

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: P701249

Luminaire Tested: SQ4P-PW1-125U-100D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701249
REPORT IS A COMBINATION OF REPORTS P700125 AND P700247
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-PW1-125U-100D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT UPLIGHT, 1000 LI
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

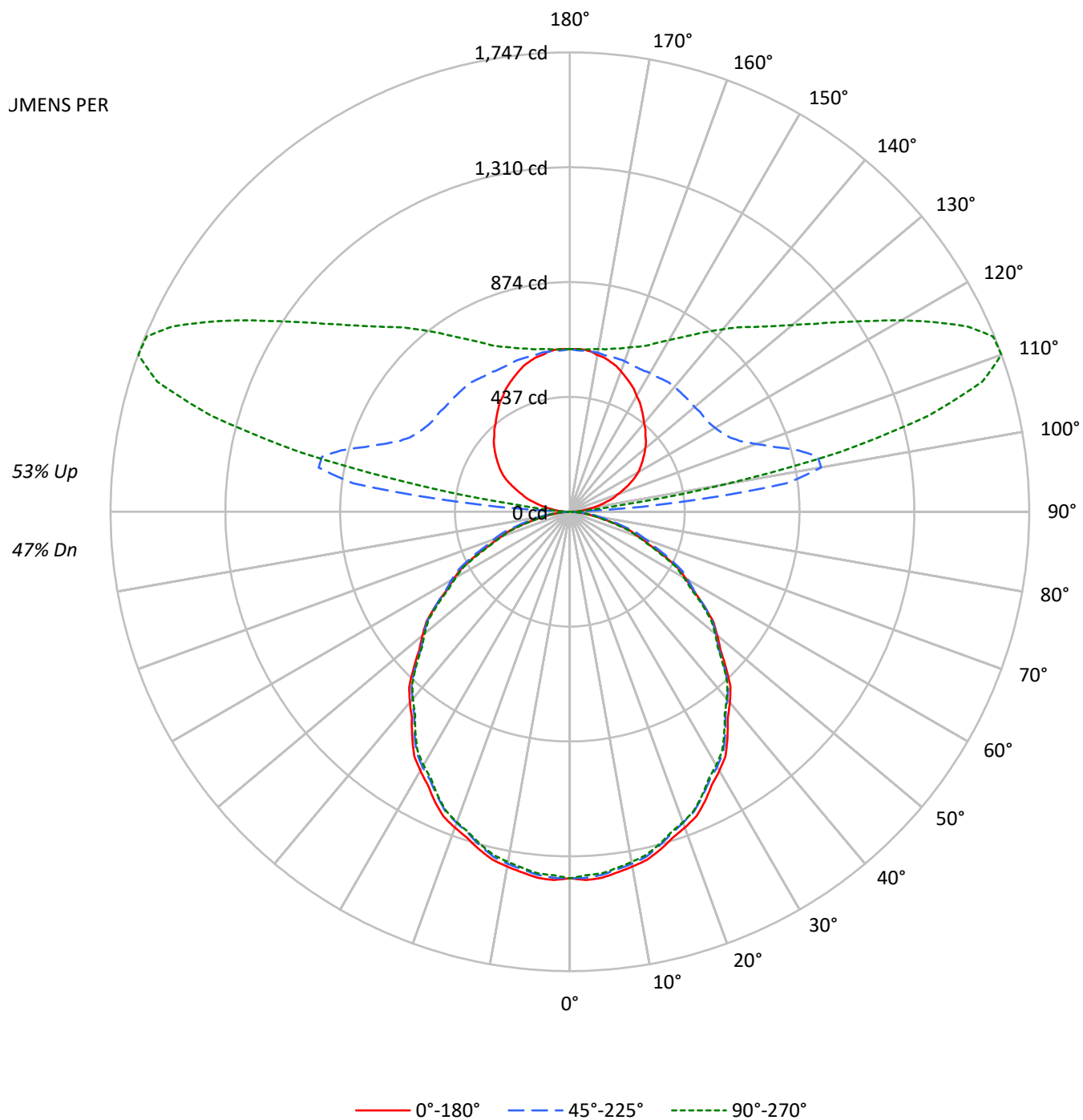
Lumens per Lamp: N/A
Luminaire Lumens: 7566.2 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.9
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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53
1	97	93	89	86	89	86	82	79	72	69	67	59	57	56	47	46	45
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	38
3	81	71	64	58	74	66	60	55	56	51	47	46	42	40	37	35	33
4	74	63	55	49	68	58	52	46	49	44	40	41	37	34	33	30	28
5	68	56	48	42	62	52	45	40	44	39	34	37	33	29	30	27	24
6	62	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	22
7	58	46	38	32	53	42	35	30	36	30	26	30	26	23	25	22	19
8	54	41	34	28	49	38	32	27	33	27	24	28	23	20	23	20	17
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15
10	47	35	27	23	43	32	26	21	28	23	19	23	19	16	19	16	14

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	1.7
10°-20°	370.6	4.9
20°-30°	549.7	7.3
30°-40°	643.2	8.5
40°-50°	640.3	8.5
50°-60°	552.9	7.3
60°-70°	398.0	5.3
70°-80°	208.7	2.8
80°-90°	53.3	0.7
90°-100°	246.4	3.3
100°-110°	857.4	11.3
110°-120°	830.6	11.0
120°-130°	651.5	8.6
130°-140°	515.7	6.8
140°-150°	398.0	5.3
150°-160°	285.3	3.8
160°-170°	174.5	2.3
170°-180°	59.0	0.8
0°-30°	1051.5	13.9
0°-40°	1694.6	22.4
0°-60°	2887.8	38.2
0°-90°	3547.8	46.9
90°-120°	1934.4	25.6
90°-150°	3499.5	46.3
90°-180°	4018.0	53.1
0°-180°	7566.2	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°	9	14	14	9	5	7
95°	42	143	416	106	65	44
105°	143	203	901	1520	1414	151
115°	250	300	670	1414	1668	246
125°	337	416	624	1054	1257	302
135°	407	457	619	878	993	315
145°	476	508	614	758	822	298
155°	541	559	605	675	698	249
165°	592	596	610	638	642	167
175°	619	619	614	624	619	59
180°	619	619	619	619	619	

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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°	9.2	13.9	13.9	9.2	4.7
92.5°	23.1	69.3	64.6	27.7	23.1
95°	41.6	143.3	415.8	106.2	64.6
97.5°	64.6	161.7	831.7	378.9	203.4
100°	87.8	171.0	970.3	910.2	586.8
102.5°	115.5	184.8	965.7	1279.9	1053.5
105°	143.3	203.4	901.0	1520.2	1413.9
107.5°	171.0	226.4	817.9	1626.4	1645.0
110°	194.0	249.5	753.1	1612.6	1746.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.8	272.7	702.3	1529.4	1742.0
115°	249.5	300.4	670.0	1413.9	1668.0
117.5°	277.2	332.7	651.5	1307.7	1561.8
120°	300.4	360.4	637.7	1206.0	1455.6
122.5°	318.8	388.1	628.4	1122.8	1349.2
125°	337.3	415.8	623.8	1053.5	1256.9
127.5°	355.8	434.3	623.8	1002.7	1173.7
130°	374.2	443.5	619.2	951.8	1104.3
132.5°	392.8	448.2	619.2	914.9	1044.3
135°	406.6	457.4	619.2	878.0	993.4
137.5°	425.1	466.7	619.2	845.6	951.8
140°	439.0	480.6	619.2	813.2	905.7
142.5°	457.4	494.4	619.2	780.9	864.1
145°	475.9	508.3	614.5	757.8	822.5
147.5°	494.4	522.1	610.0	734.7	785.5
150°	508.3	536.0	610.0	711.5	753.1
152.5°	526.8	549.9	605.3	688.5	725.4
155°	540.7	559.1	605.3	674.6	697.7
157.5°	554.5	572.9	605.3	660.8	679.3
160°	568.4	582.2	610.0	651.5	665.4
162.5°	582.2	591.5	610.0	642.2	651.5
165°	591.5	596.1	610.0	637.7	642.2
167.5°	600.7	605.3	610.0	633.0	633.0
170°	605.3	610.0	614.5	628.4	628.4
172.5°	614.5	614.5	614.5	623.8	623.8
175°	619.2	619.2	614.5	623.8	619.2
177.5°	619.2	619.2	614.5	623.8	619.2
180°	619.2	619.2	619.2	619.2	619.2

(END OF REPORT)