

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: P701274

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701274
REPORT IS A COMBINATION OF REPORTS P700102 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-WB-100U-125D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 1250 LI
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

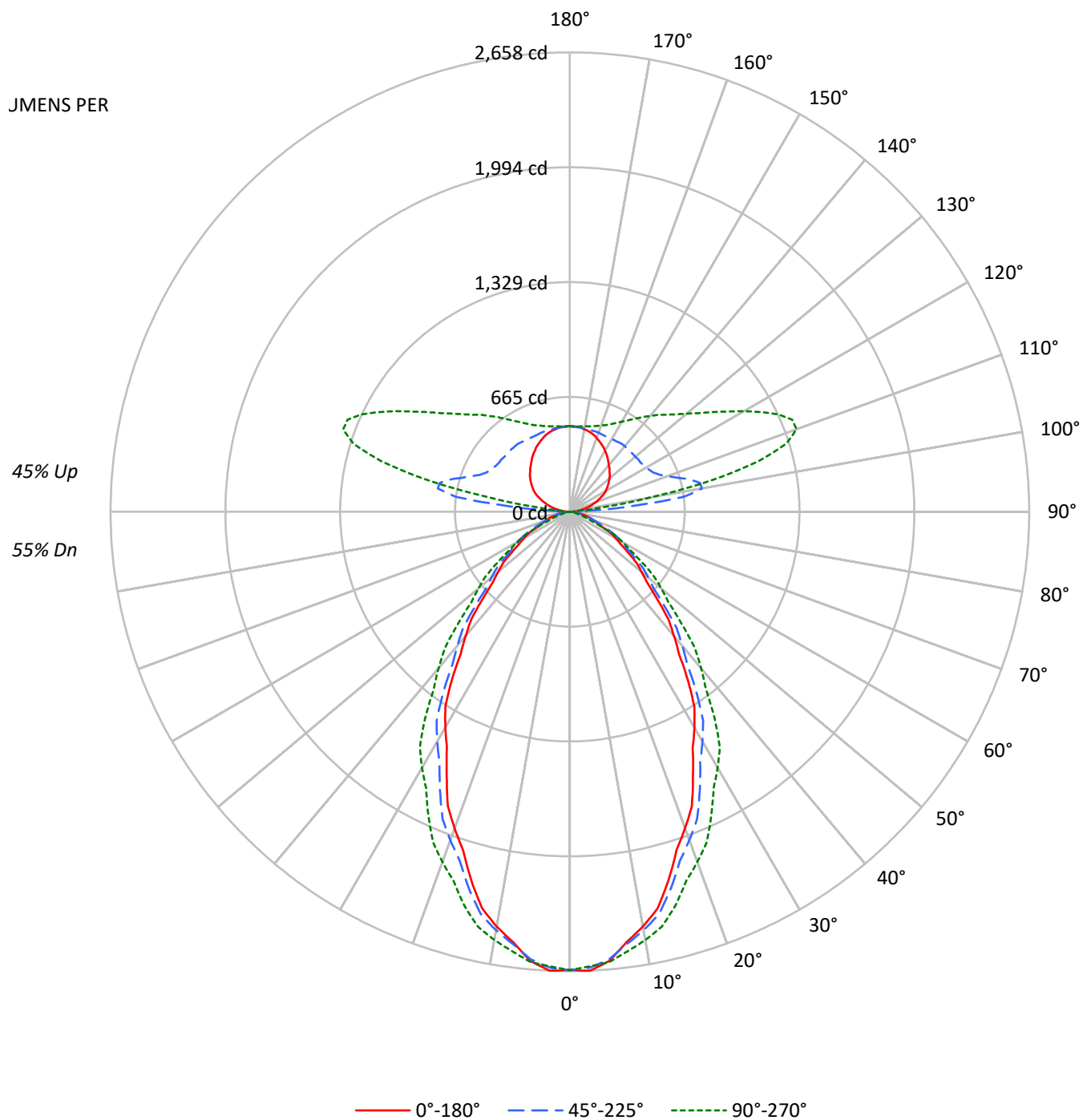
Lumens per Lamp: N/A
Luminaire Lumens: 7076.7 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 71.8
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	86	86	86	73	73	73	60	60	60
1	100	96	93	90	93	90	87	84	77	75	73	66	64	63	55	54	53
2	92	85	80	75	86	80	75	71	69	66	63	59	57	55	50	49	47
3	85	76	70	64	79	71	66	61	62	58	54	54	50	48	46	43	42
4	78	69	61	56	73	64	58	53	56	51	47	49	45	42	42	39	37
5	73	62	54	49	67	58	51	46	51	46	42	44	41	38	38	35	33
6	67	56	49	43	63	53	46	41	47	41	37	41	37	34	35	32	30
7	63	51	44	38	58	48	42	37	43	37	34	38	33	30	33	30	27
8	58	47	40	35	55	44	38	33	39	34	30	35	31	28	30	27	25
9	55	43	36	31	51	41	34	30	36	31	28	32	28	25	28	25	23
10	51	40	33	28	48	38	32	27	34	29	25	30	26	23	27	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24467	24467	24467
5°	24162	24074	24216
10°	22827	23035	23567
15°	21072	21563	22529
20°	19137	19856	21169
25°	17164	18101	19724
30°	15347	16350	18222
35°	13420	14390	16449
40°	11294	12192	14238
45°	9321	10125	11889
50°	7781	8484	9902
55°	6606	7280	8178
60°	5648	6314	6528
65°	4497	5307	4216
70°	3987	4143	2573
75°	3689	3362	1579
80°	3400	3092	1355
85°	3059	2837	1122

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 11889 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.2	3.4
10°-20°	632.7	8.9
20°-30°	819.5	11.6
30°-40°	802.5	11.3
40°-50°	614.2	8.7
50°-60°	409.3	5.8
60°-70°	223.4	3.2
70°-80°	93.1	1.3
80°-90°	27.5	0.4
90°-100°	196.9	2.8
100°-110°	685.2	9.7
110°-120°	663.7	9.4
120°-130°	520.7	7.4
130°-140°	412.1	5.8
140°-150°	318.0	4.5
150°-160°	228.0	3.2
160°-170°	139.4	2.0
170°-180°	47.2	0.7
0°-30°	1695.4	24.0
0°-40°	2497.9	35.3
0°-60°	3521.5	49.8
0°-90°	3865.4	54.6
90°-120°	1545.9	21.8
90°-150°	2796.7	39.5
90°-180°	3211.0	45.4
0°-180°	7076.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2652	2652	2652	2652	2652	
5°	2609	2583	2599	2606	2615	243
15°	2206	2198	2258	2319	2359	616
25°	1686	1691	1778	1856	1938	775
35°	1192	1197	1278	1364	1460	741
45°	714	728	776	835	911	557
55°	411	428	453	470	508	372
65°	206	223	243	213	193	214
75°	104	104	94	65	44	111
85°	29	29	27	17	11	32
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°	2651.9	2651.9	2651.9	2651.9	2651.9
2.5°	2658.4	2634.7	2640.8	2640.5	2633.1
5°	2608.9	2582.6	2599.4	2605.5	2614.7
7.5°	2512.0	2492.2	2523.1	2545.7	2564.1
10°	2436.6	2419.5	2458.8	2491.9	2515.6
12.5°	2349.2	2334.7	2383.4	2427.7	2459.0
15°	2206.1	2198.2	2257.5	2318.8	2358.6
17.5°	2053.3	2049.4	2117.4	2189.0	2239.8
20°	1949.1	1948.0	2022.3	2097.1	2156.1
22.5°	1844.0	1846.3	1924.5	2002.3	2069.7
25°	1686.1	1690.6	1778.1	1855.5	1937.5
27.5°	1540.2	1542.3	1632.4	1714.3	1801.8
30°	1440.6	1446.2	1534.7	1619.5	1710.4
32.5°	1341.0	1347.7	1434.3	1521.8	1614.5
35°	1191.5	1197.3	1277.6	1363.7	1460.4
37.5°	1037.3	1045.2	1116.6	1197.7	1293.1
40°	937.7	949.4	1012.3	1089.0	1182.2
42.5°	841.9	856.2	914.6	987.2	1071.3
45°	714.4	728.1	776.0	834.7	911.2
47.5°	604.5	620.3	657.3	707.8	772.9
50°	542.1	557.1	591.1	628.5	689.9
52.5°	487.3	502.1	532.4	561.3	613.8
55°	410.7	427.8	452.6	469.9	508.4
57.5°	348.0	364.3	384.0	391.7	415.2
60°	306.1	324.3	342.2	341.1	353.8
62.5°	267.9	283.4	301.1	288.7	289.5
65°	206.0	223.2	243.1	212.6	193.1
67.5°	166.5	169.9	190.7	148.3	125.1
70°	147.8	147.8	153.6	114.8	95.4
72.5°	130.1	130.1	124.9	93.2	72.9
75°	103.5	103.5	94.3	64.8	44.3
77.5°	79.8	79.0	72.2	48.2	32.2
80°	64.0	64.0	58.2	38.2	25.5
82.5°	50.1	50.1	45.0	29.8	18.9
85°	28.9	28.9	26.8	17.4	10.6
87.5°	10.3	10.3	9.2	5.5	4.8
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)