

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: P838309

Luminaire Tested: HCSQ607D010-HM60525840-61SQC

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838309
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: HCSQ607D010-HM60525840-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: -

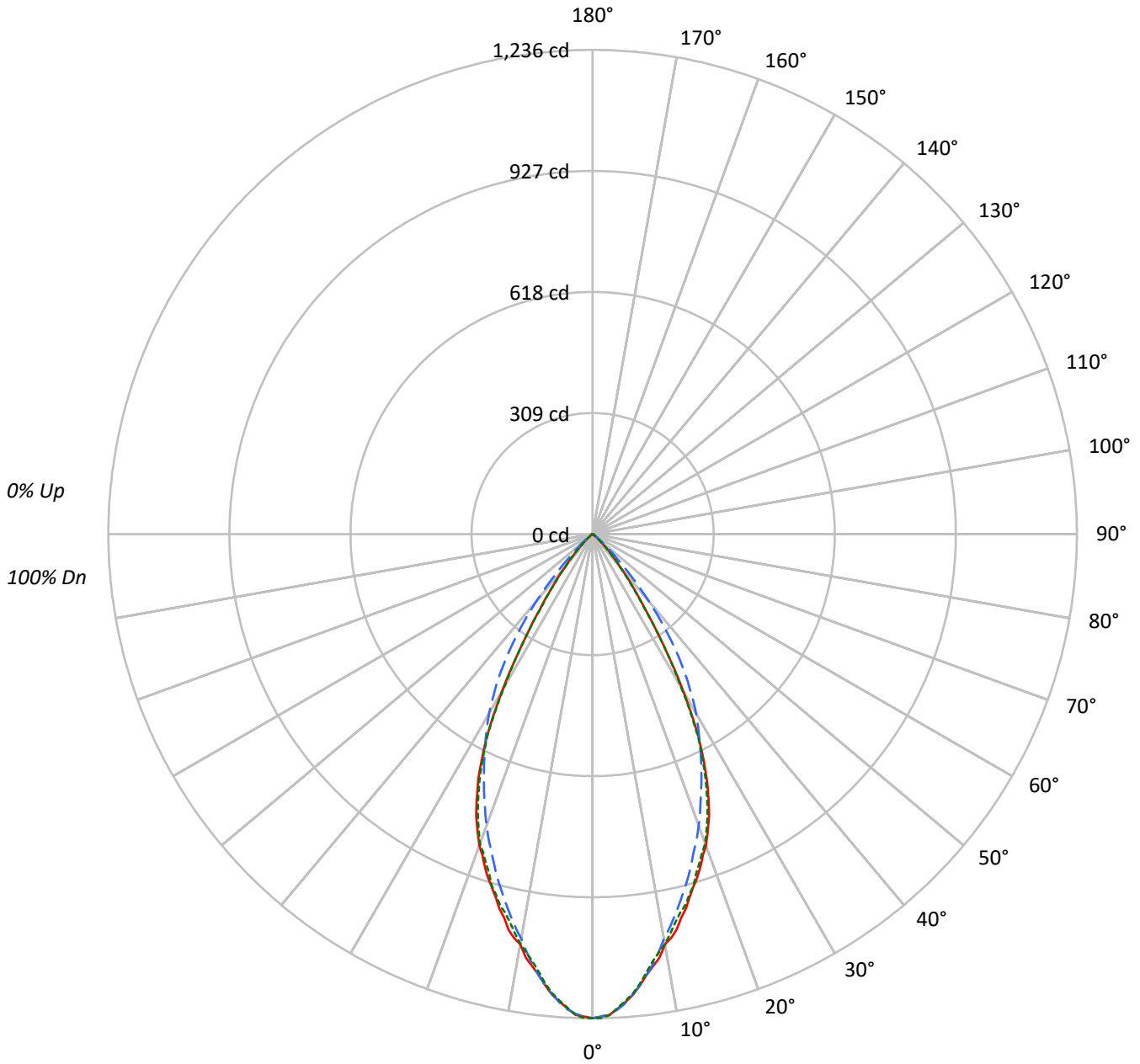
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 925.7 lumens
Efficiency: N/A
Efficacy: 115.7 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): 8
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: HCSQ607D010-HM60525840-61SQC

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°	53212	53212	53212
5°	51043	50957	50883
10°	46492	45858	46452
15°	42725	41160	42466
20°	38772	36275	38511
25°	32770	31183	32319
30°	22944	26250	22556
35°	12326	20136	12084
40°	6104	12461	6053
45°	2667	5255	2612
50°	857	1909	857
55°	435	623	405
60°	284	284	284
65°	214	214	214
70°	151	151	151
75°	133	133	133
80°	99	99	99
85°	198	198	198

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5255 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.5	11.7
10°-20°	262.1	28.3
20°-30°	302.7	32.7
30°-40°	189.1	20.4
40°-50°	52.5	5.7
50°-60°	7.3	0.8
60°-70°	2.2	0.2
70°-80°	0.9	0.1
80°-90°	0.4	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°	673.3	72.7
0°-40°	862.4	93.2
0°-60°	922.3	99.6
0°-90°	925.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	925.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1236	1236	1236	1236	1236	
5°	1181	1178	1179	1177	1177	109
15°	958	940	923	938	953	268
25°	690	670	656	669	680	308
35°	234	289	383	286	230	156
45°	44	56	86	55	43	38
55°	6	6	8	6	5	6
65°	2	2	2	2	2	2
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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CATALOG NUMBER: HCSQ607D010-HM60525840-61SQC

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1235.9	1235.9	1235.9	1235.9	1235.9
1°	1232.2	1232.2	1232.2	1235.5	1235.5
2°	1228.5	1227.7	1225.6	1228.1	1229.3
3°	1213.2	1214.9	1215.7	1214.5	1211.6
4°	1197.5	1195.9	1200.4	1197.5	1195.1
5°	1181.0	1177.7	1179.0	1177.3	1177.3
6°	1157.9	1162.0	1158.7	1155.8	1154.2
7°	1132.7	1136.0	1134.0	1129.8	1126.9
8°	1112.9	1110.8	1107.5	1106.7	1101.8
9°	1093.9	1086.5	1079.1	1080.3	1081.5
10°	1063.4	1064.2	1048.9	1060.5	1062.5
11°	1050.6	1046.0	1025.8	1035.3	1038.6
12°	1032.0	1017.5	1000.2	1008.1	1014.2
13°	1005.2	990.3	974.6	986.6	992.8
14°	984.9	968.0	948.2	963.5	976.3
15°	958.5	940.4	923.4	937.9	952.7
16°	935.4	914.3	897.4	911.5	933.8
17°	915.2	889.2	868.5	883.4	904.9
18°	891.6	861.5	842.5	858.2	882.6
19°	865.6	835.1	818.2	831.0	859.0
20°	846.2	812.0	791.7	804.1	840.5
22.5°	776.9	741.0	722.4	737.3	766.2
25°	689.8	669.6	656.4	669.1	680.3
27.5°	586.6	586.6	591.1	585.8	582.5
30°	461.5	494.9	528.0	493.3	453.7
32.5°	336.8	390.5	457.0	397.5	336.4
35°	234.5	289.4	383.1	286.1	229.9
37.5°	163.1	199.4	302.2	201.4	161.0
40°	108.6	133.7	221.7	136.2	107.7
42.5°	71.0	88.3	143.2	88.8	69.4
45°	43.8	55.7	86.3	55.3	42.9
47.5°	25.6	33.0	50.4	33.4	25.2
50°	12.8	19.4	28.5	19.0	12.8
52.5°	7.4	10.3	15.7	9.9	7.4
55°	5.8	5.8	8.3	5.8	5.4
57.5°	4.5	4.5	4.5	4.5	4.1
60°	3.3	3.7	3.3	3.3	3.3
62.5°	2.9	2.9	2.5	2.9	2.5
65°	2.1	2.1	2.1	2.1	2.1
67.5°	1.7	1.7	1.7	1.7	1.7
70°	1.2	1.2	1.2	1.2	1.2
72.5°	0.8	1.2	0.8	1.2	1.2
75°	0.8	0.8	0.8	0.8	0.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.4	0.4	0.4	0.4	0.4
85°	0.4	0.4	0.4	0.4	0.4
87.5°	0.4	0.4	0.4	0.4	0.4
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°	0.8	0.8	0.8	0.8	0.4
80°	0.4	0.4	0.4	0.4	0.4

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Scaled Data Report



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