

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: P521581

Luminaire Tested: SQ4-F-100U-100D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521581
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-38)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-100U-100D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9080.8 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

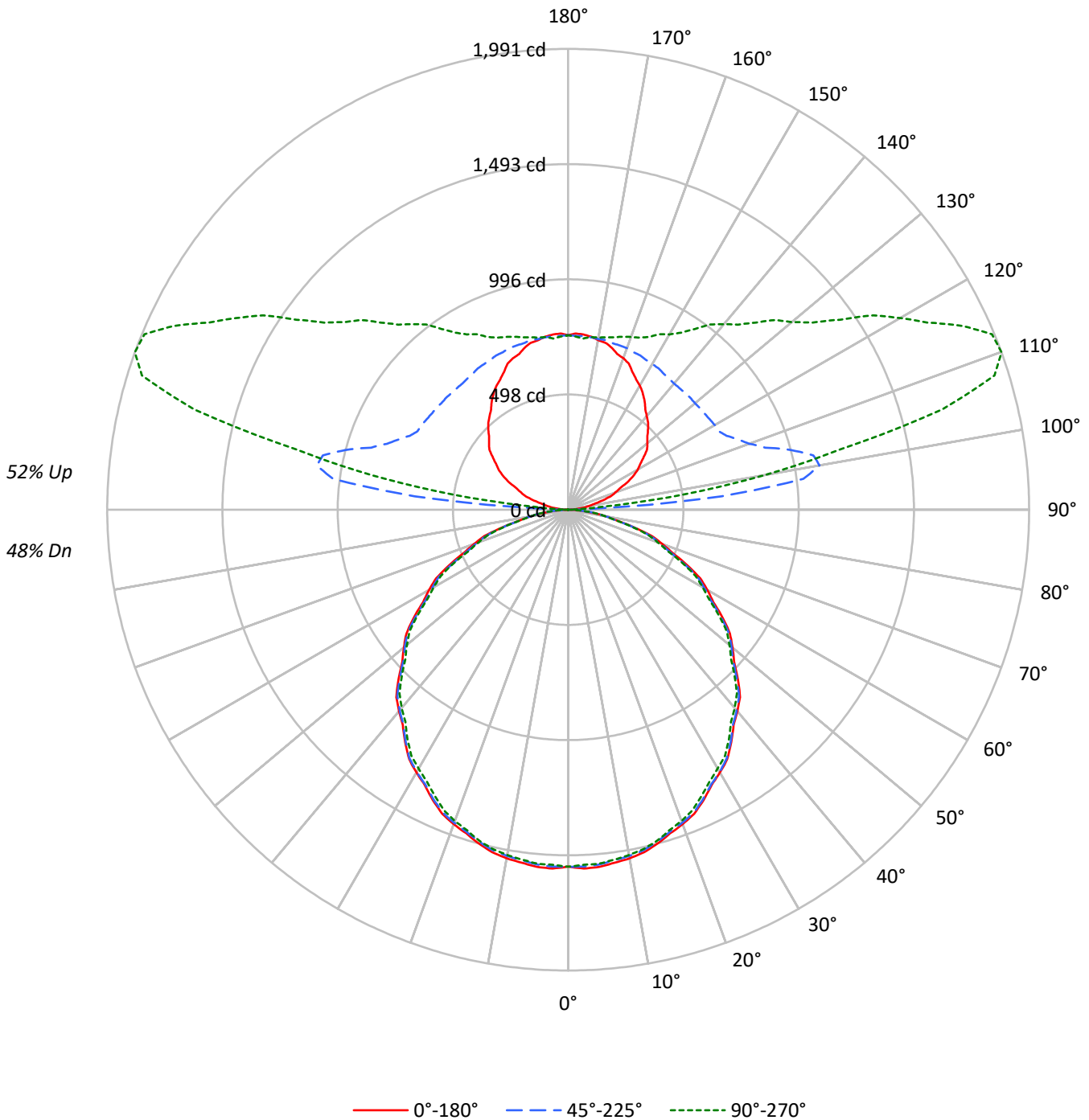
Input Watts (W): 74.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			20
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48
1	97	93	89	85	89	86	82	79	72	70	67	60	58	56	48	47	46	41
2	88	81	75	70	81	75	69	65	63	59	56	52	49	47	42	40	38	34
3	81	71	64	58	74	66	59	54	55	51	47	46	42	39	37	35	32	28
4	74	63	55	49	67	58	51	46	49	44	39	41	37	34	33	30	28	24
5	67	56	48	42	62	52	44	39	44	38	34	37	32	29	30	27	24	21
6	62	50	42	36	57	46	39	34	39	34	29	33	29	25	27	24	21	18
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	25	21	19	16
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17	14
9	49	37	30	25	45	35	28	23	30	24	20	25	21	18	21	17	15	13
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14230	14230	14230
5°	14345	14255	14215
10°	14330	14230	14190
15°	14263	14180	14150
20°	14197	14134	14050
25°	14088	14033	13880
30°	13968	13934	13762
35°	13825	13777	13633
40°	13688	13636	13469
45°	13529	13417	13263
50°	13298	13207	13053
55°	13111	12921	12767
60°	12808	12551	12372
65°	12393	12042	11856
70°	11672	11297	11095
75°	10537	10270	10117
80°	8708	8708	8591
85°	6119	7029	7262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13529 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.0	1.6
10°-20°	418.3	4.6
20°-30°	632.6	7.0
30°-40°	761.7	8.4
40°-50°	791.1	8.7
50°-60°	717.1	7.9
60°-70°	546.1	6.0
70°-80°	305.1	3.4
80°-90°	79.2	0.9
90°-100°	343.6	3.8
100°-110°	977.6	10.8
110°-120°	936.6	10.3
120°-130°	741.3	8.2
130°-140°	595.0	6.6
140°-150°	465.8	5.1
150°-160°	340.8	3.8
160°-170°	211.1	2.3
170°-180°	71.6	0.8
0°-30°	1196.9	13.2
0°-40°	1958.6	21.6
0°-60°	3466.9	38.2
0°-90°	4397.3	48.4
90°-120°	2257.8	24.9
90°-150°	4059.9	44.7
90°-180°	4684.0	51.6
0°-180°	9080.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1542	1542	1542	1542	1542	
5°	1549	1534	1539	1535	1535	147
15°	1493	1480	1485	1481	1481	421
25°	1384	1372	1378	1368	1364	637
35°	1228	1220	1223	1211	1210	768
45°	1037	1031	1028	1018	1016	799
55°	815	812	803	794	794	727
65°	568	561	552	544	543	560
75°	296	291	288	284	284	313
85°	58	62	66	68	69	72
90°	0	0	0	0	0	4
95°	37	148	665	230	142	43
105°	152	230	996	1760	1673	161
115°	282	341	755	1600	1879	278
125°	398	442	721	1196	1431	357
135°	487	528	712	1011	1142	376
145°	575	604	718	875	953	359
155°	656	672	735	791	823	303
165°	725	728	744	760	771	204
175°	760	756	753	748	742	72
180°	754	754	754	754	754	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1542.4	1542.4	1542.4	1542.4	1542.4
2.5°	1551.9	1539.3	1543.3	1540.6	1535.6
5°	1548.9	1534.2	1539.2	1534.9	1534.9
7.5°	1538.1	1524.1	1527.4	1524.9	1524.9
10°	1529.6	1513.9	1518.9	1514.6	1514.6
12.5°	1515.9	1501.8	1506.9	1502.6	1501.7
15°	1493.2	1479.5	1484.6	1481.4	1481.4
17.5°	1465.7	1452.7	1459.3	1454.1	1452.5
20°	1446.0	1431.4	1439.6	1431.0	1431.0
22.5°	1422.0	1409.0	1416.5	1406.1	1404.5
25°	1383.9	1372.4	1378.5	1367.7	1363.5
27.5°	1341.1	1328.7	1337.8	1325.8	1323.5
30°	1311.1	1299.5	1307.9	1294.9	1291.8
32.5°	1278.5	1268.7	1274.4	1262.4	1260.1
35°	1227.5	1220.2	1223.2	1211.4	1210.4
37.5°	1173.3	1166.2	1169.0	1155.9	1155.1
40°	1136.5	1130.2	1132.2	1118.3	1118.3
42.5°	1098.8	1091.6	1091.9	1078.8	1078.0
45°	1036.9	1030.6	1028.3	1017.6	1016.5
47.5°	971.1	968.2	964.7	953.9	953.9
50°	926.5	924.4	920.1	909.4	909.4
52.5°	881.1	879.9	873.8	864.8	863.1
55°	815.1	812.0	803.3	793.7	793.7
57.5°	742.9	740.4	730.7	723.0	721.1
60°	694.1	689.9	680.2	671.6	670.5
62.5°	643.5	640.2	629.6	621.9	620.0
65°	567.7	561.4	551.6	544.1	543.1
67.5°	487.6	480.5	471.9	465.7	463.6
70°	432.7	426.5	418.8	413.4	411.3
72.5°	378.8	372.5	365.7	362.0	361.6
75°	295.6	291.4	288.1	283.8	283.8
77.5°	214.4	211.9	210.2	208.0	208.0
80°	163.9	163.9	163.9	161.7	161.7
82.5°	117.6	120.1	121.9	120.6	120.6
85°	57.8	62.0	66.4	67.5	68.6
87.5°	16.3	21.3	26.6	27.4	28.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.5	60.8	141.1	41.1	31.0
95°	37.3	148.0	665.1	230.2	141.9
97.5°	68.5	173.4	1024.3	733.0	502.3
100°	90.3	188.4	1102.3	1116.6	860.1
102.5°	114.4	204.7	1085.1	1429.2	1205.2
105°	151.9	230.4	996.2	1759.7	1672.8
107.5°	190.1	260.4	892.5	1852.9	1930.3
110°	216.4	282.3	832.8	1817.3	1991.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	241.7	304.2	792.7	1732.9	1980.7
115°	282.4	341.3	755.4	1600.3	1879.2
117.5°	318.2	373.4	733.3	1455.4	1750.8
120°	346.9	393.1	731.1	1372.5	1655.6
122.5°	369.8	416.1	725.3	1299.8	1562.7
125°	398.5	441.9	721.0	1196.5	1430.6
127.5°	429.7	470.4	718.7	1134.8	1327.7
130°	445.8	486.4	715.3	1091.8	1260.0
132.5°	463.0	502.5	715.3	1058.2	1213.0
135°	487.4	528.0	712.4	1010.7	1142.5
137.5°	510.3	549.8	712.1	970.4	1084.3
140°	527.5	568.2	711.0	937.1	1046.4
142.5°	547.0	580.9	714.4	910.5	1008.6
145°	574.8	604.2	718.2	874.7	953.2
147.5°	598.6	627.2	724.5	838.7	906.5
150°	619.2	638.9	726.8	826.7	874.4
152.5°	635.3	656.0	729.0	810.6	854.9
155°	656.5	671.9	735.4	790.6	822.8
157.5°	682.9	692.1	736.8	781.5	804.4
160°	696.7	703.7	742.5	774.5	794.1
162.5°	704.7	712.8	743.7	768.7	783.8
165°	725.3	728.1	744.0	760.0	771.2
167.5°	739.4	736.8	750.6	757.8	762.3
170°	744.0	742.6	748.3	749.8	755.4
172.5°	754.3	749.5	751.7	747.5	752.0
175°	759.7	755.5	752.6	748.1	742.5
177.5°	762.0	755.3	751.7	747.1	748.3
180°	754.0	754.0	754.0	754.0	754.0

(END OF REPORT)