

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: P701271

Luminaire Tested: SQ4P-WB-100U-050D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701271
REPORT IS A COMBINATION OF REPORTS P700099 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-WB-100U-050D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 500 LU
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

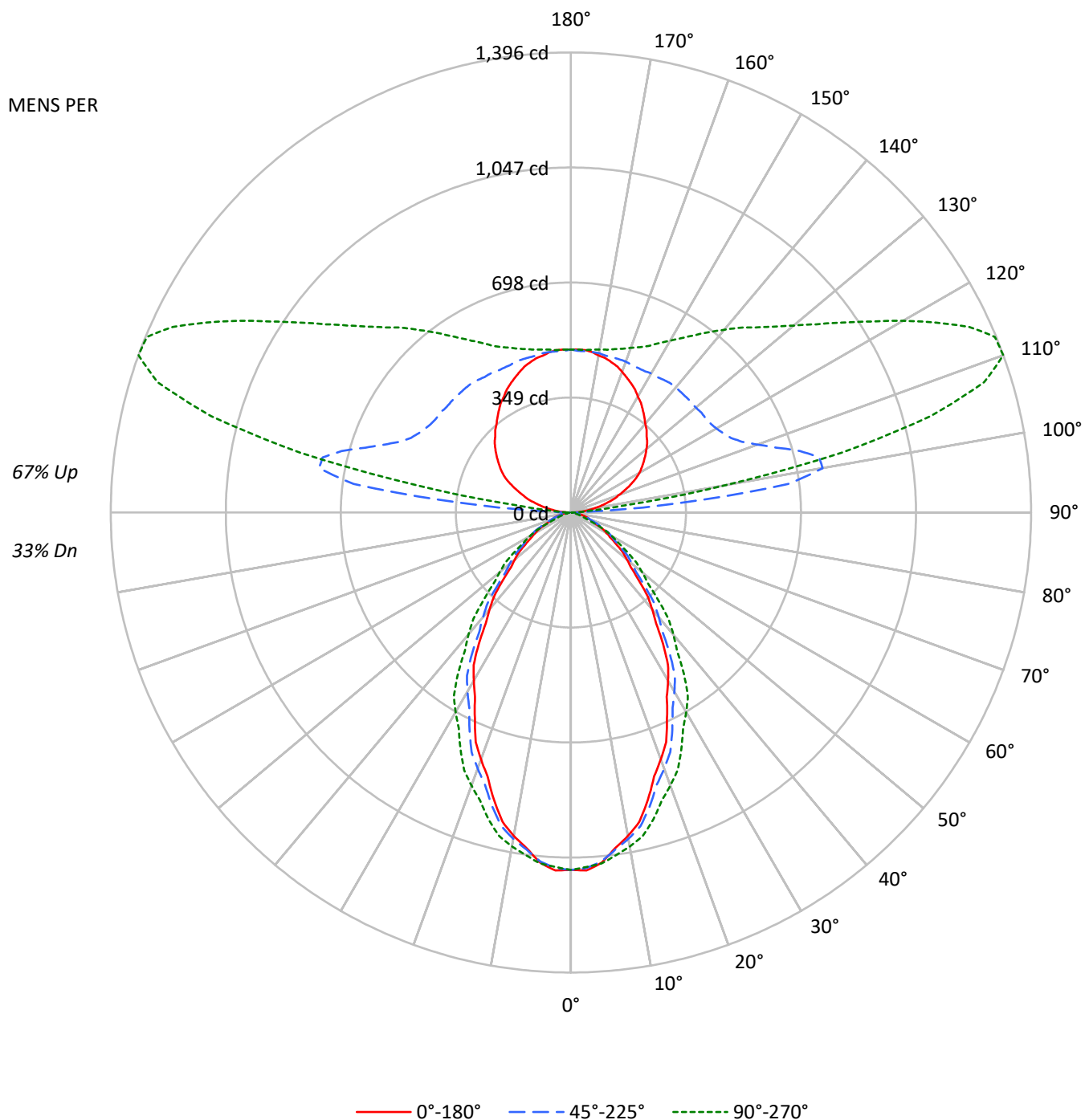
Lumens per Lamp: N/A
Luminaire Lumens: 4792.8 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 42.8
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	41	41	41
1	95	91	87	84	85	82	79	77	66	64	62	51	50	48	37	36	36
2	87	80	75	70	78	73	68	64	59	55	53	45	43	42	33	32	31
3	80	71	64	59	72	65	59	54	52	48	45	41	38	36	30	29	27
4	73	63	56	51	66	58	52	47	47	43	39	37	34	32	28	26	24
5	68	57	49	44	61	52	45	41	42	38	34	34	30	28	25	23	22
6	62	51	44	38	56	47	40	36	38	34	30	31	27	25	23	21	20
7	58	46	39	34	52	43	36	32	35	30	27	28	25	22	22	19	18
8	54	42	35	30	49	39	32	28	32	27	24	26	23	20	20	18	16
9	50	39	32	27	45	36	29	25	30	25	22	24	21	18	19	16	15
10	47	36	29	24	42	33	27	23	27	23	20	22	19	17	17	15	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10006	10006	10006
5°	9881	9846	9903
10°	9336	9420	9639
15°	8618	8819	9214
20°	7826	8120	8658
25°	7020	7403	8067
30°	6277	6687	7452
35°	5487	5885	6727
40°	4619	4986	5823
45°	3813	4141	4862
50°	3182	3469	4051
55°	2701	2977	3344
60°	2310	2581	2670
65°	1840	2170	1722
70°	1632	1694	1052
75°	1511	1376	645
80°	1392	1265	558
85°	1249	1154	455

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4862 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.5	2.1
10°-20°	258.8	5.4
20°-30°	335.1	7.0
30°-40°	328.2	6.8
40°-50°	251.2	5.2
50°-60°	167.4	3.5
60°-70°	91.3	1.9
70°-80°	38.1	0.8
80°-90°	12.0	0.2
90°-100°	196.9	4.1
100°-110°	685.2	14.3
110°-120°	663.7	13.8
120°-130°	520.7	10.9
130°-140°	412.1	8.6
140°-150°	318.0	6.6
150°-160°	228.0	4.8
160°-170°	139.4	2.9
170°-180°	47.2	1.0
0°-30°	693.4	14.5
0°-40°	1021.6	21.3
0°-60°	1440.2	30.0
0°-90°	1581.6	33.0
90°-120°	1545.9	32.3
90°-150°	2796.7	58.4
90°-180°	3211.0	67.0
0°-180°	4792.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1084	1084	1084	1084	1084	
5°	1067	1056	1063	1066	1069	99
15°	902	899	923	948	965	252
25°	690	692	727	759	792	317
35°	487	490	522	558	597	303
45°	292	298	317	341	373	228
55°	168	175	185	192	208	152
65°	84	91	99	87	79	88
75°	42	42	39	26	18	45
85°	12	12	11	7	4	13
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°	1084.5	1084.5	1084.5	1084.5	1084.5
2.5°	1087.2	1077.5	1080.0	1079.9	1076.8
5°	1066.9	1056.2	1063.1	1065.6	1069.3
7.5°	1027.3	1019.2	1031.8	1041.1	1048.7
10°	996.5	989.5	1005.5	1019.1	1028.9
12.5°	960.8	954.8	974.8	992.9	1005.6
15°	902.2	899.0	923.3	948.3	964.6
17.5°	839.8	838.2	866.0	895.3	916.0
20°	797.1	796.7	827.0	857.7	881.8
22.5°	754.1	755.1	787.0	818.8	846.4
25°	689.6	691.5	727.2	758.9	792.4
27.5°	629.9	630.7	667.6	701.1	736.9
30°	589.2	591.4	627.7	662.3	699.5
32.5°	548.5	551.1	586.6	622.3	660.3
35°	487.2	489.6	522.5	557.7	597.3
37.5°	424.2	427.5	456.7	489.8	528.8
40°	383.5	388.2	414.0	445.4	483.5
42.5°	344.3	350.2	374.1	403.8	438.1
45°	292.2	297.8	317.4	341.4	372.6
47.5°	247.2	253.7	268.8	289.5	316.1
50°	221.7	227.8	241.7	257.0	282.2
52.5°	199.3	205.4	217.7	229.5	251.0
55°	167.9	175.0	185.1	192.2	207.9
57.5°	142.3	149.0	157.1	160.2	169.7
60°	125.2	132.6	139.9	139.5	144.7
62.5°	109.6	116.0	123.1	118.1	118.4
65°	84.3	91.2	99.4	86.9	78.9
67.5°	68.1	69.5	78.0	60.6	51.2
70°	60.5	60.5	62.8	46.9	39.0
72.5°	53.2	53.2	51.0	38.2	29.8
75°	42.4	42.4	38.6	26.5	18.1
77.5°	32.7	32.3	29.5	19.7	13.1
80°	26.2	26.2	23.8	15.6	10.5
82.5°	20.5	20.5	18.5	12.2	7.7
85°	11.8	11.8	10.9	7.1	4.3
87.5°	4.2	4.2	3.8	2.3	1.9
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)