

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: P838360

Luminaire Tested: HCSQ610D010-HM60525930-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838360
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: HCSQ610D010-HM60525930-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

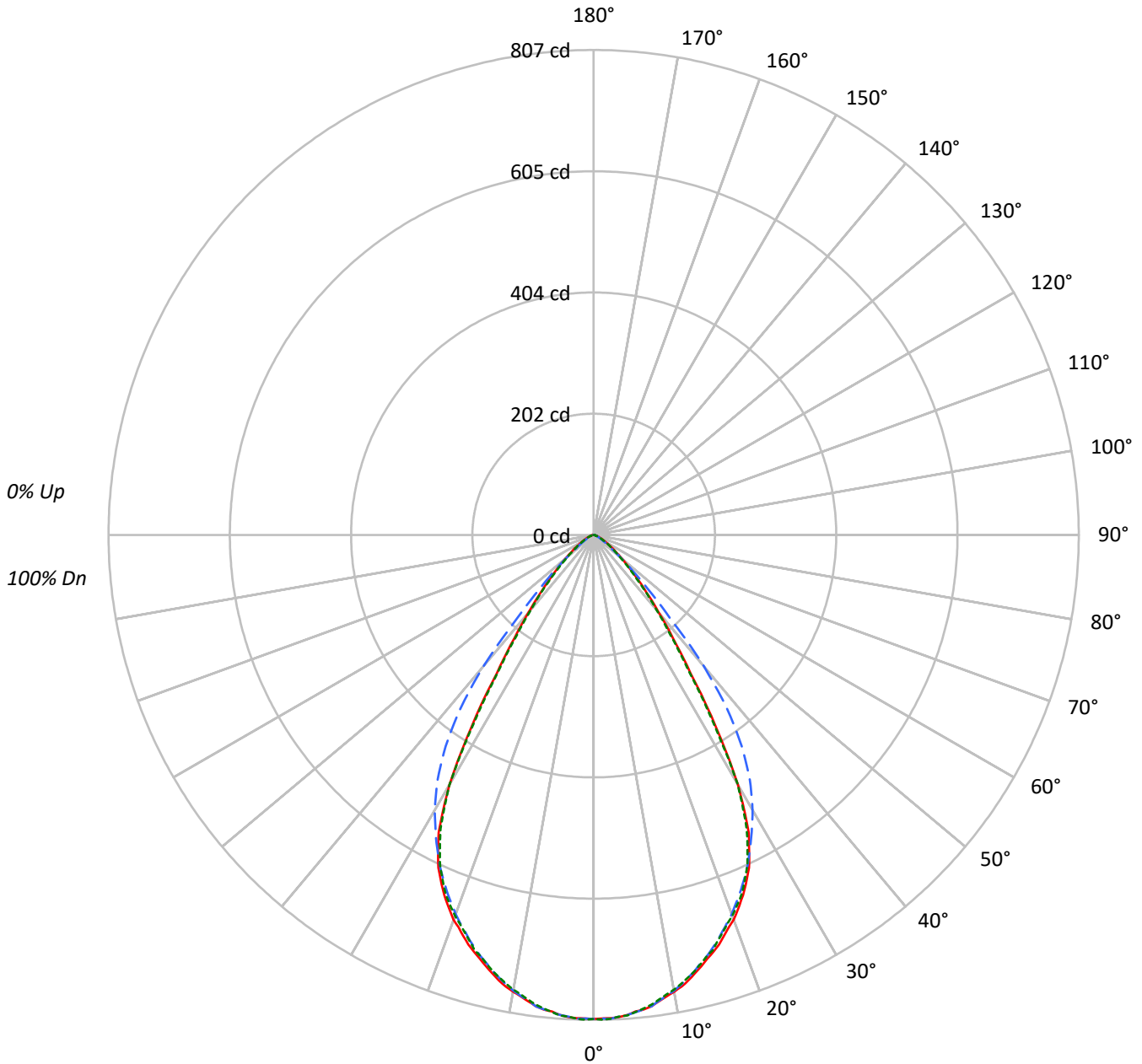
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 905.9 lumens
Efficiency: N/A
Efficacy: 91.5 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): 9.9
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				100															
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92				92															
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85				85															
3	101	94	88	84	99	92	87	83	90	85	82	87	84	81	85	82	79	78				78															
4	95	87	81	76	93	86	80	76	83	78	75	81	77	74	79	76	73	71				71															
5	90	80	74	69	88	79	74	69	78	72	68	76	71	68	74	70	67	66				66															
6	85	75	68	64	83	74	68	63	72	67	63	71	66	63	70	65	62	61				61															
7	80	70	63	59	79	69	63	59	68	62	58	67	62	58	65	61	58	56				56															
8	76	65	59	54	74	65	59	54	64	58	54	63	57	54	62	57	54	52				52															
9	72	61	55	51	70	61	55	50	60	54	50	59	54	50	58	53	50	48				48															
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45				45															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	34681	34681	34681
5°	34408	34464	34446
10°	33752	33673	33594
15°	32557	32379	32361
20°	31216	30763	30909
25°	29055	28799	28737
30°	23874	26275	23809
35°	14749	22565	14397
40°	9465	15996	9139
45°	6174	7751	5876
50°	4099	3858	3831
55°	2785	2012	2582
60°	1886	1231	1731
65°	1324	907	1182
70°	843	680	793
75°	599	516	516
80°	446	322	322
85°	198	445	198

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 7751 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.2	8.3
10°-20°	204.2	22.5
20°-30°	275.6	30.4
30°-40°	215.1	23.7
40°-50°	90.1	9.9
50°-60°	30.6	3.4
60°-70°	10.9	1.2
70°-80°	3.5	0.4
80°-90°	0.7	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°	555.0	61.3
0°-40°	770.1	85.0
0°-60°	890.7	98.3
0°-90°	905.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	905.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	806	806	806	806	806	
5°	796	797	797	796	797	75
15°	730	729	726	726	726	205
25°	612	609	606	606	605	275
35°	281	329	429	329	274	184
45°	101	109	127	104	96	81
55°	37	34	27	32	34	34
65°	13	11	9	10	12	13
75°	4	3	3	3	3	4
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°	805.5	805.5	805.5	805.5	805.5
1°	804.6	805.9	805.0	805.5	806.8
2°	804.6	804.6	805.5	805.0	805.5
3°	803.7	803.7	802.8	802.8	802.8
4°	801.0	801.0	801.0	800.1	801.9
5°	796.1	797.0	797.4	796.1	797.0
6°	794.3	794.7	793.9	793.4	792.5
7°	790.3	788.9	790.3	787.2	787.6
8°	783.6	783.6	782.7	781.8	780.9
9°	777.3	777.3	776.4	775.1	774.2
10°	772.0	770.6	770.2	768.8	768.4
11°	765.7	763.0	762.6	761.2	761.2
12°	758.1	756.8	753.6	753.2	753.2
13°	748.7	747.4	745.2	743.4	745.2
14°	739.8	738.9	734.9	736.2	735.8
15°	730.4	728.6	726.4	725.5	726.0
16°	721.9	718.8	715.7	716.1	718.8
17°	713.0	708.5	705.4	705.0	706.3
18°	701.8	698.3	693.3	695.1	695.1
19°	690.7	685.7	682.6	682.2	684.0
20°	681.3	673.7	671.4	671.0	674.6
22.5°	649.1	641.5	639.7	641.5	645.1
25°	611.6	608.9	606.2	606.2	604.9
27.5°	558.4	564.7	567.8	561.6	551.3
30°	480.2	506.6	528.5	503.5	478.9
32.5°	378.4	432.9	483.4	431.5	369.5
35°	280.6	329.2	429.3	328.8	273.9
37.5°	216.2	247.5	365.0	243.5	210.0
40°	168.4	186.7	284.6	184.5	162.6
42.5°	130.9	142.5	189.4	139.8	126.4
45°	101.4	108.6	127.3	103.6	96.5
47.5°	79.1	82.2	87.1	78.6	74.6
50°	61.2	61.2	57.6	59.0	57.2
52.5°	47.4	45.6	38.9	42.9	43.8
55°	37.1	34.0	26.8	32.2	34.4
57.5°	28.1	25.0	19.2	23.7	25.9
60°	21.9	18.8	14.3	17.9	20.1
62.5°	17.0	14.3	11.2	13.4	15.2
65°	13.0	10.7	8.9	10.3	11.6
67.5°	9.8	8.0	6.7	7.6	8.9
70°	6.7	6.3	5.4	5.8	6.3
72.5°	4.9	4.5	4.0	4.0	4.5
75°	3.6	3.1	3.1	3.1	3.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.9	0.9	0.9	0.9	0.9
85°	0.4	0.4	0.9	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°	2.2	2.2	2.2	2.2	2.2
80°	1.8	1.8	1.3	1.3	1.3

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Scaled Data Report



(END OF REPORT)