

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: P701253

Luminaire Tested: SQ4P-PW1-150U-100D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701253
REPORT IS A COMBINATION OF REPORTS P700153 AND P700248
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-PW1-150U-100D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT UPLIGHT, 1000 LI
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

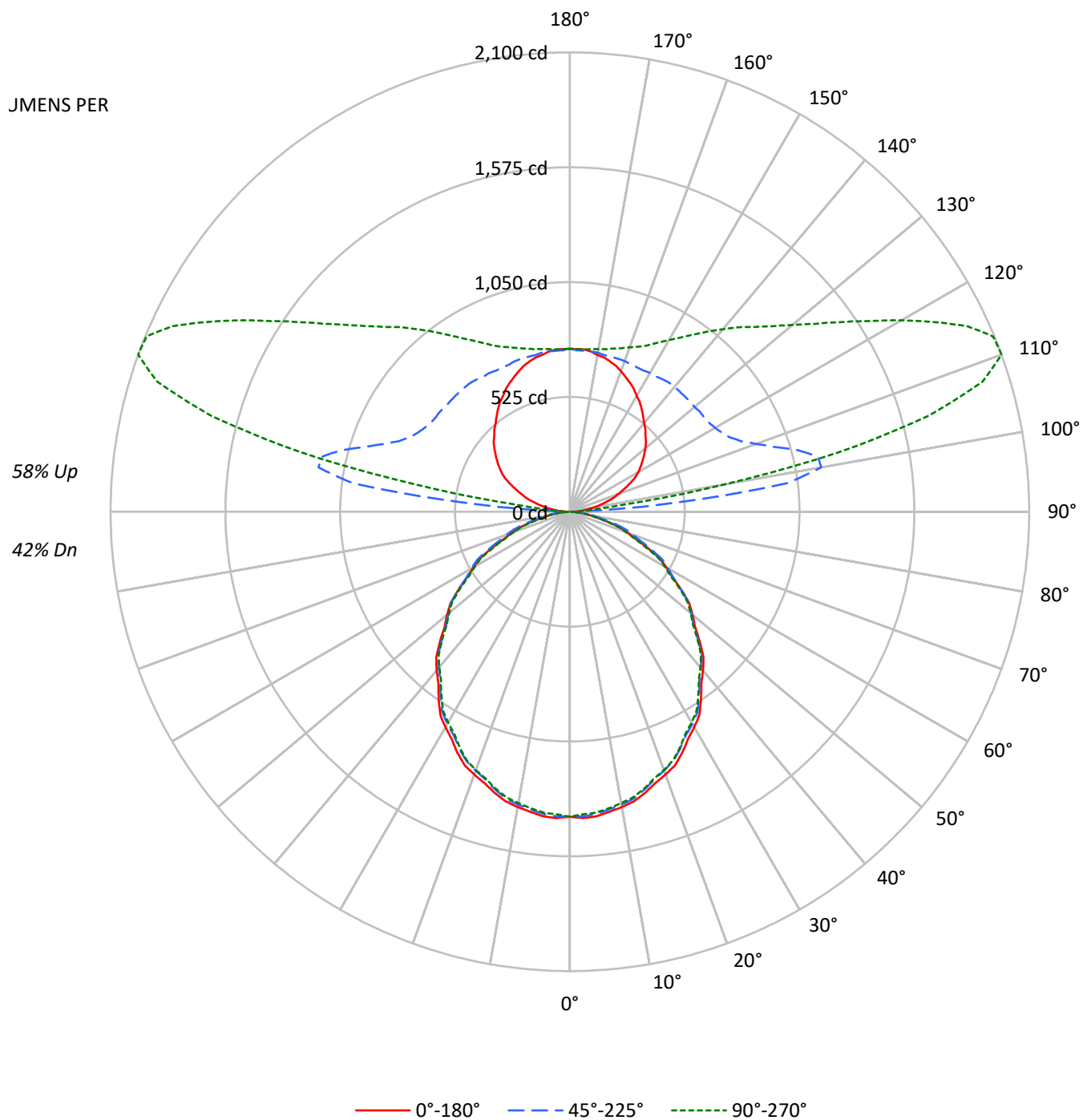
Lumens per Lamp: N/A
Luminaire Lumens: 8380.3 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 77.9
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	44	43	42
2	88	80	74	69	80	74	68	64	61	57	54	49	47	44	38	37	35
3	80	71	63	58	73	65	59	54	54	49	45	44	40	38	34	32	30
4	73	62	55	49	66	57	51	45	48	43	39	39	35	32	30	28	26
5	67	56	48	42	61	51	44	39	43	37	33	35	31	28	27	25	23
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	25	22	20
7	57	45	37	32	52	41	34	30	35	29	26	29	25	22	23	20	18
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	21	18	16
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	18	15	13

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	1.6
10°-20°	370.6	4.4
20°-30°	549.7	6.6
30°-40°	643.2	7.7
40°-50°	640.3	7.6
50°-60°	552.9	6.6
60°-70°	398.0	4.7
70°-80°	208.7	2.5
80°-90°	53.6	0.6
90°-100°	296.3	3.5
100°-110°	1031.0	12.3
110°-120°	998.8	11.9
120°-130°	783.5	9.3
130°-140°	620.1	7.4
140°-150°	478.6	5.7
150°-160°	343.1	4.1
160°-170°	209.8	2.5
170°-180°	71.0	0.8
0°-30°	1051.5	12.5
0°-40°	1694.6	20.2
0°-60°	2887.8	34.5
0°-90°	3548.1	42.3
90°-120°	2326.1	27.8
90°-150°	4208.3	50.2
90°-180°	4832.0	57.7
0°-180°	8380.3	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°	11	17	17	11	6	8
95°	50	172	500	128	78	53
105°	172	244	1084	1828	1700	181
115°	300	361	806	1700	2006	296
125°	406	500	750	1267	1511	363
135°	489	550	745	1056	1195	379
145°	572	611	739	911	989	358
155°	650	672	728	811	839	300
165°	711	717	733	767	772	201
175°	745	745	739	750	745	71
180°	745	745	745	745	745	

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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°	11.1	16.7	16.7	11.1	5.5
92.5°	27.8	83.3	77.8	33.3	27.8
95°	50.0	172.2	500.1	127.8	77.8
97.5°	77.8	194.5	1000.2	455.6	244.5
100°	105.6	205.5	1166.9	1094.6	705.6
102.5°	138.9	222.3	1161.3	1539.1	1266.9
105°	172.2	244.5	1083.5	1828.1	1700.3
107.5°	205.5	272.3	983.5	1955.8	1978.1
110°	233.3	300.1	905.7	1939.2	2100.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	266.7	327.9	844.5	1839.2	2094.7
115°	300.1	361.2	805.7	1700.3	2005.9
117.5°	333.4	400.0	783.4	1572.5	1878.1
120°	361.2	433.4	766.8	1450.2	1750.3
122.5°	383.4	466.8	755.7	1350.3	1622.4
125°	405.7	500.1	750.1	1266.9	1511.3
127.5°	427.8	522.3	750.1	1205.7	1411.4
130°	450.1	533.4	744.6	1144.6	1328.0
132.5°	472.3	538.9	744.6	1100.2	1255.7
135°	489.0	550.1	744.6	1055.7	1194.6
137.5°	511.2	561.2	744.6	1016.9	1144.6
140°	527.9	577.9	744.6	977.9	1089.0
142.5°	550.1	594.5	744.6	939.1	1039.0
145°	572.4	611.2	739.0	911.3	989.1
147.5°	594.5	627.9	733.4	883.5	944.6
150°	611.2	644.5	733.4	855.7	905.7
152.5°	633.5	661.2	727.9	827.9	872.3
155°	650.1	672.3	727.9	811.2	839.0
157.5°	666.8	689.0	727.9	794.6	816.8
160°	683.5	700.1	733.4	783.4	800.1
162.5°	700.1	711.3	733.4	772.4	783.4
165°	711.3	716.8	733.4	766.8	772.4
167.5°	722.3	727.9	733.4	761.2	761.2
170°	727.9	733.4	739.0	755.7	755.7
172.5°	739.0	739.0	739.0	750.1	750.1
175°	744.6	744.6	739.0	750.1	744.6
177.5°	744.6	744.6	739.0	750.1	744.6
180°	744.6	744.6	744.6	744.6	744.6

(END OF REPORT)