

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: P838443

Luminaire Tested: HCSQ620D010-HM60525930-61SQMW

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838443
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-HM60525930-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

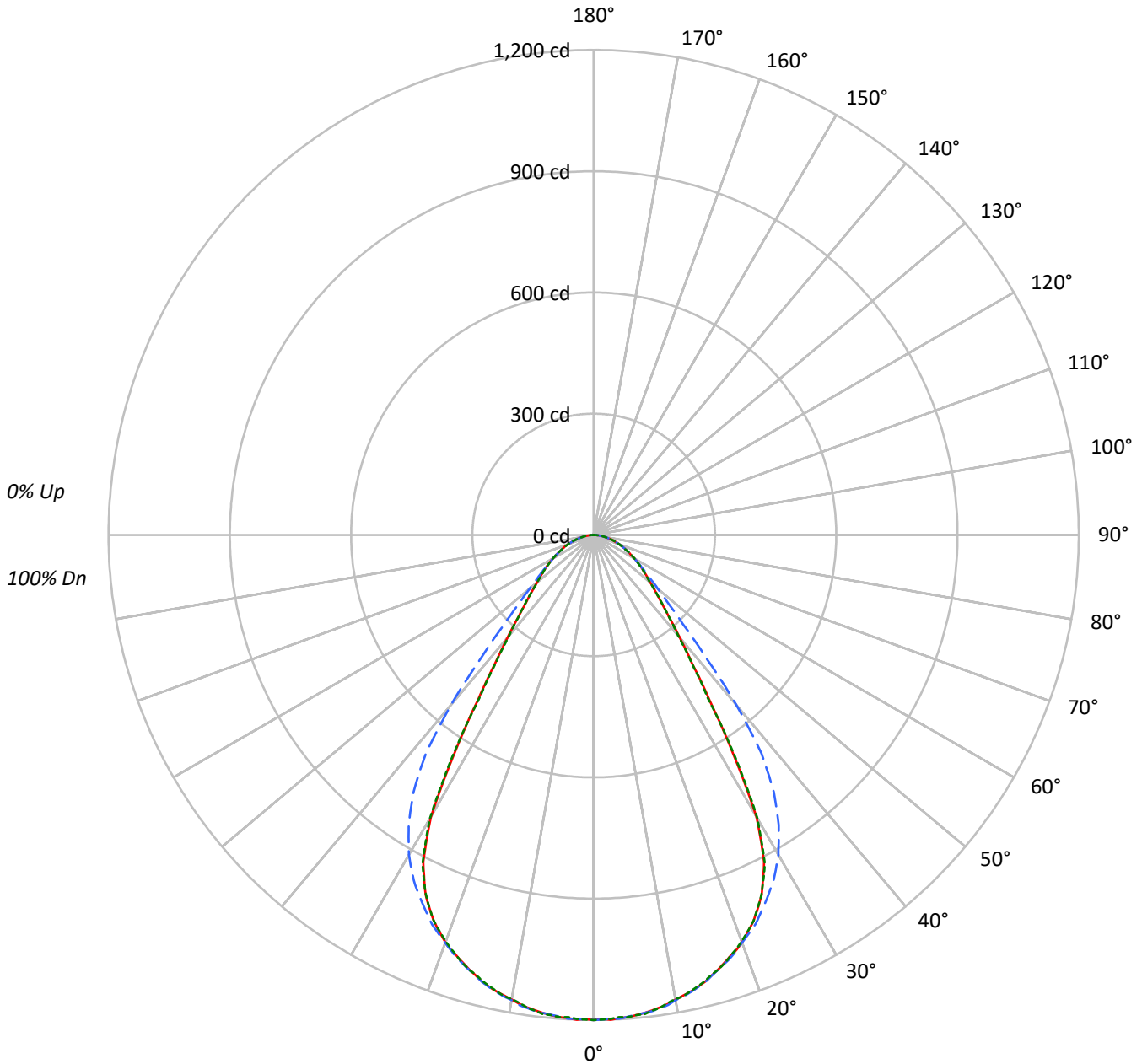
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1770.8 lumens
Efficiency: N/A
Efficacy: 88.5 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

TEST NUMBER: P838443
CATALOG NUMBER: HCSQ620D010-HM60525930-61SQMW

Luminous Intensity Polar Plot





TEST NUMBER: P838443
 CATALOG NUMBER: HCSQ620D010-HM60525930-61SQMW

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°	51688	51688	51688
5°	51562	51523	51562
10°	51056	51091	50982
15°	50298	50334	50222
20°	49164	49200	49049
25°	46709	47706	46671
30°	39997	45421	40250
35°	26281	40835	25886
40°	18576	30789	18250
45°	14407	18949	14510
50°	12251	13825	12137
55°	11020	11335	11020
60°	9972	9972	9972
65°	9149	9057	9057
70°	8346	8346	8447
75°	7819	7536	7669
80°	6868	6868	6868
85°	5780	5780	5780

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 18949 cd/sqm



TEST NUMBER: P838443

CATALOG NUMBER: HCSQ620D010-HM60525930-61SQMW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.2	6.4
10°-20°	317.8	17.9
20°-30°	452.9	25.6
30°-40°	386.2	21.8
40°-50°	213.6	12.1
50°-60°	134.6	7.6
60°-70°	89.4	5.0
70°-80°	49.1	2.8
80°-90°	14.0	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°	884.0	49.9
0°-40°	1270.1	71.7
0°-60°	1618.4	91.4
0°-90°	1770.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1770.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1200	1200	1200	1200	1200	
5°	1193	1195	1192	1190	1193	113
15°	1128	1128	1129	1128	1127	318
25°	983	995	1004	994	982	444
35°	500	590	777	591	492	325
45°	237	259	311	258	238	188
55°	147	149	151	148	147	132
65°	90	91	89	90	89	89
75°	47	46	45	46	46	49
85°	12	12	12	13	12	14
90°	0	0	0	0	0	



TEST NUMBER: P838443

CATALOG NUMBER: HCSQ620D010-HM60525930-61SQMW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1200.5	1200.5	1200.5	1200.5	1200.5
1°	1198.0	1199.7	1199.7	1198.8	1199.7
2°	1200.5	1198.0	1198.0	1198.0	1198.8
3°	1197.2	1198.8	1198.8	1196.3	1194.6
4°	1196.3	1195.5	1195.5	1198.0	1196.3
5°	1193.0	1194.6	1192.1	1190.4	1193.0
6°	1189.6	1190.4	1189.6	1190.4	1193.0
7°	1185.4	1187.9	1187.1	1186.3	1186.3
8°	1180.4	1183.7	1182.1	1182.1	1181.2
9°	1175.3	1176.2	1177.9	1177.9	1172.8
10°	1167.8	1170.3	1168.6	1169.5	1166.1
11°	1161.1	1164.4	1163.6	1161.9	1162.8
12°	1155.2	1156.9	1156.1	1153.5	1154.4
13°	1147.7	1149.3	1148.5	1148.5	1146.0
14°	1139.3	1137.6	1140.1	1138.4	1137.6
15°	1128.4	1128.4	1129.2	1128.4	1126.7
16°	1118.3	1119.1	1119.1	1118.3	1119.1
17°	1106.6	1109.9	1109.1	1107.4	1108.2
18°	1095.6	1098.2	1099.0	1098.2	1095.6
19°	1085.6	1087.3	1086.4	1083.1	1083.1
20°	1073.0	1073.8	1073.8	1072.2	1070.5
22.5°	1033.6	1039.4	1043.6	1040.3	1033.6
25°	983.2	995.0	1004.2	994.1	982.4
27.5°	912.8	936.3	963.9	938.8	917.0
30°	804.5	858.2	913.6	863.3	809.6
32.5°	640.1	745.8	851.5	755.9	650.2
35°	500.0	589.8	776.9	590.6	492.5
37.5°	399.3	463.1	681.2	458.9	395.1
40°	330.5	373.3	547.8	371.6	324.7
42.5°	276.0	308.7	410.2	305.4	276.0
45°	236.6	259.2	311.2	257.6	238.3
47.5°	207.2	221.5	249.2	220.6	207.2
50°	182.9	191.3	206.4	190.4	181.2
52.5°	163.6	168.6	174.5	166.9	161.9
55°	146.8	149.3	151.0	148.5	146.8
57.5°	130.9	132.6	131.7	130.9	130.0
60°	115.8	116.6	115.8	116.6	115.8
62.5°	102.4	103.2	101.5	102.4	101.5
65°	89.8	90.6	88.9	89.8	88.9
67.5°	78.0	78.0	78.0	78.0	77.2
70°	66.3	67.1	66.3	67.1	67.1
72.5°	56.2	56.2	55.4	56.2	56.2
75°	47.0	46.1	45.3	46.1	46.1



TEST NUMBER: P838443

CATALOG NUMBER: HCSQ620D010-HM60525930-61SQMW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	20.1	20.1	19.3	20.1	20.1
85°	11.7	11.7	11.7	12.6	11.7
87.5°	5.9	5.0	5.0	5.9	5.9
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°	36.9	36.9	36.1	36.9	36.9
80°	27.7	28.5	27.7	28.5	27.7

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

Scaled Data Report



(END OF REPORT)