

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: P838477

Luminaire Tested: HCSQ625D010-HM60525927-61SQMB

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838477
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ625D010-HM60525927-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

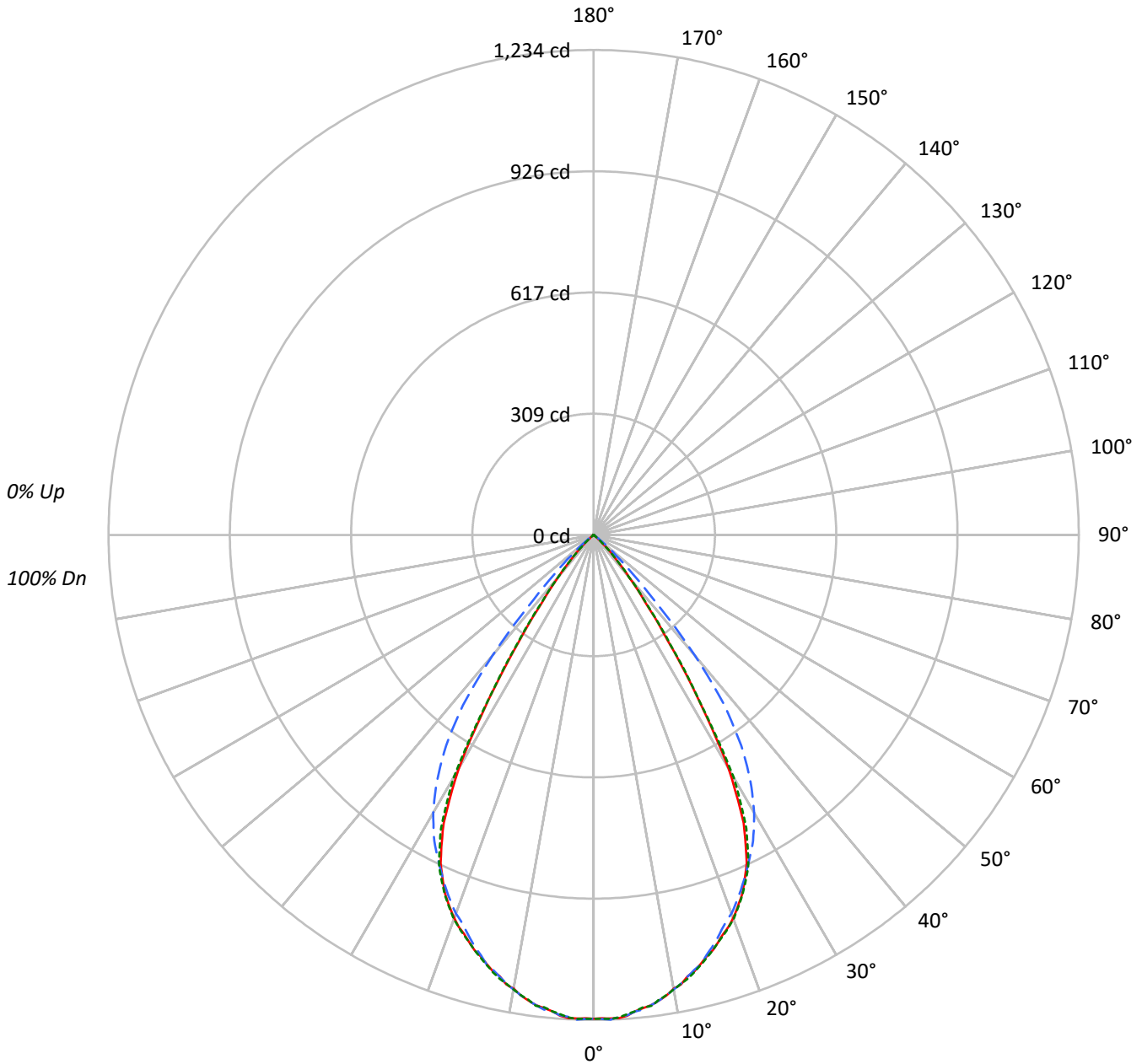
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1224.0 lumens
Efficiency: N/A
Efficacy: 44.2 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.01 / 1.03
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 27.7
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: P838477
CATALOG NUMBER: HCSQ625D010-HM60525927-61SQMB

Luminous Intensity Polar Plot





TEST NUMBER: P838477

CATALOG NUMBER: HCSQ625D010-HM60525927-61SQMB

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	106	104	105	103	101	101	99	98	97	96	95	93	93	93	93	93	93		
	2	108	103	99	96	106	101	98	94	98	95	92	95	93	90	92	90	89	87	87	87	87	87	87		
	3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	85	82	81	81	81	81	81	81		
	4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75	75	75	75	75	75		
	5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70	70	70	70	70	70		
	6	87	78	72	68	86	77	72	68	76	71	67	75	70	67	73	69	66	65	65	65	65	65	65		
	7	83	73	67	63	81	73	67	63	71	66	63	70	66	62	69	65	62	60	60	60	60	60	60		
	8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56	56	56	56	56	56		
	9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53	53	53	53	53	53		
	10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50	50	50	50	50	50		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	53014	53014	53014
5°	52569	52612	52569
10°	51253	51340	51340
15°	49491	49357	49625
20°	47528	46978	47665
25°	43763	44096	44191
30°	34115	40579	35408
35°	17298	34386	17929
40°	7869	22488	7869
45°	3044	8464	2984
50°	469	2679	469
55°	150	525	150
60°	86	86	86
65°	102	0	102
70°	0	0	126
75°	0	0	166
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 8464 cd/sqm



TEST NUMBER: P838477

CATALOG NUMBER: HCSQ625D010-HM60525927-61SQMB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.0	9.4
10°-20°	311.8	25.5
20°-30°	420.3	34.3
30°-40°	295.5	24.1
40°-50°	75.5	6.2
50°-60°	5.2	0.4
60°-70°	0.6	0.1
70°-80°	0.1	0.0
80°-90°	0.0	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°	847.1	69.2
0°-40°	1142.6	93.4
0°-60°	1223.3	99.9
0°-90°	1224.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1224.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1231	1231	1231	1231	1231	
5°	1216	1218	1217	1218	1216	115
15°	1110	1108	1107	1110	1113	312
25°	921	924	928	931	930	412
35°	329	436	654	447	341	221
45°	50	75	139	76	49	44
55°	2	2	7	2	2	2
65°	1	1	0	1	1	1
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P838477

CATALOG NUMBER: HCSQ625D010-HM60525927-61SQMB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1231.3	1231.3	1231.3	1231.3	1231.3
1°	1230.3	1231.3	1232.3	1232.3	1231.3
2°	1231.3	1228.3	1234.3	1231.3	1232.3
3°	1231.3	1225.3	1228.3	1230.3	1229.3
4°	1226.3	1222.3	1225.3	1224.3	1222.3
5°	1216.3	1218.3	1217.3	1218.3	1216.3
6°	1210.3	1212.3	1214.3	1211.3	1208.3
7°	1205.3	1204.3	1205.3	1207.3	1207.3
8°	1196.3	1198.3	1196.3	1197.3	1194.3
9°	1186.3	1186.3	1186.3	1188.3	1185.3
10°	1172.3	1177.3	1174.3	1176.3	1174.3
11°	1165.3	1163.3	1163.3	1164.3	1163.3
12°	1148.3	1150.3	1149.3	1151.3	1154.3
13°	1139.3	1140.3	1136.3	1141.3	1141.3
14°	1125.3	1124.3	1126.3	1125.3	1127.3
15°	1110.3	1108.3	1107.3	1110.3	1113.3
16°	1099.3	1094.3	1091.3	1095.3	1099.3
17°	1083.3	1078.3	1074.3	1082.3	1083.3
18°	1067.3	1065.3	1055.3	1065.3	1070.3
19°	1054.3	1047.3	1038.3	1049.3	1055.3
20°	1037.3	1031.3	1025.3	1031.3	1040.3
22.5°	988.3	983.3	978.3	985.3	990.3
25°	921.2	924.2	928.2	931.2	930.2
27.5°	826.2	853.2	878.2	862.2	841.2
30°	686.2	754.2	816.2	765.2	712.2
32.5°	497.1	613.2	742.2	636.2	502.1
35°	329.1	436.1	654.2	447.1	341.1
37.5°	214.1	293.1	546.1	294.1	224.1
40°	140.0	191.0	400.1	195.1	140.0
42.5°	86.0	121.0	243.1	126.0	86.0
45°	50.0	75.0	139.0	76.0	49.0
47.5°	23.0	41.0	79.0	40.0	24.0
50°	7.0	18.0	40.0	18.0	7.0
52.5°	3.0	5.0	19.0	5.0	3.0
55°	2.0	2.0	7.0	2.0	2.0
57.5°	2.0	1.0	2.0	2.0	2.0
60°	1.0	1.0	1.0	1.0	1.0
62.5°	1.0	1.0	1.0	1.0	1.0
65°	1.0	1.0	0.0	1.0	1.0
67.5°	1.0	0.0	0.0	0.0	1.0
70°	0.0	0.0	0.0	0.0	1.0
72.5°	0.0	0.0	0.0	0.0	1.0
75°	0.0	0.0	0.0	0.0	1.0



TEST NUMBER: P838477

CATALOG NUMBER: HCSQ625D010-HM60525927-61SQMB

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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°	0.0	0.0	0.0	0.0	0.0
80°	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



(END OF REPORT)