

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: P701245

Luminaire Tested: SQ4P-PW1-100U-100D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701245
REPORT IS A COMBINATION OF REPORTS P700097 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-PW1-100U-100D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 1000 LI
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

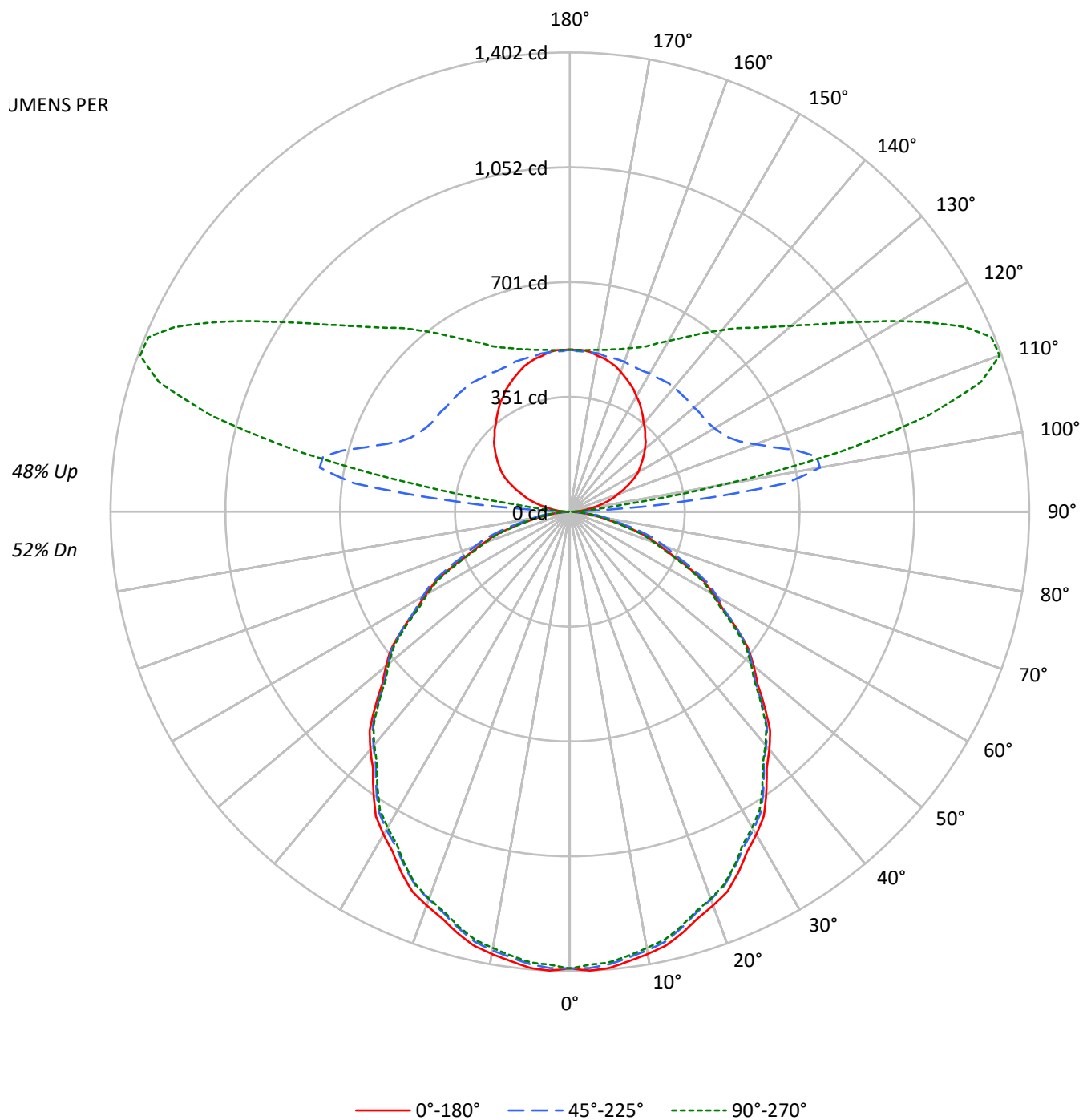
Lumens per Lamp: N/A
Luminaire Lumens: 6758.8 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 60.9
Input Voltage (V): NR
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58
1	98	94	90	87	91	87	84	81	74	72	70	63	61	59	52	51	50
2	90	82	76	71	83	76	71	67	65	61	58	55	52	50	46	44	42
3	82	72	65	59	76	67	61	56	58	53	49	49	45	42	41	38	36
4	75	64	56	50	69	60	53	47	51	46	42	44	39	36	36	33	31
5	69	57	49	43	63	53	46	41	46	40	36	39	35	31	33	29	27
6	63	51	43	37	58	48	41	35	41	36	31	35	31	27	30	26	24
7	59	46	38	33	54	43	36	31	38	32	28	32	28	24	27	24	21
8	54	42	34	29	50	39	32	28	34	29	25	29	25	22	25	21	19
9	51	38	31	26	47	36	29	25	31	26	22	27	23	20	23	20	17
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	21	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12859	12859	12859
5°	12944	12841	12784
10°	12839	12737	12667
15°	12704	12562	12517
20°	12552	12358	12336
25°	12376	12152	12113
30°	12115	11933	11853
35°	11771	11604	11535
40°	11404	11225	11182
45°	10960	10815	10766
50°	10507	10419	10346
55°	10013	10013	9857
60°	9405	9586	9247
65°	8604	9034	8392
70°	7583	8314	7389
75°	6481	7440	6302
80°	5026	6270	5095
85°	3250	4817	4287

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10960 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.3	1.9
10°-20°	370.6	5.5
20°-30°	549.7	8.1
30°-40°	643.2	9.5
40°-50°	640.3	9.5
50°-60°	552.9	8.2
60°-70°	398.0	5.9
70°-80°	208.7	3.1
80°-90°	53.0	0.8
90°-100°	196.9	2.9
100°-110°	685.2	10.1
110°-120°	663.7	9.8
120°-130°	520.7	7.7
130°-140°	412.1	6.1
140°-150°	318.0	4.7
150°-160°	228.0	3.4
160°-170°	139.4	2.1
170°-180°	47.2	0.7
0°-30°	1051.5	15.6
0°-40°	1694.6	25.1
0°-60°	2887.8	42.7
0°-90°	3547.5	52.5
90°-120°	1545.9	22.9
90°-150°	2796.7	41.4
90°-180°	3211.0	47.5
0°-180°	6758.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1394	1394	1394	1394	1394	
5°	1398	1382	1386	1383	1380	132
15°	1330	1313	1315	1313	1310	375
25°	1216	1195	1194	1186	1190	559
35°	1045	1031	1030	1021	1024	653
45°	840	833	829	826	825	648
55°	622	622	622	614	613	555
65°	394	406	414	398	384	391
75°	182	199	209	195	177	195
85°	31	40	46	43	40	40
90°	7	11	11	7	4	6
95°	33	114	332	85	52	35
105°	114	162	720	1215	1130	120
115°	199	240	535	1130	1333	197
125°	270	332	498	842	1004	241
135°	325	366	495	702	794	252
145°	380	406	491	606	657	238
155°	432	447	484	539	558	199
165°	473	476	487	510	513	133
175°	495	495	491	498	495	47
180°	495	495	495	495	495	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1393.8	1393.8	1393.8	1393.8	1393.8
2.5°	1401.8	1390.1	1393.8	1390.8	1384.0
5°	1397.6	1381.9	1386.5	1382.7	1380.4
7.5°	1383.4	1369.0	1372.2	1368.3	1366.8
10°	1370.4	1356.1	1359.5	1354.5	1352.1
12.5°	1355.9	1340.4	1343.8	1338.7	1337.4
15°	1330.0	1313.1	1315.2	1312.7	1310.4
17.5°	1300.0	1283.0	1283.2	1279.4	1278.8
20°	1278.4	1260.4	1258.7	1253.8	1256.4
22.5°	1254.9	1235.8	1234.1	1227.4	1230.8
25°	1215.7	1195.4	1193.7	1186.3	1189.9
27.5°	1170.6	1150.5	1150.5	1140.1	1144.0
30°	1137.2	1118.0	1120.1	1107.8	1112.6
32.5°	1101.9	1084.5	1085.5	1073.5	1078.4
35°	1045.1	1030.7	1030.3	1020.6	1024.1
37.5°	987.1	974.4	972.3	966.8	967.6
40°	946.9	936.0	932.0	928.4	928.4
42.5°	904.5	894.8	890.8	888.0	887.2
45°	840.0	832.7	828.9	826.5	825.1
47.5°	776.0	769.5	766.1	764.4	763.1
50°	732.0	727.2	725.9	722.0	720.8
52.5°	687.7	684.8	683.6	678.9	677.7
55°	622.5	621.5	622.5	614.1	612.8
57.5°	554.8	556.7	560.7	549.1	546.2
60°	509.7	514.4	519.5	505.9	501.1
62.5°	463.4	471.3	478.2	462.5	455.7
65°	394.1	406.2	413.8	397.6	384.4
67.5°	327.5	342.3	351.4	334.1	319.0
70°	281.1	298.1	308.2	290.7	273.9
72.5°	240.9	259.7	268.0	251.2	234.6
75°	181.8	198.6	208.7	194.8	176.8
77.5°	128.9	144.8	153.3	141.2	126.1
80°	94.6	111.4	118.0	107.8	95.9
82.5°	67.1	81.1	85.5	79.4	71.1
85°	30.7	40.2	45.5	42.9	40.5
87.5°	7.8	14.6	18.7	18.7	19.7
90°	7.4	11.0	11.0	7.4	3.7
92.5°	18.5	55.4	51.7	22.2	18.5
95°	33.2	114.4	332.4	84.9	51.7
97.5°	51.7	129.3	664.7	302.8	162.5
100°	70.2	136.6	775.4	727.4	469.0
102.5°	92.3	147.7	771.7	1022.9	841.9
105°	114.4	162.5	720.0	1214.9	1130.0
107.5°	136.6	181.0	653.6	1299.8	1314.6
110°	155.1	199.4	601.9	1288.8	1395.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	177.3	217.8	561.3	1222.2	1392.1
115°	199.4	240.0	535.4	1130.0	1333.0
117.5°	221.5	265.9	520.7	1045.0	1248.1
120°	240.0	288.0	509.6	963.7	1163.2
122.5°	254.8	310.2	502.2	897.3	1078.3
125°	269.5	332.4	498.5	841.9	1004.4
127.5°	284.4	347.1	498.5	801.3	937.9
130°	299.1	354.5	494.8	760.7	882.5
132.5°	313.9	358.2	494.8	731.2	834.5
135°	324.9	365.6	494.8	701.6	793.9
137.5°	339.7	372.9	494.8	675.7	760.7
140°	350.8	384.0	494.8	649.9	723.7
142.5°	365.6	395.1	494.8	624.1	690.5
145°	380.3	406.2	491.1	605.6	657.3
147.5°	395.1	417.3	487.4	587.1	627.8
150°	406.2	428.3	487.4	568.6	601.9
152.5°	421.0	439.5	483.7	550.2	579.8
155°	432.0	446.8	483.7	539.1	557.6
157.5°	443.1	457.9	483.7	528.1	542.8
160°	454.2	465.3	487.4	520.7	531.7
162.5°	465.3	472.7	487.4	513.2	520.7
165°	472.7	476.4	487.4	509.6	513.2
167.5°	480.0	483.7	487.4	505.9	505.9
170°	483.7	487.4	491.1	502.2	502.2
172.5°	491.1	491.1	491.1	498.5	498.5
175°	494.8	494.8	491.1	498.5	494.8
177.5°	494.8	494.8	491.1	498.5	494.8
180°	494.8	494.8	494.8	494.8	494.8

(END OF REPORT)