

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: P838483

Luminaire Tested: HCSQ625D010-HM60525930-61SQMW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838483
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: HCSQ625D010-HM60525930-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

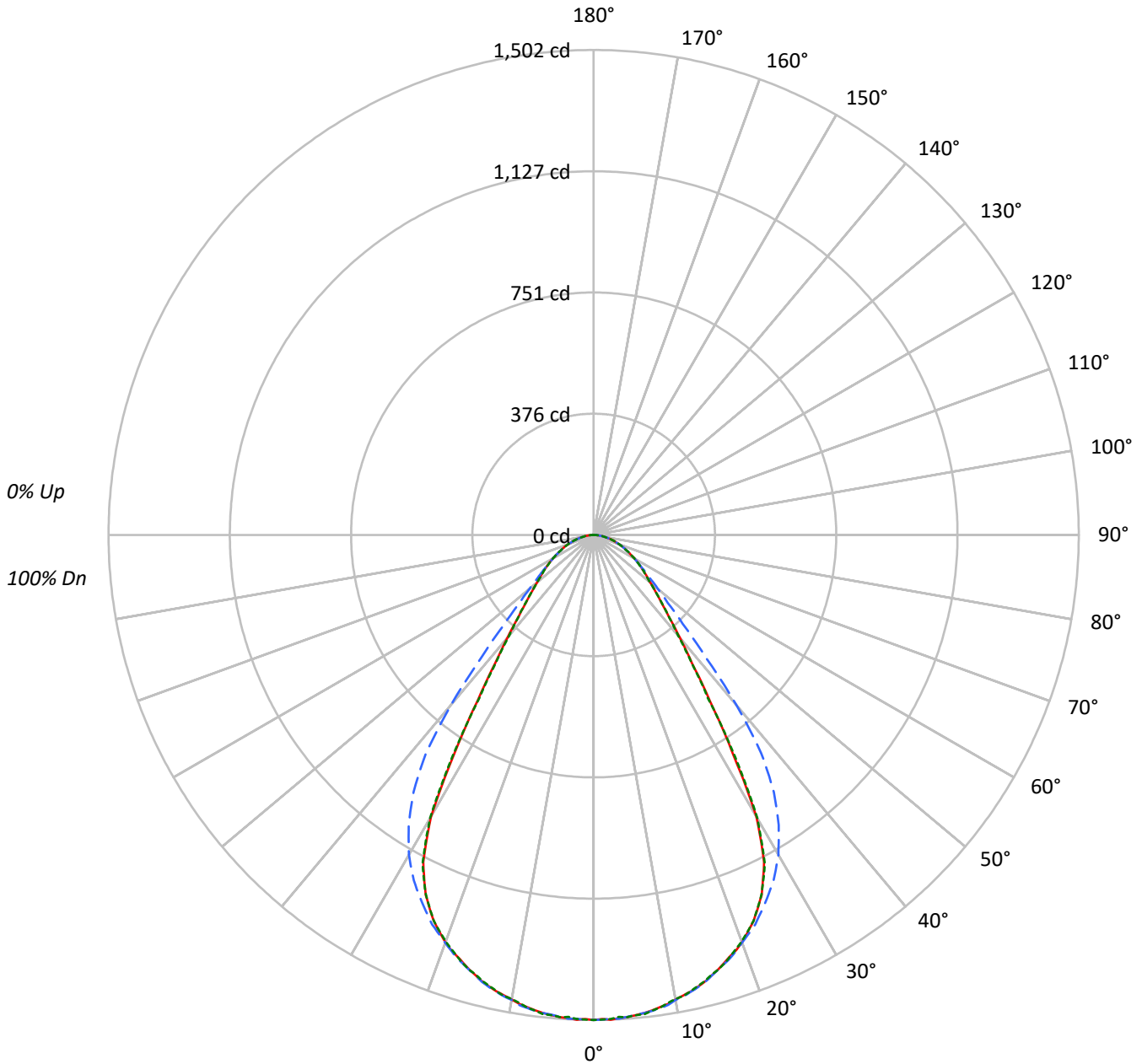
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2216.1 lumens
Efficiency: N/A
Efficacy: 80.0 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): 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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Luminous Intensity Polar Plot





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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	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°	64691	64691	64691
5°	64528	64484	64528
10°	63897	63945	63805
15°	62948	62993	62855
20°	61530	61576	61384
25°	58457	59706	58409
30°	50059	56846	50373
35°	32893	51105	32394
40°	23252	38534	22836
45°	18029	23717	18157
50°	15332	17302	15192
55°	13789	14187	13789
60°	12478	12478	12478
65°	11441	11339	11339
70°	10436	10436	10574
75°	9782	9432	9599
80°	8579	8579	8579
85°	7262	7262	7262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 23717 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.7	6.4
10°-20°	397.8	17.9
20°-30°	566.8	25.6
30°-40°	483.3	21.8
40°-50°	267.4	12.1
50°-60°	168.4	7.6
60°-70°	111.8	5.0
70°-80°	61.4	2.8
80°-90°	17.5	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°	1106.3	49.9
0°-40°	1589.6	71.7
0°-60°	2025.4	91.4
0°-90°	2216.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2216.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1502	1502	1502	1502	1502	
5°	1493	1495	1492	1490	1493	142
15°	1412	1412	1413	1412	1410	398
25°	1230	1245	1257	1244	1230	556
35°	626	738	972	739	616	407
45°	296	324	390	322	298	235
55°	184	187	189	186	184	165
65°	112	113	111	112	111	112
75°	59	58	57	58	58	62
85°	15	15	15	16	15	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1502.5	1502.5	1502.5	1502.5	1502.5
1°	1499.3	1501.4	1501.4	1500.4	1501.4
2°	1502.5	1499.3	1499.3	1499.3	1500.4
3°	1498.3	1500.4	1500.4	1497.2	1495.1
4°	1497.2	1496.2	1496.2	1499.3	1497.2
5°	1493.0	1495.1	1492.0	1489.9	1493.0
6°	1488.8	1489.9	1488.8	1489.9	1493.0
7°	1483.6	1486.7	1485.7	1484.6	1484.6
8°	1477.3	1481.5	1479.4	1479.4	1478.3
9°	1471.0	1472.0	1474.1	1474.1	1467.8
10°	1461.5	1464.7	1462.6	1463.6	1459.4
11°	1453.1	1457.3	1456.3	1454.2	1455.2
12°	1445.8	1447.9	1446.8	1443.7	1444.7
13°	1436.3	1438.4	1437.4	1437.4	1434.2
14°	1425.8	1423.7	1426.9	1424.8	1423.7
15°	1412.2	1412.2	1413.2	1412.2	1410.1
16°	1399.6	1400.6	1400.6	1399.6	1400.6
17°	1384.9	1389.1	1388.0	1385.9	1387.0
18°	1371.2	1374.4	1375.4	1374.4	1371.2
19°	1358.6	1360.7	1359.7	1355.5	1355.5
20°	1342.9	1343.9	1343.9	1341.8	1339.7
22.5°	1293.5	1300.9	1306.1	1301.9	1293.5
25°	1230.5	1245.2	1256.8	1244.2	1229.5
27.5°	1142.4	1171.8	1206.4	1174.9	1147.6
30°	1006.9	1074.1	1143.4	1080.4	1013.2
32.5°	801.1	933.4	1065.7	946.0	813.7
35°	625.8	738.1	972.3	739.2	616.3
37.5°	499.8	579.6	852.6	574.3	494.5
40°	413.7	467.2	685.6	465.1	406.3
42.5°	345.4	386.4	513.4	382.2	345.4
45°	296.1	324.4	389.5	322.3	298.2
47.5°	259.3	277.2	311.8	276.1	259.3
50°	228.9	239.4	258.3	238.3	226.8
52.5°	204.7	211.0	218.4	208.9	202.6
55°	183.7	186.9	189.0	185.8	183.7
57.5°	163.8	165.9	164.8	163.8	162.7
60°	144.9	145.9	144.9	145.9	144.9
62.5°	128.1	129.1	127.0	128.1	127.0
65°	112.3	113.4	111.3	112.3	111.3
67.5°	97.6	97.6	97.6	97.6	96.6
70°	82.9	84.0	82.9	84.0	84.0
72.5°	70.3	70.3	69.3	70.3	70.3
75°	58.8	57.7	56.7	57.7	57.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	25.2	25.2	24.1	25.2	25.2
85°	14.7	14.7	14.7	15.7	14.7
87.5°	7.3	6.3	6.3	7.3	7.3
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°	46.2	46.2	45.1	46.2	46.2
80°	34.6	35.7	34.6	35.7	34.6

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(END OF REPORT)