

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: P520270

Luminaire Tested: **SQ4-F-125U-050D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520270
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-125U-050D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

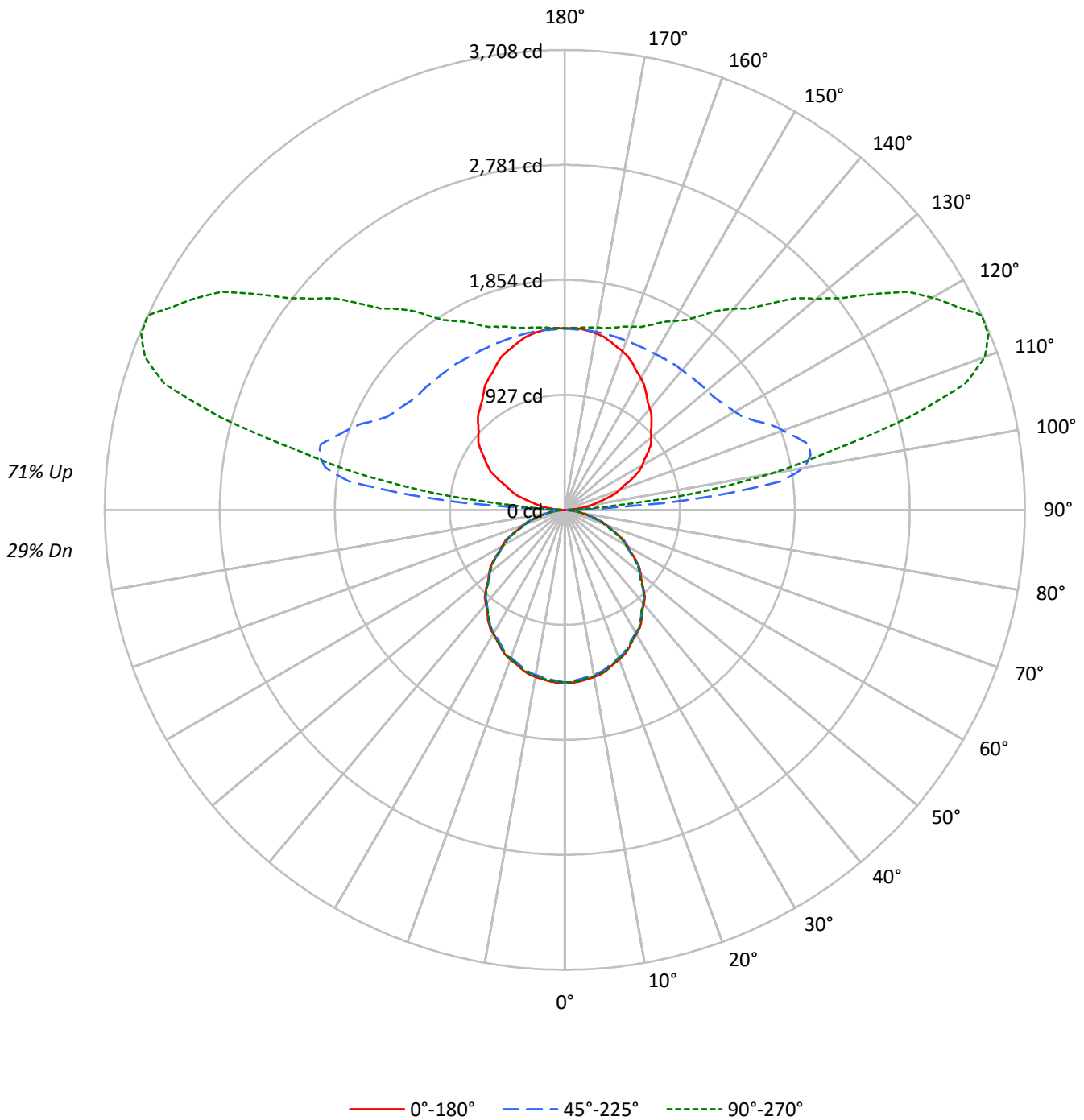
Lumens per Lamp: N/A
Luminaire Lumens: 13236.2 lumens
Efficiency: N/A
Efficacy: 148.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 89.1
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29
1	93	89	85	82	83	80	77	74	63	60	58	47	45	44	32	31	31	24
2	85	77	72	67	76	70	65	60	55	51	48	41	39	37	28	27	26	20
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	25	23	22	17
4	70	60	52	47	63	54	47	42	43	38	34	32	29	26	22	20	19	15
5	64	53	45	40	57	48	41	36	38	33	29	29	25	23	20	18	16	13
6	59	48	40	34	53	43	36	31	34	29	25	26	22	20	18	16	14	11
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	13	10
8	51	39	31	26	45	35	28	24	28	23	20	21	18	15	15	13	11	9
9	47	35	28	23	42	32	26	21	26	21	17	20	16	14	14	12	10	8
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6415	6415	6415
5°	6431	6353	6404
10°	6409	6330	6374
15°	6366	6285	6338
20°	6305	6232	6278
25°	6235	6159	6215
30°	6148	6098	6137
35°	6080	6007	6038
40°	5964	5908	5918
45°	5841	5793	5793
50°	5718	5664	5637
55°	5584	5509	5479
60°	5376	5289	5255
65°	5120	5019	4958
70°	4771	4669	4570
75°	4279	4148	4048
80°	3462	3414	3313
85°	2064	2366	2461



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.2	1.0
10°-20°	373.6	2.8
20°-30°	561.2	4.2
30°-40°	669.8	5.1
40°-50°	686.4	5.2
50°-60°	612.2	4.6
60°-70°	455.9	3.4
70°-80°	247.5	1.9
80°-90°	60.7	0.5
90°-100°	683.9	5.2
100°-110°	1842.3	13.9
110°-120°	1933.4	14.6
120°-130°	1568.9	11.9
130°-140°	1230.4	9.3
140°-150°	944.7	7.1
150°-160°	679.2	5.1
160°-170°	415.0	3.1
170°-180°	139.9	1.1
0°-30°	1066.0	8.1
0°-40°	1735.8	13.1
0°-60°	3034.4	22.9
0°-90°	3798.5	28.7
90°-120°	4459.5	33.7
90°-150°	8203.5	62.0
90°-180°	9438.0	71.3
0°-180°	13236.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1389	1387	1372	1385	1383	132
15°	1333	1329	1316	1327	1327	376
25°	1225	1221	1210	1218	1221	564
35°	1080	1076	1067	1067	1072	674
45°	895	897	888	886	888	691
55°	694	694	685	680	681	618
65°	469	467	460	454	454	465
75°	240	238	233	229	227	254
85°	39	43	45	46	46	55
90°	4	11	22	24	24	8
95°	104	372	1121	573	397	109
105°	341	530	2037	3048	2861	358
115°	602	736	1697	3278	3708	592
125°	821	943	1523	2575	3030	733
135°	989	1104	1481	2077	2352	763
145°	1144	1233	1462	1776	1907	717
155°	1298	1345	1449	1593	1644	598
165°	1408	1424	1454	1512	1520	397
175°	1464	1462	1456	1477	1473	139
180°	1462	1462	1462	1462	1462	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1390.5	1390.5	1390.5	1390.5	1390.5
2.5°	1395.0	1392.1	1380.1	1390.4	1389.1
5°	1388.7	1386.8	1371.9	1384.9	1383.0
7.5°	1378.6	1375.0	1360.4	1373.0	1371.1
10°	1368.2	1364.5	1351.4	1362.5	1360.8
12.5°	1354.7	1352.6	1338.0	1349.2	1348.8
15°	1332.9	1329.2	1316.1	1327.2	1327.2
17.5°	1303.8	1301.6	1288.9	1299.6	1298.1
20°	1284.4	1280.8	1269.5	1278.8	1278.8
22.5°	1260.6	1258.4	1247.2	1255.1	1256.5
25°	1224.9	1221.2	1210.0	1217.5	1221.1
27.5°	1185.3	1182.5	1173.1	1177.9	1180.5
30°	1154.1	1154.1	1144.8	1146.8	1152.2
32.5°	1125.8	1125.8	1115.0	1116.9	1119.5
35°	1079.6	1076.0	1066.6	1066.7	1072.2
37.5°	1026.0	1024.2	1018.2	1017.1	1018.6
40°	990.3	988.5	981.0	982.8	982.8
42.5°	954.6	952.7	945.2	942.7	945.6
45°	895.3	897.2	887.9	886.1	887.9
47.5°	836.9	836.9	829.5	824.3	827.2
50°	796.7	796.7	789.2	785.5	785.5
52.5°	755.0	756.5	747.5	742.4	743.9
55°	694.3	694.3	685.0	679.5	681.3
57.5°	627.3	627.3	618.0	612.5	615.8
60°	582.7	582.7	573.3	567.8	569.6
62.5°	538.0	538.0	528.6	523.1	523.4
65°	469.1	467.3	459.8	454.2	454.2
67.5°	402.8	398.1	392.4	385.0	385.0
70°	353.7	351.8	346.2	338.8	338.8
72.5°	309.0	305.7	300.1	294.1	294.1
75°	240.1	238.3	232.7	229.0	227.1
77.5°	172.0	170.6	170.1	165.0	166.4
80°	130.3	130.3	128.5	124.7	124.7
82.5°	93.1	94.6	91.2	90.4	88.9
85°	39.0	42.7	44.7	46.5	46.5
87.5°	8.2	14.0	14.9	16.8	16.8
90°	3.7	11.1	22.3	24.2	24.2
92.5°	45.5	160.5	317.3	152.7	106.2
95°	104.3	372.0	1121.1	573.3	396.7
97.5°	166.5	425.8	1758.4	1469.0	1107.7
100°	214.2	447.3	1961.0	2051.8	1702.2
102.5°	260.4	477.4	2028.1	2488.3	2201.3
105°	340.8	530.2	2037.4	3048.1	2860.6
107.5°	416.8	585.8	1950.6	3335.8	3384.2
110°	467.4	627.7	1871.6	3425.1	3601.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	521.1	669.7	1795.6	3405.4	3695.6
115°	601.5	736.3	1696.6	3278.2	3707.9
117.5°	674.9	801.3	1619.9	3075.2	3553.8
120°	722.6	844.6	1581.1	2929.5	3421.1
122.5°	764.3	884.9	1552.8	2780.5	3270.7
125°	821.2	943.3	1523.4	2574.7	3030.0
127.5°	876.0	996.2	1504.7	2393.4	2799.8
130°	908.9	1029.0	1497.3	2289.5	2646.4
132.5°	941.6	1060.3	1489.8	2197.9	2525.7
135°	988.9	1103.6	1480.6	2077.1	2352.1
137.5°	1034.0	1144.0	1475.7	1974.7	2200.6
140°	1065.3	1170.8	1471.3	1911.7	2115.6
142.5°	1098.0	1196.4	1468.2	1852.9	2024.7
145°	1143.5	1232.7	1461.9	1775.9	1907.0
147.5°	1192.6	1270.2	1455.6	1711.3	1814.3
150°	1225.4	1292.8	1452.6	1670.6	1756.2
152.5°	1255.2	1313.8	1451.2	1637.5	1707.0
155°	1298.0	1345.4	1448.9	1593.4	1644.5
157.5°	1335.6	1372.4	1449.3	1562.6	1596.8
160°	1359.5	1390.5	1450.8	1544.4	1570.0
162.5°	1380.3	1405.5	1452.2	1529.4	1547.6
165°	1407.9	1424.3	1454.5	1512.3	1519.6
167.5°	1430.2	1439.7	1456.4	1499.2	1502.2
170°	1445.1	1448.8	1456.4	1491.7	1491.7
172.5°	1454.1	1454.8	1457.9	1484.3	1484.3
175°	1463.8	1462.0	1456.4	1476.7	1473.1
177.5°	1467.9	1465.0	1457.5	1469.3	1466.4
180°	1461.9	1461.9	1461.9	1461.9	1461.9

(END OF REPORT)