

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: P838310

Luminaire Tested: HCSQ607D010-HM60525840-61SQH

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838310
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-HM60525840-61SQH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: -

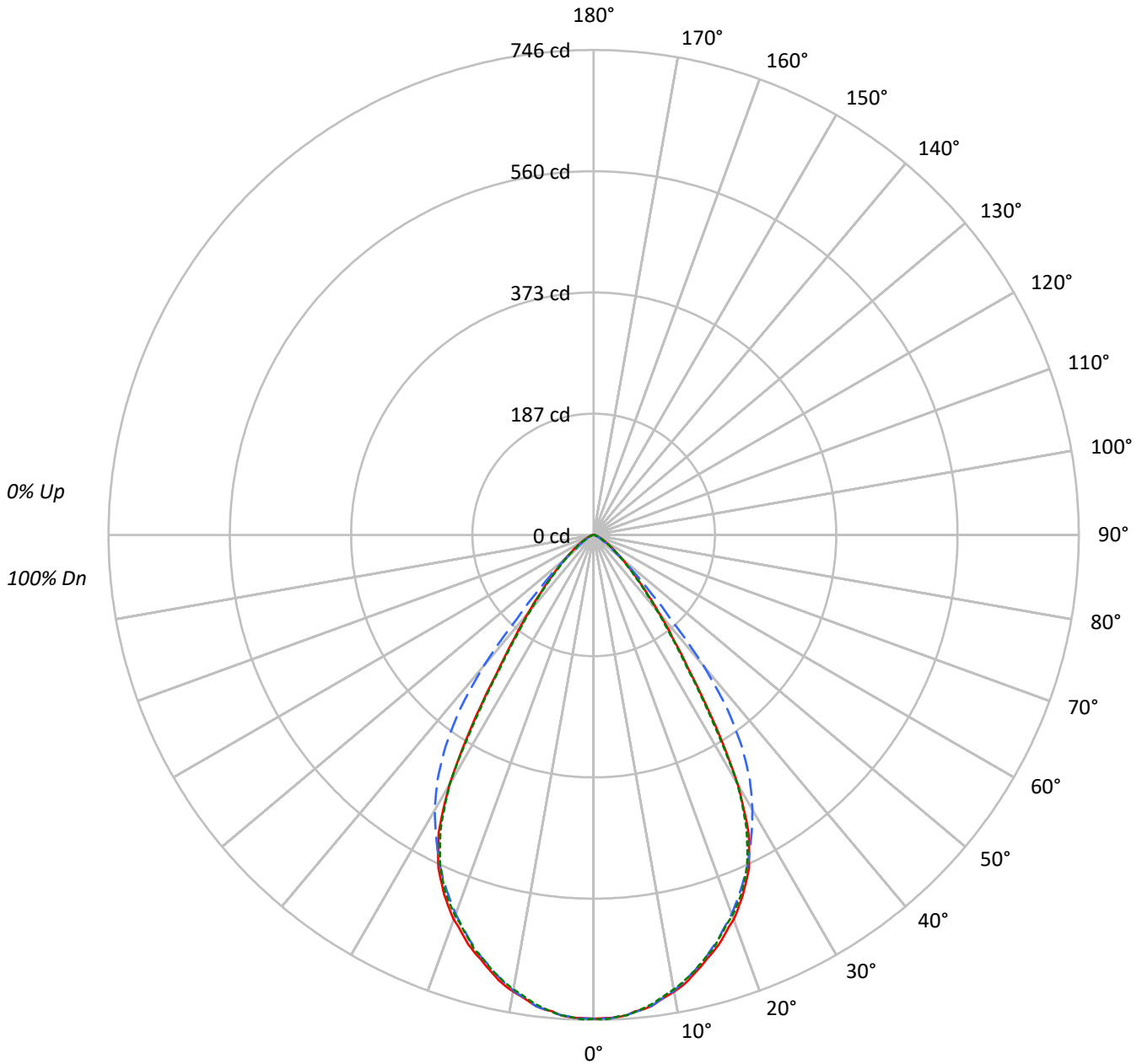
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 837.0 lumens
Efficiency: N/A
Efficacy: 104.6 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	84	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	79	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	62	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°	32042	32042	32042
5°	31788	31845	31827
10°	31185	31111	31041
15°	30083	29918	29896
20°	28843	28426	28559
25°	26846	26608	26551
30°	22059	24277	22000
35°	13624	20851	13298
40°	8746	14776	8442
45°	5705	7161	5431
50°	3785	3563	3537
55°	2575	1862	2387
60°	1739	1137	1602
65°	1223	846	1090
70°	780	629	730
75°	549	482	482
80°	422	298	298
85°	198	395	198

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 7161 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.5	8.3
10°-20°	188.6	22.5
20°-30°	254.6	30.4
30°-40°	198.7	23.7
40°-50°	83.2	9.9
50°-60°	28.2	3.4
60°-70°	10.1	1.2
70°-80°	3.3	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°	512.8	61.3
0°-40°	711.5	85.0
0°-60°	823.0	98.3
0°-90°	837.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	837.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	744	744	744	744	744	
5°	736	736	737	736	736	70
15°	675	673	671	670	671	190
25°	565	563	560	560	559	254
35°	259	304	397	304	253	170
45°	94	100	118	96	89	75
55°	34	31	25	30	32	32
65°	12	10	8	10	11	12
75°	3	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°	744.2	744.2	744.2	744.2	744.2
1°	743.4	744.6	743.8	744.2	745.5
2°	743.4	743.4	744.2	743.8	744.2
3°	742.6	742.6	741.7	741.7	741.7
4°	740.1	740.1	740.1	739.3	740.9
5°	735.5	736.4	736.8	735.5	736.4
6°	733.9	734.3	733.5	733.1	732.2
7°	730.2	728.9	730.2	727.3	727.7
8°	724.0	724.0	723.2	722.3	721.5
9°	718.2	718.2	717.4	716.1	715.3
10°	713.3	712.0	711.6	710.4	710.0
11°	707.5	705.0	704.6	703.4	703.4
12°	700.5	699.2	696.3	695.9	695.9
13°	691.8	690.6	688.5	686.8	688.5
14°	683.5	682.7	679.0	680.2	679.8
15°	674.9	673.2	671.2	670.3	670.7
16°	667.0	664.1	661.2	661.7	664.1
17°	658.8	654.6	651.8	651.3	652.6
18°	648.5	645.2	640.6	642.3	642.3
19°	638.1	633.6	630.7	630.3	631.9
20°	629.5	622.4	620.4	620.0	623.3
22.5°	599.7	592.7	591.1	592.7	596.0
25°	565.1	562.6	560.1	560.1	558.9
27.5°	516.0	521.7	524.6	518.8	509.4
30°	443.7	468.1	488.3	465.2	442.5
32.5°	349.6	400.0	446.6	398.7	341.4
35°	259.2	304.2	396.7	303.8	253.0
37.5°	199.8	228.7	337.2	225.0	194.0
40°	155.6	172.5	262.9	170.5	150.2
42.5°	120.9	131.7	175.0	129.2	116.8
45°	93.7	100.3	117.6	95.8	89.2
47.5°	73.1	75.9	80.5	72.6	68.9
50°	56.5	56.5	53.2	54.5	52.8
52.5°	43.8	42.1	35.9	39.6	40.5
55°	34.3	31.4	24.8	29.7	31.8
57.5°	26.0	23.1	17.7	21.9	23.9
60°	20.2	17.3	13.2	16.5	18.6
62.5°	15.7	13.2	10.3	12.4	14.0
65°	12.0	9.9	8.3	9.5	10.7
67.5°	9.1	7.4	6.2	7.0	8.3
70°	6.2	5.8	5.0	5.4	5.8
72.5°	4.5	4.1	3.7	3.7	4.1
75°	3.3	2.9	2.9	2.9	2.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	0.8	0.8	0.8	0.8	0.8
85°	0.4	0.4	0.8	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°	2.1	2.1	2.1	2.1	2.1
80°	1.7	1.7	1.2	1.2	1.2

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Scaled Data Report



(END OF REPORT)