

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: P838315

Luminaire Tested: HCSQ607D010-HM60525927-61SQH

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838315
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ607D010-HM60525927-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

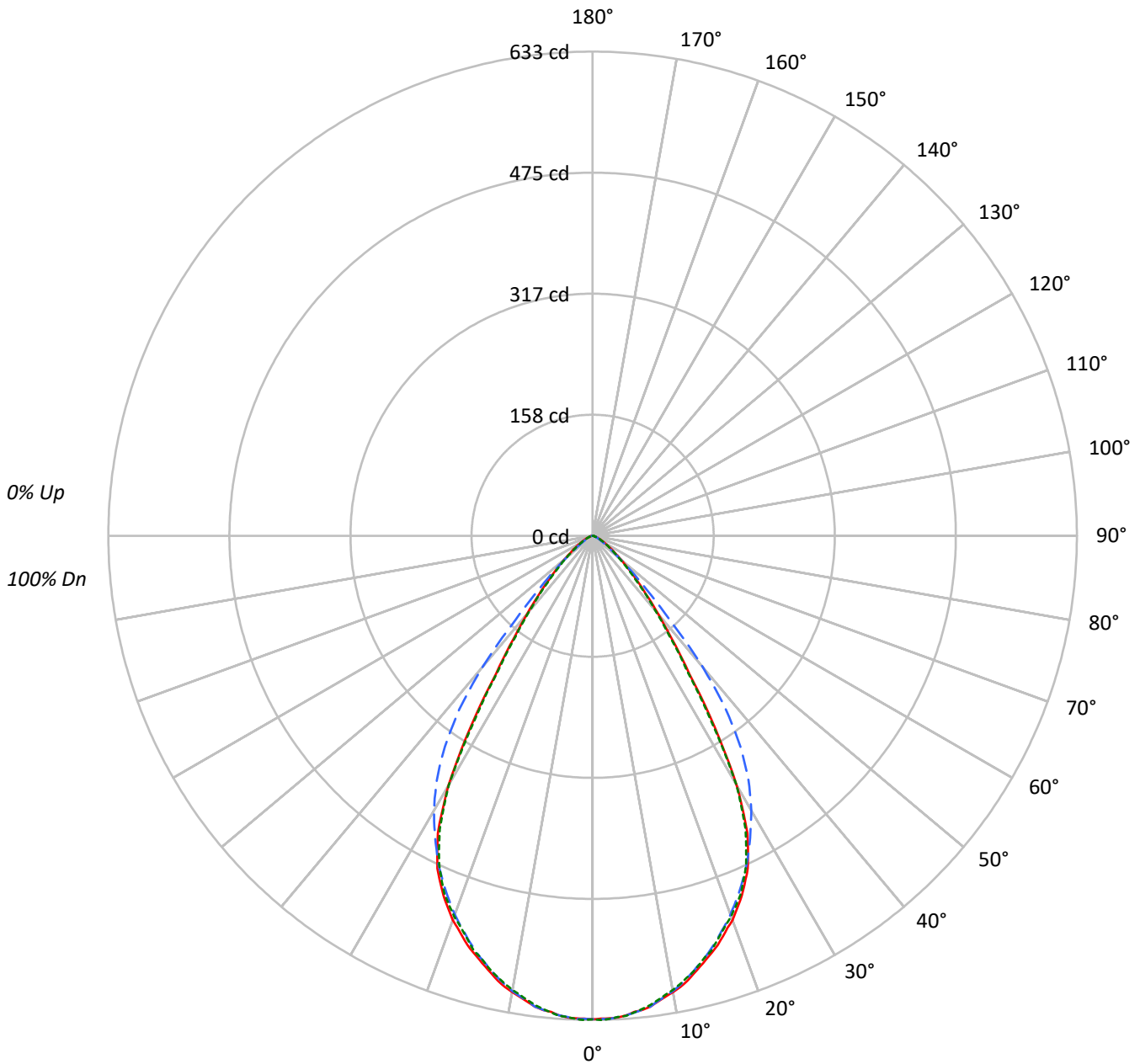
Lumens per Lamp: N/A
Luminaire Lumens: 711.0 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.01 / 1.04
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92																			
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85																			
3	101	94	88	84	99	92	87	83	90	85	82	87	83	81	85	82	79	78																			
4	95	87	81	76	93	86	80	76	83	78	75	81	77	74	79	76	73	71																			
5	90	80	74	69	88	79	74	69	78	72	68	76	71	68	74	70	67	66																			
6	85	75	68	64	83	74	68	63	72	67	63	71	66	63	70	65	62	61																			
7	80	70	63	59	78	69	63	59	68	62	58	67	62	58	65	61	58	56																			
8	76	65	59	54	74	65	59	54	64	58	54	63	57	54	61	57	54	52																			
9	72	61	55	51	70	61	55	50	60	54	50	59	54	50	58	53	50	48																			
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27215	27215	27215
5°	27004	27047	27034
10°	26485	26424	26363
15°	25550	25412	25394
20°	24499	24147	24257
25°	22803	22604	22551
30°	18738	20622	18683
35°	11574	17708	11295
40°	7430	12551	7172
45°	4847	6083	4609
50°	3215	3028	3008
55°	2184	1576	2027
60°	1481	964	1361
65°	1039	713	927
70°	667	529	617
75°	466	416	416
80°	347	273	273
85°	198	346	198

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6083 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.0	8.3
10°-20°	160.2	22.5
20°-30°	216.3	30.4
30°-40°	168.8	23.7
40°-50°	70.7	9.9
50°-60°	24.0	3.4
60°-70°	8.6	1.2
70°-80°	2.8	0.4
80°-90°	0.6	0.1
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°	435.6	61.3
0°-40°	604.4	85.0
0°-60°	699.1	98.3
0°-90°	711.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	711.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	625	626	626	625	626	59
15°	573	572	570	569	570	161
25°	480	478	476	476	475	216
35°	220	258	337	258	215	145
45°	80	85	100	81	76	64
55°	29	27	21	25	27	27
65°	10	8	7	8	9	10
75°	3	2	2	2	2	3
85°	0	0	1	0	0	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	632.1	632.1	632.1	632.1	632.1
1°	631.4	632.5	631.8	632.1	633.2
2°	631.4	631.4	632.1	631.8	632.1
3°	630.7	630.7	630.0	630.0	630.0
4°	628.6	628.6	628.6	627.9	629.3
5°	624.8	625.5	625.8	624.8	625.5
6°	623.4	623.7	623.0	622.7	622.0
7°	620.2	619.2	620.2	617.8	618.1
8°	615.0	615.0	614.3	613.6	612.9
9°	610.1	610.1	609.4	608.3	607.6
10°	605.8	604.8	604.4	603.4	603.0
11°	600.9	598.8	598.5	597.4	597.4
12°	595.0	593.9	591.5	591.1	591.1
13°	587.6	586.6	584.8	583.4	584.8
14°	580.6	579.9	576.7	577.8	577.4
15°	573.2	571.8	570.1	569.4	569.7
16°	566.6	564.1	561.7	562.0	564.1
17°	559.6	556.1	553.6	553.3	554.3
18°	550.8	548.0	544.1	545.5	545.5
19°	542.0	538.2	535.7	535.4	536.8
20°	534.7	528.7	527.0	526.6	529.4
22.5°	509.4	503.5	502.1	503.5	506.3
25°	480.0	477.9	475.8	475.8	474.7
27.5°	438.3	443.2	445.6	440.7	432.6
30°	376.9	397.6	414.8	395.1	375.8
32.5°	297.0	339.7	379.4	338.7	290.0
35°	220.2	258.4	336.9	258.0	214.9
37.5°	169.7	194.2	286.4	191.1	164.8
40°	132.2	146.6	223.3	144.8	127.6
42.5°	102.7	111.8	148.7	109.7	99.2
45°	79.6	85.2	99.9	81.3	75.7
47.5°	62.1	64.5	68.4	61.7	58.6
50°	48.0	48.0	45.2	46.3	44.9
52.5°	37.2	35.8	30.5	33.7	34.4
55°	29.1	26.6	21.0	25.2	27.0
57.5°	22.1	19.6	15.1	18.6	20.3
60°	17.2	14.7	11.2	14.0	15.8
62.5°	13.3	11.2	8.8	10.5	11.9
65°	10.2	8.4	7.0	8.1	9.1
67.5°	7.7	6.3	5.3	6.0	7.0
70°	5.3	4.9	4.2	4.6	4.9
72.5°	3.9	3.5	3.2	3.2	3.5
75°	2.8	2.5	2.5	2.5	2.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.7	0.7	0.7	0.7	0.7
85°	0.4	0.4	0.7	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°	1.8	1.8	1.8	1.8	1.8
80°	1.4	1.4	1.1	1.1	1.1

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Scaled Data Report



(END OF REPORT)