

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: P838423

Luminaire Tested: HCSQ620D010-HM60525830-61SQMW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838423
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-HM60525830-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: -

Summary

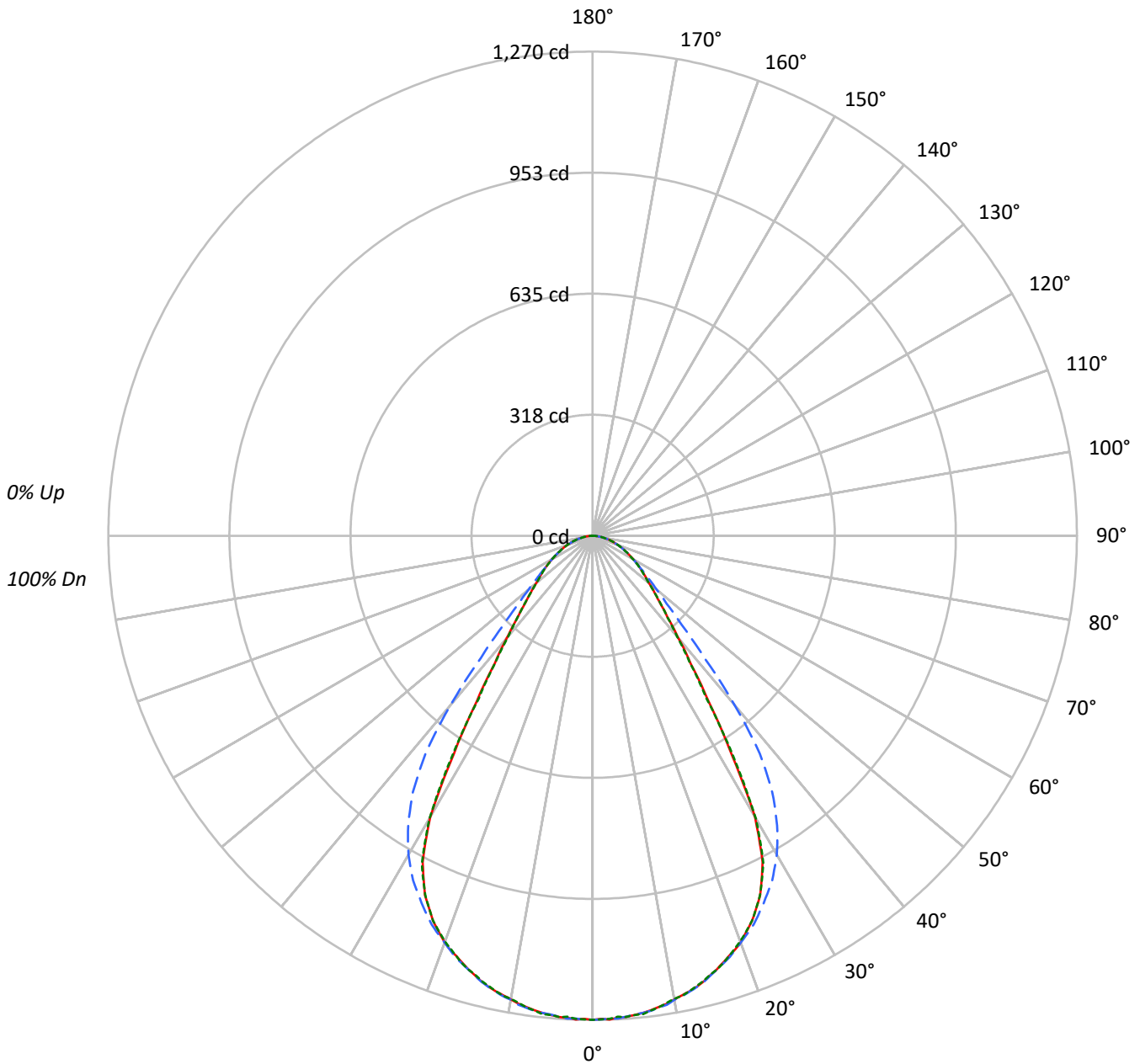
Lumens per Lamp: N/A
Luminaire Lumens: 1872.7 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.11
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

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					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	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°	54668	54668	54668
5°	54531	54492	54531
10°	53994	54033	53920
15°	53191	53231	53115
20°	51995	52036	51872
25°	49402	50452	49359
30°	42304	48036	42567
35°	27794	43184	27374
40°	19649	32565	19301
45°	15235	20045	15344
50°	12954	14622	12834
55°	11658	11988	11658
60°	10540	10540	10540
65°	9668	9577	9577
70°	8825	8825	8938
75°	8268	7968	8118
80°	7265	7265	7265
85°	6126	6126	6126

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 20045 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.7	6.4
10°-20°	336.1	17.9
20°-30°	479.0	25.6
30°-40°	408.4	21.8
40°-50°	226.0	12.1
50°-60°	142.3	7.6
60°-70°	94.5	5.0
70°-80°	51.9	2.8
80°-90°	14.8	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°	934.9	49.9
0°-40°	1343.3	71.7
0°-60°	1711.6	91.4
0°-90°	1872.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1872.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1270	1270	1270	1270	1270	
5°	1262	1263	1261	1259	1262	120
15°	1193	1193	1194	1193	1192	336
25°	1040	1052	1062	1051	1039	470
35°	529	624	822	625	521	344
45°	250	274	329	272	252	198
55°	155	158	160	157	155	139
65°	95	96	94	95	94	94
75°	50	49	48	49	49	52
85°	12	12	12	13	12	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1269.7	1269.7	1269.7	1269.7	1269.7
1°	1267.0	1268.8	1268.8	1267.9	1268.8
2°	1269.7	1267.0	1267.0	1267.0	1267.9
3°	1266.1	1267.9	1267.9	1265.2	1263.4
4°	1265.2	1264.3	1264.3	1267.0	1265.2
5°	1261.7	1263.4	1260.8	1259.0	1261.7
6°	1258.1	1259.0	1258.1	1259.0	1261.7
7°	1253.7	1256.3	1255.5	1254.6	1254.6
8°	1248.4	1251.9	1250.1	1250.1	1249.2
9°	1243.0	1243.9	1245.7	1245.7	1240.4
10°	1235.0	1237.7	1235.9	1236.8	1233.3
11°	1228.0	1231.5	1230.6	1228.8	1229.7
12°	1221.7	1223.5	1222.6	1220.0	1220.9
13°	1213.8	1215.5	1214.6	1214.6	1212.0
14°	1204.9	1203.1	1205.8	1204.0	1203.1
15°	1193.3	1193.3	1194.2	1193.3	1191.6
16°	1182.7	1183.6	1183.6	1182.7	1183.6
17°	1170.3	1173.8	1172.9	1171.2	1172.1
18°	1158.7	1161.4	1162.3	1161.4	1158.7
19°	1148.1	1149.9	1149.0	1145.4	1145.4
20°	1134.8	1135.7	1135.7	1133.9	1132.1
22.5°	1093.1	1099.3	1103.7	1100.2	1093.1
25°	1039.9	1052.3	1062.0	1051.4	1039.0
27.5°	965.3	990.2	1019.4	992.8	969.8
30°	850.9	907.7	966.2	913.0	856.2
32.5°	677.0	788.8	900.6	799.4	687.6
35°	528.8	623.7	821.6	624.6	520.8
37.5°	422.3	489.8	720.4	485.3	417.9
40°	349.6	394.8	579.4	393.1	343.4
42.5°	291.9	326.5	433.9	323.0	291.9
45°	250.2	274.2	329.2	272.4	252.0
47.5°	219.2	234.2	263.5	233.3	219.2
50°	193.4	202.3	218.3	201.4	191.6
52.5°	173.0	178.3	184.5	176.6	171.2
55°	155.3	157.9	159.7	157.0	155.3
57.5°	138.4	140.2	139.3	138.4	137.5
60°	122.4	123.3	122.4	123.3	122.4
62.5°	108.2	109.1	107.4	108.2	107.4
65°	94.9	95.8	94.0	94.9	94.0
67.5°	82.5	82.5	82.5	82.5	81.6
70°	70.1	71.0	70.1	71.0	71.0
72.5°	59.4	59.4	58.6	59.4	59.4
75°	49.7	48.8	47.9	48.8	48.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	21.3	21.3	20.4	21.3	21.3
85°	12.4	12.4	12.4	13.3	12.4
87.5°	6.2	5.3	5.3	6.2	6.2
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

Scaled Data Report



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Scaled Data Report





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

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77.5°	39.0	39.0	38.2	39.0	39.0
80°	29.3	30.2	29.3	30.2	29.3

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