

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: P838339

Luminaire Tested: HCSQ610D010-HM60525830-61SQC

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838339
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ610D010-HM60525830-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: -

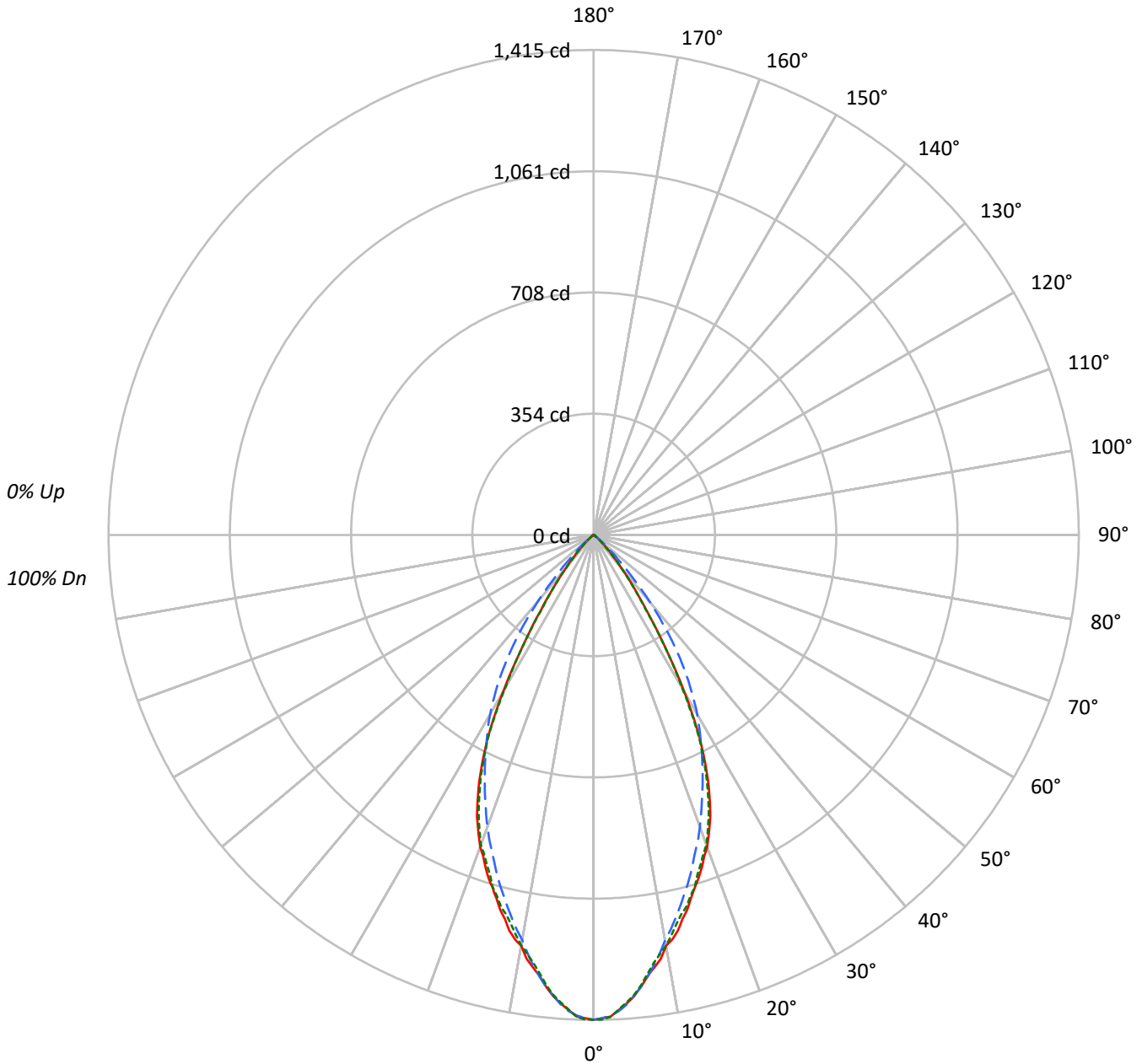
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1059.6 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 9.9
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	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95	94																			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87																			
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81																			
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	78	76																			
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71																			
6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66																			
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62																			
8	80	71	65	61	79	70	65	61	69	64	60	68	64	60	67	63	60	59																			
9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	56	55																			
10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	60911	60911	60911
5°	58425	58326	58243
10°	53216	52490	53172
15°	48907	47115	48608
20°	44380	41526	44078
25°	37511	35692	36993
30°	26265	30044	25818
35°	14107	23048	13834
40°	6986	14259	6930
45°	3051	6016	2990
50°	978	2184	978
55°	495	713	458
60°	327	327	327
65°	245	245	245
70°	176	176	176
75°	150	150	150
80°	124	124	124
85°	247	247	247

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6016 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.2	11.7
10°-20°	300.0	28.3
20°-30°	346.5	32.7
30°-40°	216.4	20.4
40°-50°	60.1	5.7
50°-60°	8.4	0.8
60°-70°	2.5	0.2
70°-80°	1.0	0.1
80°-90°	0.5	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°	770.7	72.7
0°-40°	987.1	93.2
0°-60°	1055.6	99.6
0°-90°	1059.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1059.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1415	1415	1415	1415	1415	
5°	1352	1348	1350	1348	1348	125
15°	1097	1076	1057	1074	1090	307
25°	790	766	751	766	779	353
35°	268	331	438	327	263	178
45°	50	64	99	63	49	43
55°	7	7	10	7	6	7
65°	2	2	2	2	2	3
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1414.7	1414.7	1414.7	1414.7	1414.7
1°	1410.4	1410.4	1410.4	1414.2	1414.2
2°	1406.2	1405.2	1402.9	1405.7	1407.1
3°	1388.7	1390.6	1391.5	1390.1	1386.8
4°	1370.7	1368.8	1374.0	1370.7	1367.9
5°	1351.8	1348.1	1349.5	1347.6	1347.6
6°	1325.4	1330.1	1326.3	1323.0	1321.1
7°	1296.6	1300.3	1298.0	1293.2	1289.9
8°	1273.9	1271.5	1267.7	1266.8	1261.1
9°	1252.1	1243.6	1235.1	1236.5	1238.0
10°	1217.2	1218.1	1200.6	1213.9	1216.2
11°	1202.5	1197.3	1174.2	1185.0	1188.8
12°	1181.3	1164.7	1144.9	1153.9	1160.9
13°	1150.6	1133.5	1115.6	1129.3	1136.4
14°	1127.4	1108.0	1085.3	1102.8	1117.5
15°	1097.2	1076.4	1057.0	1073.5	1090.5
16°	1070.7	1046.6	1027.2	1043.3	1068.8
17°	1047.5	1017.8	994.2	1011.2	1035.7
18°	1020.6	986.1	964.4	982.3	1010.2
19°	990.8	955.9	936.5	951.2	983.3
20°	968.6	929.4	906.3	920.4	962.0
22.5°	889.3	848.1	826.9	843.9	877.0
25°	789.6	766.4	751.3	765.9	778.7
27.5°	671.4	671.4	676.6	670.5	666.7
30°	528.3	566.5	604.3	564.6	519.3
32.5°	385.6	447.0	523.1	455.0	385.1
35°	268.4	331.2	438.5	327.4	263.2
37.5°	186.6	228.2	345.9	230.6	184.3
40°	124.3	153.1	253.7	155.9	123.3
42.5°	81.3	101.1	164.0	101.6	79.4
45°	50.1	63.8	98.8	63.3	49.1
47.5°	29.3	37.8	57.6	38.3	28.8
50°	14.6	22.2	32.6	21.7	14.6
52.5°	8.5	11.8	18.0	11.3	8.5
55°	6.6	6.6	9.5	6.6	6.1
57.5°	5.2	5.2	5.2	5.2	4.7
60°	3.8	4.3	3.8	3.8	3.8
62.5°	3.3	3.3	2.8	3.3	2.8
65°	2.4	2.4	2.4	2.4	2.4
67.5°	1.9	1.9	1.9	1.9	1.9
70°	1.4	1.4	1.4	1.4	1.4
72.5°	0.9	1.4	0.9	1.4	1.4
75°	0.9	0.9	0.9	0.9	0.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.5	0.5	0.5	0.5	0.5
85°	0.5	0.5	0.5	0.5	0.5
87.5°	0.5	0.5	0.5	0.5	0.5
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°	0.9	0.9	0.9	0.9	0.5
80°	0.5	0.5	0.5	0.5	0.5

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