

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: P701279

Luminaire Tested: SQ4P-WB-150U-050D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701279
REPORT IS A COMBINATION OF REPORTS P700155 AND P700248
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-WB-150U-050D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT UPLIGHT, 500 LU
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

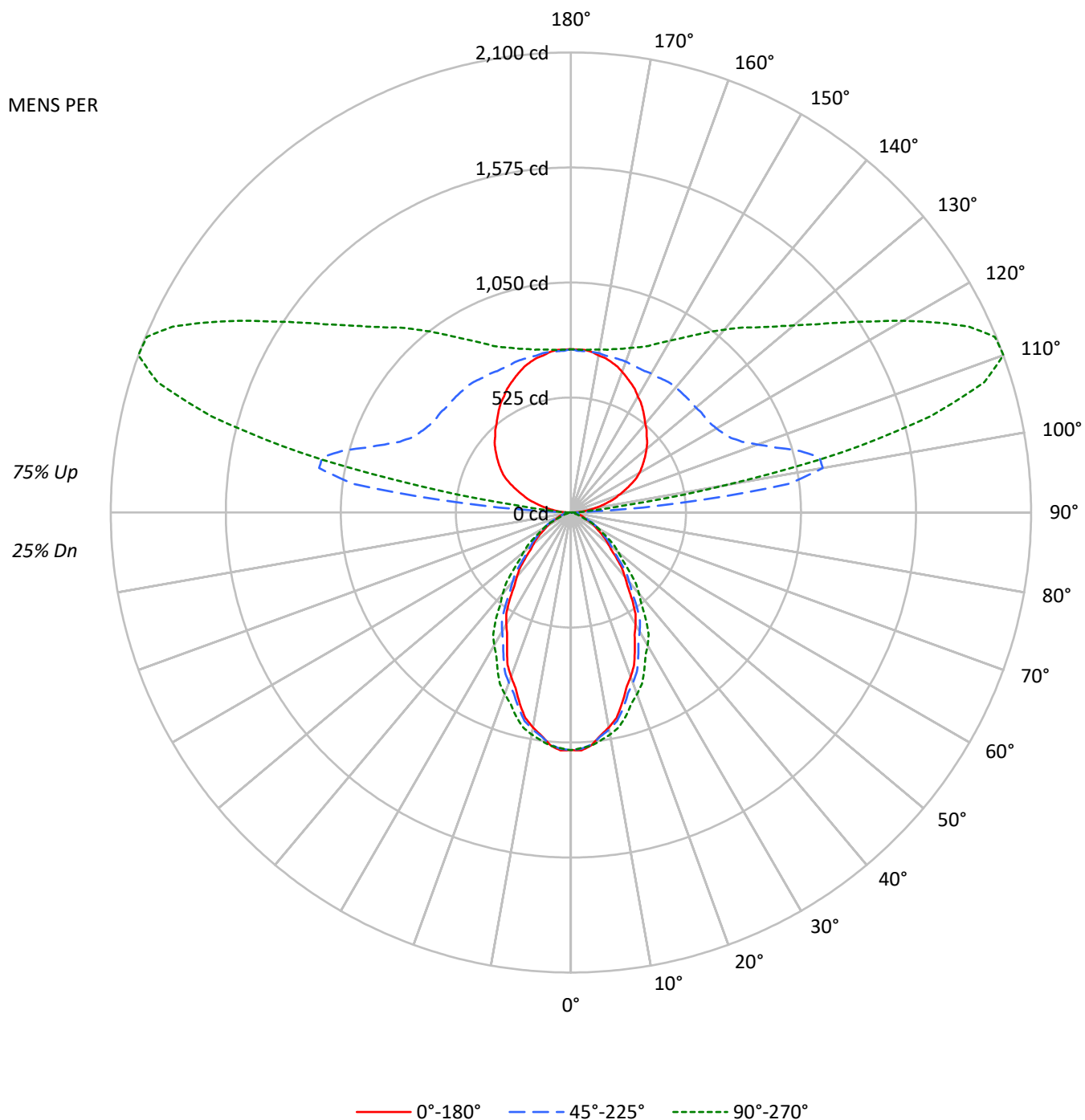
Lumens per Lamp: N/A
Luminaire Lumens: 6414.3 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 59.8
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33
1	93	89	85	82	82	79	76	74	61	59	58	45	44	43	30	29	29
2	85	78	73	68	75	70	65	61	54	51	49	40	38	37	27	26	25
3	78	69	62	57	69	62	56	52	48	45	42	36	34	32	24	23	22
4	71	61	54	49	63	55	49	44	43	39	36	32	30	28	22	21	19
5	66	55	47	42	58	49	43	38	39	35	31	29	26	24	20	19	17
6	60	49	42	37	54	44	38	33	35	31	27	27	24	21	19	17	16
7	56	45	37	32	50	40	34	29	32	28	24	24	21	19	17	15	14
8	52	41	33	28	46	37	30	26	29	25	22	22	19	17	16	14	13
9	48	37	30	25	43	34	27	23	27	22	19	21	18	16	15	13	12
10	45	34	27	23	40	31	25	21	25	20	18	19	16	14	14	12	11

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	1.6
10°-20°	258.8	4.0
20°-30°	335.1	5.2
30°-40°	328.2	5.1
40°-50°	251.2	3.9
50°-60°	167.4	2.6
60°-70°	91.3	1.4
70°-80°	38.1	0.6
80°-90°	12.6	0.2
90°-100°	296.3	4.6
100°-110°	1031.0	16.1
110°-120°	998.8	15.6
120°-130°	783.5	12.2
130°-140°	620.1	9.7
140°-150°	478.6	7.5
150°-160°	343.1	5.3
160°-170°	209.8	3.3
170°-180°	71.0	1.1
0°-30°	693.4	10.8
0°-40°	1021.6	15.9
0°-60°	1440.2	22.5
0°-90°	1582.2	24.7
90°-120°	2326.1	36.3
90°-150°	4208.3	65.6
90°-180°	4832.0	75.3
0°-180°	6414.3	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°	11	17	17	11	6	7
95°	50	172	500	128	78	53
105°	172	244	1084	1828	1700	181
115°	300	361	806	1700	2006	296
125°	406	500	750	1267	1511	363
135°	489	550	745	1056	1195	379
145°	572	611	739	911	989	358
155°	650	672	728	811	839	300
165°	711	717	733	767	772	201
175°	745	745	739	750	745	71
180°	745	745	745	745	745	

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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°	11.1	16.7	16.7	11.1	5.5
92.5°	27.8	83.3	77.8	33.3	27.8
95°	50.0	172.2	500.1	127.8	77.8
97.5°	77.8	194.5	1000.2	455.6	244.5
100°	105.6	205.5	1166.9	1094.6	705.6
102.5°	138.9	222.3	1161.3	1539.1	1266.9
105°	172.2	244.5	1083.5	1828.1	1700.3
107.5°	205.5	272.3	983.5	1955.8	1978.1
110°	233.3	300.1	905.7	1939.2	2100.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	266.7	327.9	844.5	1839.2	2094.7
115°	300.1	361.2	805.7	1700.3	2005.9
117.5°	333.4	400.0	783.4	1572.5	1878.1
120°	361.2	433.4	766.8	1450.2	1750.3
122.5°	383.4	466.8	755.7	1350.3	1622.4
125°	405.7	500.1	750.1	1266.9	1511.3
127.5°	427.8	522.3	750.1	1205.7	1411.4
130°	450.1	533.4	744.6	1144.6	1328.0
132.5°	472.3	538.9	744.6	1100.2	1255.7
135°	489.0	550.1	744.6	1055.7	1194.6
137.5°	511.2	561.2	744.6	1016.9	1144.6
140°	527.9	577.9	744.6	977.9	1089.0
142.5°	550.1	594.5	744.6	939.1	1039.0
145°	572.4	611.2	739.0	911.3	989.1
147.5°	594.5	627.9	733.4	883.5	944.6
150°	611.2	644.5	733.4	855.7	905.7
152.5°	633.5	661.2	727.9	827.9	872.3
155°	650.1	672.3	727.9	811.2	839.0
157.5°	666.8	689.0	727.9	794.6	816.8
160°	683.5	700.1	733.4	783.4	800.1
162.5°	700.1	711.3	733.4	772.4	783.4
165°	711.3	716.8	733.4	766.8	772.4
167.5°	722.3	727.9	733.4	761.2	761.2
170°	727.9	733.4	739.0	755.7	755.7
172.5°	739.0	739.0	739.0	750.1	750.1
175°	744.6	744.6	739.0	750.1	744.6
177.5°	744.6	744.6	739.0	750.1	744.6
180°	744.6	744.6	744.6	744.6	744.6

(END OF REPORT)