

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: P838457

Luminaire Tested: HCSQ625D010-HM60525827-61SQMB

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838457
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: HCSQ625D010-HM60525827-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: -

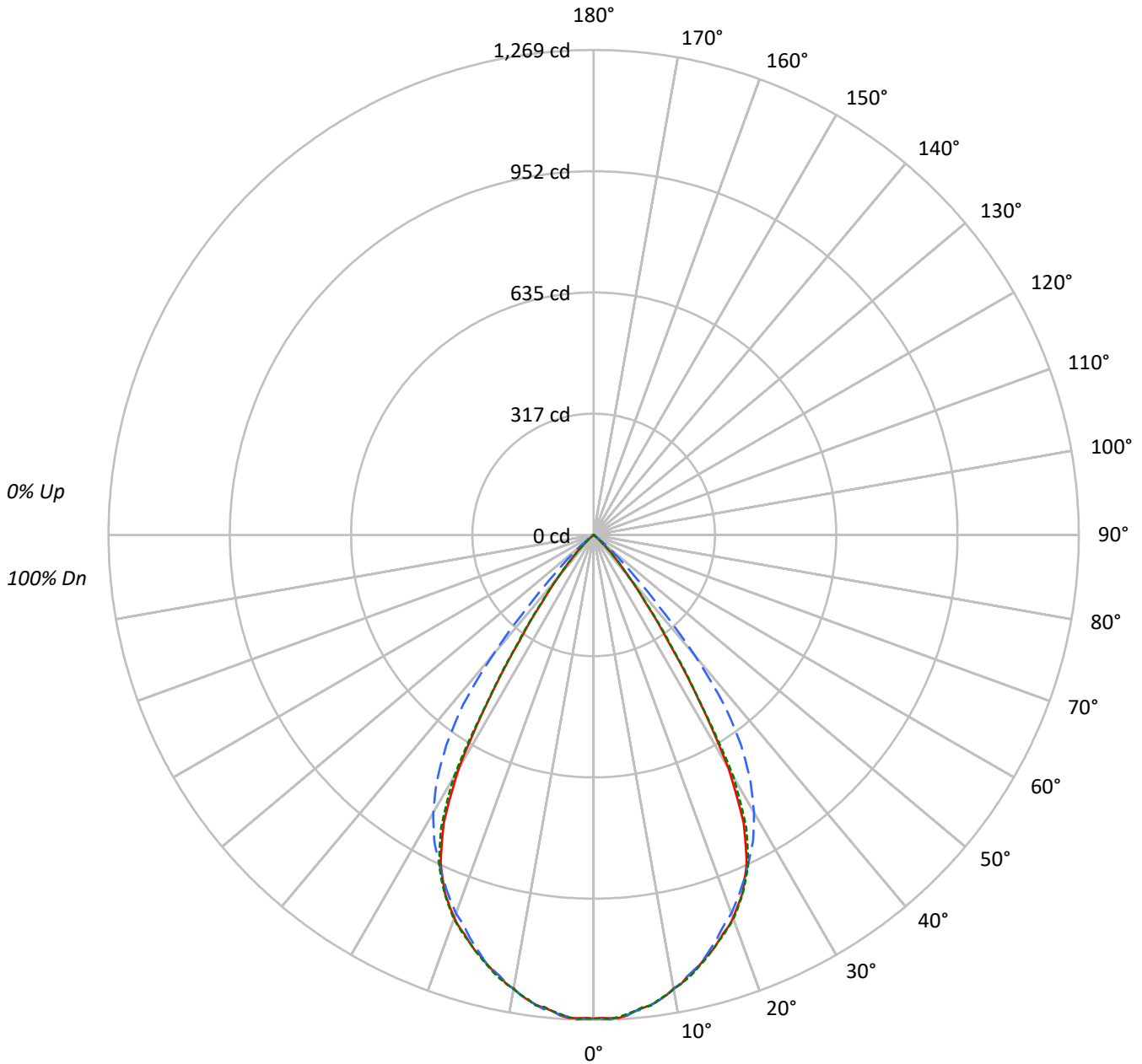
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1258.0 lumens
Efficiency: N/A
Efficacy: 45.4 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): 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	50	30	10	0		
RCR	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100		
	1	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93	93	93	93	93	93		
	2	108	103	99	96	106	101	98	94	98	95	92	95	93	90	92	90	89	87	87	87	87	87	87		
	3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	85	82	81	81	81	81	81	81		
	4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75	75	75	75	75	75		
	5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70	70	70	70	70	70		
	6	87	78	72	68	86	77	72	68	76	71	67	75	70	67	73	69	66	65	65	65	65	65	65		
	7	83	73	67	63	81	73	67	63	71	66	63	70	66	62	69	65	62	60	60	60	60	60	60		
	8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56	56	56	56	56	56		
	9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53	53	53	53	53	53		
	10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50	50	50	50	50	50		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	54487	54487	54487
5°	54029	54073	54029
10°	52678	52766	52766
15°	50864	50726	51002
20°	48848	48279	48990
25°	44979	45321	45421
30°	35060	41707	36392
35°	17776	35337	18428
40°	8088	23112	8088
45°	3130	8701	3069
50°	482	2753	482
55°	158	540	158
60°	86	86	86
65°	102	0	102
70°	0	0	126
75°	0	0	166
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 8701 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.2	9.4
10°-20°	320.5	25.5
20°-30°	432.0	34.3
30°-40°	303.7	24.1
40°-50°	77.5	6.2
50°-60°	5.4	0.4
60°-70°	0.6	0.0
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°	870.6	69.2
0°-40°	1174.3	93.4
0°-60°	1257.3	99.9
0°-90°	1258.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1258.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1266	1266	1266	1266	1266	
5°	1250	1252	1251	1252	1250	118
15°	1141	1139	1138	1141	1144	321
25°	947	950	954	957	956	423
35°	338	448	672	460	351	228
45°	51	77	143	78	50	45
55°	2	2	7	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°	1265.5	1265.5	1265.5	1265.5	1265.5
1°	1264.5	1265.5	1266.5	1266.5	1265.5
2°	1265.5	1262.4	1268.6	1265.5	1266.5
3°	1265.5	1259.4	1262.4	1264.5	1263.5
4°	1260.4	1256.3	1259.4	1258.3	1256.3
5°	1250.1	1252.2	1251.1	1252.2	1250.1
6°	1243.9	1246.0	1248.0	1245.0	1241.9
7°	1238.8	1237.8	1238.8	1240.8	1240.8
8°	1229.5	1231.6	1229.5	1230.6	1227.5
9°	1219.3	1219.3	1219.3	1221.3	1218.2
10°	1204.9	1210.0	1206.9	1209.0	1206.9
11°	1197.7	1195.6	1195.6	1196.6	1195.6
12°	1180.2	1182.3	1181.2	1183.3	1186.4
13°	1170.9	1172.0	1167.9	1173.0	1173.0
14°	1156.5	1155.5	1157.6	1156.5	1158.6
15°	1141.1	1139.1	1138.0	1141.1	1144.2
16°	1129.8	1124.7	1121.6	1125.7	1129.8
17°	1113.4	1108.2	1104.1	1112.3	1113.4
18°	1096.9	1094.9	1084.6	1094.9	1100.0
19°	1083.6	1076.4	1067.1	1078.4	1084.6
20°	1066.1	1059.9	1053.7	1059.9	1069.2
22.5°	1015.7	1010.6	1005.4	1012.6	1017.8
25°	946.8	949.9	954.0	957.1	956.1
27.5°	849.2	876.9	902.6	886.2	864.6
30°	705.2	775.1	838.9	786.5	732.0
32.5°	510.9	630.2	762.8	653.8	516.1
35°	338.2	448.2	672.3	459.5	350.6
37.5°	220.0	301.2	561.3	302.2	230.3
40°	143.9	196.4	411.2	200.5	143.9
42.5°	88.4	124.4	249.8	129.5	88.4
45°	51.4	77.1	142.9	78.1	50.4
47.5°	23.6	42.1	81.2	41.1	24.7
50°	7.2	18.5	41.1	18.5	7.2
52.5°	3.1	5.1	19.5	5.1	3.1
55°	2.1	2.1	7.2	2.1	2.1
57.5°	2.1	1.0	2.1	2.1	2.1
60°	1.0	1.0	1.0	1.0	1.0
62.5°	1.0	1.0	1.0	1.0	1.0
65°	1.0	1.0	0.0	1.0	1.0
67.5°	1.0	0.0	0.0	0.0	1.0
70°	0.0	0.0	0.0	0.0	1.0
72.5°	0.0	0.0	0.0	0.0	1.0
75°	0.0	0.0	0.0	0.0	1.0



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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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