

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: CORELITE

Report Number: P854389

Luminaire Tested: SQ2-WBM-125U-050D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854389
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G3-2104-222-5)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBM-125U-050D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

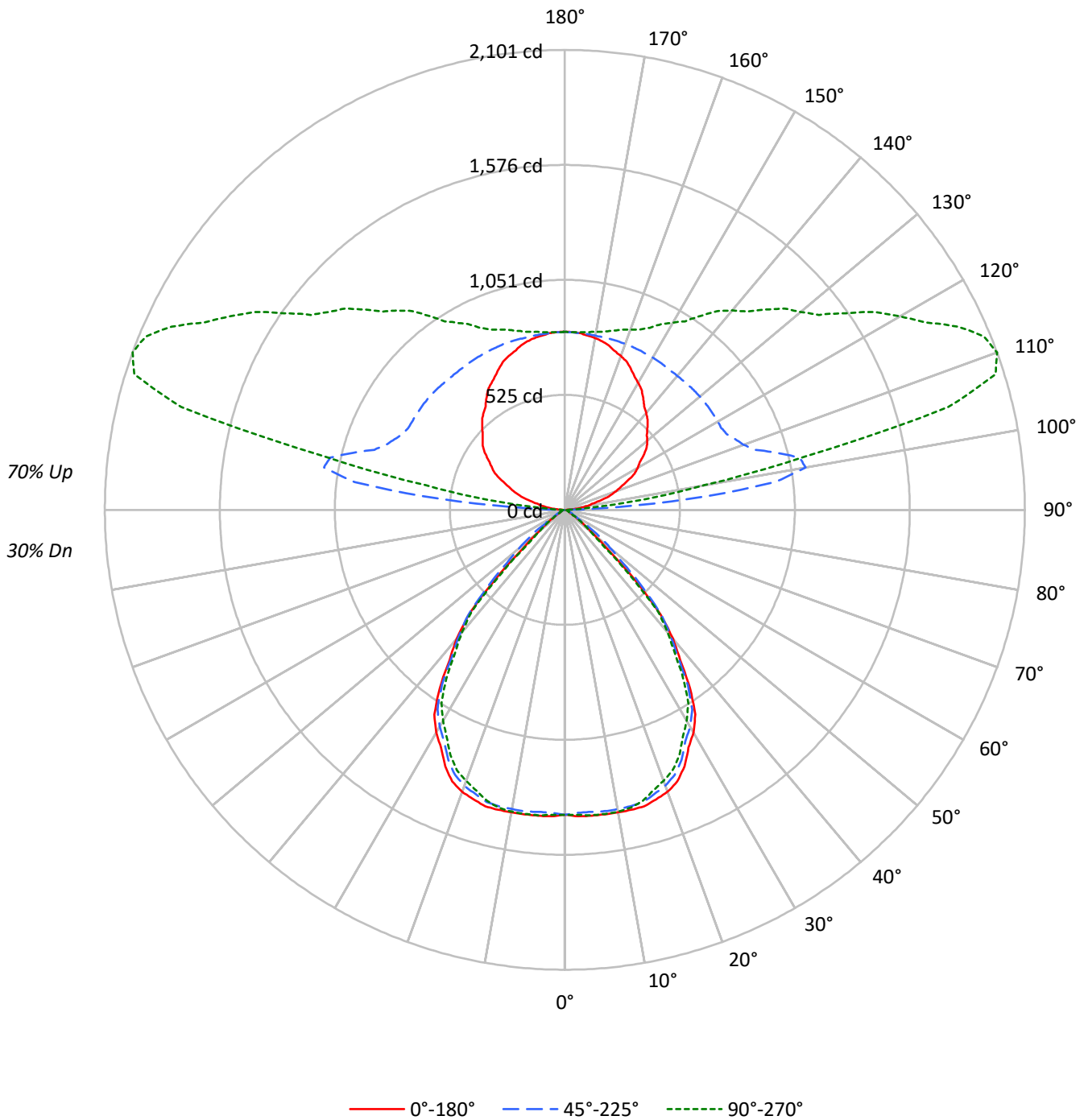
Lumens per Lamp: N/A
Luminaire Lumens: 7208.9 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.19 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 62
Input Voltage (V): 120
Input Current (Ain): 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				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	0
RCR																		
0	102	102	102	102	92	92	92	92	72	72	72	55	55	55	38	38	38	30
1	94	91	87	84	85	82	79	76	65	63	61	50	48	47	35	35	34	28
2	87	81	75	71	78	73	68	65	58	55	53	45	43	41	33	32	31	25
3	80	72	65	60	72	65	60	55	52	49	46	41	38	36	30	29	27	23
4	74	64	57	52	66	58	52	48	47	43	40	37	34	32	28	26	25	21
5	68	58	51	45	61	53	46	42	43	39	35	34	31	29	25	24	22	19
6	63	52	45	40	57	48	41	37	39	35	31	31	28	26	23	22	20	17
7	58	47	40	35	53	43	37	33	36	31	28	28	25	23	22	20	18	16
8	54	43	36	31	49	40	33	29	33	28	25	26	23	21	20	18	17	14
9	51	39	33	28	46	36	30	26	30	26	23	24	21	19	19	17	15	13
10	47	36	30	25	43	33	28	24	28	23	20	22	19	17	18	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22491	22491	22491
5°	22739	22447	22707
10°	23002	22756	22953
15°	23435	23101	23000
20°	23557	23041	22646
25°	23017	22447	22019
30°	21888	21310	20732
35°	19671	19297	18607
40°	16166	15829	15365
45°	10229	11485	9225
50°	3969	6757	3642
55°	1914	3068	1942
60°	904	1518	840
65°	802	879	764
70°	803	803	755
75°	749	811	686
80°	744	744	651
85°	741	741	556

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 11485 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.4	1.9
10°-20°	391.4	5.4
20°-30°	579.5	8.0
30°-40°	600.3	8.3
40°-50°	360.8	5.0
50°-60°	86.3	1.2
60°-70°	23.5	0.3
70°-80°	13.1	0.2
80°-90°	5.1	0.1
90°-100°	311.0	4.3
100°-110°	1012.4	14.0
110°-120°	1001.4	13.9
120°-130°	818.4	11.4
130°-140°	668.9	9.3
140°-150°	521.0	7.2
150°-160°	375.5	5.2
160°-170°	229.5	3.2
170°-180°	77.4	1.1
0°-30°	1104.3	15.3
0°-40°	1704.6	23.6
0°-60°	2151.7	29.8
0°-90°	2193.4	30.4
90°-120°	2324.8	32.2
90°-150°	4333.0	60.1
90°-180°	5015.0	69.6
0°-180°	7208.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1393	1393	1393	1393	1393	
5°	1403	1398	1385	1403	1401	134
15°	1402	1411	1382	1383	1376	395
25°	1292	1304	1260	1244	1236	591
35°	998	996	979	961	944	614
45°	448	503	503	476	404	343
55°	68	78	109	73	69	69
65°	21	22	23	21	20	21
75°	12	13	13	12	11	13
85°	4	4	4	4	3	4
90°	0	3	7	6	6	2
95°	42	128	570	203	125	49
105°	172	248	1003	1916	1814	183
115°	318	380	817	1684	1981	315
125°	442	493	806	1329	1567	393
135°	534	590	802	1147	1294	412
145°	624	670	800	988	1082	391
155°	712	735	805	885	918	328
165°	777	784	807	837	847	219
175°	810	810	810	816	814	77
180°	813	813	813	813	813	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1393.0	1393.0	1393.0	1393.0	1393.0
2.5°	1401.0	1396.3	1385.0	1397.7	1394.6
5°	1403.0	1398.1	1385.0	1403.0	1401.0
7.5°	1403.0	1399.9	1388.8	1403.7	1400.8
10°	1403.0	1403.0	1388.0	1402.9	1400.0
12.5°	1403.8	1407.7	1387.2	1398.1	1393.6
15°	1402.0	1410.8	1382.0	1382.8	1376.0
17.5°	1387.0	1400.7	1361.0	1353.0	1343.6
20°	1371.0	1384.7	1341.0	1325.8	1318.0
22.5°	1343.0	1357.5	1310.6	1296.2	1287.6
25°	1292.0	1303.7	1260.0	1243.8	1236.0
27.5°	1224.4	1229.7	1191.8	1176.6	1168.0
30°	1174.0	1173.0	1143.0	1123.7	1112.0
32.5°	1109.2	1110.6	1083.0	1064.4	1048.8
35°	998.0	996.0	979.0	960.6	944.0
37.5°	865.4	866.8	848.6	829.1	822.6
40°	767.0	769.9	751.0	730.0	729.0
42.5°	647.0	668.7	655.0	633.1	629.0
45°	448.0	502.8	503.0	476.4	404.0
47.5°	249.2	317.6	358.6	282.8	211.4
50°	158.0	203.0	269.0	169.4	145.0
52.5°	112.4	134.7	199.4	120.9	105.8
55°	68.0	77.8	109.0	72.9	69.0
57.5°	41.6	50.2	63.8	49.4	41.2
60°	28.0	35.8	47.0	31.9	26.0
62.5°	24.8	27.1	36.6	25.6	23.6
65°	21.0	22.0	23.0	21.0	20.0
67.5°	18.6	19.6	19.4	18.6	17.6
70°	17.0	18.0	17.0	17.0	16.0
72.5°	15.4	15.6	15.4	14.6	14.4
75°	12.0	13.0	13.0	12.0	11.0
77.5°	9.6	10.4	9.6	9.6	8.6
80°	8.0	8.0	8.0	8.0	7.0
82.5°	6.4	6.4	6.4	6.4	5.4
85°	4.0	4.0	4.0	4.0	3.0
87.5°	1.6	2.2	3.0	2.0	2.0
90°	0.0	2.9	7.0	6.0	6.0
92.5°	14.4	51.7	165.4	54.5	42.0
95°	42.0	128.0	569.9	203.2	125.0
97.5°	79.0	166.6	967.3	589.1	359.6
100°	103.0	189.0	1116.9	995.9	645.9
102.5°	130.2	213.1	1098.5	1473.4	1120.3
105°	172.0	248.2	1002.9	1915.5	1813.8
107.5°	217.2	288.9	912.1	1953.8	2061.6
110°	250.0	315.5	868.9	1906.2	2100.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	277.2	341.9	841.7	1820.3	2071.2
115°	318.0	379.6	816.9	1683.6	1980.8
117.5°	360.0	415.5	807.3	1558.3	1854.2
120°	384.0	438.7	804.9	1481.3	1767.8
122.5°	407.2	461.1	805.7	1414.5	1681.4
125°	441.9	492.8	805.9	1329.2	1566.8
127.5°	471.7	523.8	805.7	1265.4	1463.4
130°	490.9	543.7	804.9	1228.9	1405.8
132.5°	507.7	562.9	804.1	1195.0	1361.0
135°	533.9	589.7	801.9	1147.2	1293.9
137.5°	559.5	615.7	799.7	1098.6	1228.9
140°	577.9	631.7	798.9	1065.7	1188.9
142.5°	595.5	647.0	798.9	1034.2	1144.1
145°	623.9	669.9	799.9	988.0	1081.9
147.5°	651.5	691.4	801.3	948.7	1021.3
150°	669.9	705.1	802.9	925.3	986.9
152.5°	688.3	717.3	803.7	907.4	956.5
155°	711.9	735.4	804.9	884.7	917.9
157.5°	734.3	751.1	806.1	867.8	891.1
160°	747.9	761.6	806.9	857.3	875.9
162.5°	759.9	770.5	806.9	848.4	862.3
165°	776.9	783.8	806.9	837.1	846.9
167.5°	788.9	793.2	807.1	828.6	833.7
170°	796.9	798.9	807.9	823.0	824.9
172.5°	802.5	803.7	809.5	819.7	819.3
175°	809.9	809.9	809.9	815.9	813.9
177.5°	812.9	812.1	811.3	815.2	812.1
180°	812.9	812.9	812.9	812.9	812.9



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	1.50	2.13	2.63	3.24	4.78	1.10	1.73	2.23	2.84	4.37
	3H	2.01	2.57	3.14	3.69	5.24	1.61	2.17	2.75	3.29	4.84
	4H	2.25	2.78	3.40	3.90	5.46	1.84	2.37	2.98	3.49	5.04
	6H	2.46	2.95	3.61	4.07	5.63	2.02	2.51	3.18	3.63	5.20
	8H	2.53	2.99	3.69	4.13	5.69	2.08	2.54	3.24	3.68	5.24
	12H	2.57	3.01	3.73	4.14	5.72	2.10	2.54	3.26	3.67	5.25
4H	2H	1.50	2.03	2.65	3.15	4.71	1.13	1.67	2.29	2.78	4.34
	3H	2.22	2.66	3.38	3.81	5.37	1.86	2.30	3.02	3.45	5.01
	4H	2.61	3.01	3.77	4.14	5.73	2.23	2.63	3.39	3.76	5.35
	6H	2.95	3.29	4.11	4.45	6.03	2.55	2.90	3.72	4.05	5.63
	8H	3.08	3.40	4.24	4.55	6.14	2.67	2.99	3.83	4.14	5.73
	12H	3.17	3.46	4.35	4.62	6.21	2.72	3.01	3.90	4.17	5.77
8H	4H	2.69	3.01	3.85	4.16	5.75	2.34	2.66	3.50	3.81	5.40
	6H	3.15	3.42	4.34	4.61	6.20	2.80	3.06	3.98	4.25	5.84
	8H	3.37	3.60	4.56	4.77	6.38	3.00	3.23	4.19	4.40	6.01
	12H	3.54	3.74	4.73	4.91	6.55	3.14	3.35	4.33	4.51	6.15
12H	4H	2.66	2.95	3.83	4.11	5.70	2.31	2.60	3.49	3.76	5.36
	6H	3.18	3.41	4.36	4.57	6.19	2.83	3.06	4.02	4.23	5.84
	8H	3.41	3.62	4.60	4.78	6.42	3.06	3.26	4.25	4.43	6.07