

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: P937006

Luminaire Tested: SQ4-FB-050U-125D-B50-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937006
REPORT IS A COMBINATION OF REPORTS P933472 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-B50-1D-UNV-W2A-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

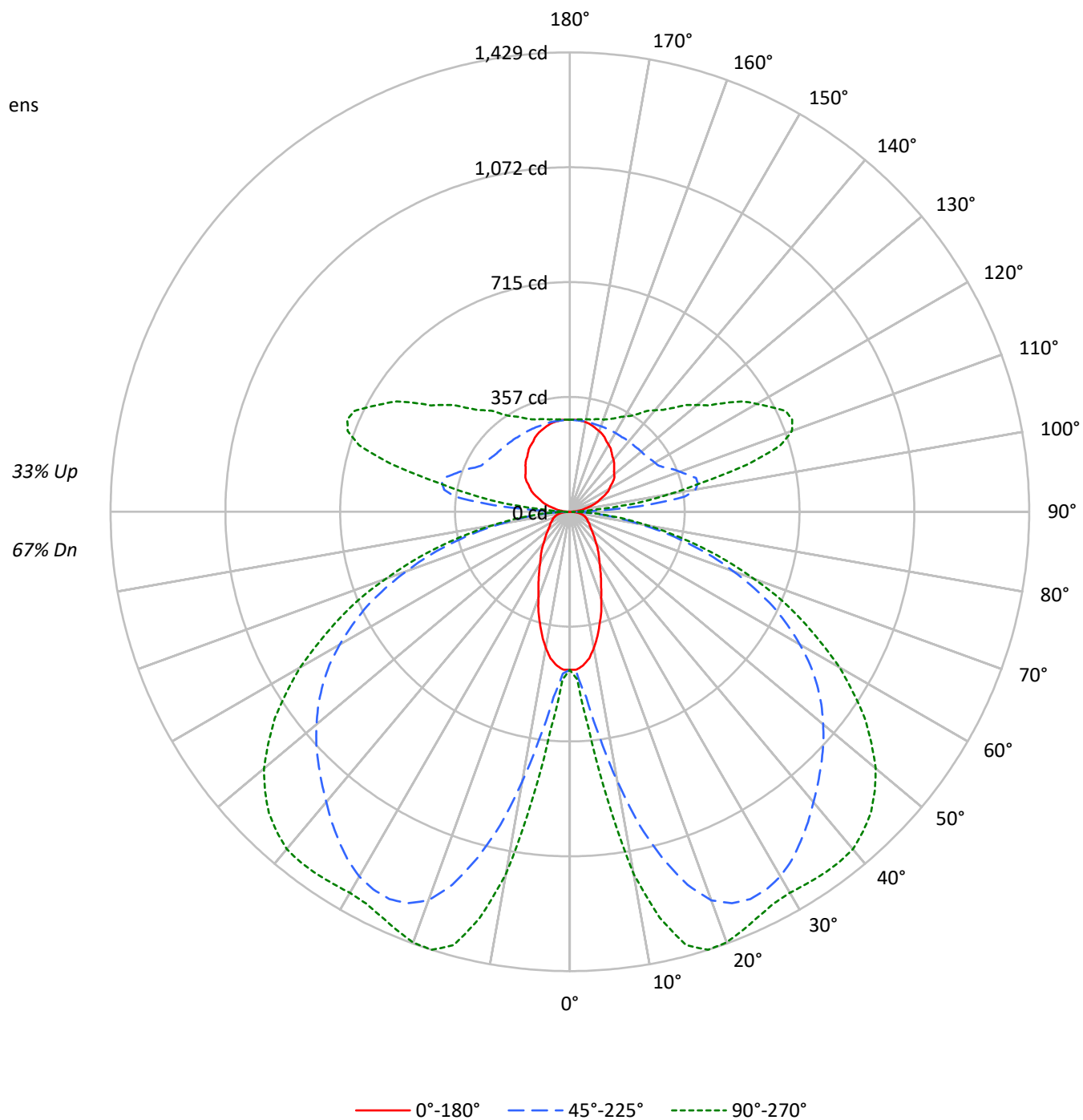
Lumens per Lamp: N/A
Luminaire Lumens: 5662.8 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4561	4561	4561
5°	4451	5267	6130
10°	4032	7672	10163
15°	3423	10017	12272
20°	2784	11600	12508
25°	2320	12130	12253
30°	1953	12196	12230
35°	1724	11985	12546
40°	1501	11712	12873
45°	1356	11508	12923
50°	1241	11324	12709
55°	1184	11058	12146
60°	1210	10558	11256
65°	1252	9805	10034
70°	1323	8533	8477
75°	1453	6940	6616
80°	1554	4797	4458
85°	1308	2530	2282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 12923 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.6	1.1
10°-20°	281.8	5.0
20°-30°	492.9	8.7
30°-40°	634.5	11.2
40°-50°	708.7	12.5
50°-60°	678.8	12.0
60°-70°	537.9	9.5
70°-80°	316.3	5.6
80°-90°	89.0	1.6
90°-100°	139.8	2.5
100°-110°	367.6	6.5
110°-120°	381.1	6.7
120°-130°	305.7	5.4
130°-140°	239.9	4.2
140°-150°	184.1	3.3
150°-160°	132.6	2.3
160°-170°	81.1	1.4
170°-180°	27.4	0.5
0°-30°	838.2	14.8
0°-40°	1472.7	26.0
0°-60°	2860.2	50.5
0°-90°	3803.4	67.2
90°-120°	888.5	15.7
90°-150°	1618.3	28.6
90°-180°	1859.0	32.8
0°-180°	5662.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	492	492	492	492	492	
5°	479	514	578	654	678	44
15°	359	662	1116	1353	1396	100
25°	229	751	1329	1388	1389	106
35°	155	718	1252	1323	1375	97
45°	106	572	1106	1268	1324	82
55°	76	364	939	1090	1120	69
65°	60	193	697	784	795	60
75°	44	118	382	420	422	46
85°	16	36	95	104	106	17
90°	2	5	15	7	7	3
95°	18	72	241	124	84	21
105°	66	100	406	617	576	70
115°	118	143	326	649	741	116
125°	164	183	296	500	590	145
135°	195	215	287	404	458	151
145°	226	241	283	345	372	142
155°	256	263	283	311	320	117
165°	276	280	283	294	298	78
175°	287	287	285	289	289	27
180°	287	287	287	287	287	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	491.5	491.5	491.5	491.5	491.5	491.5	491.5	491.5	491.5	491.5	491.5
2.5°	491.5	491.5	494.6	496.2	499.4	501.0	504.2	507.3	516.8	518.4	521.5
5°	478.9	485.2	505.8	513.6	535.7	565.8	578.4	599.0	641.7	654.3	662.2
7.5°	459.9	474.1	524.7	537.3	592.6	671.6	704.9	749.2	817.1	850.2	877.1
10°	429.8	459.9	549.9	580.0	670.1	790.2	851.8	913.5	1016.2	1062.1	1079.4
12.5°	396.7	445.7	576.8	617.9	747.6	923.0	997.2	1065.2	1182.2	1243.8	1253.2
15°	358.7	425.2	602.1	662.2	829.7	1033.6	1115.8	1199.5	1308.6	1352.8	1363.9
17.5°	325.6	409.4	625.9	689.1	892.9	1133.1	1216.9	1286.5	1374.9	1405.0	1412.9
20°	284.5	384.1	641.7	723.8	959.3	1205.9	1286.5	1340.2	1400.3	1419.2	1422.4
22.5°	254.4	357.2	651.1	736.5	1003.6	1250.1	1318.1	1360.7	1401.8	1408.2	1409.7
25°	229.2	327.2	649.6	750.7	1041.5	1277.0	1329.2	1360.7	1384.5	1387.6	1387.6
27.5°	205.5	293.9	643.2	753.8	1069.9	1283.3	1324.4	1346.5	1357.6	1363.9	1363.9
30°	184.9	262.4	627.5	747.6	1082.6	1277.0	1310.1	1321.2	1332.3	1341.8	1346.5
32.5°	169.1	232.3	603.7	734.9	1084.2	1261.2	1284.9	1291.2	1307.0	1329.2	1337.0
35°	154.9	202.3	576.8	717.5	1074.7	1235.9	1251.7	1258.0	1289.6	1322.8	1333.8
37.5°	140.7	180.2	542.1	687.5	1060.5	1205.9	1216.9	1228.0	1277.0	1316.5	1329.2
40°	126.5	161.2	501.0	654.3	1038.3	1169.5	1179.0	1196.4	1261.2	1307.0	1319.6
42.5°	115.3	145.4	456.7	619.5	1009.8	1128.5	1142.7	1168.0	1242.2	1291.2	1305.5
45°	105.9	129.6	409.4	572.1	973.5	1085.8	1106.3	1141.1	1220.1	1267.5	1280.1
47.5°	96.4	118.5	360.3	523.1	934.0	1043.1	1069.9	1109.5	1190.0	1235.9	1247.0
50°	88.5	107.5	311.3	470.9	891.3	997.2	1028.9	1069.9	1152.1	1194.8	1209.1
52.5°	82.2	98.0	265.5	418.8	842.4	949.8	986.2	1028.9	1106.3	1147.4	1156.9
55°	75.8	90.0	226.0	363.5	791.8	899.3	938.8	979.9	1055.7	1090.4	1096.8
57.5°	72.7	83.8	192.8	311.3	738.0	842.4	886.6	924.6	995.6	1022.5	1028.9
60°	68.0	79.0	167.6	267.1	679.6	788.7	826.6	864.5	924.6	946.7	951.4
62.5°	63.2	75.8	148.6	224.4	619.5	725.4	763.4	798.1	848.7	864.5	870.8
65°	60.1	72.7	134.3	192.8	557.9	659.0	697.0	727.0	768.1	783.9	787.1
67.5°	56.9	69.6	123.3	166.0	496.2	592.6	621.1	649.6	681.2	697.0	698.5
70°	52.1	66.4	113.8	147.0	433.0	516.8	540.5	570.5	595.8	603.7	608.5
72.5°	49.0	61.6	107.5	132.7	368.3	444.1	466.3	483.6	505.8	513.6	513.6
75°	44.3	55.3	101.2	118.5	301.9	363.5	382.5	399.8	417.2	420.4	415.6
77.5°	39.5	49.0	87.0	99.6	235.5	287.7	303.5	312.9	327.2	330.3	331.9
80°	33.2	42.7	68.0	77.4	170.6	211.7	222.9	230.7	243.4	243.4	246.6
82.5°	25.3	33.2	49.0	55.3	115.3	145.4	154.9	159.6	167.6	167.6	167.6
85°	15.8	20.5	31.6	36.3	69.6	88.5	94.8	96.4	102.7	104.3	104.3
87.5°	7.9	11.0	20.5	22.1	36.3	45.9	45.9	49.0	49.0	47.4	45.9
90°	2.0	3.5	5.0	5.4	8.5	12.6	14.7	13.0	9.7	7.3	7.3
92.5°	7.7	20.7	33.9	37.2	52.2	72.3	82.4	72.2	51.8	36.6	35.1
95°	18.5	42.4	66.4	72.4	128.5	203.3	240.8	214.8	163.0	124.1	119.7
97.5°	31.9	53.1	74.2	79.5	173.1	297.9	360.3	344.0	311.2	286.6	278.2
100°	42.3	61.5	80.7	85.5	189.3	327.8	397.1	398.4	400.8	402.6	392.6
102.5°	51.2	69.1	87.0	91.4	196.8	337.3	407.5	428.4	470.2	501.5	492.9
105°	66.2	81.4	96.5	100.3	202.3	338.4	406.4	453.2	546.8	617.0	612.4
107.5°	81.6	95.7	109.8	113.4	203.3	323.4	383.3	448.6	579.2	677.1	678.2
110°	92.0	104.7	117.5	120.7	201.8	310.0	364.1	437.0	583.0	692.5	697.2

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	102.2	114.3	126.5	129.5	201.8	298.3	346.5	421.2	570.6	682.7	690.0
115°	117.6	128.8	140.0	142.8	203.7	284.9	325.5	397.4	541.3	649.3	659.5
117.5°	132.8	143.0	153.2	155.7	207.5	276.6	311.1	376.0	505.9	603.3	614.6
120°	141.7	151.3	160.8	163.3	210.6	273.8	305.3	364.6	483.3	572.4	583.4
122.5°	150.4	160.1	169.7	172.1	215.0	272.3	300.8	354.3	461.2	541.3	552.2
125°	163.6	172.4	181.2	183.4	221.0	271.0	296.1	341.5	432.3	500.3	510.3
127.5°	174.4	183.3	192.2	194.5	227.0	270.4	292.1	331.0	408.9	467.4	475.8
130°	180.2	189.8	199.3	201.7	231.4	270.8	290.5	325.2	394.6	446.6	454.4
132.5°	186.1	195.8	205.3	207.7	234.9	271.0	289.2	320.2	382.3	428.9	435.9
135°	195.0	203.7	212.5	214.6	238.7	270.8	286.8	312.8	364.8	403.9	409.8
137.5°	204.1	212.7	221.4	223.5	244.5	272.4	286.5	308.4	352.4	385.4	390.3
140°	211.6	219.5	227.5	229.5	248.0	272.7	285.1	304.1	342.1	370.6	375.2
142.5°	217.3	224.7	232.0	233.9	251.0	273.7	285.1	301.8	335.1	360.2	364.1
145°	226.2	232.6	239.0	240.6	254.8	273.8	283.2	296.8	324.1	344.6	347.5
147.5°	235.1	241.3	247.5	249.1	260.5	275.6	283.2	293.9	315.4	331.5	334.0
150°	240.8	246.4	252.1	253.5	263.4	276.6	283.2	292.2	310.4	324.0	326.1
152.5°	246.8	251.1	255.4	256.4	265.3	277.2	283.2	290.9	306.4	318.0	319.5
155°	255.6	258.8	262.0	262.7	269.6	278.6	283.2	289.4	301.7	310.9	312.0
157.5°	262.2	265.3	268.3	269.1	273.8	280.0	283.2	288.0	297.6	304.8	305.5
160°	266.7	269.0	271.4	272.0	275.7	280.7	283.2	287.3	295.5	301.7	302.1
162.5°	271.0	272.8	274.6	275.1	277.8	281.4	283.2	286.6	293.6	298.8	299.2
165°	275.9	277.5	279.2	279.5	280.8	282.3	283.2	285.6	290.6	294.3	294.7
167.5°	280.3	281.0	281.8	282.0	283.0	284.4	285.1	286.7	290.0	292.4	292.6
170°	283.2	283.9	284.7	284.9	285.0	285.1	285.1	286.7	290.0	292.4	292.4
172.5°	284.7	284.9	285.1	285.1	285.1	285.1	285.1	286.4	288.9	290.8	290.7
175°	286.8	286.8	286.8	286.8	286.3	285.4	285.1	285.9	287.6	288.8	288.8
177.5°	286.8	286.8	286.8	286.8	286.4	285.8	285.5	286.2	287.5	288.4	288.2
180°	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	491.5	491.5
2.5°	524.7	521.5
5°	674.8	678.0
7.5°	908.8	907.2
10°	1130.0	1144.2
12.5°	1291.2	1294.3
15°	1389.2	1395.5
17.5°	1427.2	1428.7
20°	1428.7	1425.6
22.5°	1411.3	1408.2
25°	1390.7	1389.2
27.5°	1371.8	1373.4
30°	1363.9	1368.7
32.5°	1363.9	1371.8
35°	1367.1	1374.9
37.5°	1365.5	1374.9
40°	1359.2	1370.2
42.5°	1341.8	1349.6
45°	1314.9	1324.4
47.5°	1280.1	1286.5
50°	1235.9	1242.2
52.5°	1180.6	1182.2
55°	1114.2	1120.5
57.5°	1043.1	1044.7
60°	964.1	968.8
62.5°	880.3	880.3
65°	791.8	794.9
67.5°	700.1	708.1
70°	606.9	608.5
72.5°	515.2	515.2
75°	420.4	422.0
77.5°	330.3	330.3
80°	245.0	246.6
82.5°	169.1	172.2
85°	105.9	105.9
87.5°	49.0	44.3
90°	7.3	7.3
92.5°	29.3	23.4
95°	102.1	84.5
97.5°	244.7	211.2
100°	352.6	312.6
102.5°	458.7	424.5
105°	594.0	575.6
107.5°	682.6	687.1
110°	716.4	735.5

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	719.5	748.9
115°	700.3	741.1
117.5°	659.9	705.2
120°	627.3	671.3
122.5°	595.6	638.9
125°	550.2	590.2
127.5°	509.5	543.2
130°	485.6	516.7
132.5°	463.7	491.7
135°	433.9	457.9
137.5°	409.9	429.6
140°	393.6	412.0
142.5°	380.0	395.8
145°	359.6	371.5
147.5°	343.9	353.8
150°	334.1	342.1
152.5°	325.6	331.7
155°	316.0	320.0
157.5°	308.3	311.1
160°	303.7	305.3
162.5°	300.7	302.2
165°	296.4	298.0
167.5°	293.3	293.9
170°	292.4	292.4
172.5°	290.1	289.5
175°	288.8	288.8
177.5°	287.6	286.8
180°	286.8	286.8

(END OF REPORT)