

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P837258

Luminaire Tested: HCSQ407D010-HM40525930-41SQC

Issue Date: 5/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P837258
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-165-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ407D010-HM40525930-41SQC
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

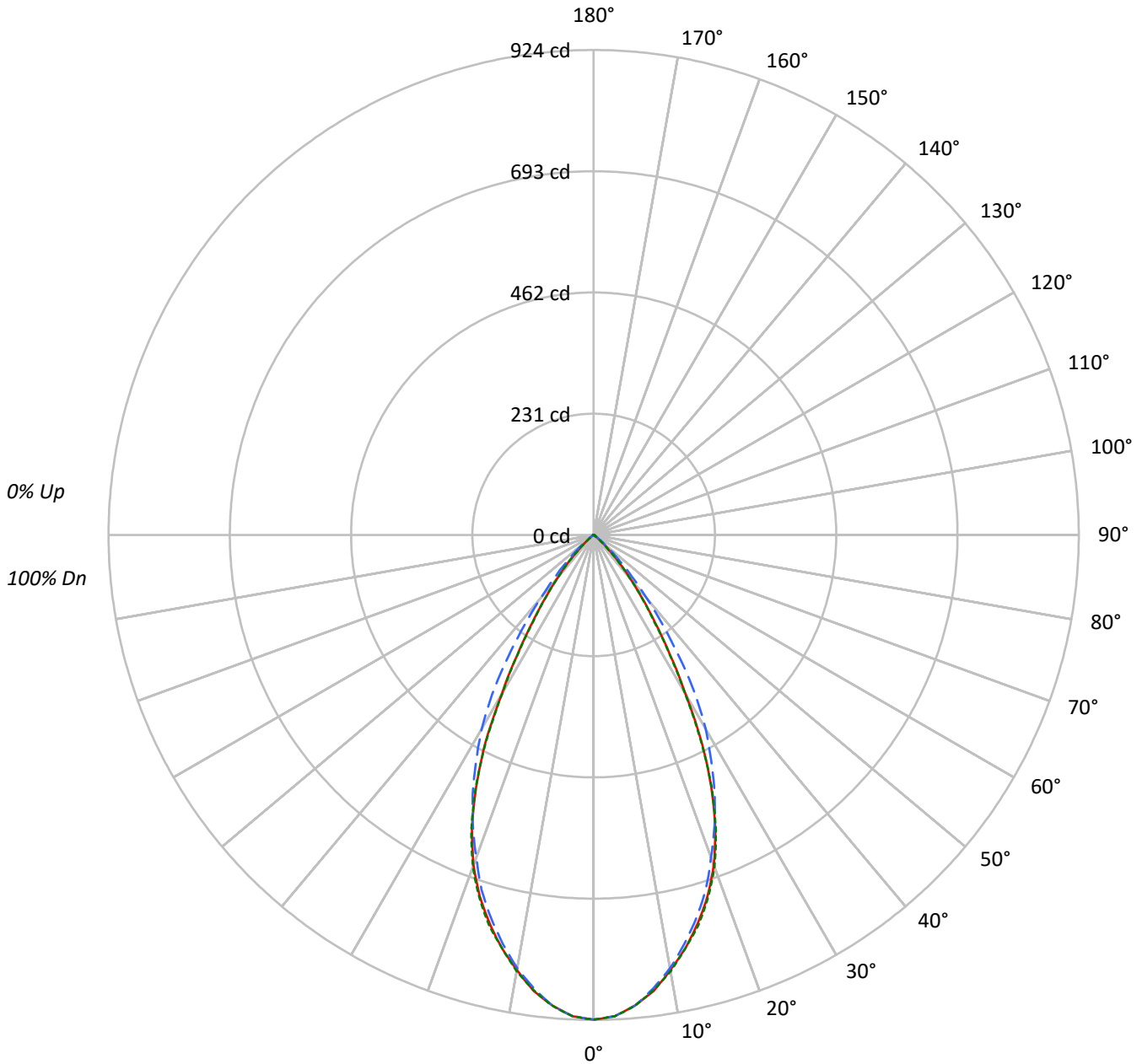
Lumens per Lamp: N/A
Luminaire Lumens: 746.2 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.85 / 0.87
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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					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	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	106	104	105	103	101	101	99	98	97	96	95	94				
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	93	91	89	87				
3	103	96	91	87	101	95	90	87	92	89	85	90	87	84	88	85	83	81				
4	98	90	85	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76				
5	93	84	79	74	91	83	78	74	82	77	73	80	76	73	79	75	72	71				
6	88	79	73	69	87	79	73	69	77	72	68	76	71	68	74	71	68	66				
7	84	75	69	65	82	74	68	64	73	68	64	72	67	64	70	66	63	62				
8	80	70	64	60	79	70	64	60	69	64	60	68	63	60	67	63	60	58				
9	76	67	61	57	75	66	60	57	65	60	56	64	60	56	63	59	56	55				
10	73	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53	52				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	89464	89464	89464
5°	87550	87589	87589
10°	82808	82444	83034
15°	76834	75781	77246
20°	68969	67423	69402
25°	56652	58287	56844
30°	39163	47631	38861
35°	24114	33646	23534
40°	13607	19665	13506
45°	6220	9864	5960
50°	1582	3949	1643
55°	760	1199	692
60°	504	426	581
65°	436	344	436
70°	312	312	425
75°	262	262	412
80°	391	391	391
85°	445	778	778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 9864 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.0	11.3
10°-20°	212.2	28.4
20°-30°	242.5	32.5
30°-40°	150.6	20.2
40°-50°	47.4	6.4
50°-60°	6.1	0.8
60°-70°	1.8	0.2
70°-80°	0.9	0.1
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°	538.7	72.2
0°-40°	689.3	92.4
0°-60°	742.9	99.6
0°-90°	746.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	746.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	924	924	924	924	924	
5°	900	900	901	900	901	84
15°	766	760	756	760	770	214
25°	530	538	545	538	532	238
35°	204	235	284	230	199	131
45°	45	54	72	55	44	38
55°	4	4	7	4	4	4
65°	2	2	2	2	2	2
75°	1	1	1	1	1	1
85°	0	1	1	1	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	923.5	923.5	923.5	923.5	923.5
2.5°	917.9	918.6	917.9	919.4	917.9
5°	900.3	899.5	900.7	899.9	900.7
7.5°	876.3	871.8	871.4	874.4	874.8
10°	841.8	840.7	838.1	840.7	844.1
12.5°	806.6	802.1	798.3	803.6	806.6
15°	766.1	760.5	755.6	760.5	770.2
17.5°	721.5	713.6	709.5	715.1	724.5
20°	669.0	660.8	654.0	658.9	673.2
22.5°	606.1	605.3	600.8	603.4	608.7
25°	530.0	537.5	545.3	537.5	531.8
27.5°	446.4	466.6	484.6	461.0	443.0
30°	350.1	380.8	425.8	378.6	347.4
32.5°	270.6	302.8	360.2	298.7	268.4
35°	203.9	235.4	284.5	229.8	199.0
37.5°	149.9	173.5	216.3	172.0	149.9
40°	107.6	122.9	155.5	122.6	106.8
42.5°	74.6	84.7	108.7	84.0	72.3
45°	45.4	54.3	72.0	54.7	43.5
47.5°	24.0	34.5	45.4	33.0	24.0
50°	10.5	18.4	26.2	18.0	10.9
52.5°	5.6	7.9	14.2	7.9	5.6
55°	4.5	4.5	7.1	4.5	4.1
57.5°	3.4	3.4	3.7	3.4	3.4
60°	2.6	2.6	2.2	2.6	3.0
62.5°	2.2	2.2	1.9	2.2	2.2
65°	1.9	1.9	1.5	1.9	1.9
67.5°	1.5	1.5	1.5	1.5	1.5
70°	1.1	1.1	1.1	1.5	1.5
72.5°	1.1	1.1	1.1	1.1	1.1
75°	0.7	0.7	0.7	0.7	1.1
77.5°	0.7	0.7	0.7	0.7	0.7
80°	0.7	0.7	0.7	0.7	0.7
82.5°	0.4	0.7	0.7	0.7	0.7
85°	0.4	0.7	0.7	0.7	0.7
87.5°	0.4	0.4	0.7	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0

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Report Generated By 670245859 / DESKTOP-T8S5UU9

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Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270°

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