

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: P838487

Luminaire Tested: HCSQ625D010-HM60525935-61SQMB

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838487
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-HM60525935-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

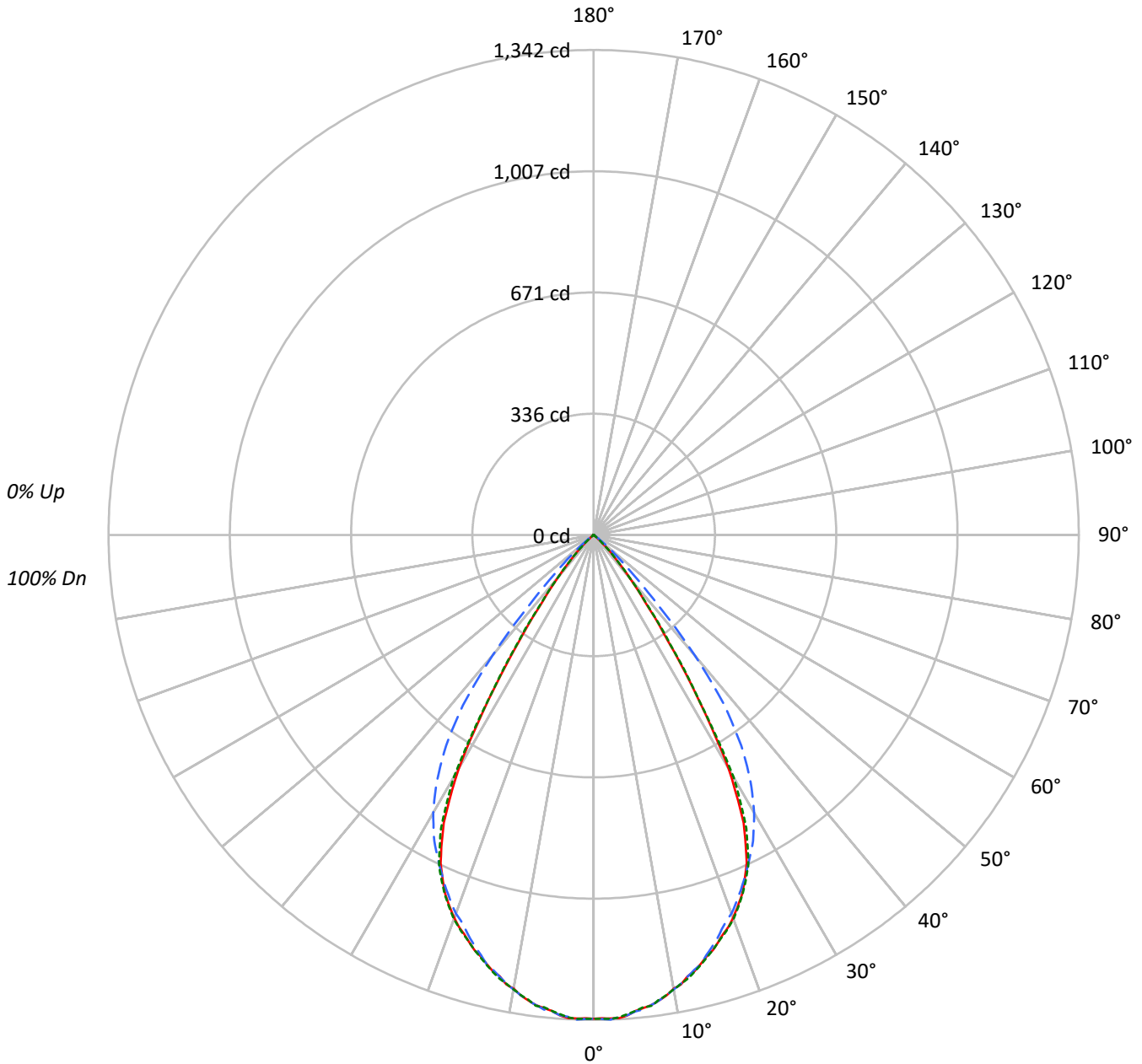
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1331.0 lumens
Efficiency: N/A
Efficacy: 48.1 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

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CATALOG NUMBER: HCSQ625D010-HM60525935-61SQMB

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	57652	57652	57652
5°	57163	57210	57163
10°	55734	55830	55830
15°	53815	53672	53962
20°	51679	51083	51830
25°	47592	47953	48058
30°	37098	44128	38500
35°	18812	37392	19495
40°	8560	24455	8560
45°	3312	9207	3245
50°	509	2914	509
55°	165	570	165
60°	95	95	95
65°	112	0	112
70°	0	0	138
75°	0	0	183
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 9207 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.0	9.4
10°-20°	339.1	25.5
20°-30°	457.1	34.3
30°-40°	321.4	24.1
40°-50°	82.1	6.2
50°-60°	5.7	0.4
60°-70°	0.7	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°	921.1	69.2
0°-40°	1242.5	93.3
0°-60°	1330.2	99.9
0°-90°	1331.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1331.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1339	1339	1339	1339	1339	
5°	1323	1325	1324	1325	1323	125
15°	1207	1205	1204	1207	1211	340
25°	1002	1005	1009	1013	1012	448
35°	358	474	711	486	371	241
45°	54	82	151	83	53	47
55°	2	2	8	2	2	3
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1339.0	1339.0	1339.0	1339.0	1339.0
1°	1337.9	1339.0	1340.0	1340.0	1339.0
2°	1339.0	1335.7	1342.2	1339.0	1340.0
3°	1339.0	1332.4	1335.7	1337.9	1336.8
4°	1333.5	1329.2	1332.4	1331.3	1329.2
5°	1322.6	1324.8	1323.7	1324.8	1322.6
6°	1316.1	1318.3	1320.5	1317.2	1313.9
7°	1310.7	1309.6	1310.7	1312.9	1312.9
8°	1300.9	1303.1	1300.9	1302.0	1298.7
9°	1290.0	1290.0	1290.0	1292.2	1288.9
10°	1274.8	1280.2	1277.0	1279.1	1277.0
11°	1267.2	1265.0	1265.0	1266.1	1265.0
12°	1248.7	1250.9	1249.8	1251.9	1255.2
13°	1238.9	1240.0	1235.6	1241.1	1241.1
14°	1223.7	1222.6	1224.7	1223.7	1225.8
15°	1207.3	1205.2	1204.1	1207.3	1210.6
16°	1195.4	1189.9	1186.7	1191.0	1195.4
17°	1178.0	1172.5	1168.2	1176.9	1178.0
18°	1160.6	1158.4	1147.5	1158.4	1163.8
19°	1146.4	1138.8	1129.0	1141.0	1147.5
20°	1127.9	1121.4	1114.9	1121.4	1131.2
22.5°	1074.6	1069.2	1063.8	1071.4	1076.8
25°	1001.8	1005.0	1009.4	1012.6	1011.6
27.5°	898.4	927.8	955.0	937.6	914.8
30°	746.2	820.1	887.6	832.1	774.4
32.5°	540.6	666.8	807.1	691.8	546.0
35°	357.9	474.2	711.4	486.2	370.9
37.5°	232.8	318.7	593.9	319.8	243.6
40°	152.3	207.8	435.1	212.1	152.3
42.5°	93.5	131.6	264.3	137.1	93.5
45°	54.4	81.6	151.2	82.7	53.3
47.5°	25.0	44.6	85.9	43.5	26.1
50°	7.6	19.6	43.5	19.6	7.6
52.5°	3.3	5.4	20.7	5.4	3.3
55°	2.2	2.2	7.6	2.2	2.2
57.5°	2.2	1.1	2.2	2.2	2.2
60°	1.1	1.1	1.1	1.1	1.1
62.5°	1.1	1.1	1.1	1.1	1.1
65°	1.1	1.1	0.0	1.1	1.1
67.5°	1.1	0.0	0.0	0.0	1.1
70°	0.0	0.0	0.0	0.0	1.1
72.5°	0.0	0.0	0.0	0.0	1.1
75°	0.0	0.0	0.0	0.0	1.1



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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



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Scaled Data Report





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

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77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0

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