

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: P838527

Luminaire Tested: HCSQ630D010-HM63040935-61SQMB

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838527
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: HCSQ630D010-HM63040935-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

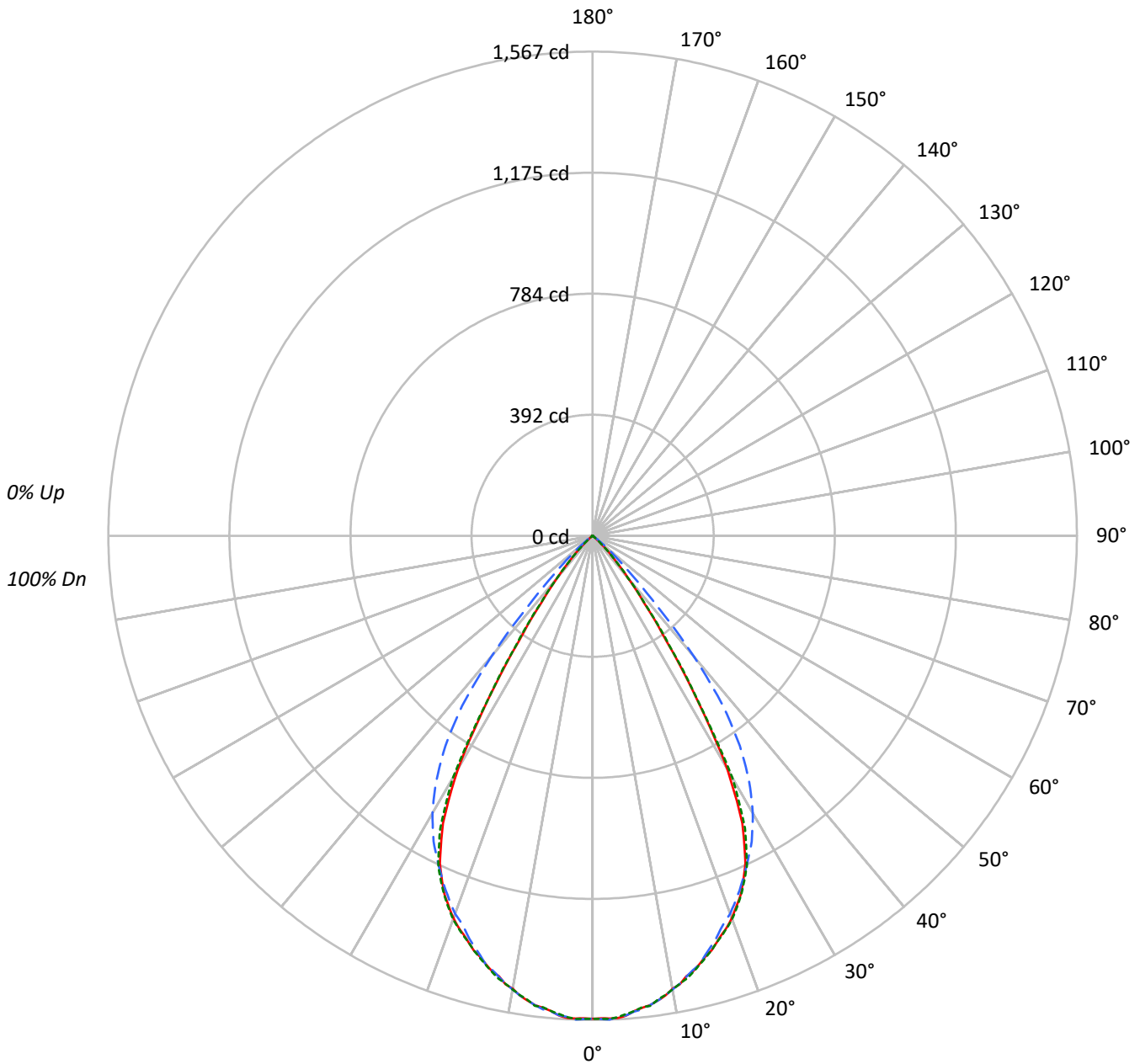
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1553.9 lumens
Efficiency: N/A
Efficacy: 55.1 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): 28.2
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	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°	67305	67305	67305
5°	66741	66792	66741
10°	65068	65178	65178
15°	62832	62658	63002
20°	60339	59638	60513
25°	55564	55982	56105
30°	43308	51516	44949
35°	21960	43652	22759
40°	9993	28547	9993
45°	3867	10747	3787
50°	596	3403	596
55°	188	668	188
60°	112	112	112
65°	132	0	132
70°	0	0	164
75°	0	0	216
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 10747 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.0	9.4
10°-20°	395.9	25.5
20°-30°	533.6	34.3
30°-40°	375.2	24.1
40°-50°	95.8	6.2
50°-60°	6.6	0.4
60°-70°	0.8	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°	1075.4	69.2
0°-40°	1450.6	93.4
0°-60°	1553.0	99.9
0°-90°	1553.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1553.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1563	1563	1563	1563	1563	
5°	1544	1547	1545	1547	1544	146
15°	1410	1407	1406	1410	1413	397
25°	1170	1173	1178	1182	1181	523
35°	418	554	830	568	433	281
45°	64	95	176	96	62	55
55°	2	2	9	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°	1563.2	1563.2	1563.2	1563.2	1563.2
1°	1561.9	1563.2	1564.5	1564.5	1563.2
2°	1563.2	1559.4	1567.0	1563.2	1564.5
3°	1563.2	1555.6	1559.4	1561.9	1560.7
4°	1556.9	1551.8	1555.6	1554.3	1551.8
5°	1544.2	1546.7	1545.4	1546.7	1544.2
6°	1536.5	1539.1	1541.6	1537.8	1534.0
7°	1530.2	1528.9	1530.2	1532.7	1532.7
8°	1518.8	1521.3	1518.8	1520.0	1516.2
9°	1506.1	1506.1	1506.1	1508.6	1504.8
10°	1488.3	1494.6	1490.8	1493.4	1490.8
11°	1479.4	1476.9	1476.9	1478.1	1476.9
12°	1457.8	1460.4	1459.1	1461.6	1465.4
13°	1446.4	1447.7	1442.6	1448.9	1448.9
14°	1428.6	1427.3	1429.9	1428.6	1431.1
15°	1409.6	1407.0	1405.7	1409.6	1413.4
16°	1395.6	1389.2	1385.4	1390.5	1395.6
17°	1375.3	1368.9	1363.8	1374.0	1375.3
18°	1355.0	1352.4	1339.7	1352.4	1358.8
19°	1338.4	1329.6	1318.1	1332.1	1339.7
20°	1316.9	1309.2	1301.6	1309.2	1320.7
22.5°	1254.6	1248.3	1241.9	1250.8	1257.2
25°	1169.6	1173.4	1178.4	1182.3	1181.0
27.5°	1048.9	1083.2	1114.9	1094.6	1068.0
30°	871.1	957.5	1036.2	971.5	904.1
32.5°	631.1	778.4	942.2	807.6	637.5
35°	417.8	553.7	830.5	567.6	433.0
37.5°	271.8	372.1	693.3	373.3	284.5
40°	177.8	242.5	507.9	247.6	177.8
42.5°	109.2	153.7	308.6	160.0	109.2
45°	63.5	95.2	176.5	96.5	62.2
47.5°	29.2	52.1	100.3	50.8	30.5
50°	8.9	22.9	50.8	22.9	8.9
52.5°	3.8	6.3	24.1	6.3	3.8
55°	2.5	2.5	8.9	2.5	2.5
57.5°	2.5	1.3	2.5	2.5	2.5
60°	1.3	1.3	1.3	1.3	1.3
62.5°	1.3	1.3	1.3	1.3	1.3
65°	1.3	1.3	0.0	1.3	1.3
67.5°	1.3	0.0	0.0	0.0	1.3
70°	0.0	0.0	0.0	0.0	1.3
72.5°	0.0	0.0	0.0	0.0	1.3
75°	0.0	0.0	0.0	0.0	1.3



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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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