

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: P838329

Luminaire Tested: HCSQ607D010-HM60525940-61SQC

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838329
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-HM60525940-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

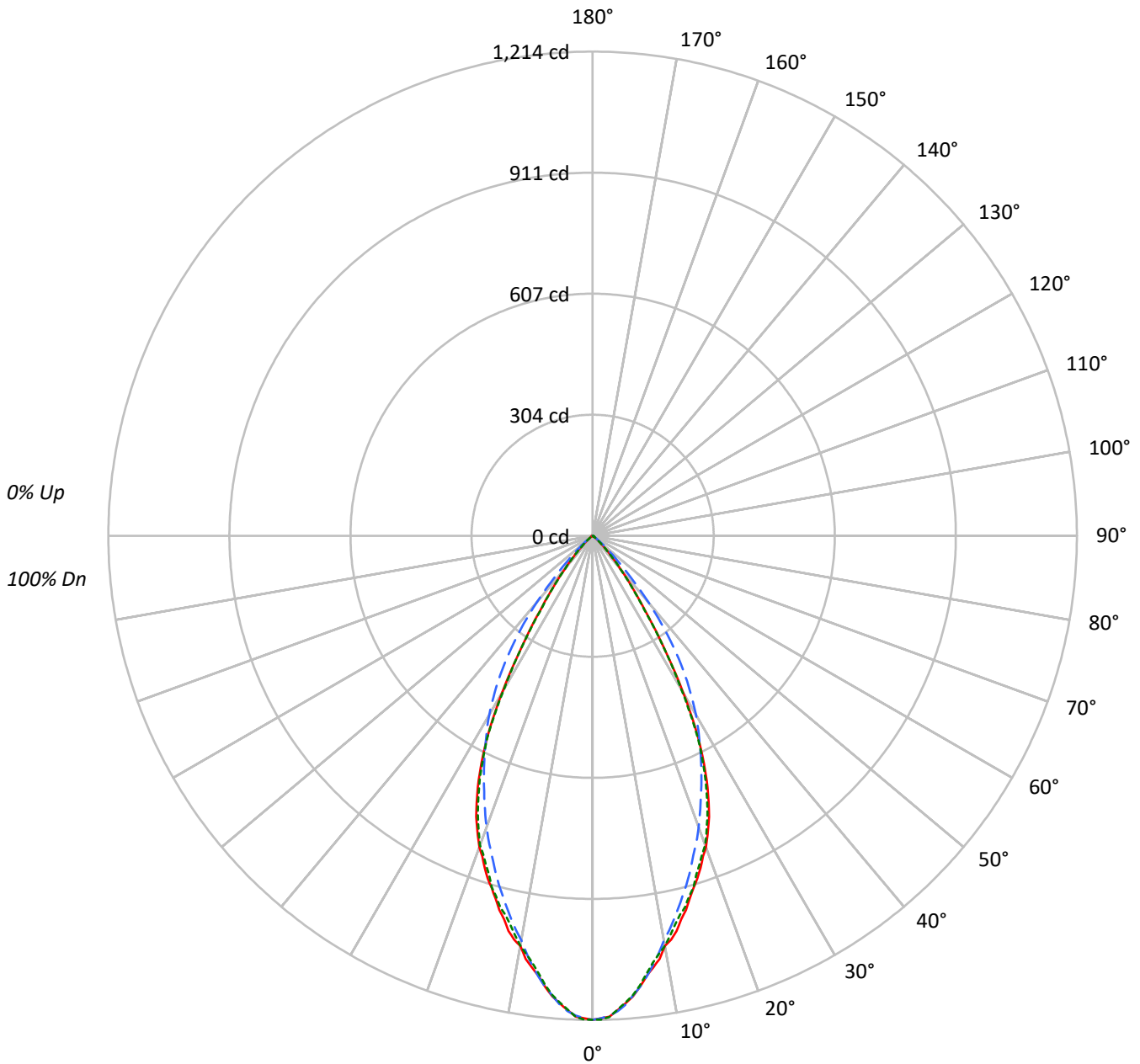
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 909.0 lumens
Efficiency: N/A
Efficacy: 113.6 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

TEST NUMBER: P838329
CATALOG NUMBER: HCSQ607D010-HM60525940-61SQC

Luminous Intensity Polar Plot





TEST NUMBER: P838329

CATALOG NUMBER: HCSQ607D010-HM60525940-61SQC

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	50	30	10	0		
RCR	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100		
	1	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95	94	94	94	94	94	94		
	2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87	87	87	87	87	87		
	3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81	81	81	81	81	81		
	4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	78	76	76	76	76	76	76		
	5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71	71	71	71	71	71		
	6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66	66	66	66	66	66		
	7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62	62	62	62	62	62		
	8	80	71	65	61	79	70	65	61	69	64	60	68	64	60	67	63	60	59	59	59	59	59	59		
	9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	56	55	55	55	55	55	55		
	10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52	52	52	52	52	52		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	52252	52252	52252
5°	50122	50036	49967
10°	45652	45031	45617
15°	41954	40420	41699
20°	38075	35624	37814
25°	32176	30618	31734
30°	22531	25773	22149
35°	12100	19774	11868
40°	5991	12236	5947
45°	2618	5157	2570
50°	844	1876	844
55°	428	608	398
60°	276	276	276
65°	204	204	204
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: 5157 cd/sqm



TEST NUMBER: P838329

CATALOG NUMBER: HCSQ607D010-HM60525940-61SQC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.6	11.7
10°-20°	257.3	28.3
20°-30°	297.3	32.7
30°-40°	185.6	20.4
40°-50°	51.6	5.7
50°-60°	7.2	0.8
60°-70°	2.1	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°	661.2	72.7
0°-40°	846.8	93.2
0°-60°	905.6	99.6
0°-90°	909.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	909.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1214	1214	1214	1214	1214	
5°	1160	1156	1158	1156	1156	107
15°	941	923	907	921	936	264
25°	677	658	644	657	668	303
35°	230	284	376	281	226	153
45°	43	55	85	54	42	37
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



TEST NUMBER: P838329

CATALOG NUMBER: HCSQ607D010-HM60525940-61SQC

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1213.6	1213.6	1213.6	1213.6	1213.6
1°	1210.0	1210.0	1210.0	1213.2	1213.2
2°	1206.3	1205.5	1203.5	1205.9	1207.1
3°	1191.3	1192.9	1193.8	1192.5	1189.7
4°	1175.9	1174.3	1178.8	1175.9	1173.5
5°	1159.7	1156.5	1157.7	1156.1	1156.1
6°	1137.0	1141.1	1137.8	1135.0	1133.4
7°	1112.3	1115.5	1113.5	1109.4	1106.6
8°	1092.8	1090.8	1087.6	1086.7	1081.9
9°	1074.2	1066.9	1059.6	1060.8	1062.0
10°	1044.2	1045.0	1030.0	1041.3	1043.4
11°	1031.6	1027.2	1007.3	1016.6	1019.9
12°	1013.4	999.2	982.2	989.9	995.9
13°	987.0	972.4	957.0	968.8	974.9
14°	967.2	950.5	931.1	946.1	958.7
15°	941.2	923.4	906.8	921.0	935.5
16°	918.5	897.9	881.2	895.0	916.9
17°	898.7	873.1	852.9	867.5	888.5
18°	875.6	846.0	827.3	842.7	866.6
19°	850.0	820.0	803.4	816.0	843.5
20°	831.0	797.3	777.5	789.6	825.3
22.5°	762.9	727.6	709.4	724.0	752.3
25°	677.3	657.5	644.5	657.1	668.0
27.5°	576.0	576.0	580.5	575.2	572.0
30°	453.2	486.0	518.4	484.4	445.5
32.5°	330.8	383.5	448.7	390.4	330.4
35°	230.2	284.2	376.2	280.9	225.8
37.5°	160.1	195.8	296.7	197.8	158.1
40°	106.6	131.3	217.7	133.8	105.8
42.5°	69.7	86.7	140.7	87.2	68.1
45°	43.0	54.7	84.7	54.3	42.2
47.5°	25.1	32.4	49.5	32.8	24.7
50°	12.6	19.1	28.0	18.6	12.6
52.5°	7.3	10.1	15.4	9.7	7.3
55°	5.7	5.7	8.1	5.7	5.3
57.5°	4.5	4.5	4.5	4.5	4.1
60°	3.2	3.6	3.2	3.2	3.2
62.5°	2.8	2.8	2.4	2.8	2.4
65°	2.0	2.0	2.0	2.0	2.0
67.5°	1.6	1.6	1.6	1.6	1.6
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



TEST NUMBER: P838329

CATALOG NUMBER: HCSQ607D010-HM60525940-61SQC

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



Report Generated By 670245859 / DESKTOP-T8S5UU9

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





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

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



77.5°	0.8	0.8	0.8	0.8	0.4
80°	0.4	0.4	0.4	0.4	0.4

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)