

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: P838489

Luminaire Tested: HCSQ625D010-HM60525940-61SQC

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838489
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: HCSQ625D010-HM60525940-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

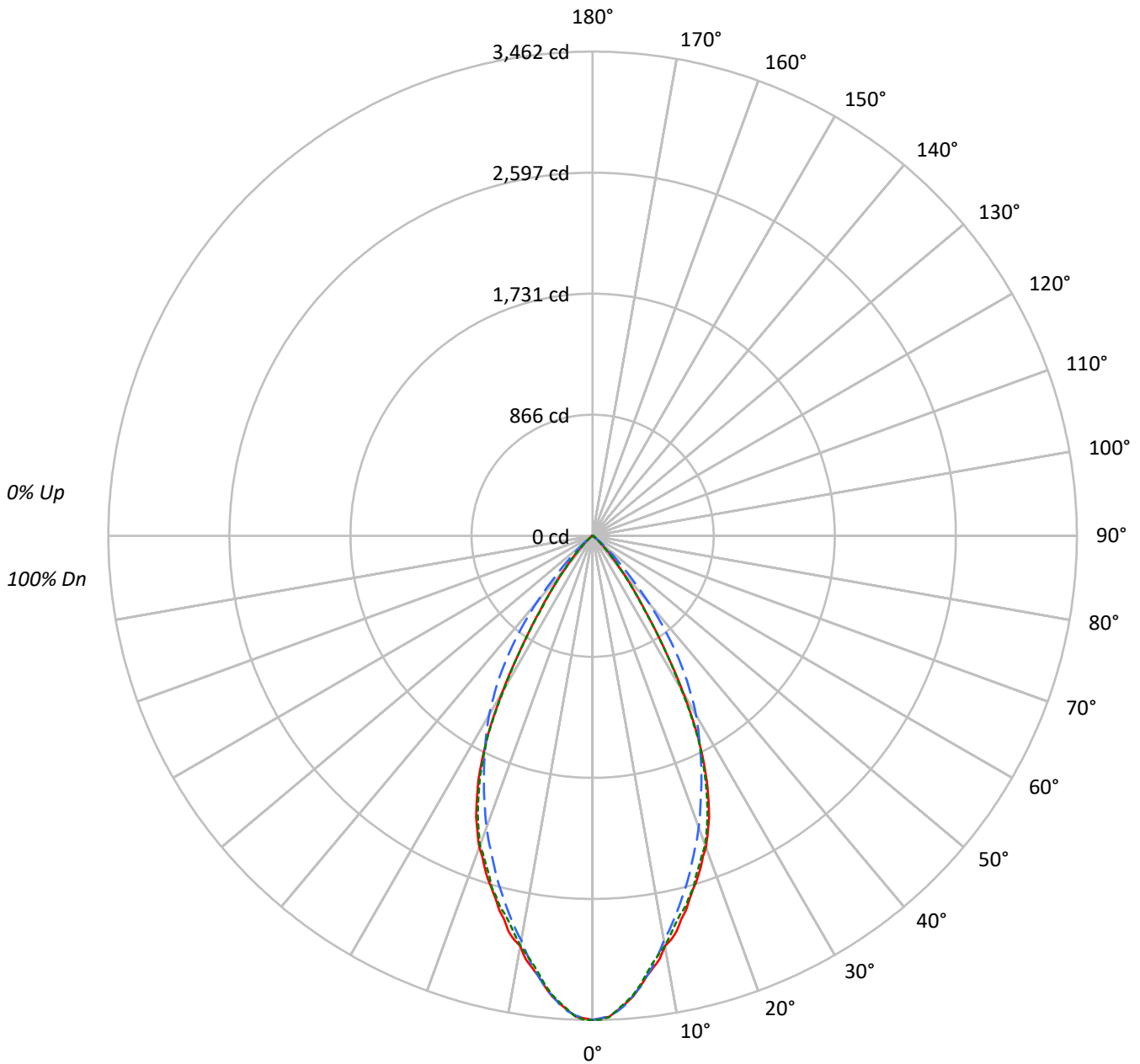
Lumens per Lamp: N/A
Luminaire Lumens: 2593.1 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 27.7
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	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	96	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	77	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°	149050	149050	149050
5°	142972	142726	142523
10°	130220	128449	130119
15°	119674	115292	118952
20°	108604	101613	107862
25°	91788	87336	90524
30°	64268	73526	63175
35°	34522	56398	33849
40°	17092	34898	16963
45°	7465	14717	7325
50°	2398	5345	2398
55°	1216	1734	1126
60°	801	801	801
65°	591	591	591
70°	441	441	441
75°	383	383	383
80°	298	298	298
85°	593	593	593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 14717 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	304.0	11.7
10°-20°	734.1	28.3
20°-30°	848.0	32.7
30°-40°	529.5	20.4
40°-50°	147.1	5.7
50°-60°	20.6	0.8
60°-70°	6.1	0.2
70°-80°	2.6	0.1
80°-90°	1.1	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°	1886.0	72.7
0°-40°	2415.6	93.2
0°-60°	2583.3	99.6
0°-90°	2593.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2593.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3462	3462	3462	3462	3462	
5°	3308	3299	3302	3298	3298	305
15°	2685	2634	2586	2627	2669	752
25°	1932	1875	1838	1874	1906	863
35°	657	810	1073	801	644	436
45°	123	156	242	155	120	106
55°	16	16	23	16	15	16
65°	6	6	6	6	6	6
75°	2	2	2	2	2	2
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3461.8	3461.8	3461.8	3461.8	3461.8
1°	3451.4	3451.4	3451.4	3460.7	3460.7
2°	3441.0	3438.7	3432.9	3439.9	3443.3
3°	3398.2	3402.9	3405.2	3401.7	3393.6
4°	3354.3	3349.7	3362.4	3354.3	3347.4
5°	3308.0	3298.8	3302.3	3297.6	3297.6
6°	3243.3	3254.9	3245.6	3237.5	3232.9
7°	3172.8	3182.0	3176.2	3164.7	3156.6
8°	3117.3	3111.5	3102.2	3099.9	3086.0
9°	3064.1	3043.3	3022.5	3025.9	3029.4
10°	2978.5	2980.8	2938.0	2970.4	2976.2
11°	2942.7	2930.0	2873.3	2899.9	2909.1
12°	2890.6	2850.2	2801.6	2823.6	2840.9
13°	2815.5	2773.9	2729.9	2763.5	2780.8
14°	2758.8	2711.4	2655.9	2698.7	2734.5
15°	2684.8	2634.0	2586.5	2627.0	2668.6
16°	2620.1	2561.1	2513.7	2553.0	2615.5
17°	2563.4	2490.6	2432.8	2474.4	2534.5
18°	2497.5	2413.1	2359.9	2403.9	2472.1
19°	2424.7	2339.1	2291.7	2327.5	2406.2
20°	2370.3	2274.4	2217.7	2252.4	2354.1
22.5°	2176.1	2075.5	2023.4	2065.1	2146.0
25°	1932.1	1875.4	1838.4	1874.3	1905.5
27.5°	1643.0	1643.0	1655.8	1640.7	1631.5
30°	1292.7	1386.4	1478.9	1381.7	1270.7
32.5°	943.5	1093.8	1280.0	1113.5	942.3
35°	656.8	810.5	1073.0	801.3	644.0
37.5°	456.7	558.5	846.4	564.3	450.9
40°	304.1	374.6	620.9	381.6	301.8
42.5°	198.9	247.4	401.2	248.6	194.3
45°	122.6	156.1	241.7	154.9	120.3
47.5°	71.7	92.5	141.1	93.7	70.5
50°	35.8	54.3	79.8	53.2	35.8
52.5°	20.8	28.9	43.9	27.8	20.8
55°	16.2	16.2	23.1	16.2	15.0
57.5°	12.7	12.7	12.7	12.7	11.6
60°	9.3	10.4	9.3	9.3	9.3
62.5°	8.1	8.1	6.9	8.1	6.9
65°	5.8	5.8	5.8	5.8	5.8
67.5°	4.6	4.6	4.6	4.6	4.6
70°	3.5	3.5	3.5	3.5	3.5
72.5°	2.3	3.5	2.3	3.5	3.5
75°	2.3	2.3	2.3	2.3	2.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	1.2	1.2	1.2	1.2	1.2
85°	1.2	1.2	1.2	1.2	1.2
87.5°	1.2	1.2	1.2	1.2	1.2
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°	2.3	2.3	2.3	2.3	1.2
80°	1.2	1.2	1.2	1.2	1.2

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(END OF REPORT)