

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: P838724

Luminaire Tested: HCSQ655D010-HM64560935-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838724
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ655D010-HM64560935-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

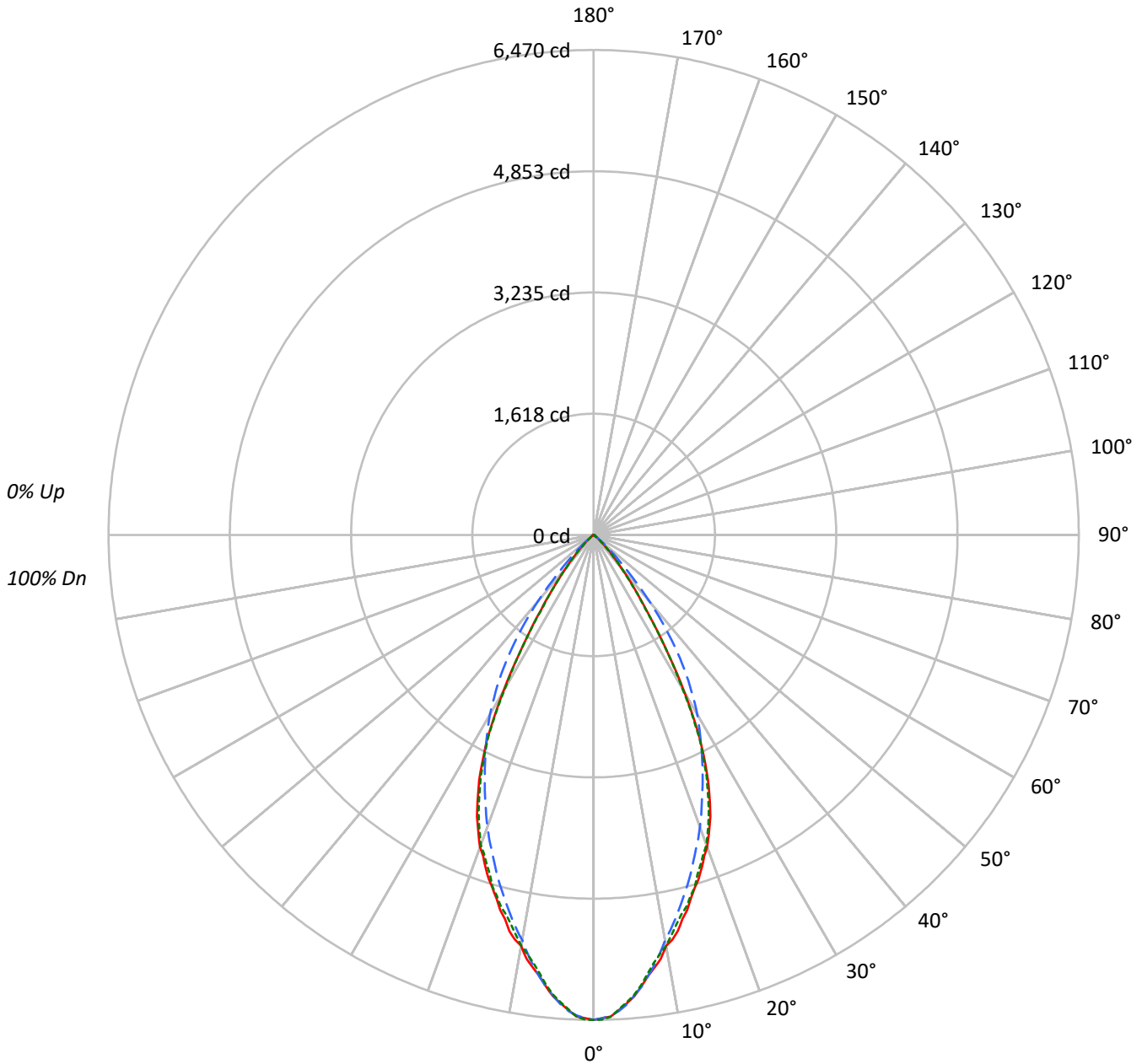
Lumens per Lamp: N/A
Luminaire Lumens: 4846.3 lumens
Efficiency: N/A
Efficacy: 89.7 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 54
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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CATALOG NUMBER: HCSQ655D010-HM64560935-61SQC

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	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	107	105	105	103	101	101	100	98	98	96	95	94								
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87								
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81								
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	78	76								
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71								
6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66								
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62								
8	80	71	65	61	79	70	65	61	69	64	60	68	64	60	67	63	60	59								
9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	56	55								
10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	278574	278574	278574
5°	267217	266750	266374
10°	243380	240070	243192
15°	223670	215482	222320
20°	202982	189910	201594
25°	171551	163233	169190
30°	120115	137411	118076
35°	64519	105406	63268
40°	31941	65226	31700
45°	13950	27504	13682
50°	4488	9987	4488
55°	2274	3243	2109
60°	1490	1490	1490
65°	1100	1100	1100
70°	818	818	818
75°	715	715	715
80°	545	545	545
85°	1087	1087	1087

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 27504 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	568.2	11.7
10°-20°	1371.9	28.3
20°-30°	1584.8	32.7
30°-40°	989.7	20.4
40°-50°	275.0	5.7
50°-60°	38.5	0.8
60°-70°	11.3	0.2
70°-80°	4.8	0.1
80°-90°	2.1	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°	3524.9	72.7
0°-40°	4514.6	93.2
0°-60°	4828.1	99.6
0°-90°	4846.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4846.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6470	6470	6470	6470	6470	
5°	6183	6165	6172	6163	6163	570
15°	5018	4923	4834	4910	4988	1406
25°	3611	3505	3436	3503	3561	1613
35°	1228	1515	2005	1498	1204	816
45°	229	292	452	290	225	199
55°	30	30	43	30	28	30
65°	11	11	11	11	11	11
75°	4	4	4	4	4	5
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6470.1	6470.1	6470.1	6470.1	6470.1
1°	6450.6	6450.6	6450.6	6467.9	6467.9
2°	6431.2	6426.9	6416.1	6429.0	6435.5
3°	6351.2	6359.9	6364.2	6357.7	6342.6
4°	6269.1	6260.5	6284.2	6269.1	6256.1
5°	6182.7	6165.4	6171.9	6163.2	6163.2
6°	6061.6	6083.3	6066.0	6050.8	6042.2
7°	5929.8	5947.1	5936.3	5914.7	5899.6
8°	5826.1	5815.3	5798.0	5793.7	5767.7
9°	5726.7	5687.8	5648.9	5655.4	5661.9
10°	5566.8	5571.1	5491.1	5551.6	5562.5
11°	5499.8	5476.0	5370.1	5419.8	5437.1
12°	5402.5	5326.9	5236.1	5277.2	5309.6
13°	5262.1	5184.3	5102.2	5164.8	5197.2
14°	5156.2	5067.6	4963.9	5043.8	5110.8
15°	5017.9	4922.8	4834.2	4909.8	4987.6
16°	4896.9	4786.6	4698.0	4771.5	4888.2
17°	4791.0	4654.8	4546.8	4624.6	4736.9
18°	4667.8	4510.0	4410.6	4492.7	4620.2
19°	4531.6	4371.7	4283.1	4350.1	4497.1
20°	4430.1	4250.7	4144.8	4209.7	4399.8
22.5°	4067.0	3879.0	3781.8	3859.6	4010.8
25°	3611.1	3505.2	3436.0	3503.0	3561.4
27.5°	3070.8	3070.8	3094.6	3066.5	3049.2
30°	2416.0	2591.1	2763.9	2582.4	2375.0
32.5°	1763.4	2044.3	2392.2	2081.1	1761.2
35°	1227.5	1514.9	2005.4	1497.6	1203.7
37.5°	853.6	1043.8	1581.9	1054.6	842.8
40°	568.3	700.2	1160.5	713.1	564.0
42.5°	371.7	462.5	749.9	464.6	363.1
45°	229.1	291.7	451.7	289.6	224.7
47.5°	134.0	172.9	263.6	175.0	131.8
50°	67.0	101.6	149.1	99.4	67.0
52.5°	38.9	54.0	82.1	51.9	38.9
55°	30.3	30.3	43.2	30.3	28.1
57.5°	23.8	23.8	23.8	23.8	21.6
60°	17.3	19.4	17.3	17.3	17.3
62.5°	15.1	15.1	13.0	15.1	13.0
65°	10.8	10.8	10.8	10.8	10.8
67.5°	8.6	8.6	8.6	8.6	8.6
70°	6.5	6.5	6.5	6.5	6.5
72.5°	4.3	6.5	4.3	6.5	6.5
75°	4.3	4.3	4.3	4.3	4.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	2.2	2.2	2.2	2.2	2.2
85°	2.2	2.2	2.2	2.2	2.2
87.5°	2.2	2.2	2.2	2.2	2.2
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°	4.3	4.3	4.3	4.3	2.2
80°	2.2	2.2	2.2	2.2	2.2

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(END OF REPORT)