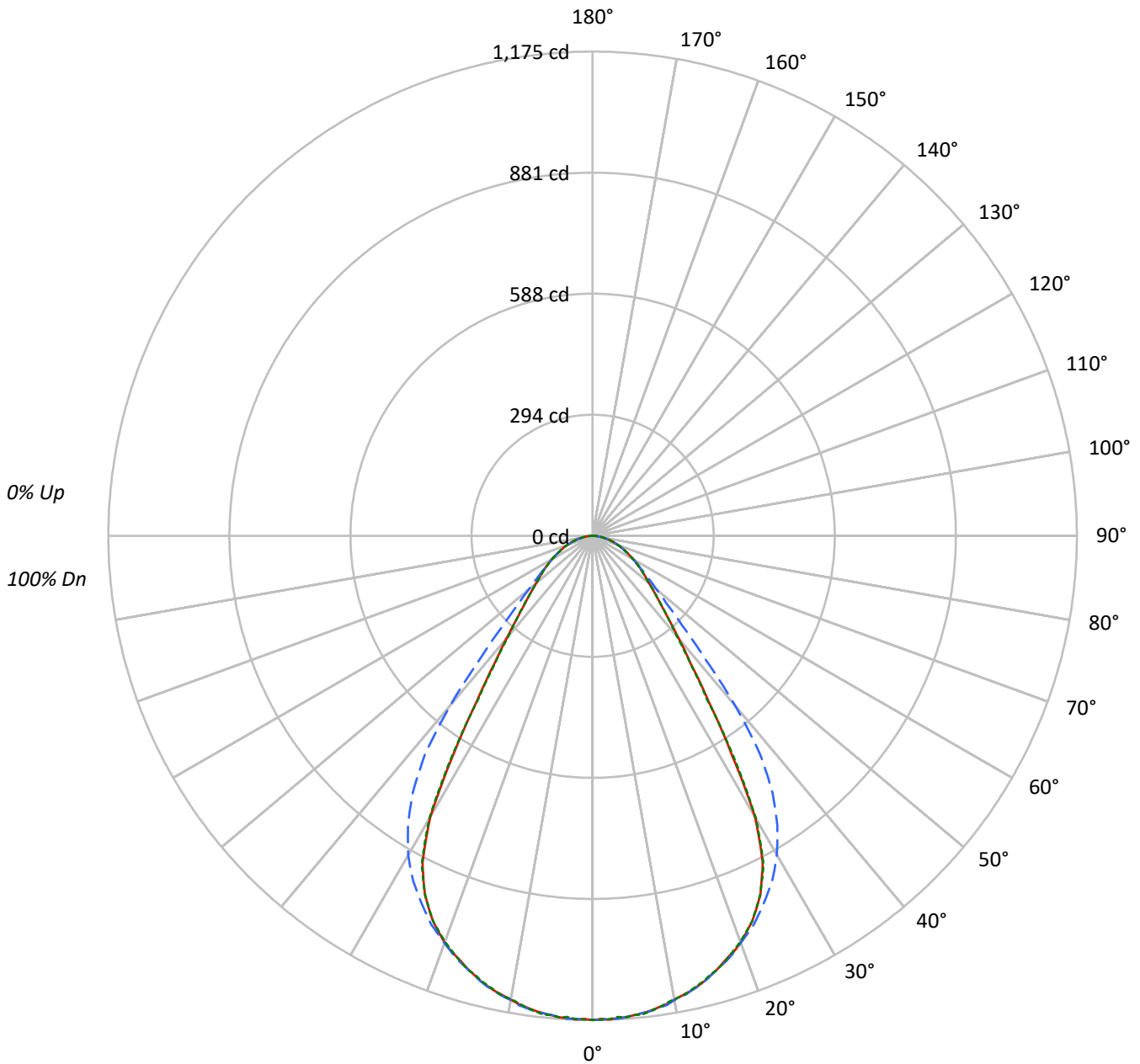
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1733.6 lumens
Efficiency: N/A
Efficacy: 86.7 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): 20
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									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°	50603	50603	50603
5°	50477	50442	50477
10°	49985	50020	49911
15°	49241	49277	49166
20°	48133	48169	48018
25°	45730	46704	45692
30°	39157	44466	39405
35°	25729	39973	25340
40°	18188	30143	17862
45°	14102	18553	14206
50°	11990	13531	11883
55°	10787	11095	10787
60°	9756	9756	9756
65°	8955	8874	8874
70°	8170	8170	8271
75°	7652	7386	7519
80°	6719	6719	6719
85°	5681	5681	5681

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 18553 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.8	6.4
10°-20°	311.2	17.9
20°-30°	443.4	25.6
30°-40°	378.1	21.8
40°-50°	209.2	12.1
50°-60°	131.7	7.6
60°-70°	87.5	5.0
70°-80°	48.1	2.8
80°-90°	13.7	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°	865.4	49.9
0°-40°	1243.5	71.7
0°-60°	1584.3	91.4
0°-90°	1733.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1733.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1175	1175	1175	1175	1175	
5°	1168	1170	1167	1165	1168	111
15°	1105	1105	1106	1105	1103	311
25°	963	974	983	973	962	435
35°	490	577	760	578	482	318
45°	232	254	305	252	233	184
55°	144	146	148	145	144	129
65°	88	89	87	88	87	87
75°	46	45	44	45	45	48
85°	12	12	12	12	12	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1175.3	1175.3	1175.3	1175.3	1175.3
1°	1172.8	1174.5	1174.5	1173.6	1174.5
2°	1175.3	1172.8	1172.8	1172.8	1173.6
3°	1172.0	1173.6	1173.6	1171.2	1169.5
4°	1171.2	1170.4	1170.4	1172.8	1171.2
5°	1167.9	1169.5	1167.1	1165.4	1167.9
6°	1164.6	1165.4	1164.6	1165.4	1167.9
7°	1160.5	1163.0	1162.2	1161.3	1161.3
8°	1155.6	1158.9	1157.2	1157.2	1156.4
9°	1150.7	1151.5	1153.1	1153.1	1148.2
10°	1143.3	1145.7	1144.1	1144.9	1141.6
11°	1136.7	1140.0	1139.2	1137.5	1138.3
12°	1130.9	1132.6	1131.8	1129.3	1130.1
13°	1123.5	1125.2	1124.4	1124.4	1121.9
14°	1115.3	1113.7	1116.2	1114.5	1113.7
15°	1104.7	1104.7	1105.5	1104.7	1103.0
16°	1094.8	1095.6	1095.6	1094.8	1095.6
17°	1083.3	1086.6	1085.8	1084.1	1084.9
18°	1072.6	1075.1	1075.9	1075.1	1072.6
19°	1062.8	1064.4	1063.6	1060.3	1060.3
20°	1050.5	1051.3	1051.3	1049.6	1048.0
22.5°	1011.9	1017.6	1021.7	1018.4	1011.9
25°	962.6	974.1	983.1	973.2	961.8
27.5°	893.6	916.6	943.7	919.0	897.7
30°	787.6	840.2	894.4	845.1	792.6
32.5°	626.7	730.1	833.6	740.0	636.5
35°	489.5	577.4	760.5	578.2	482.1
37.5°	390.9	453.4	666.9	449.3	386.8
40°	323.6	365.5	536.3	363.8	317.8
42.5°	270.2	302.2	401.6	299.0	270.2
45°	231.6	253.8	304.7	252.1	233.3
47.5°	202.9	216.8	243.9	216.0	202.9
50°	179.0	187.3	202.0	186.4	177.4
52.5°	160.2	165.1	170.8	163.4	158.5
55°	143.7	146.2	147.8	145.4	143.7
57.5°	128.1	129.8	128.9	128.1	127.3
60°	113.3	114.2	113.3	114.2	113.3
62.5°	100.2	101.0	99.4	100.2	99.4
65°	87.9	88.7	87.1	87.9	87.1
67.5°	76.4	76.4	76.4	76.4	75.6
70°	64.9	65.7	64.9	65.7	65.7
72.5°	55.0	55.0	54.2	55.0	55.0
75°	46.0	45.2	44.4	45.2	45.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	19.7	19.7	18.9	19.7	19.7
85°	11.5	11.5	11.5	12.3	11.5
87.5°	5.7	4.9	4.9	5.7	5.7
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°	36.1	36.1	35.3	36.1	36.1
80°	27.1	27.9	27.1	27.9	27.1

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