

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: P838299

Luminaire Tested: HCSQ607D010-HM60525830-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838299
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ607D010-HM60525830-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: -

Summary

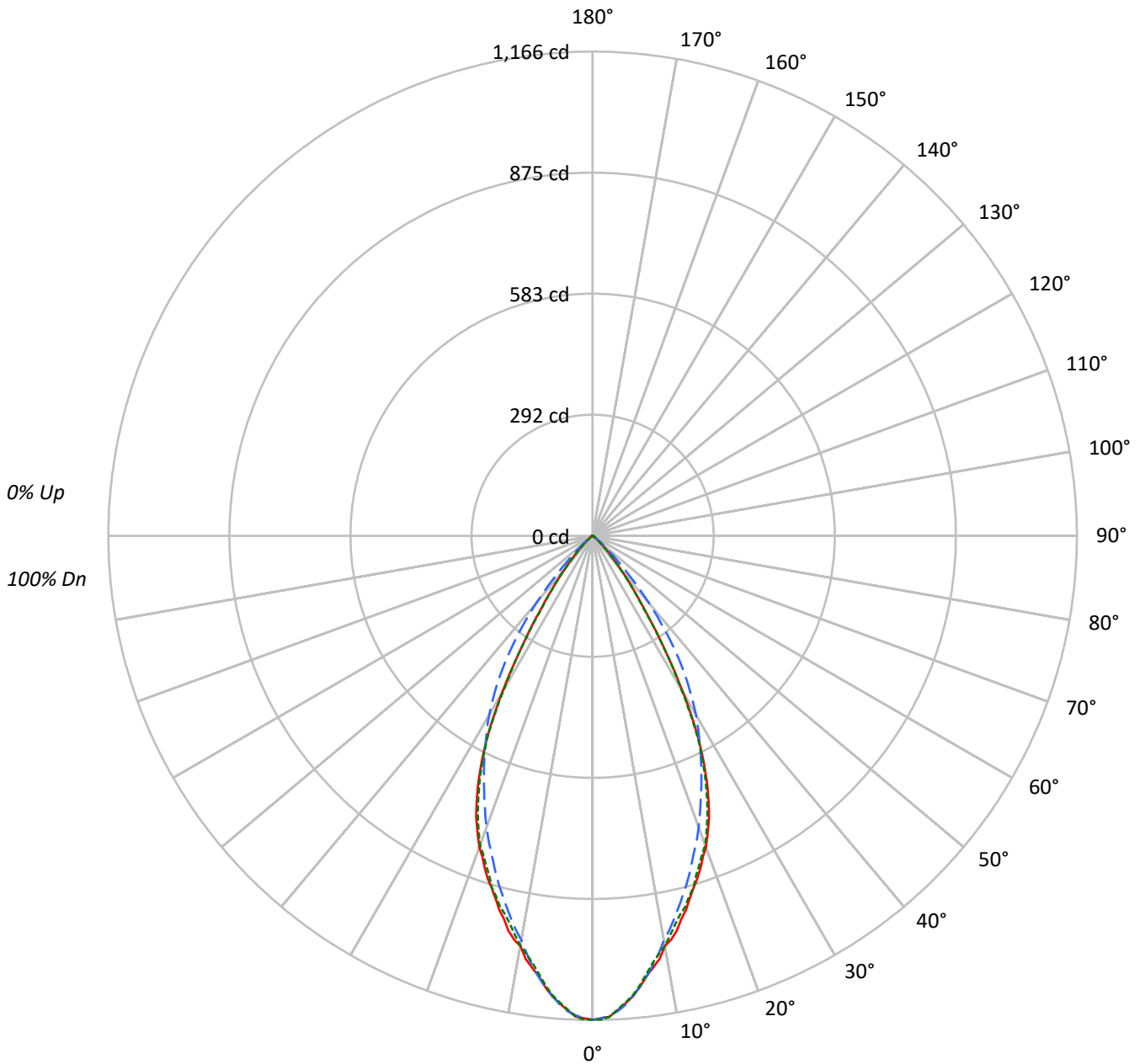
Lumens per Lamp: N/A
Luminaire Lumens: 873.1 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 8
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									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	107	105	105	103	101	101	100	98	98	96	95	94																			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87																			
3	103	96	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81																			
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76																			
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71																			
6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66																			
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62																			
8	80	71	65	61	79	70	65	61	69	64	60	68	64	60	67	63	60	59																			
9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	56	55																			
10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	50186	50186	50186
5°	48139	48056	47987
10°	43847	43248	43812
15°	40295	38820	40050
20°	36568	34213	36316
25°	30903	29407	30480
30°	21637	24754	21274
35°	11621	18990	11395
40°	5755	11753	5710
45°	2515	4956	2466
50°	810	1802	810
55°	413	586	383
60°	267	267	267
65°	194	194	194
70°	151	151	151
75°	133	133	133
80°	99	99	99
85°	198	198	198

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 4956 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	11.7
10°-20°	247.2	28.3
20°-30°	285.5	32.7
30°-40°	178.3	20.4
40°-50°	49.5	5.7
50°-60°	6.9	0.8
60°-70°	2.0	0.2
70°-80°	0.9	0.1
80°-90°	0.4	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°	635.0	72.7
0°-40°	813.3	93.2
0°-60°	869.8	99.6
0°-90°	873.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	873.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1166	1166	1166	1166	1166	
5°	1114	1111	1112	1110	1110	103
15°	904	887	871	884	898	253
25°	650	632	619	631	642	291
35°	221	273	361	270	217	147
45°	41	53	81	52	40	36
55°	6	6	8	6	5	5
65°	2	2	2	2	2	2
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1165.6	1165.6	1165.6	1165.6	1165.6
1°	1162.1	1162.1	1162.1	1165.2	1165.2
2°	1158.6	1157.8	1155.9	1158.2	1159.4
3°	1144.2	1145.7	1146.5	1145.3	1142.6
4°	1129.4	1127.8	1132.1	1129.4	1127.0
5°	1113.8	1110.7	1111.9	1110.3	1110.3
6°	1092.0	1095.9	1092.8	1090.1	1088.5
7°	1068.3	1071.4	1069.4	1065.5	1062.8
8°	1049.6	1047.6	1044.5	1043.7	1039.1
9°	1031.7	1024.7	1017.7	1018.8	1020.0
10°	1002.9	1003.6	989.2	1000.1	1002.1
11°	990.8	986.5	967.4	976.4	979.5
12°	973.3	959.6	943.3	950.7	956.5
13°	948.0	934.0	919.2	930.4	936.3
14°	928.9	912.9	894.2	908.6	920.7
15°	904.0	886.8	870.9	884.5	898.5
16°	882.2	862.3	846.4	859.6	880.6
17°	863.1	838.6	819.1	833.1	853.4
18°	840.9	812.5	794.6	809.4	832.3
19°	816.4	787.6	771.6	783.7	810.2
20°	798.1	765.8	746.7	758.4	792.6
22.5°	732.7	698.8	681.3	695.3	722.6
25°	650.5	631.5	619.0	631.1	641.6
27.5°	553.2	553.2	557.5	552.4	549.3
30°	435.2	466.8	497.9	465.2	427.9
32.5°	317.7	368.3	431.0	374.9	317.3
35°	221.1	272.9	361.3	269.8	216.8
37.5°	153.8	188.0	285.0	190.0	151.8
40°	102.4	126.1	209.1	128.5	101.6
42.5°	67.0	83.3	135.1	83.7	65.4
45°	41.3	52.6	81.4	52.2	40.5
47.5°	24.1	31.1	47.5	31.5	23.7
50°	12.1	18.3	26.9	17.9	12.1
52.5°	7.0	9.7	14.8	9.3	7.0
55°	5.5	5.5	7.8	5.5	5.1
57.5°	4.3	4.3	4.3	4.3	3.9
60°	3.1	3.5	3.1	3.1	3.1
62.5°	2.7	2.7	2.3	2.7	2.3
65°	1.9	1.9	1.9	1.9	1.9
67.5°	1.6	1.6	1.6	1.6	1.6
70°	1.2	1.2	1.2	1.2	1.2
72.5°	0.8	1.2	0.8	1.2	1.2
75°	0.8	0.8	0.8	0.8	0.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.4	0.4	0.4	0.4	0.4
85°	0.4	0.4	0.4	0.4	0.4
87.5°	0.4	0.4	0.4	0.4	0.4
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°	0.8	0.8	0.8	0.8	0.4
80°	0.4	0.4	0.4	0.4	0.4

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Scaled Data Report



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