

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: P701280

Luminaire Tested: SQ4P-WB-150U-075D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701280
REPORT IS A COMBINATION OF REPORTS P700156 AND P700248
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-WB-150U-075D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT UPLIGHT, 750 LU
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

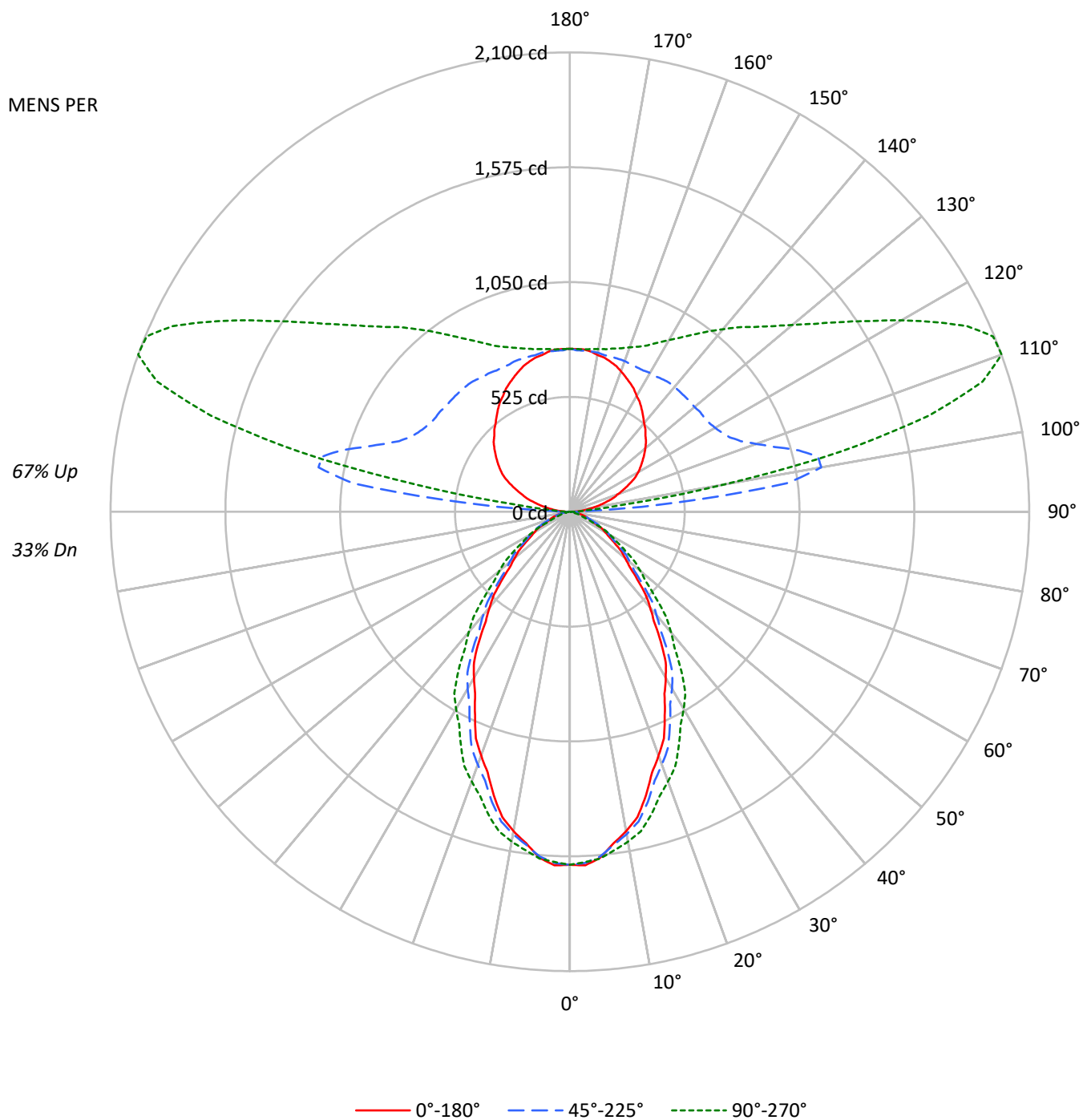
Lumens per Lamp: N/A
Luminaire Lumens: 7185.5 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 68.6
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40
1	95	91	87	84	85	82	79	76	66	64	62	51	49	48	37	36	35
2	87	80	75	70	78	73	68	64	58	55	52	45	43	41	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	51	47	47	42	39	37	34	32	28	26	24
5	67	57	49	44	61	52	45	41	42	38	34	33	30	28	25	23	22
6	62	51	44	38	56	47	40	36	38	34	30	30	27	25	23	21	19
7	58	46	39	34	52	42	36	31	35	30	27	28	25	22	21	19	18
8	54	42	35	30	49	39	32	28	32	27	24	26	22	20	20	18	16
9	50	39	32	27	45	35	29	25	29	25	22	24	20	18	18	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°	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	2.1
10°-20°	385.0	5.4
20°-30°	498.7	6.9
30°-40°	488.3	6.8
40°-50°	373.8	5.2
50°-60°	249.1	3.5
60°-70°	135.9	1.9
70°-80°	56.6	0.8
80°-90°	17.8	0.2
90°-100°	296.3	4.1
100°-110°	1031.0	14.3
110°-120°	998.8	13.9
120°-130°	783.5	10.9
130°-140°	620.1	8.6
140°-150°	478.6	6.7
150°-160°	343.1	4.8
160°-170°	209.8	2.9
170°-180°	71.0	1.0
0°-30°	1031.7	14.4
0°-40°	1520.0	21.2
0°-60°	2142.9	29.8
0°-90°	2353.3	32.8
90°-120°	2326.1	32.4
90°-150°	4208.3	58.6
90°-180°	4832.0	67.2
0°-180°	7185.5	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°	11	17	17	11	6	8
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°	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°	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)