

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: P937303

Luminaire Tested: SQ4-FB-075U-100D-B40-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937303
REPORT IS A COMBINATION OF REPORTS P933511 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-B40-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

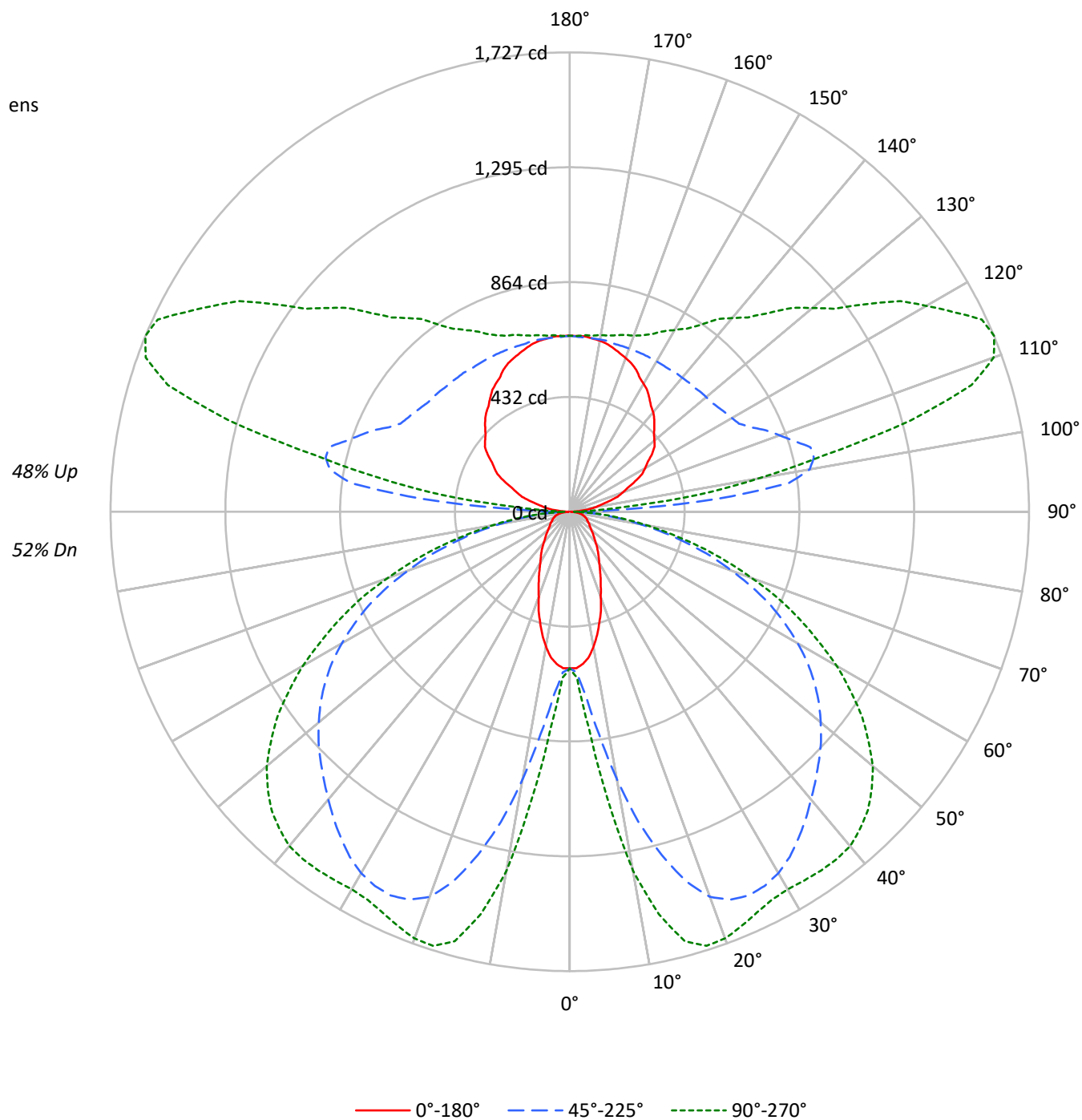
Lumens per Lamp: N/A
Luminaire Lumens: 8845.2 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 76.8
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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3641	3641	3641
5°	3556	4207	4894
10°	3224	6131	8114
15°	2740	8009	9798
20°	2229	9279	9986
25°	1859	9707	9782
30°	1567	9766	9764
35°	1385	9602	10016
40°	1206	9388	10277
45°	1091	9231	10317
50°	1000	9089	10147
55°	957	8882	9697
60°	979	8489	8986
65°	1016	7892	8010
70°	1081	6878	6768
75°	1193	5602	5281
80°	1292	3880	3559
85°	1127	2054	1821

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10317 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.1	0.9
10°-20°	337.5	3.8
20°-30°	590.2	6.7
30°-40°	759.8	8.6
40°-50°	848.7	9.6
50°-60°	812.9	9.2
60°-70°	644.2	7.3
70°-80°	378.8	4.3
80°-90°	107.8	1.2
90°-100°	322.5	3.6
100°-110°	847.9	9.6
110°-120°	879.2	9.9
120°-130°	705.2	8.0
130°-140°	553.4	6.3
140°-150°	424.7	4.8
150°-160°	305.9	3.5
160°-170°	187.1	2.1
170°-180°	63.2	0.7
0°-30°	1003.8	11.3
0°-40°	1763.7	19.9
0°-60°	3425.2	38.7
0°-90°	4556.0	51.5
90°-120°	2049.7	23.2
90°-150°	3733.0	42.2
90°-180°	4289.0	48.5
0°-180°	8845.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	589	589	589	589	589	
5°	574	615	693	784	812	53
15°	430	793	1336	1620	1671	120
25°	274	899	1592	1662	1664	126
35°	186	859	1499	1584	1647	116
45°	127	685	1325	1518	1586	98
55°	91	435	1124	1306	1342	83
65°	72	231	835	939	952	71
75°	53	142	458	504	505	55
85°	19	44	114	125	127	20
90°	4	12	34	17	17	5
95°	43	167	556	286	195	47
105°	153	231	937	1423	1328	162
115°	271	330	751	1498	1710	268
125°	377	423	683	1154	1362	335
135°	450	495	662	932	1056	348
145°	522	555	653	795	857	327
155°	590	606	653	717	738	271
165°	636	645	653	679	687	180
175°	662	662	658	666	666	63
180°	662	662	662	662	662	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6
2.5°	588.6	588.6	592.4	594.3	598.0	599.9	603.8	607.6	618.8	620.8	624.6
5°	573.5	581.0	605.7	615.1	641.6	677.6	692.7	717.3	768.4	783.6	793.0
7.5°	550.7	567.7	628.4	643.5	709.8	804.4	844.1	897.1	978.5	1018.2	1050.4
10°	514.7	550.7	658.7	694.6	802.5	946.3	1020.1	1094.0	1217.0	1271.9	1292.7
12.5°	475.0	533.7	690.8	740.0	895.2	1105.3	1194.2	1275.6	1415.7	1489.5	1500.9
15°	429.7	509.1	721.1	793.0	993.6	1237.8	1336.2	1436.5	1567.1	1620.1	1633.3
17.5°	389.9	490.2	749.5	825.2	1069.3	1357.1	1457.3	1540.6	1646.6	1682.5	1692.0
20°	340.6	459.9	768.4	866.9	1148.9	1444.1	1540.6	1605.0	1676.9	1699.6	1703.3
22.5°	304.7	427.7	779.8	881.9	1201.8	1497.1	1578.4	1629.5	1678.8	1686.3	1688.2
25°	274.5	391.7	777.8	899.0	1247.2	1529.2	1591.7	1629.5	1658.0	1661.7	1661.7
27.5°	246.0	352.0	770.3	902.8	1281.3	1536.8	1586.0	1612.5	1625.8	1633.3	1633.3
30°	221.5	314.2	751.4	895.2	1296.4	1529.2	1569.0	1582.2	1595.5	1606.8	1612.5
32.5°	202.6	278.2	722.9	880.0	1298.3	1510.3	1538.7	1546.2	1565.1	1591.7	1601.2
35°	185.5	242.3	690.8	859.2	1287.0	1480.1	1499.0	1506.5	1544.3	1584.2	1597.3
37.5°	168.5	215.7	649.2	823.3	1270.0	1444.1	1457.3	1470.6	1529.2	1576.5	1591.7
40°	151.4	193.0	599.9	783.6	1243.4	1400.5	1411.9	1432.7	1510.3	1565.1	1580.3
42.5°	138.2	174.1	546.9	741.9	1209.4	1351.3	1368.3	1398.6	1487.6	1546.2	1563.3
45°	126.8	155.2	490.2	685.1	1165.9	1300.2	1324.9	1366.5	1461.1	1517.9	1533.1
47.5°	115.5	141.9	431.6	626.5	1118.5	1249.1	1281.3	1328.6	1425.1	1480.1	1493.2
50°	106.0	128.7	372.8	564.0	1067.4	1194.2	1232.1	1281.3	1379.7	1430.8	1447.9
52.5°	98.5	117.4	317.9	501.6	1008.8	1137.5	1181.0	1232.1	1324.9	1374.1	1385.4
55°	90.8	107.9	270.6	435.3	948.2	1076.9	1124.2	1173.4	1264.2	1305.9	1313.5
57.5°	87.1	100.3	230.9	372.8	883.9	1008.8	1061.8	1107.2	1192.3	1224.5	1232.1
60°	81.4	94.6	200.6	319.8	813.9	944.4	989.9	1035.2	1107.2	1133.7	1139.3
62.5°	75.7	90.8	177.9	268.7	741.9	868.7	914.1	955.8	1016.3	1035.2	1042.9
65°	71.9	87.1	160.9	230.9	668.1	789.2	834.7	870.6	919.9	938.8	942.5
67.5°	68.1	83.3	147.6	198.7	594.3	709.8	743.8	777.8	815.8	834.7	836.6
70°	62.5	79.5	136.3	176.0	518.6	618.8	647.3	683.2	713.5	722.9	728.7
72.5°	58.6	73.8	128.7	159.0	441.0	531.8	558.3	579.1	605.7	615.1	615.1
75°	53.0	66.3	121.1	141.9	361.5	435.3	458.0	478.8	499.7	503.5	497.7
77.5°	47.3	58.6	104.1	119.3	282.0	344.5	363.4	374.7	391.7	395.6	397.5
80°	39.7	51.1	81.4	92.7	204.4	253.6	266.8	276.3	291.5	291.5	295.3
82.5°	30.3	39.7	58.6	66.3	138.2	174.1	185.5	191.2	200.6	200.6	200.6
85°	18.9	24.6	37.8	43.5	83.3	106.0	113.5	115.5	123.0	124.9	124.9
87.5°	9.5	13.3	24.6	26.5	43.5	54.9	54.9	58.6	58.6	56.8	54.9
90°	4.4	7.9	11.6	12.4	19.5	28.9	33.7	30.0	22.5	16.9	16.9
92.5°	17.8	47.9	78.1	85.7	120.4	166.8	190.0	166.6	119.6	84.3	81.0
95°	42.6	97.9	153.1	166.9	296.4	469.2	555.5	495.7	376.1	286.4	276.3
97.5°	73.7	122.4	171.1	183.4	399.4	687.3	831.3	793.5	718.0	661.2	641.9
100°	97.7	141.9	186.1	197.2	436.8	756.4	916.1	918.9	924.4	928.5	905.5
102.5°	118.1	159.4	200.6	211.0	454.0	778.0	940.1	988.2	1084.6	1156.8	1137.0
105°	152.8	187.8	222.7	231.4	466.7	780.5	937.4	1045.3	1261.3	1423.2	1412.6
107.5°	188.3	220.9	253.5	261.6	469.1	745.8	884.1	1034.7	1335.9	1561.8	1564.4
110°	212.3	241.7	271.0	278.4	465.5	715.0	839.7	1008.1	1344.8	1597.3	1608.4

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	235.8	263.8	291.8	298.8	465.7	688.1	799.3	971.6	1316.2	1574.6	1591.6
115°	271.3	297.2	323.0	329.5	470.0	657.2	750.9	916.9	1248.9	1497.8	1521.3
117.5°	306.4	329.9	353.3	359.3	478.7	637.9	717.6	867.4	1167.0	1391.7	1417.8
120°	326.8	349.0	371.0	376.6	485.8	631.4	704.3	841.2	1114.9	1320.2	1345.6
122.5°	346.9	369.1	391.5	397.0	496.0	628.1	694.1	817.3	1063.8	1248.7	1273.7
125°	377.4	397.8	418.1	423.2	509.8	625.2	683.0	787.7	997.1	1154.1	1177.1
127.5°	402.3	422.9	443.3	448.5	523.5	623.6	673.7	763.5	943.3	1078.2	1097.7
130°	415.6	437.8	459.8	465.4	533.7	624.7	670.1	750.2	910.2	1030.3	1048.2
132.5°	429.4	451.5	473.6	479.1	541.8	625.2	667.0	738.6	881.9	989.4	1005.4
135°	449.8	470.0	490.1	495.2	550.7	624.7	661.6	721.6	841.6	931.6	945.4
137.5°	470.7	490.6	510.5	515.5	563.9	628.5	660.8	711.5	812.9	889.0	900.4
140°	488.0	506.3	524.8	529.4	572.1	629.2	657.6	701.4	789.1	854.8	865.4
142.5°	501.4	518.4	535.4	539.6	578.9	631.4	657.6	696.1	773.1	830.8	840.0
145°	521.8	536.6	551.3	555.0	587.8	631.4	653.2	684.7	747.7	794.8	801.7
147.5°	542.2	556.6	571.0	574.6	600.8	635.7	653.2	678.0	727.5	764.7	770.4
150°	555.5	568.5	581.6	584.8	607.7	638.0	653.2	674.1	716.0	747.4	752.1
152.5°	569.3	579.2	589.0	591.5	612.1	639.5	653.2	671.1	706.8	733.6	737.2
155°	589.7	597.0	604.3	606.1	621.8	642.7	653.2	667.4	695.9	717.2	719.5
157.5°	604.8	612.0	619.0	620.8	631.6	646.1	653.2	664.3	686.4	703.0	704.6
160°	615.0	620.6	626.1	627.4	636.0	647.5	653.2	662.7	681.6	695.8	696.8
162.5°	625.2	629.4	633.5	634.6	640.8	649.1	653.2	661.2	677.2	689.2	690.1
165°	636.3	640.1	643.9	644.8	647.6	651.3	653.2	658.9	670.4	679.0	680.0
167.5°	646.5	648.3	650.1	650.5	652.9	656.1	657.6	661.3	668.9	674.5	674.9
170°	653.2	655.0	656.8	657.2	657.3	657.5	657.6	661.3	668.9	674.5	674.5
172.5°	656.8	657.1	657.5	657.6	657.6	657.6	657.6	660.6	666.5	671.0	670.6
175°	661.6	661.6	661.6	661.6	660.3	658.5	657.6	659.5	663.2	666.1	666.1
177.5°	661.6	661.6	661.6	661.6	660.6	659.2	658.6	660.1	663.1	665.3	664.9
180°	661.6	661.6	661.6	661.6	661.6	661.6	661.6	661.6	661.6	661.6	661.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	588.6	588.6
2.5°	628.4	624.6
5°	808.1	811.9
7.5°	1088.2	1086.4
10°	1353.2	1370.2
12.5°	1546.2	1550.1
15°	1663.6	1671.2
17.5°	1709.1	1710.9
20°	1710.9	1707.2
22.5°	1690.1	1686.3
25°	1665.5	1663.6
27.5°	1642.8	1644.7
30°	1633.3	1639.0
32.5°	1633.3	1642.8
35°	1637.2	1646.6
37.5°	1635.2	1646.6
40°	1627.6	1640.9
42.5°	1606.8	1616.3
45°	1574.7	1586.0
47.5°	1533.1	1540.6
50°	1480.1	1487.6
52.5°	1413.8	1415.7
55°	1334.3	1341.9
57.5°	1249.1	1251.0
60°	1154.5	1160.1
62.5°	1054.2	1054.2
65°	948.2	951.9
67.5°	838.4	847.8
70°	726.8	728.7
72.5°	617.0	617.0
75°	503.5	505.3
77.5°	395.6	395.6
80°	293.4	295.3
82.5°	202.6	206.3
85°	126.8	126.8
87.5°	58.6	53.0
90°	16.9	16.9
92.5°	67.5	54.1
95°	235.6	194.9
97.5°	564.5	487.1
100°	813.3	721.1
102.5°	1058.1	979.2
105°	1370.1	1327.7
107.5°	1574.6	1584.8
110°	1652.5	1696.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1659.5	1727.4
115°	1615.5	1709.6
117.5°	1522.2	1626.6
120°	1447.0	1548.4
122.5°	1373.8	1473.9
125°	1269.4	1361.5
127.5°	1175.4	1253.2
130°	1120.0	1191.8
132.5°	1069.8	1134.2
135°	1000.9	1056.4
137.5°	945.7	991.2
140°	907.9	950.3
142.5°	876.5	913.0
145°	829.4	857.0
147.5°	793.2	816.1
150°	770.6	789.1
152.5°	751.1	765.1
155°	728.8	738.0
157.5°	711.1	717.6
160°	700.5	704.3
162.5°	693.6	697.2
165°	683.7	687.4
167.5°	676.5	678.0
170°	674.5	674.5
172.5°	669.3	667.8
175°	666.1	666.1
177.5°	663.2	661.6
180°	661.6	661.6

(END OF REPORT)