

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: P838385

Luminaire Tested: HCSQ615D010-HM60525835-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838385
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ615D010-HM60525835-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: -

Summary

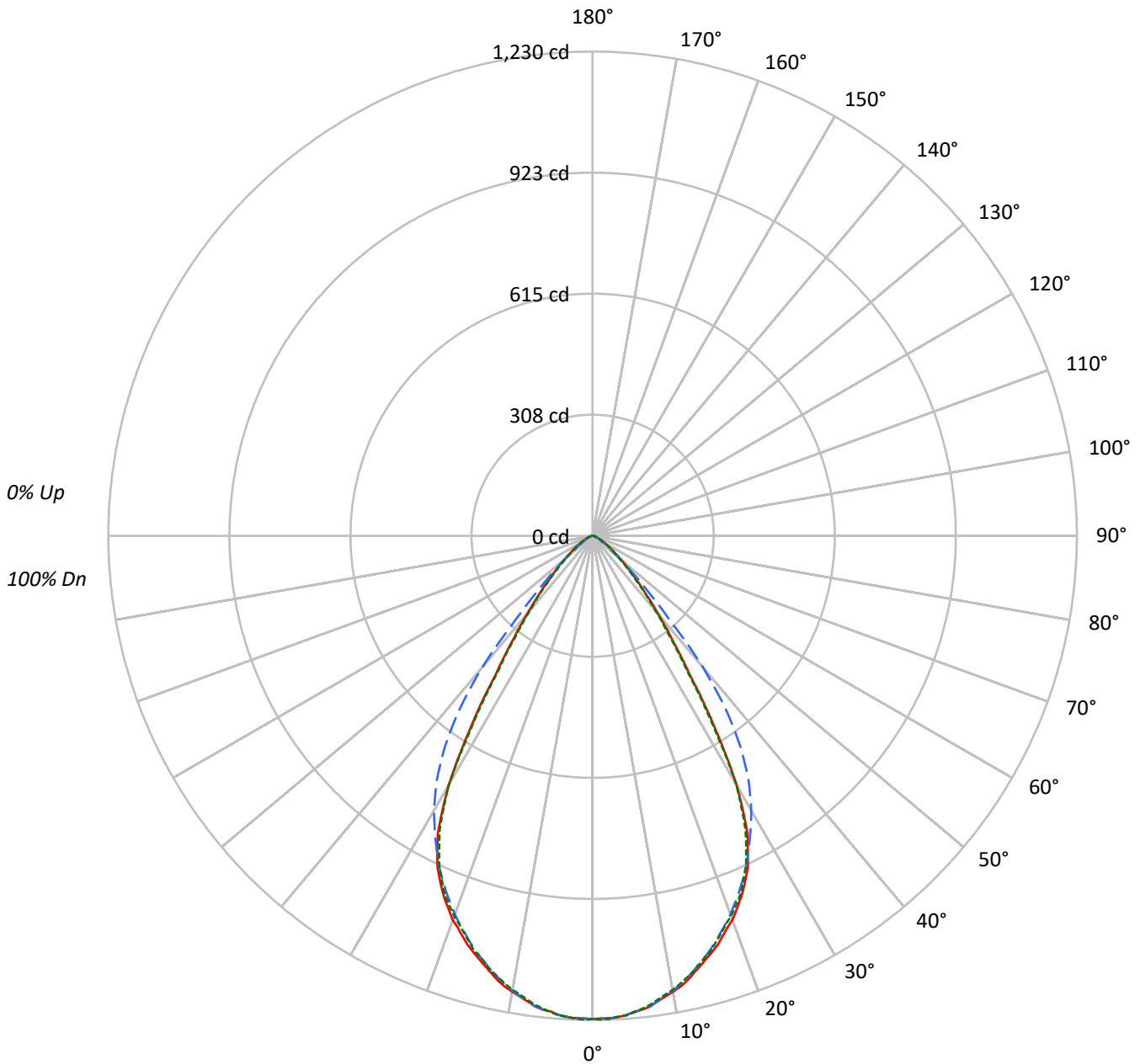
Lumens per Lamp: N/A
Luminaire Lumens: 1380.7 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.01 / 1.04
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 14
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: P838385

CATALOG NUMBER: HCSQ615D010-HM60525835-61SQH

Luminous Intensity Polar Plot





TEST NUMBER: P838385

CATALOG NUMBER: HCSQ615D010-HM60525835-61SQH

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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92								
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85								
3	101	94	88	84	99	92	87	83	90	85	82	87	84	81	85	82	79	78								
4	95	87	81	76	93	86	80	76	83	78	75	81	77	74	79	76	73	71								
5	90	80	74	69	88	79	74	69	78	72	68	76	71	68	74	70	67	66								
6	85	75	68	64	83	74	68	63	72	67	63	71	66	63	70	65	62	61								
7	80	70	63	59	78	69	63	59	68	62	58	67	62	58	65	61	58	56								
8	76	65	59	54	74	65	59	54	64	58	54	63	57	54	62	57	54	52								
9	72	61	55	51	70	61	55	50	60	54	50	59	54	50	58	53	50	48								
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	52855	52855	52855
5°	52439	52525	52499
10°	51436	51318	51200
15°	49620	49348	49317
20°	47574	46886	47106
25°	44281	43891	43796
30°	36387	40047	36288
35°	22475	34391	21939
40°	14428	24376	13928
45°	9414	11813	8957
50°	6249	5881	5841
55°	4241	3070	3933
60°	2876	1877	2635
65°	2007	1386	1803
70°	1284	1032	1196
75°	898	799	799
80°	669	496	496
85°	346	692	346

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 11813 cd/sqm



TEST NUMBER: P838385
 CATALOG NUMBER: HCSQ615D010-HM60525835-61SQH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.6	8.3
10°-20°	311.2	22.5
20°-30°	420.0	30.4
30°-40°	327.8	23.7
40°-50°	137.3	9.9
50°-60°	46.6	3.4
60°-70°	16.6	1.2
70°-80°	5.4	0.4
80°-90°	1.1	0.1
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°	845.9	61.3
0°-40°	1173.7	85.0
0°-60°	1357.6	98.3
0°-90°	1380.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1380.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1228	1228	1228	1228	1228	
5°	1213	1215	1215	1213	1215	115
15°	1113	1110	1107	1106	1106	313
25°	932	928	924	924	922	419
35°	428	502	654	501	417	281
45°	155	166	194	158	147	124
55°	56	52	41	49	52	52
65°	20	16	14	16	18	20
75°	5	5	5	5	5	6
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



TEST NUMBER: P838385

CATALOG NUMBER: HCSQ615D010-HM60525835-61SQH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1227.6	1227.6	1227.6	1227.6	1227.6
1°	1226.2	1228.3	1226.9	1227.6	1229.6
2°	1226.2	1226.2	1227.6	1226.9	1227.6
3°	1224.9	1224.9	1223.5	1223.5	1223.5
4°	1220.8	1220.8	1220.8	1219.4	1222.2
5°	1213.3	1214.7	1215.3	1213.3	1214.7
6°	1210.6	1211.3	1209.9	1209.2	1207.9
7°	1204.4	1202.4	1204.4	1199.7	1200.4
8°	1194.2	1194.2	1192.9	1191.5	1190.2
9°	1184.7	1184.7	1183.3	1181.3	1179.9
10°	1176.5	1174.5	1173.8	1171.8	1171.1
11°	1167.0	1162.9	1162.2	1160.2	1160.2
12°	1155.4	1153.4	1148.6	1147.9	1147.9
13°	1141.1	1139.1	1135.7	1133.0	1135.7
14°	1127.5	1126.1	1120.0	1122.1	1121.4
15°	1113.2	1110.5	1107.1	1105.7	1106.4
16°	1100.3	1095.5	1090.7	1091.4	1095.5
17°	1086.7	1079.9	1075.1	1074.4	1076.4
18°	1069.6	1064.2	1056.7	1059.4	1059.4
19°	1052.6	1045.1	1040.4	1039.7	1042.4
20°	1038.3	1026.7	1023.3	1022.7	1028.1
22.5°	989.3	977.7	975.0	977.7	983.2
25°	932.1	928.0	923.9	923.9	921.9
27.5°	851.1	860.6	865.4	855.8	840.2
30°	731.9	772.1	805.5	767.3	729.9
32.5°	576.7	659.8	736.7	657.7	563.1
35°	427.6	501.8	654.3	501.1	417.4
37.5°	329.5	377.2	556.3	371.1	320.0
40°	256.7	284.6	433.7	281.2	247.8
42.5°	199.5	217.2	288.7	213.1	192.7
45°	154.6	165.5	194.0	158.0	147.1
47.5°	120.5	125.3	132.8	119.8	113.7
50°	93.3	93.3	87.8	89.9	87.2
52.5°	72.2	69.4	59.2	65.4	66.7
55°	56.5	51.7	40.9	49.0	52.4
57.5°	42.9	38.1	29.3	36.1	39.5
60°	33.4	28.6	21.8	27.2	30.6
62.5°	25.9	21.8	17.0	20.4	23.1
65°	19.7	16.3	13.6	15.7	17.7
67.5°	15.0	12.3	10.2	11.6	13.6
70°	10.2	9.5	8.2	8.9	9.5
72.5°	7.5	6.8	6.1	6.1	6.8
75°	5.4	4.8	4.8	4.8	4.8



TEST NUMBER: P838385

CATALOG NUMBER: HCSQ615D010-HM60525835-61SQH

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	1.4	1.4	1.4	1.4	1.4
85°	0.7	0.7	1.4	0.7	0.7
87.5°	0.7	0.7	0.7	0.7	0.7
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





77.5°	3.4	3.4	3.4	3.4	3.4
80°	2.7	2.7	2.0	2.0	2.0

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

Scaled Data Report



(END OF REPORT)