

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: P838304

Luminaire Tested: HCSQ607D010-HM60525835-61SQC

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838304
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-HM60525835-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: -

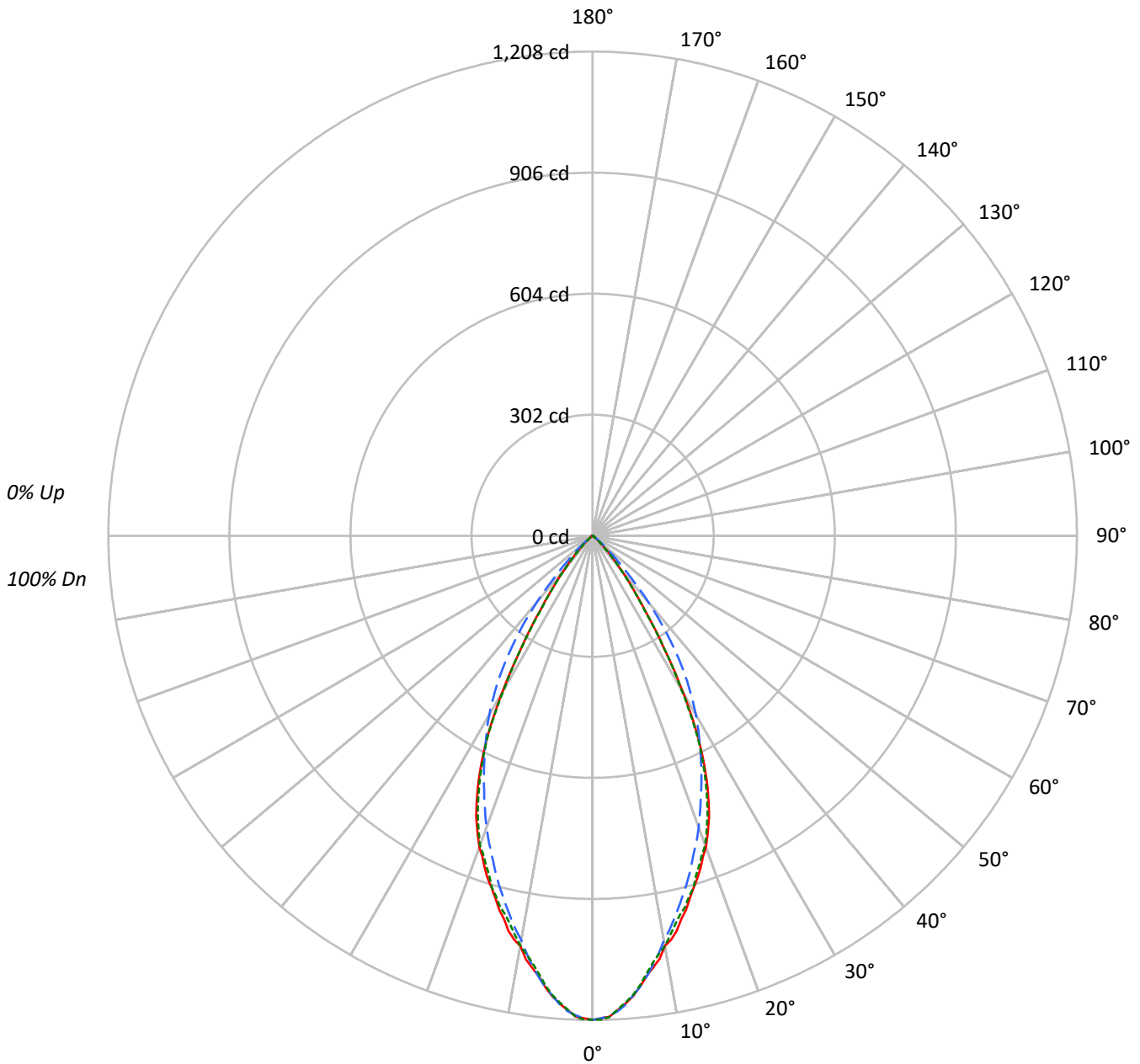
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 904.5 lumens
Efficiency: N/A
Efficacy: 113.1 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	97	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	78	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°	51994	51994	51994
5°	49876	49790	49716
10°	45425	44808	45390
15°	41748	40220	41494
20°	37888	35445	37626
25°	32019	30466	31578
30°	22417	25649	22039
35°	12042	19674	11811
40°	5963	12174	5918
45°	2606	5133	2551
50°	837	1862	837
55°	420	608	390
60°	276	276	276
65°	204	204	204
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: 5133 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.0	11.7
10°-20°	256.1	28.3
20°-30°	295.8	32.7
30°-40°	184.7	20.4
40°-50°	51.3	5.7
50°-60°	7.2	0.8
60°-70°	2.1	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°	657.9	72.7
0°-40°	842.6	93.2
0°-60°	901.1	99.6
0°-90°	904.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	904.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1208	1208	1208	1208	1208	
5°	1154	1151	1152	1150	1150	106
15°	937	919	902	916	931	262
25°	674	654	641	654	665	301
35°	229	283	374	280	225	152
45°	43	54	84	54	42	37
55°	6	6	8	6	5	6
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°	1207.6	1207.6	1207.6	1207.6	1207.6
1°	1204.0	1204.0	1204.0	1207.2	1207.2
2°	1200.4	1199.5	1197.5	1200.0	1201.2
3°	1185.4	1187.0	1187.9	1186.6	1183.8
4°	1170.1	1168.5	1172.9	1170.1	1167.7
5°	1154.0	1150.7	1152.0	1150.3	1150.3
6°	1131.4	1135.4	1132.2	1129.4	1127.8
7°	1106.8	1110.0	1108.0	1104.0	1101.1
8°	1087.4	1085.4	1082.2	1081.4	1076.5
9°	1068.9	1061.6	1054.3	1055.6	1056.8
10°	1039.0	1039.8	1024.9	1036.2	1038.2
11°	1026.5	1022.1	1002.3	1011.6	1014.8
12°	1008.4	994.2	977.3	985.0	991.0
13°	982.1	967.6	952.3	964.0	970.0
14°	962.4	945.8	926.5	941.4	953.9
15°	936.6	918.8	902.3	916.4	930.9
16°	914.0	893.4	876.9	890.6	912.4
17°	894.2	868.8	848.6	863.2	884.1
18°	871.2	841.8	823.2	838.6	862.4
19°	845.8	816.0	799.4	811.9	839.4
20°	826.9	793.4	773.6	785.7	821.2
22.5°	759.1	724.0	705.9	720.4	748.6
25°	674.0	654.2	641.3	653.8	664.7
27.5°	573.2	573.2	577.6	572.3	569.1
30°	450.9	483.6	515.9	482.0	443.3
32.5°	329.1	381.6	446.5	388.4	328.7
35°	229.1	282.7	374.3	279.5	224.7
37.5°	159.3	194.8	295.2	196.8	157.3
40°	106.1	130.7	216.6	133.1	105.3
42.5°	69.4	86.3	140.0	86.7	67.8
45°	42.8	54.5	84.3	54.0	41.9
47.5°	25.0	32.3	49.2	32.7	24.6
50°	12.5	19.0	27.8	18.6	12.5
52.5°	7.3	10.1	15.3	9.7	7.3
55°	5.6	5.6	8.1	5.6	5.2
57.5°	4.4	4.4	4.4	4.4	4.0
60°	3.2	3.6	3.2	3.2	3.2
62.5°	2.8	2.8	2.4	2.8	2.4
65°	2.0	2.0	2.0	2.0	2.0
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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