

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: P838476

Luminaire Tested: HCSQ625D010-HM60525927-61SQLWW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838476
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ625D010-HM60525927-61SQLWW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, LENSED WALLWASH TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

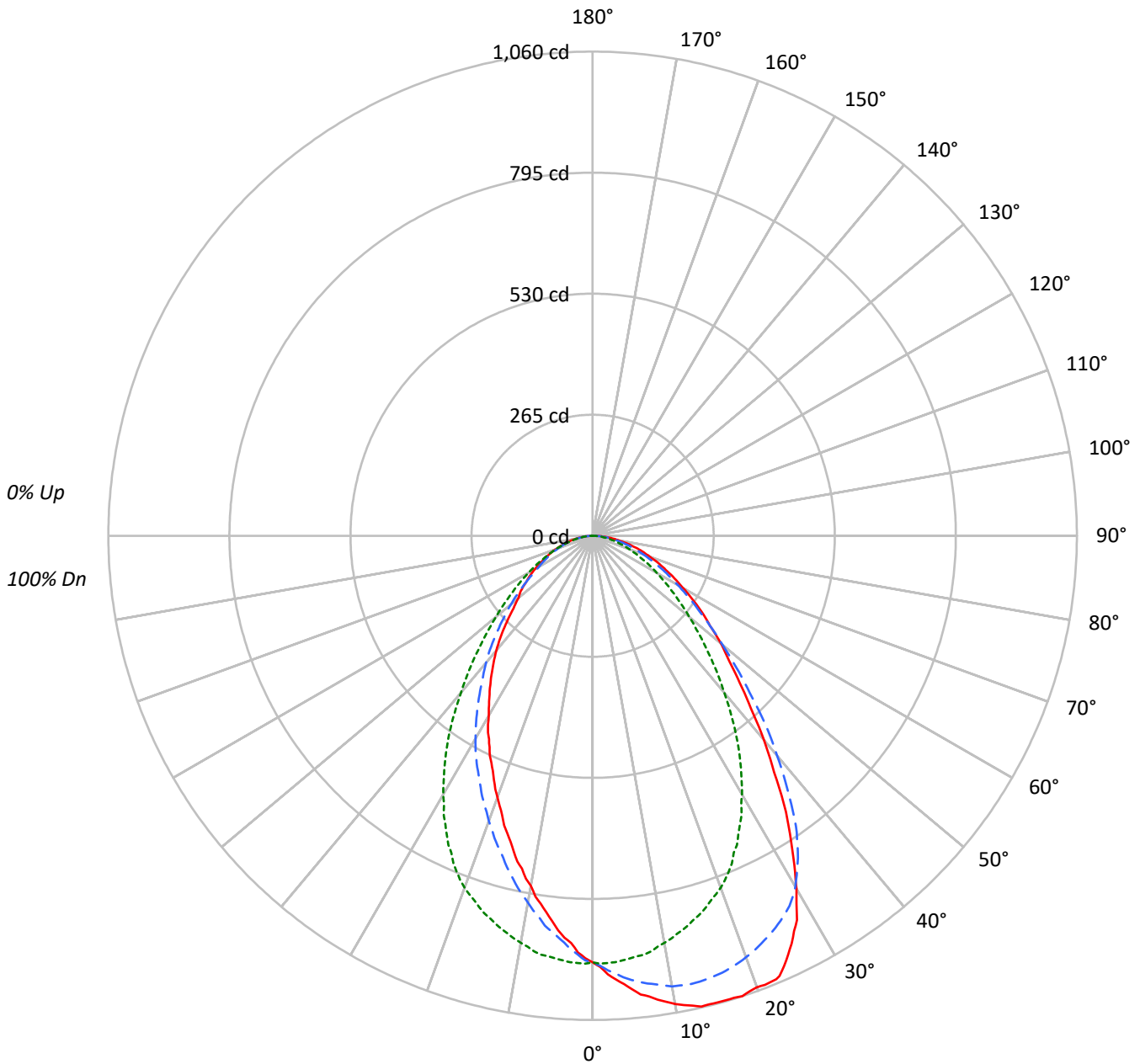
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1766.0 lumens
Efficiency: N/A
Efficacy: 63.8 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.08 / 1.17
Luminous Opening: Rectangular (W 0.33' x L: 0.33' 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

TEST NUMBER: P838476
CATALOG NUMBER: HCSQ625D010-HM60525927-61SQLWW

Luminous Intensity Polar Plot





TEST NUMBER: P838476

CATALOG NUMBER: HCSQ625D010-HM60525927-61SQLWW

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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87								
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75								
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66								
4	87	76	69	63	85	75	68	62	73	66	62	71	65	61	68	64	60	58								
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	51								
6	75	63	55	49	74	62	55	49	61	54	49	59	53	48	58	52	48	46								
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	42								
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38								
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34								
10	58	46	39	34	57	45	38	34	44	38	34	44	38	33	43	37	33	32								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	90472	90472	90472	90472	90472
5°	96944	94950	90331	85664	84302
10°	102393	98557	89015	80162	76522
15°	106100	100383	86944	74307	69593
20°	108443	101227	84526	68443	62773
25°	108162	101214	79836	62734	56855
30°	99770	99266	73147	57374	50785
35°	87266	91819	65506	51326	46004
40°	73715	79469	56655	45906	41480
45°	62336	66570	48499	40279	36306
50°	55311	55839	41596	35116	31951
55°	49487	47798	35975	30233	30064
60°	44175	41656	31388	26156	28288
65°	40573	37020	27278	24298	25903
70°	37388	33140	24076	22660	24076
75°	35184	29570	20961	20586	22084
80°	32357	26499	18410	18968	20084
85°	32234	23898	15561	15561	17784

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 40°
 Vertical Angle: 45°
 Luminance: 67118 cd/sqm



TEST NUMBER: P838476

CATALOG NUMBER: HCSQ625D010-HM60525927-61SQLWW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.1	5.0
10°-20°	245.5	13.9
20°-30°	350.2	19.8
30°-40°	360.9	20.4
40°-50°	290.5	16.5
50°-60°	205.5	11.6
60°-70°	133.2	7.5
70°-80°	71.5	4.1
80°-90°	20.7	1.2
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°	683.8	38.7
0°-40°	1044.7	59.2
0°-60°	1540.7	87.2
0°-90°	1766.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1766.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	934	934	934	934	934	
5°	997	976	929	881	867	97
15°	1058	1001	867	741	694	299
25°	1012	947	747	587	532	461
35°	738	776	554	434	389	458
45°	455	486	354	294	265	355
55°	293	283	213	179	178	262
65°	177	162	119	106	113	177
75°	94	79	56	55	59	100
85°	29	22	14	14	16	32
90°	0	0	0	0	0	



TEST NUMBER: P838476

CATALOG NUMBER: HCSQ625D010-HM60525927-61SQLWW

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9	933.9
1°	943.9	947.9	944.9	944.9	941.9	940.9	942.9	939.9	938.9	936.9	932.9
2°	960.9	957.9	956.9	957.9	951.9	951.9	948.9	942.9	939.9	935.9	924.9
3°	972.9	970.9	968.9	967.9	961.9	956.9	952.9	945.9	939.9	934.9	918.9
4°	983.9	983.9	981.9	977.9	971.9	965.9	957.9	949.9	940.9	931.9	910.9
5°	996.9	997.9	988.9	987.9	980.9	971.9	962.9	951.9	940.9	928.9	905.9
6°	1009.9	1004.9	1002.9	995.9	985.9	977.9	966.9	954.9	939.9	925.9	894.9
7°	1015.9	1014.9	1009.9	1002.9	993.9	980.9	969.9	953.9	937.9	923.9	886.9
8°	1025.9	1025.9	1019.9	1010.9	997.9	985.9	971.9	952.9	936.9	918.9	875.9
9°	1032.9	1032.9	1024.9	1016.9	1004.9	988.9	972.9	951.9	931.9	910.9	865.9
10°	1040.9	1038.9	1032.9	1020.9	1010.9	992.9	972.9	950.9	928.9	904.9	855.9
11°	1046.9	1043.9	1036.9	1027.9	1011.9	993.9	972.9	950.9	924.9	898.9	845.9
12°	1051.9	1049.9	1040.9	1029.9	1013.9	995.9	971.9	946.9	917.9	890.9	832.9
13°	1057.9	1051.9	1042.9	1032.9	1014.9	993.9	967.9	940.9	912.9	883.9	821.9
14°	1056.9	1055.9	1047.9	1033.9	1013.9	991.9	966.9	934.9	905.9	875.9	808.9
15°	1057.9	1056.9	1047.9	1034.9	1012.9	988.9	963.9	930.9	898.9	866.9	795.9
16°	1057.9	1057.9	1045.9	1032.9	1011.9	985.9	957.9	926.9	891.9	859.9	784.9
17°	1057.9	1057.9	1047.9	1029.9	1008.9	983.9	951.9	918.9	883.9	849.9	768.9
18°	1059.9	1056.9	1043.9	1028.9	1004.9	978.9	947.9	912.9	876.9	838.9	757.9
19°	1054.9	1052.9	1041.9	1022.9	1001.9	972.9	941.9	905.9	869.9	829.9	744.9
20°	1051.9	1054.9	1039.9	1019.9	995.9	967.9	935.9	898.9	859.9	819.9	731.9
21°	1052.9	1051.9	1035.9	1014.9	991.9	960.9	928.9	890.9	848.9	807.9	719.9
22.5°	1050.9	1047.9	1030.9	1007.9	979.9	951.9	916.9	877.9	832.9	786.9	696.9
23°	1046.9	1043.9	1030.9	1005.9	975.9	947.9	910.9	869.9	826.9	779.9	690.9
24°	1030.9	1029.9	1023.9	998.9	970.9	939.9	903.9	856.9	808.9	759.9	675.9
25°	1011.9	1013.9	1010.9	994.9	962.9	930.9	892.9	840.9	791.9	746.9	657.9
26°	993.9	993.9	991.9	985.9	954.9	920.9	876.9	821.9	774.9	727.9	638.9
27°	970.9	974.9	970.9	967.9	946.9	909.9	859.9	808.9	755.9	709.9	622.9
28°	952.9	952.9	950.9	945.9	938.9	896.9	841.9	789.9	737.9	693.9	604.9
29°	920.9	926.9	927.9	928.9	927.9	879.9	824.9	768.9	718.9	670.9	587.9
30°	891.9	897.9	901.9	908.9	909.9	864.9	804.9	751.9	700.9	653.9	572.9
32.5°	812.9	823.9	834.9	846.9	852.9	819.9	755.9	697.9	645.9	603.9	526.9
35°	737.9	740.9	752.9	780.9	786.9	765.9	697.9	642.9	593.9	553.9	483.9
37.5°	652.9	658.9	675.9	707.9	709.9	692.9	645.9	581.9	535.9	500.9	440.0
40°	582.9	585.9	597.9	624.9	633.9	622.9	581.9	523.9	481.9	448.0	398.0
42.5°	512.9	516.9	531.9	552.9	565.9	552.9	516.9	467.0	426.0	401.0	358.0
45°	455.0	460.0	474.0	485.9	489.9	481.9	450.0	409.0	380.0	354.0	321.0
47.5°	405.0	410.0	420.0	425.0	430.0	422.0	397.0	363.0	334.0	313.0	283.0
50°	367.0	366.0	373.0	375.0	375.0	366.0	345.0	317.0	293.0	276.0	251.0
52.5°	324.0	326.0	331.0	329.0	328.0	320.0	302.0	278.0	258.0	243.0	220.0
55°	293.0	290.0	293.0	291.0	287.0	279.0	263.0	243.0	226.0	213.0	192.0
57.5°	259.0	259.0	260.0	256.0	251.0	242.0	228.0	212.0	197.0	186.0	169.0
60°	228.0	230.0	229.0	225.0	220.0	210.0	199.0	183.0	170.0	162.0	146.0



TEST NUMBER: P838476

CATALOG NUMBER: HCSQ625D010-HM60525927-61SQLWW

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
67.5°	155.0	155.0	152.0	149.0	142.0	133.0	125.0	115.0	108.0	101.0	91.0
70°	132.0	134.0	130.0	125.0	120.0	114.0	105.0	97.0	90.0	85.0	77.0
72.5°	114.0	113.0	110.0	105.0	101.0	94.0	86.0	80.0	74.0	70.0	64.0
75°	94.0	94.0	91.0	87.0	82.0	76.0	70.0	65.0	60.0	56.0	53.0
77.5°	75.0	76.0	73.0	70.0	66.0	60.0	55.0	51.0	47.0	44.0	42.0
80°	58.0	59.0	56.0	54.0	49.0	46.0	42.0	38.0	35.0	33.0	32.0
82.5°	44.0	43.0	41.0	40.0	36.0	33.0	29.0	27.0	25.0	23.0	23.0
85°	29.0	28.0	27.0	26.0	23.0	20.0	19.0	17.0	15.0	14.0	14.0
87.5°	15.0	15.0	14.0	13.0	12.0	10.0	9.0	7.0	6.0	6.0	6.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P838476

CATALOG NUMBER: HCSQ625D010-HM60525927-61SQLWW

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	933.9	933.9	933.9
1°	929.9	925.9	924.9
2°	917.9	911.9	912.9
3°	906.9	899.9	892.9
4°	892.9	881.9	881.9
5°	880.9	869.9	866.9
6°	869.9	851.9	847.9
7°	859.9	837.9	830.9
8°	842.9	820.9	813.9
9°	830.9	806.9	799.9
10°	814.9	790.9	777.9
11°	801.9	774.9	764.9
12°	787.9	754.9	744.9
13°	771.9	737.9	731.9
14°	756.9	723.9	712.9
15°	740.9	706.9	693.9
16°	723.9	689.9	677.9
17°	709.9	671.9	662.9
18°	695.9	655.9	641.9
19°	678.9	640.9	624.9
20°	663.9	621.9	608.9
21°	647.9	607.9	593.9
22.5°	625.9	580.9	567.9
23°	618.9	572.9	558.9
24°	602.9	556.9	544.9
25°	586.9	544.9	531.9
26°	572.9	526.9	514.9
27°	558.9	512.9	499.9
28°	543.9	497.9	487.9
29°	528.9	481.9	472.0
30°	512.9	471.0	454.0
32.5°	473.0	435.0	421.0
35°	434.0	401.0	389.0
37.5°	396.0	369.0	358.0
40°	363.0	339.0	328.0
42.5°	329.0	307.0	296.0
45°	294.0	276.0	265.0
47.5°	262.0	247.0	235.0
50°	233.0	218.0	212.0
52.5°	205.0	195.0	198.0
55°	179.0	179.0	178.0
57.5°	154.0	161.0	162.0
60°	135.0	144.0	146.0



TEST NUMBER: P838476

CATALOG NUMBER: HCSQ625D010-HM60525927-61SQLWW

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	93.0	98.0	100.0
70°	80.0	84.0	85.0
72.5°	68.0	71.0	73.0
75°	55.0	59.0	59.0
77.5°	45.0	47.0	48.0
80°	34.0	35.0	36.0
82.5°	24.0	25.0	26.0
85°	14.0	15.0	16.0
87.5°	6.0	6.0	6.0
90°	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



Report Generated By 670245859 / DESKTOP-T8S5UU9

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

Scaled Data Report





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

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

Scaled Data Report



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

Scaled Data Report





62.5°	202.0	204.0	201.0	196.0	191.0	182.0	172.0	158.0	148.0	140.0	126.0
65°	177.0	178.0	176.0	171.0	166.0	157.0	147.0	135.0	127.0	119.0	107.0

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

Scaled Data Report



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

Scaled Data Report



62.5°	121.0	128.0	129.0
65°	106.0	112.0	113.0

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

Scaled Data Report



(END OF REPORT)