

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

(formerly Eaton)

Brand: CORELITE

Report Number: P520233

Luminaire Tested: **SQ4-F-100U-100D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520233
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-100D-930-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

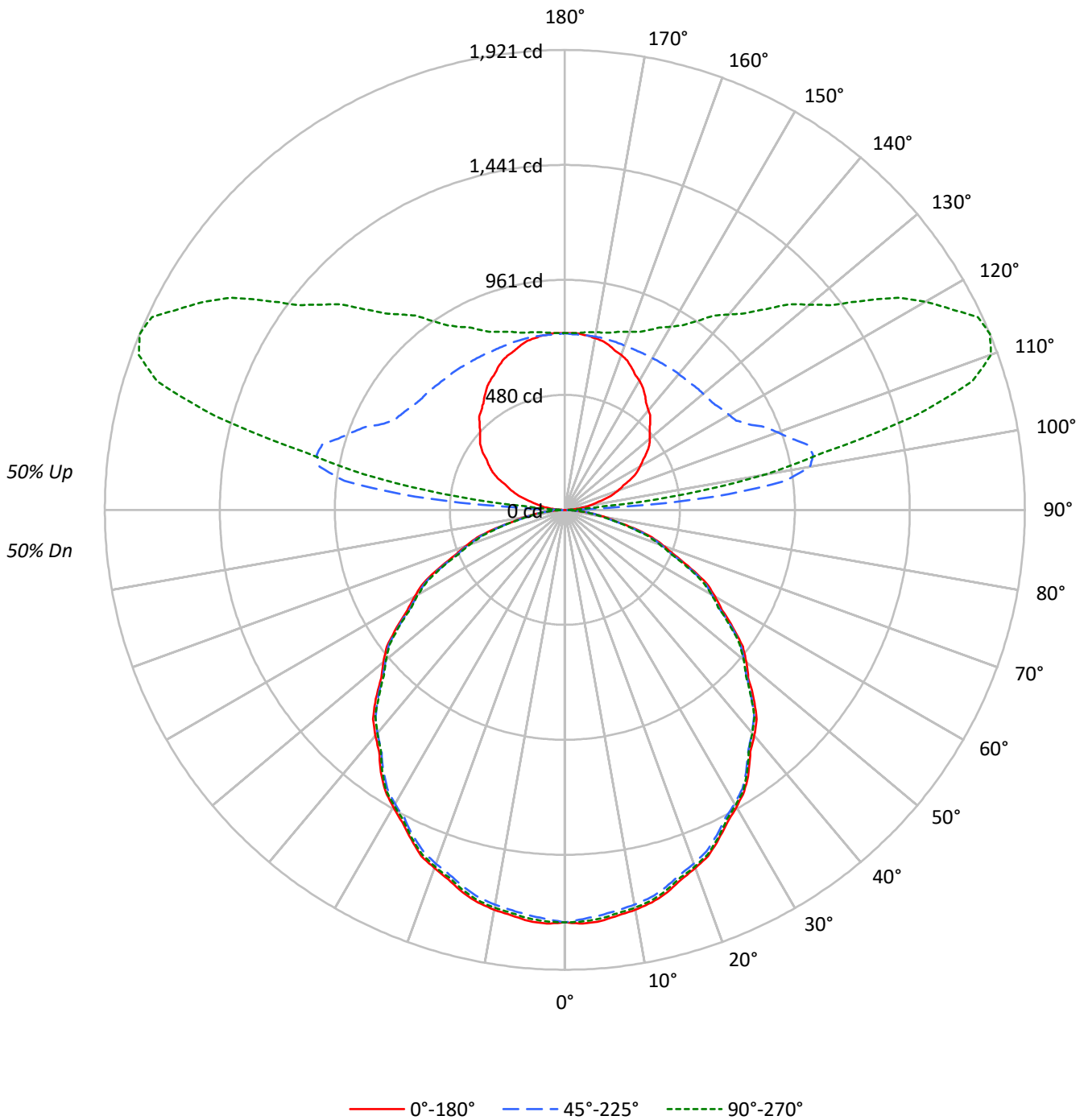
Lumens per Lamp: N/A
Luminaire Lumens: 9495.3 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 90.2
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	
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	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	70	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	39	35
3	81	71	64	58	74	66	60	55	56	51	47	47	43	40	38	36	33	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	31	27	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	24	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	19	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	19	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10598	10598	10598
5°	10646	10500	10581
10°	10593	10460	10541
15°	10528	10385	10468
20°	10420	10295	10381
25°	10306	10185	10266
30°	10180	10072	10122
35°	10053	9929	9981
40°	9886	9771	9780
45°	9712	9578	9547
50°	9461	9348	9326
55°	9183	9081	9017
60°	8904	8744	8714
65°	8469	8278	8211
70°	7868	7677	7528
75°	7027	6802	6661
80°	5781	5572	5320
85°	3423	3754	3839



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.6	1.7
10°-20°	463.1	4.9
20°-30°	695.5	7.3
30°-40°	830.0	8.7
40°-50°	850.8	9.0
50°-60°	757.6	8.0
60°-70°	564.7	5.9
70°-80°	305.8	3.2
80°-90°	71.1	0.7
90°-100°	345.5	3.6
100°-110°	953.9	10.0
110°-120°	983.8	10.4
120°-130°	790.5	8.3
130°-140°	621.3	6.5
140°-150°	476.5	5.0
150°-160°	342.4	3.6
160°-170°	209.4	2.2
170°-180°	70.6	0.7
0°-30°	1321.3	13.9
0°-40°	2151.3	22.7
0°-60°	3759.7	39.6
0°-90°	4701.3	49.5
90°-120°	2283.2	24.0
90°-150°	4171.5	43.9
90°-180°	4794.0	50.5
0°-180°	9495.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1723	1723	1723	1723	1723	
5°	1724	1721	1701	1716	1714	163
15°	1653	1648	1631	1644	1644	466
25°	1518	1515	1501	1509	1513	700
35°	1339	1333	1322	1325	1329	836
45°	1116	1111	1101	1095	1098	859
55°	856	858	847	838	841	766
65°	582	580	569	563	564	575
75°	296	292	286	280	280	315
85°	48	53	53	54	54	68
90°	2	5	9	11	12	5
95°	51	187	627	258	168	54
105°	170	262	1050	1602	1509	181
115°	305	368	845	1673	1903	299
125°	418	476	766	1297	1522	372
135°	503	557	745	1050	1184	389
145°	583	624	736	894	962	365
155°	658	680	730	802	828	303
165°	712	721	733	762	767	201
175°	738	739	734	745	742	70
180°	738	738	738	738	738	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1723.1	1723.1	1723.1	1723.1	1723.1
2.5°	1729.8	1726.1	1710.9	1723.1	1721.3
5°	1724.3	1720.9	1700.6	1716.0	1713.7
7.5°	1708.3	1704.8	1687.0	1701.1	1699.1
10°	1696.0	1692.5	1674.7	1688.9	1687.7
12.5°	1679.8	1676.4	1658.6	1672.7	1671.6
15°	1653.4	1647.6	1630.9	1643.9	1643.9
17.5°	1618.4	1614.0	1598.5	1609.4	1609.6
20°	1591.9	1588.4	1572.9	1584.8	1586.0
22.5°	1565.4	1561.9	1544.6	1555.5	1557.6
25°	1518.5	1515.1	1500.8	1509.2	1512.7
27.5°	1470.3	1465.2	1451.2	1458.5	1461.1
30°	1433.4	1431.0	1418.1	1421.6	1425.1
32.5°	1394.6	1392.3	1381.1	1382.9	1389.1
35°	1338.8	1333.1	1322.3	1324.7	1329.3
37.5°	1272.8	1270.0	1259.5	1258.2	1262.6
40°	1231.2	1226.5	1216.9	1214.6	1218.1
42.5°	1185.7	1181.2	1169.7	1167.4	1171.8
45°	1116.5	1110.7	1101.1	1095.3	1097.5
47.5°	1038.9	1038.9	1029.0	1022.1	1025.6
50°	988.7	988.7	976.9	971.1	974.6
52.5°	936.7	937.6	924.8	921.8	920.6
55°	856.3	857.5	846.8	838.5	840.9
57.5°	778.7	776.1	763.7	758.4	759.6
60°	723.8	720.3	710.8	702.7	708.4
62.5°	668.0	666.3	656.8	647.6	646.9
65°	581.9	579.5	568.8	563.0	564.2
67.5°	496.2	493.4	483.7	475.3	478.3
70°	437.5	437.5	426.9	422.1	418.6
72.5°	383.6	379.0	371.2	364.4	361.9
75°	295.7	292.2	286.2	280.3	280.3
77.5°	215.2	212.2	208.4	204.3	203.2
80°	163.2	162.1	157.3	156.0	150.2
82.5°	114.9	114.7	111.9	108.8	108.6
85°	48.5	53.1	53.2	54.4	54.4
87.5°	9.0	15.0	15.2	13.5	13.7
90°	2.4	4.6	9.4	10.7	11.8
92.5°	21.3	88.2	157.7	57.6	44.8
95°	50.7	187.0	626.9	257.7	167.7
97.5°	84.1	209.4	928.6	714.9	517.8
100°	108.6	222.9	1040.1	1047.4	851.1
102.5°	132.3	238.2	1061.7	1294.1	1108.0
105°	169.9	262.3	1049.5	1602.2	1508.8
107.5°	210.1	292.3	990.9	1750.8	1784.9
110°	238.5	312.3	945.6	1782.8	1893.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	263.9	335.0	903.1	1757.5	1921.0
115°	304.6	368.1	845.3	1673.3	1903.0
117.5°	340.0	403.2	807.2	1554.8	1816.1
120°	363.6	426.0	792.2	1474.5	1737.8
122.5°	386.3	445.8	779.9	1399.6	1648.9
125°	417.9	475.6	766.1	1296.6	1521.7
127.5°	444.9	502.5	758.1	1209.5	1403.6
130°	462.8	520.5	754.4	1156.2	1332.8
132.5°	479.8	534.7	750.6	1111.5	1271.4
135°	502.9	557.1	744.9	1050.2	1184.1
137.5°	528.8	578.3	742.1	998.7	1113.0
140°	543.1	591.6	740.2	964.4	1064.8
142.5°	559.1	603.9	738.3	933.9	1022.4
145°	583.1	623.6	735.5	894.1	962.1
147.5°	606.3	641.6	732.9	860.4	913.2
150°	623.3	652.2	731.9	840.3	883.1
152.5°	636.6	663.6	730.9	823.1	858.4
155°	657.5	679.5	729.5	802.2	827.6
157.5°	676.9	693.7	729.8	786.8	804.1
160°	688.2	703.2	730.7	778.2	791.0
162.5°	697.7	710.9	731.7	770.6	780.6
165°	711.8	721.0	733.1	761.6	767.3
167.5°	722.7	728.3	734.3	756.1	757.9
170°	728.4	733.0	734.3	753.2	753.2
172.5°	733.1	735.9	734.3	749.3	748.4
175°	737.9	738.9	734.3	744.9	742.5
177.5°	739.7	738.7	734.0	740.6	738.7
180°	737.9	737.9	737.9	737.9	737.9

(END OF REPORT)