

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: P701259

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701259
REPORT IS A COMBINATION OF REPORTS P700211 AND P700244
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-WB-050U-050D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 500 LUN
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

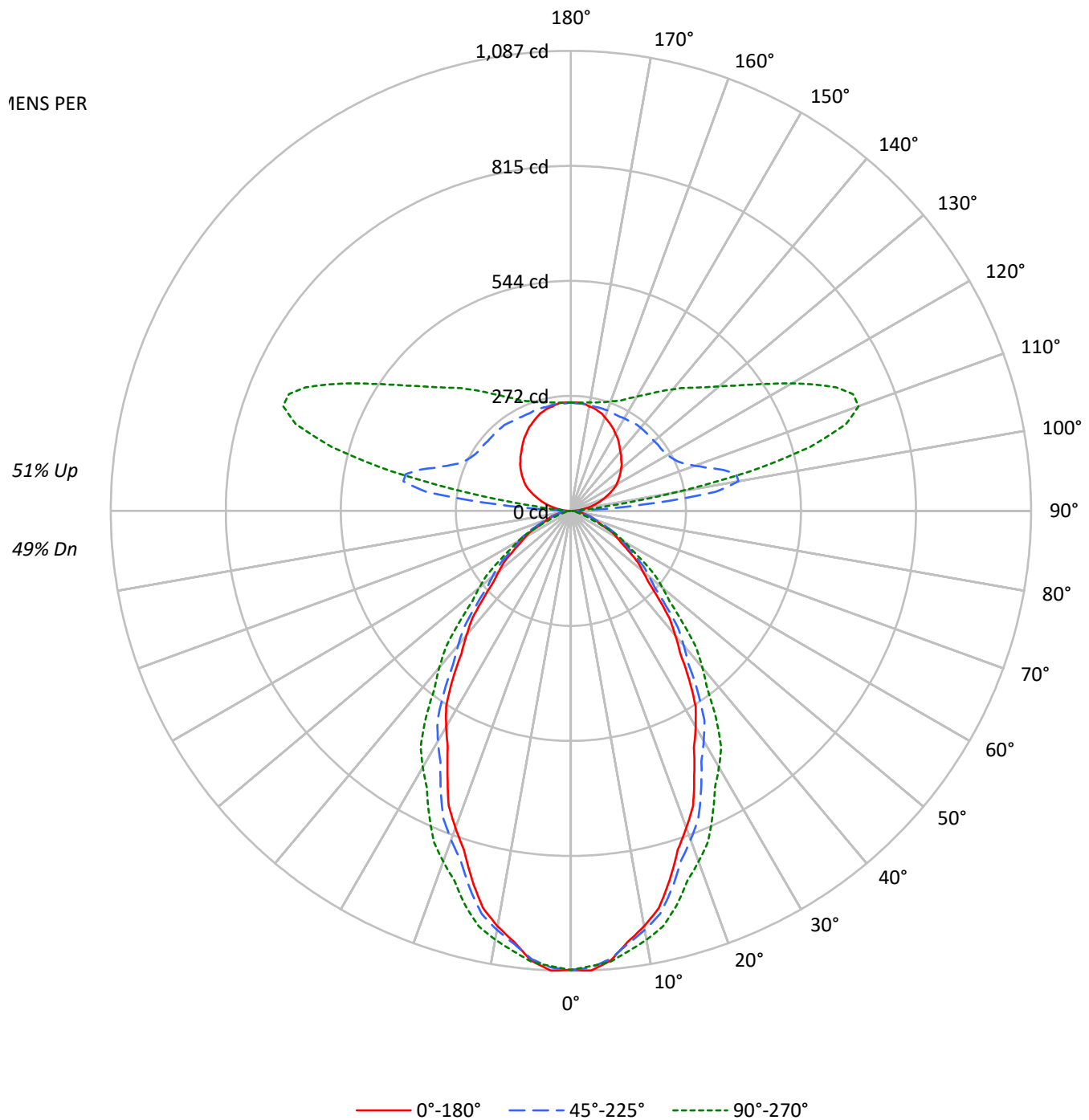
Lumens per Lamp: N/A
Luminaire Lumens: 3244.8 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 29.8
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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	99	95	91	88	91	88	85	82	74	72	70	62	60	59	50	49	49
2	91	84	79	74	84	78	73	69	66	63	60	56	53	51	46	44	43
3	84	75	68	63	77	70	64	59	60	55	52	50	47	45	42	39	38
4	77	67	60	54	71	62	56	51	54	49	45	46	42	39	38	36	34
5	71	60	53	47	66	56	50	45	49	44	40	42	38	35	35	32	30
6	66	55	47	42	61	51	45	40	44	39	35	38	34	31	32	29	27
7	61	50	42	37	57	47	40	35	41	35	32	35	31	28	30	27	25
8	57	46	38	33	53	43	36	32	37	32	29	32	28	26	28	25	22
9	53	42	35	30	50	39	33	29	35	30	26	30	26	23	26	23	21
10	50	39	32	27	47	36	30	26	32	27	24	28	24	21	24	21	19

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	3.1
10°-20°	258.8	8.0
20°-30°	335.1	10.3
30°-40°	328.2	10.1
40°-50°	251.2	7.7
50°-60°	167.4	5.2
60°-70°	91.3	2.8
70°-80°	38.1	1.2
80°-90°	11.4	0.4
90°-100°	102.0	3.1
100°-110°	355.0	10.9
110°-120°	343.9	10.6
120°-130°	269.8	8.3
130°-140°	213.5	6.6
140°-150°	164.8	5.1
150°-160°	118.1	3.6
160°-170°	72.3	2.2
170°-180°	24.4	0.8
0°-30°	693.4	21.4
0°-40°	1021.6	31.5
0°-60°	1440.2	44.4
0°-90°	1581.0	48.7
90°-120°	800.9	24.7
90°-150°	1449.0	44.7
90°-180°	1664.0	51.3
0°-180°	3244.8	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°	4	6	6	4	2	3
95°	17	59	172	44	27	18
105°	59	84	373	629	585	62
115°	103	124	277	585	691	102
125°	140	172	258	436	520	125
135°	168	189	256	364	411	130
145°	197	210	254	314	340	123
155°	224	232	251	279	289	103
165°	245	247	253	264	266	69
175°	256	256	254	258	256	24
180°	256	256	256	256	256	

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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°	3.8	5.7	5.7	3.8	1.9
92.5°	9.5	28.7	26.8	11.5	9.5
95°	17.2	59.3	172.2	44.0	26.8
97.5°	26.8	66.9	344.3	156.9	84.2
100°	36.4	70.8	401.8	376.9	243.0
102.5°	47.8	76.5	399.9	529.9	436.2
105°	59.3	84.2	373.1	629.4	585.4
107.5°	70.8	93.8	338.6	673.5	681.1
110°	80.4	103.3	311.9	667.7	723.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	91.9	112.9	290.8	633.3	721.3
115°	103.3	124.3	277.4	585.4	690.6
117.5°	114.8	137.8	269.7	541.4	646.6
120°	124.3	149.2	264.0	499.3	602.6
122.5°	132.0	160.7	260.2	464.9	558.6
125°	139.7	172.2	258.3	436.2	520.4
127.5°	147.3	179.8	258.3	415.2	485.9
130°	155.0	183.6	256.4	394.1	457.3
132.5°	162.6	185.5	256.4	378.8	432.4
135°	168.3	189.4	256.4	363.5	411.4
137.5°	176.0	193.3	256.4	350.1	394.1
140°	181.7	199.0	256.4	336.7	375.0
142.5°	189.4	204.7	256.4	323.3	357.8
145°	197.1	210.5	254.5	313.8	340.5
147.5°	204.7	216.2	252.6	304.2	325.2
150°	210.5	221.9	252.6	294.7	311.9
152.5°	218.1	227.6	250.7	285.0	300.4
155°	223.8	231.5	250.7	279.3	288.8
157.5°	229.5	237.2	250.7	273.6	281.2
160°	235.3	241.1	252.6	269.7	275.5
162.5°	241.1	244.9	252.6	265.9	269.7
165°	244.9	246.8	252.6	264.0	265.9
167.5°	248.7	250.7	252.6	262.1	262.1
170°	250.7	252.6	254.5	260.2	260.2
172.5°	254.5	254.5	254.5	258.3	258.3
175°	256.4	256.4	254.5	258.3	256.4
177.5°	256.4	256.4	254.5	258.3	256.4
180°	256.4	256.4	256.4	256.4	256.4

(END OF REPORT)