

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: P701272

Luminaire Tested: SQ4P-WB-100U-075D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701272
REPORT IS A COMBINATION OF REPORTS P700100 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-WB-100U-075D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 750 LU
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

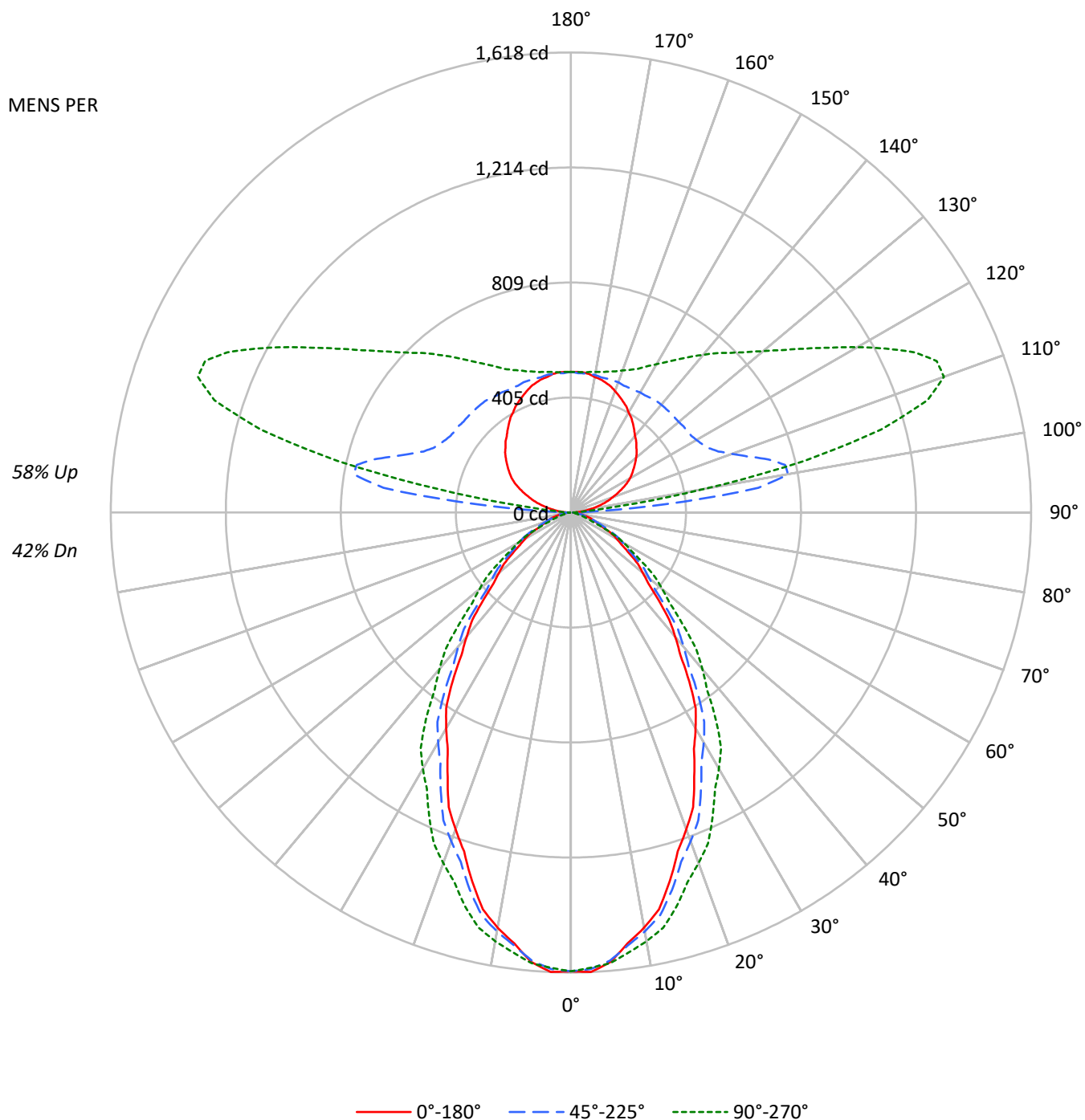
Lumens per Lamp: N/A
Luminaire Lumens: 5564.0 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 51.6
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	97	93	90	86	89	85	82	80	71	69	67	57	56	55	45	44	43
2	89	82	77	72	81	76	71	67	63	60	57	51	49	47	41	39	38
3	82	73	67	61	75	68	62	57	57	52	49	46	44	41	37	35	34
4	75	66	58	53	69	61	54	49	51	46	43	42	39	36	34	32	30
5	70	59	52	46	64	55	48	43	46	41	38	38	35	32	31	29	27
6	65	53	46	40	59	49	43	38	42	37	33	35	31	29	28	26	24
7	60	48	41	36	55	45	38	34	38	33	30	32	28	26	26	24	22
8	56	44	37	32	51	41	35	30	35	30	27	30	26	23	24	22	20
9	52	41	34	29	48	38	32	27	33	28	24	27	24	21	23	20	18
10	49	37	31	26	45	35	29	25	30	25	22	26	22	19	21	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14888	14888	14888
5°	14703	14650	14736
10°	13892	14017	14342
15°	12823	13122	13710
20°	11645	12082	12882
25°	10446	11015	12002
30°	9339	9949	11088
35°	8167	8756	10010
40°	6872	7420	8664
45°	5672	6161	7235
50°	4735	5163	6026
55°	4020	4430	4977
60°	3438	3842	3973
65°	2738	3229	2565
70°	2428	2522	1567
75°	2246	2046	959
80°	2067	1881	824
85°	1863	1736	677

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7235 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.0	2.7
10°-20°	385.0	6.9
20°-30°	498.7	9.0
30°-40°	488.3	8.8
40°-50°	373.8	6.7
50°-60°	249.1	4.5
60°-70°	135.9	2.4
70°-80°	56.6	1.0
80°-90°	17.2	0.3
90°-100°	196.9	3.5
100°-110°	685.2	12.3
110°-120°	663.7	11.9
120°-130°	520.7	9.4
130°-140°	412.1	7.4
140°-150°	318.0	5.7
150°-160°	228.0	4.1
160°-170°	139.4	2.5
170°-180°	47.2	0.8
0°-30°	1031.7	18.5
0°-40°	1520.0	27.3
0°-60°	2142.9	38.5
0°-90°	2352.7	42.3
90°-120°	1545.9	27.8
90°-150°	2796.7	50.3
90°-180°	3211.0	57.7
0°-180°	5564.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1614	1614	1614	1614	1614	
5°	1588	1572	1582	1586	1591	148
15°	1342	1338	1374	1411	1435	375
25°	1026	1029	1082	1129	1179	472
35°	725	729	777	830	889	451
45°	435	443	472	508	554	339
55°	250	260	275	286	309	227
65°	125	136	148	129	118	130
75°	63	63	57	39	27	67
85°	18	18	16	11	6	19
90°	7	11	11	7	4	5
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°	1613.7	1613.7	1613.7	1613.7	1613.7
2.5°	1617.7	1603.3	1607.0	1606.8	1602.4
5°	1587.6	1571.5	1581.8	1585.5	1591.1
7.5°	1528.6	1516.6	1535.3	1549.1	1560.4
10°	1482.8	1472.3	1496.2	1516.4	1530.9
12.5°	1429.6	1420.7	1450.4	1477.3	1496.4
15°	1342.5	1337.7	1373.8	1411.1	1435.3
17.5°	1249.5	1247.2	1288.5	1332.1	1363.0
20°	1186.0	1185.4	1230.6	1276.1	1312.0
22.5°	1122.1	1123.5	1171.1	1218.4	1259.4
25°	1026.1	1028.8	1082.0	1129.1	1179.0
27.5°	937.3	938.5	993.3	1043.2	1096.4
30°	876.6	880.1	933.9	985.5	1040.8
32.5°	816.1	820.1	872.8	926.0	982.5
35°	725.1	728.6	777.4	829.9	888.7
37.5°	631.3	636.0	679.5	728.9	786.9
40°	570.6	577.7	616.1	662.7	719.4
42.5°	512.3	520.9	556.6	600.8	651.9
45°	434.7	443.1	472.2	508.0	554.5
47.5°	367.9	377.5	399.9	430.7	470.3
50°	329.9	339.0	359.7	382.4	419.8
52.5°	296.6	305.5	324.0	341.6	373.5
55°	249.9	260.3	275.4	286.0	309.4
57.5°	211.7	221.7	233.7	238.4	252.7
60°	186.3	197.4	208.2	207.5	215.3
62.5°	163.0	172.5	183.3	175.6	176.1
65°	125.4	135.8	147.9	129.4	117.5
67.5°	101.3	103.4	116.1	90.3	76.2
70°	90.0	90.0	93.5	69.9	58.1
72.5°	79.2	79.2	76.0	56.7	44.4
75°	63.0	63.0	57.4	39.4	26.9
77.5°	48.6	48.1	43.9	29.3	19.5
80°	38.9	38.9	35.4	23.2	15.5
82.5°	30.5	30.5	27.4	18.1	11.5
85°	17.6	17.6	16.4	10.6	6.4
87.5°	6.3	6.3	5.6	3.3	2.9
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)