

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: P838422

Luminaire Tested: HCSQ620D010-HM60525830-61SQMB

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838422
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: HCSQ620D010-HM60525830-61SQMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE BLACK TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: -

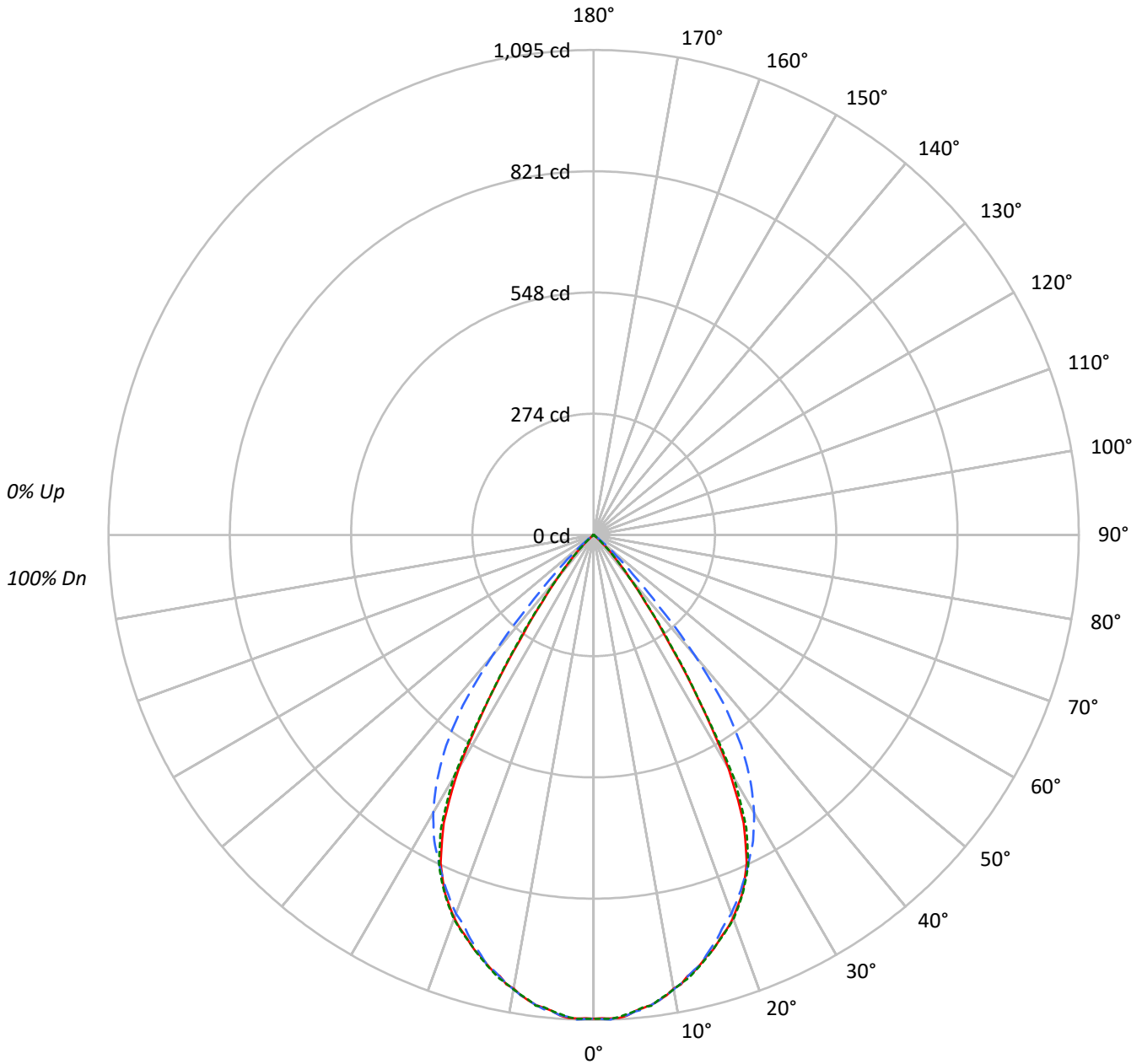
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1085.9 lumens
Efficiency: N/A
Efficacy: 54.3 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): 20
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°	47034	47034	47034
5°	46635	46673	46635
10°	45469	45547	45547
15°	43906	43786	44022
20°	42163	41677	42286
25°	38827	39122	39207
30°	30262	36000	31411
35°	15343	30501	15905
40°	6981	19953	6981
45°	2704	7508	2649
50°	415	2378	415
55°	135	465	135
60°	78	78	78
65°	92	0	92
70°	0	0	113
75°	0	0	150
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 7508 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.0	9.4
10°-20°	276.6	25.5
20°-30°	372.9	34.3
30°-40°	262.2	24.1
40°-50°	66.9	6.2
50°-60°	4.6	0.4
60°-70°	0.6	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°	751.5	69.2
0°-40°	1013.7	93.3
0°-60°	1085.2	99.9
0°-90°	1085.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1085.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1092	1092	1092	1092	1092	
5°	1079	1081	1080	1081	1079	102
15°	985	983	982	985	988	277
25°	817	820	824	826	825	365
35°	292	387	580	397	303	196
45°	44	67	123	67	44	39
55°	2	2	6	2	2	2
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°	1092.4	1092.4	1092.4	1092.4	1092.4
1°	1091.5	1092.4	1093.2	1093.2	1092.4
2°	1092.4	1089.7	1095.0	1092.4	1093.2
3°	1092.4	1087.0	1089.7	1091.5	1090.6
4°	1087.9	1084.4	1087.0	1086.1	1084.4
5°	1079.0	1080.8	1079.9	1080.8	1079.0
6°	1073.7	1075.5	1077.3	1074.6	1072.0
7°	1069.3	1068.4	1069.3	1071.1	1071.1
8°	1061.3	1063.1	1061.3	1062.2	1059.5
9°	1052.4	1052.4	1052.4	1054.2	1051.5
10°	1040.0	1044.4	1041.8	1043.6	1041.8
11°	1033.8	1032.0	1032.0	1032.9	1032.0
12°	1018.7	1020.5	1019.6	1021.4	1024.0
13°	1010.7	1011.6	1008.1	1012.5	1012.5
14°	998.3	997.4	999.2	998.3	1000.1
15°	985.0	983.2	982.3	985.0	987.6
16°	975.2	970.8	968.1	971.7	975.2
17°	961.0	956.6	953.0	960.1	961.0
18°	946.8	945.1	936.2	945.1	949.5
19°	935.3	929.1	921.1	930.9	936.2
20°	920.2	914.9	909.6	914.9	922.9
22.5°	876.7	872.3	867.9	874.1	878.5
25°	817.3	819.9	823.5	826.1	825.3
27.5°	733.0	756.9	779.1	764.9	746.3
30°	608.7	669.1	724.1	678.8	631.8
32.5°	441.0	544.0	658.4	564.4	445.5
35°	291.9	386.9	580.3	396.7	302.6
37.5°	189.9	260.0	484.5	260.9	198.8
40°	124.2	169.5	355.0	173.0	124.2
42.5°	76.3	107.4	215.6	111.8	76.3
45°	44.4	66.6	123.3	67.4	43.5
47.5°	20.4	36.4	70.1	35.5	21.3
50°	6.2	16.0	35.5	16.0	6.2
52.5°	2.7	4.4	16.9	4.4	2.7
55°	1.8	1.8	6.2	1.8	1.8
57.5°	1.8	0.9	1.8	1.8	1.8
60°	0.9	0.9	0.9	0.9	0.9
62.5°	0.9	0.9	0.9	0.9	0.9
65°	0.9	0.9	0.0	0.9	0.9
67.5°	0.9	0.0	0.0	0.0	0.9
70°	0.0	0.0	0.0	0.0	0.9
72.5°	0.0	0.0	0.0	0.0	0.9
75°	0.0	0.0	0.0	0.0	0.9



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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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