

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: P564939

Luminaire Tested: **SQ4-PW1-100U-075D-840-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564939
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-100U-075D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

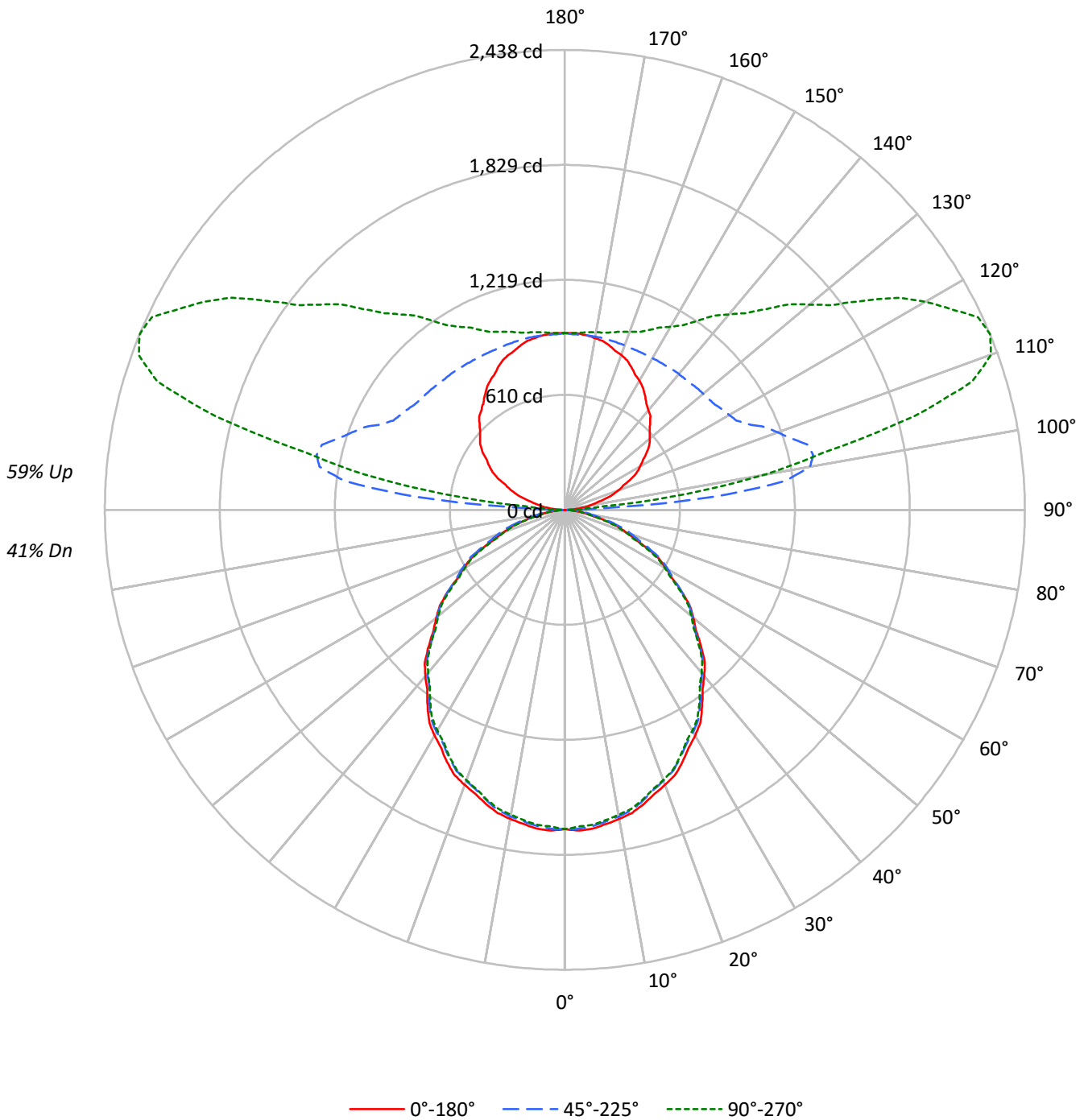
Lumens per Lamp: N/A
Luminaire Lumens: 10392.5 lumens
Efficiency: N/A
Efficacy: 133.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 78
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	43	42	41	35
2	87	80	74	69	79	73	68	64	60	57	54	49	46	44	38	36	35	30
3	80	70	63	58	72	65	58	53	53	49	45	43	40	37	33	31	29	25
4	73	62	55	49	66	57	50	45	47	42	38	38	35	32	30	27	25	22
5	67	55	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	19	16
7	57	45	37	32	52	41	34	29	35	29	25	28	24	21	22	19	17	15
8	53	41	33	28	48	37	31	26	31	26	22	26	22	19	20	18	15	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10408	10408	10408
5°	10476	10393	10347
10°	10392	10309	10252
15°	10282	10168	10130
20°	10159	10003	9983
25°	10017	9835	9805
30°	9805	9657	9594
35°	9527	9393	9337
40°	9230	9086	9051
45°	8871	8754	8715
50°	8503	8432	8375
55°	8106	8106	7978
60°	7611	7759	7483
65°	6966	7312	6792
70°	6140	6730	5980
75°	5245	6024	5102
80°	4066	5069	4119
85°	2632	3896	3472



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.3	1.5
10°-20°	449.9	4.3
20°-30°	667.3	6.4
30°-40°	780.8	7.5
40°-50°	777.4	7.5
50°-60°	671.3	6.5
60°-70°	483.2	4.6
70°-80°	253.4	2.4
80°-90°	64.8	0.6
90°-100°	438.6	4.2
100°-110°	1210.8	11.7
110°-120°	1248.7	12.0
120°-130°	1003.5	9.7
130°-140°	788.6	7.6
140°-150°	604.8	5.8
150°-160°	434.7	4.2
160°-170°	265.8	2.6
170°-180°	89.6	0.9
0°-30°	1276.6	12.3
0°-40°	2057.4	19.8
0°-60°	3506.1	33.7
0°-90°	4307.4	41.4
90°-120°	2898.1	27.9
90°-150°	5295.0	50.9
90°-180°	6085.0	58.6
0°-180°	10392.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1692	1692	1692	1692	1692	
5°	1697	1678	1683	1679	1676	161
15°	1615	1594	1597	1594	1591	455
25°	1476	1451	1449	1440	1445	679
35°	1269	1251	1251	1239	1244	793
45°	1020	1011	1006	1003	1002	787
55°	756	754	756	745	744	674
65°	479	493	502	483	467	474
75°	221	241	254	237	215	236
85°	37	49	55	52	49	49
90°	3	6	12	14	15	6
95°	64	237	796	327	213	69
105°	216	333	1332	2034	1915	230
115°	387	467	1073	2124	2416	380
125°	530	604	972	1646	1932	472
135°	638	707	946	1333	1503	494
145°	740	792	934	1135	1221	463
155°	835	862	926	1018	1050	385
165°	904	915	930	967	974	255
175°	936	938	932	946	942	89
180°	936	936	936	936	936	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1692.2	1692.2	1692.2	1692.2	1692.2
2.5°	1701.8	1687.8	1692.2	1688.5	1680.3
5°	1696.7	1677.7	1683.3	1678.7	1675.8
7.5°	1679.4	1661.9	1666.0	1661.2	1659.4
10°	1663.9	1646.4	1650.5	1644.4	1641.5
12.5°	1646.0	1627.3	1631.4	1625.4	1623.6
15°	1614.7	1594.3	1596.8	1593.8	1590.8
17.5°	1578.3	1557.6	1558.0	1553.3	1552.7
20°	1552.1	1530.2	1528.2	1522.3	1525.2
22.5°	1523.5	1500.4	1498.4	1490.1	1494.2
25°	1476.0	1451.3	1449.2	1440.4	1444.7
27.5°	1421.2	1396.7	1396.7	1384.3	1389.0
30°	1380.6	1357.3	1359.7	1345.0	1350.8
32.5°	1337.7	1316.7	1318.0	1303.2	1309.1
35°	1268.8	1251.3	1250.9	1239.1	1243.5
37.5°	1198.4	1183.0	1180.5	1173.7	1174.9
40°	1149.5	1136.4	1131.6	1127.2	1127.2
42.5°	1098.2	1086.3	1081.5	1078.2	1077.1
45°	1019.8	1011.1	1006.4	1003.4	1001.9
47.5°	942.3	934.1	930.1	927.9	926.5
50°	888.6	882.8	881.2	876.6	875.2
52.5°	834.9	831.4	829.9	824.2	822.7
55°	755.9	754.5	755.9	745.4	744.0
57.5°	673.6	675.9	680.8	666.7	663.2
60°	618.7	624.6	630.7	614.1	608.3
62.5°	562.7	572.0	580.6	561.6	553.4
65°	478.6	493.2	502.4	482.7	466.7
67.5°	397.5	415.6	426.7	405.4	387.3
70°	341.4	361.8	374.2	352.9	332.5
72.5°	292.5	315.3	325.3	305.2	284.8
75°	220.7	241.1	253.5	236.6	214.7
77.5°	156.5	175.8	186.1	171.3	153.3
80°	114.8	135.2	143.1	130.9	116.3
82.5°	81.4	98.3	103.8	96.4	86.5
85°	37.3	48.9	55.2	52.1	49.2
87.5°	10.1	18.9	25.1	25.4	26.9
90°	3.0	5.9	12.0	13.5	15.0
92.5°	27.0	112.0	200.2	73.1	56.9
95°	64.4	237.3	795.7	327.1	212.8
97.5°	106.7	265.8	1178.7	907.5	657.2
100°	137.9	282.9	1320.1	1329.5	1080.4
102.5°	167.8	302.3	1347.7	1642.6	1406.4
105°	215.8	333.0	1332.1	2033.7	1915.0
107.5°	266.7	371.0	1257.8	2222.3	2265.7
110°	302.7	396.5	1200.3	2262.9	2403.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	335.1	425.3	1146.3	2230.8	2438.3
115°	386.6	467.2	1072.9	2123.9	2415.5
117.5°	431.6	511.8	1024.6	1973.5	2305.2
120°	461.5	540.6	1005.5	1871.7	2205.7
122.5°	490.3	565.9	989.9	1776.6	2093.0
125°	530.5	603.7	972.5	1645.8	1931.5
127.5°	564.6	637.9	962.3	1535.2	1781.7
130°	587.4	660.7	957.5	1467.6	1691.8
132.5°	609.0	678.7	952.7	1410.8	1613.8
135°	638.3	707.2	945.5	1333.0	1502.9
137.5°	671.3	734.0	941.9	1267.7	1412.7
140°	689.3	750.8	939.5	1224.1	1351.6
142.5°	709.7	766.5	937.1	1185.4	1297.7
145°	740.2	791.5	933.5	1134.8	1221.2
147.5°	769.6	814.4	930.2	1092.1	1159.2
150°	791.2	827.8	929.0	1066.6	1120.8
152.5°	808.0	842.2	927.8	1044.8	1089.7
155°	834.6	862.5	926.0	1018.2	1050.4
157.5°	859.2	880.6	926.3	998.8	1020.7
160°	873.6	892.6	927.5	987.8	1004.0
162.5°	885.6	902.3	928.7	978.2	990.8
165°	903.6	915.3	930.5	966.7	974.0
167.5°	917.4	924.4	932.0	959.7	962.0
170°	924.5	930.4	932.0	956.0	956.0
172.5°	930.5	934.1	932.0	951.2	950.0
175°	936.5	938.0	932.0	945.5	942.5
177.5°	938.9	937.8	931.7	940.1	937.7
180°	936.5	936.5	936.5	936.5	936.5

(END OF REPORT)