

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: P838466

Luminaire Tested: HCSQ625D010-HM60525835-61SQLWW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838466
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-HM60525835-61SQLWW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, LENSED WALLWASH TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: -

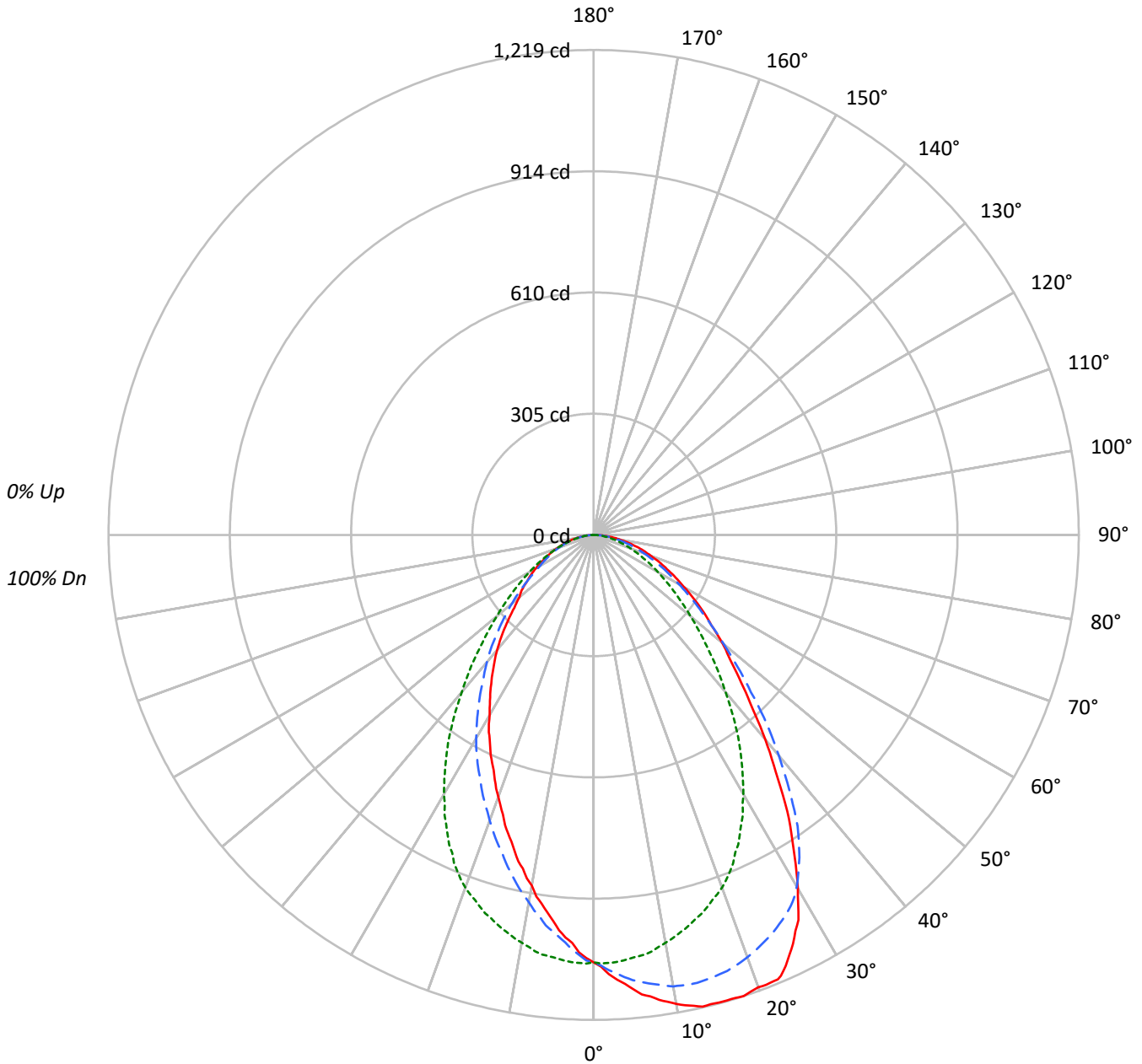
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2031.5 lumens
Efficiency: N/A
Efficacy: 73.3 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

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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					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	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°	104073	104073	104073	104073	104073
5°	111521	109226	103907	98539	96973
10°	117788	113376	102393	92212	88031
15°	122046	115477	100012	85480	80054
20°	124742	116443	97237	78732	72216
25°	124420	116425	91840	72172	65406
30°	114771	114189	84143	66010	58414
35°	100394	105627	75357	59037	52911
40°	84805	91419	65166	52798	47714
45°	71693	76584	55787	46334	41758
50°	63615	64226	47851	40391	36743
55°	56918	54976	41380	34776	34573
60°	50801	47905	36096	30090	32531
65°	46671	42579	31381	27943	29799
70°	42997	38111	27701	26059	27701
75°	40462	34005	24105	23693	25415
80°	37211	30488	21200	21813	23096
85°	37125	27510	17895	17895	20452

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 40°
 Vertical Angle: 45°
 Luminance: 77215 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.3	5.0
10°-20°	282.4	13.9
20°-30°	402.8	19.8
30°-40°	415.2	20.4
40°-50°	334.2	16.5
50°-60°	236.3	11.6
60°-70°	153.2	7.5
70°-80°	82.3	4.1
80°-90°	23.8	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°	786.6	38.7
0°-40°	1201.7	59.2
0°-60°	1772.3	87.2
0°-90°	2031.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2031.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1074	1074	1074	1074	1074	
5°	1147	1123	1068	1013	997	111
15°	1217	1151	997	852	798	344
25°	1164	1089	859	675	612	530
35°	849	893	637	499	447	527
45°	523	559	407	338	305	409
55°	337	326	245	206	205	301
65°	204	186	137	122	130	203
75°	108	91	64	63	68	115
85°	33	25	16	16	18	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	1074.3	1074.3	1074.3	1074.3	1074.3	1074.3	1074.3	1074.3	1074.3	1074.3	1074.3
1°	1085.8	1090.4	1086.9	1086.9	1083.5	1082.3	1084.6	1081.2	1080.0	1077.7	1073.1
2°	1105.3	1101.9	1100.7	1101.9	1095.0	1095.0	1091.5	1084.6	1081.2	1076.6	1063.9
3°	1119.2	1116.8	1114.5	1113.4	1106.5	1100.7	1096.1	1088.1	1081.2	1075.4	1057.0
4°	1131.8	1131.8	1129.5	1124.9	1118.0	1111.1	1101.9	1092.7	1082.3	1072.0	1047.8
5°	1146.8	1147.9	1137.6	1136.4	1128.4	1118.0	1107.6	1095.0	1082.3	1068.5	1042.1
6°	1161.7	1156.0	1153.7	1145.6	1134.1	1124.9	1112.2	1098.4	1081.2	1065.1	1029.4
7°	1168.6	1167.5	1161.7	1153.7	1143.3	1128.4	1115.7	1097.3	1078.9	1062.8	1020.2
8°	1180.1	1180.1	1173.2	1162.9	1147.9	1134.1	1118.0	1096.1	1077.7	1057.0	1007.6
9°	1188.2	1188.2	1179.0	1169.8	1156.0	1137.6	1119.2	1095.0	1072.0	1047.8	996.1
10°	1197.4	1195.1	1188.2	1174.4	1162.9	1142.2	1119.2	1093.8	1068.5	1040.9	984.6
11°	1204.3	1200.8	1192.8	1182.4	1164.0	1143.3	1119.2	1093.8	1063.9	1034.0	973.1
12°	1210.0	1207.7	1197.4	1184.7	1166.3	1145.6	1118.0	1089.2	1055.9	1024.8	958.1
13°	1216.9	1210.0	1199.7	1188.2	1167.5	1143.3	1113.4	1082.3	1050.1	1016.8	945.5
14°	1215.8	1214.6	1205.4	1189.3	1166.3	1141.0	1112.2	1075.4	1042.1	1007.6	930.5
15°	1216.9	1215.8	1205.4	1190.5	1165.2	1137.6	1108.8	1070.8	1034.0	997.2	915.6
16°	1216.9	1216.9	1203.1	1188.2	1164.0	1134.1	1101.9	1066.2	1026.0	989.2	902.9
17°	1216.9	1216.9	1205.4	1184.7	1160.6	1131.8	1095.0	1057.0	1016.8	977.7	884.5
18°	1219.2	1215.8	1200.8	1183.6	1156.0	1126.1	1090.4	1050.1	1008.7	965.0	871.9
19°	1213.5	1211.2	1198.5	1176.7	1152.5	1119.2	1083.5	1042.1	1000.7	954.7	856.9
20°	1210.0	1213.5	1196.2	1173.2	1145.6	1113.4	1076.6	1034.0	989.2	943.2	842.0
21°	1211.2	1210.0	1191.6	1167.5	1141.0	1105.3	1068.5	1024.8	976.5	929.4	828.1
22.5°	1208.9	1205.4	1185.9	1159.4	1127.2	1095.0	1054.7	1009.9	958.1	905.2	801.7
23°	1204.3	1200.8	1185.9	1157.1	1122.6	1090.4	1047.8	1000.7	951.2	897.2	794.8
24°	1185.9	1184.7	1177.8	1149.1	1116.8	1081.2	1039.8	985.7	930.5	874.2	777.5
25°	1164.0	1166.3	1162.9	1144.5	1107.6	1070.8	1027.1	967.3	911.0	859.2	756.8
26°	1143.3	1143.3	1141.0	1134.1	1098.4	1059.3	1008.7	945.5	891.4	837.3	735.0
27°	1116.8	1121.5	1116.8	1113.4	1089.2	1046.7	989.2	930.5	869.6	816.6	716.6
28°	1096.1	1096.1	1093.8	1088.1	1080.0	1031.7	968.5	908.7	848.9	798.2	695.9
29°	1059.3	1066.2	1067.4	1068.5	1067.4	1012.2	948.9	884.5	827.0	771.8	676.3
30°	1026.0	1032.9	1037.5	1045.5	1046.7	994.9	925.9	865.0	806.3	752.2	659.1
32.5°	935.1	947.8	960.4	974.2	981.1	943.2	869.6	802.8	743.0	694.7	606.2
35°	848.9	852.3	866.1	898.3	905.2	881.1	802.8	739.6	683.2	637.2	556.7
37.5°	751.1	758.0	777.5	814.3	816.6	797.1	743.0	669.4	616.5	576.3	506.1
40°	670.6	674.0	687.8	718.9	729.2	716.6	669.4	602.7	554.4	515.3	457.8
42.5°	590.1	594.7	611.9	636.1	651.0	636.1	594.7	537.1	490.0	461.2	411.8
45°	523.3	529.1	545.2	559.0	563.6	554.4	517.6	470.4	437.1	407.2	369.2
47.5°	465.8	471.6	483.1	488.8	494.6	485.4	456.6	417.5	384.2	360.0	325.5
50°	422.1	421.0	429.0	431.3	431.3	421.0	396.8	364.6	337.0	317.5	288.7
52.5°	372.7	375.0	380.7	378.4	377.3	368.1	347.4	319.8	296.8	279.5	253.0
55°	337.0	333.6	337.0	334.7	330.1	320.9	302.5	279.5	259.9	245.0	220.8
57.5°	297.9	297.9	299.1	294.5	288.7	278.3	262.2	243.8	226.6	213.9	194.4
60°	262.2	264.5	263.4	258.8	253.0	241.5	228.9	210.5	195.5	186.3	167.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
67.5°	178.3	178.3	174.8	171.4	163.3	153.0	143.8	132.3	124.2	116.2	104.7
70°	151.8	154.1	149.5	143.8	138.0	131.1	120.8	111.6	103.5	97.8	88.6
72.5°	131.1	130.0	126.5	120.8	116.2	108.1	98.9	92.0	85.1	80.5	73.6
75°	108.1	108.1	104.7	100.1	94.3	87.4	80.5	74.8	69.0	64.4	61.0
77.5°	86.3	87.4	84.0	80.5	75.9	69.0	63.3	58.7	54.1	50.6	48.3
80°	66.7	67.9	64.4	62.1	56.4	52.9	48.3	43.7	40.3	38.0	36.8
82.5°	50.6	49.5	47.2	46.0	41.4	38.0	33.4	31.1	28.8	26.5	26.5
85°	33.4	32.2	31.1	29.9	26.5	23.0	21.9	19.6	17.3	16.1	16.1
87.5°	17.3	17.3	16.1	15.0	13.8	11.5	10.4	8.1	6.9	6.9	6.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	1074.3	1074.3	1074.3
1°	1069.7	1065.1	1063.9
2°	1055.9	1049.0	1050.1
3°	1043.2	1035.2	1027.1
4°	1027.1	1014.5	1014.5
5°	1013.3	1000.7	997.2
6°	1000.7	980.0	975.4
7°	989.2	963.9	955.8
8°	969.6	944.3	936.3
9°	955.8	928.2	920.2
10°	937.4	909.8	894.9
11°	922.5	891.4	879.9
12°	906.4	868.4	856.9
13°	888.0	848.9	842.0
14°	870.7	832.7	820.1
15°	852.3	813.2	798.2
16°	832.7	793.6	779.8
17°	816.6	772.9	762.6
18°	800.5	754.5	738.4
19°	781.0	737.3	718.9
20°	763.7	715.4	700.5
21°	745.3	699.3	683.2
22.5°	720.0	668.3	653.3
23°	712.0	659.1	643.0
24°	693.6	640.7	626.9
25°	675.2	626.9	611.9
26°	659.1	606.2	592.4
27°	643.0	590.1	575.1
28°	625.7	572.8	561.3
29°	608.5	554.4	542.9
30°	590.1	541.7	522.2
32.5°	544.0	500.3	484.2
35°	499.2	461.2	447.4
37.5°	455.5	424.4	411.8
40°	417.5	389.9	377.3
42.5°	378.4	353.1	340.5
45°	338.2	317.5	304.8
47.5°	301.4	284.1	270.3
50°	268.0	250.7	243.8
52.5°	235.8	224.3	227.7
55°	205.9	205.9	204.7
57.5°	177.1	185.2	186.3
60°	155.3	165.6	167.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	107.0	112.7	115.0
70°	92.0	96.6	97.8
72.5°	78.2	81.7	84.0
75°	63.3	67.9	67.9
77.5°	51.8	54.1	55.2
80°	39.1	40.3	41.4
82.5°	27.6	28.8	29.9
85°	16.1	17.3	18.4
87.5°	6.9	6.9	6.9
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



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Scaled Data Report





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

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62.5°	232.3	234.6	231.2	225.4	219.7	209.3	197.8	181.7	170.2	161.0	144.9
65°	203.6	204.7	202.4	196.7	190.9	180.6	169.1	155.3	146.1	136.9	123.1

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62.5°	139.2	147.2	148.4
65°	121.9	128.8	130.0

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Scaled Data Report



(END OF REPORT)