

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: P563564

Luminaire Tested: **SQ4-PP3-100U-050D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P563564  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2103-172-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PP3-100U-050D-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

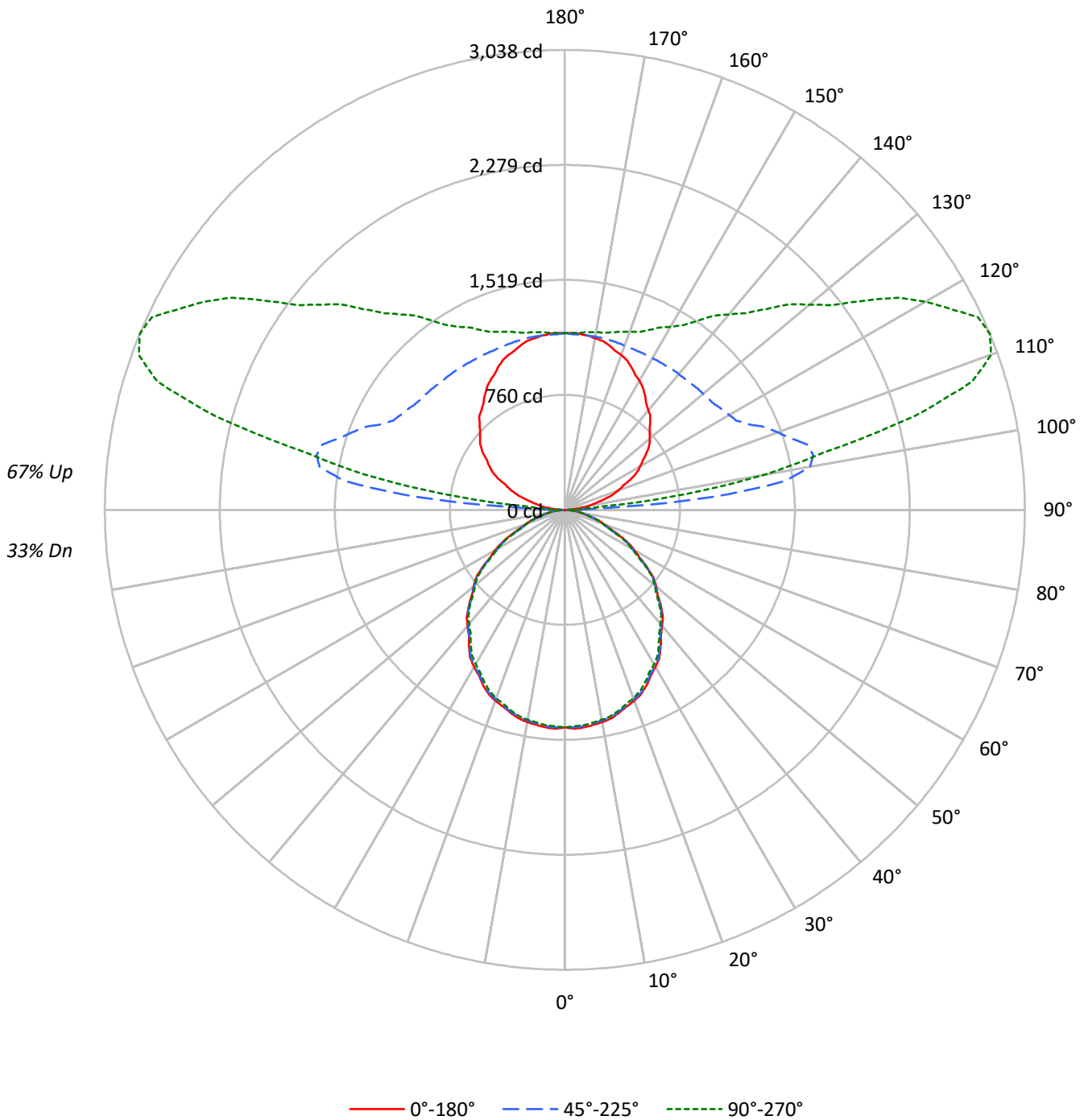
Lumens per Lamp: N/A  
Luminaire Lumens: 11264.3 lumens  
Efficiency: N/A  
Efficacy: 133.0 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 84.7  
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



TEST NUMBER: P563564  
CATALOG NUMBER: SQ4-PP3-100U-050D-830-1D-UNV-STD-W-8

### Luminous Intensity Polar Plot





TEST NUMBER: P563564

CATALOG NUMBER: SQ4-PP3-100U-050D-830-1D-UNV-STD-W-8

**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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	79	73	68	77	71	66	62	57	53	50	44	41	39	32	30	29	23
3	78	69	62	56	70	63	57	52	50	46	42	39	36	33	28	26	25	20
4	71	61	53	48	64	55	49	44	45	40	36	34	31	29	25	23	21	17
5	66	54	47	41	59	49	43	37	40	35	31	31	27	25	23	20	19	15
6	60	49	41	35	54	44	37	32	36	31	27	28	24	22	20	18	16	13
7	56	44	36	31	50	40	33	28	32	27	24	25	22	19	19	16	15	12
8	52	40	32	27	46	36	30	25	29	24	21	23	20	17	17	15	13	10
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	13	12	9
10	45	33	26	21	40	30	24	20	25	20	17	19	16	14	15	12	11	9

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6633	6633	6633
5°	6681	6640	6617
10°	6670	6623	6593
15°	6626	6590	6554
20°	6582	6545	6495
25°	6504	6459	6395
30°	6384	6350	6269
35°	6217	6174	6096
40°	6018	5980	5911
45°	5853	5812	5755
50°	5643	5607	5553
55°	5351	5280	5240
60°	4871	4732	4708
65°	4292	4113	4099
70°	3705	3553	3553
75°	3189	3144	3100
80°	2811	2845	2779
85°	2202	2403	2403



TEST NUMBER: P563564

CATALOG NUMBER: SQ4-PP3-100U-050D-830-1D-UNV-STD-W-8

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.0	1.2
10°-20°	388.2	3.4
20°-30°	581.5	5.2
30°-40°	682.0	6.1
40°-50°	684.2	6.1
50°-60°	583.6	5.2
60°-70°	380.6	3.4
70°-80°	191.0	1.7
80°-90°	55.3	0.5
90°-100°	546.5	4.9
100°-110°	1508.6	13.4
110°-120°	1555.9	13.8
120°-130°	1250.3	11.1
130°-140°	982.6	8.7
140°-150°	753.6	6.7
150°-160°	541.6	4.8
160°-170°	331.2	2.9
170°-180°	111.7	1.0
0°-30°	1105.6	9.8
0°-40°	1787.7	15.9
0°-60°	3055.5	27.1
0°-90°	3682.4	32.7
90°-120°	3611.0	32.1
90°-150°	6597.5	58.6
90°-180°	7582.0	67.3
0°-180°	11264.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1438	1438	1438	1438	1438	
5°	1443	1429	1434	1429	1429	137
15°	1387	1374	1380	1375	1372	391
25°	1278	1263	1269	1258	1256	588
35°	1104	1093	1096	1084	1082	690
45°	897	891	891	882	882	691
55°	665	663	656	653	652	591
65°	393	386	377	374	376	392
75°	179	179	176	175	174	194
85°	42	45	45	45	45	49
90°	4	7	15	17	19	7
95°	80	296	991	408	265	86
105°	269	415	1660	2534	2386	286
115°	482	582	1337	2646	3010	473
125°	661	752	1212	2051	2407	588
135°	795	881	1178	1661	1873	615
145°	922	986	1163	1414	1522	577
155°	1040	1075	1154	1269	1309	479
165°	1126	1140	1159	1204	1214	317
175°	1167	1169	1161	1178	1174	111
180°	1167	1167	1167	1167	1167	

TEST NUMBER: P563564

CATALOG NUMBER: SQ4-PP3-100U-050D-830-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1437.8	1437.8	1437.8	1437.8	1437.8
2.5°	1446.9	1435.0	1437.8	1435.6	1429.7
5°	1442.8	1429.3	1434.0	1429.0	1429.0
7.5°	1433.0	1418.2	1422.9	1417.9	1417.6
10°	1423.9	1409.1	1413.8	1408.8	1407.5
12.5°	1410.8	1396.0	1401.7	1395.7	1395.4
15°	1387.4	1373.8	1379.8	1374.7	1372.3
17.5°	1360.9	1346.1	1353.4	1346.3	1345.3
20°	1340.8	1326.0	1333.2	1323.1	1323.1
22.5°	1316.6	1301.8	1310.0	1296.9	1296.9
25°	1277.8	1263.0	1268.9	1257.6	1256.3
27.5°	1231.6	1217.1	1223.3	1210.5	1210.2
30°	1198.4	1184.8	1192.1	1178.2	1176.9
32.5°	1162.1	1149.5	1154.8	1140.9	1139.6
35°	1103.9	1092.8	1096.3	1083.7	1082.4
37.5°	1042.6	1031.3	1035.3	1024.5	1024.0
40°	999.3	991.9	993.0	984.1	981.6
42.5°	958.9	950.6	951.6	942.8	942.3
45°	897.2	891.0	890.9	882.1	882.1
47.5°	831.7	827.0	825.6	818.3	818.1
50°	786.3	782.6	781.3	774.9	773.7
52.5°	738.9	737.2	732.9	727.6	727.3
55°	665.3	662.9	656.5	652.7	651.5
57.5°	585.4	580.5	573.4	567.8	568.8
60°	528.0	523.1	512.9	510.3	510.3
62.5°	472.5	466.6	456.4	452.9	454.9
65°	393.2	385.8	376.8	374.3	375.5
67.5°	321.1	314.4	304.7	304.7	303.7
70°	274.7	271.0	263.4	263.4	263.4
72.5°	233.4	231.6	226.1	226.0	225.1
75°	178.9	178.9	176.4	175.1	173.9
77.5°	134.1	134.6	133.3	132.0	129.8
80°	105.8	108.3	107.1	105.8	104.6
82.5°	79.6	82.1	81.9	79.6	79.4
85°	41.6	45.3	45.4	45.4	45.4
87.5°	11.8	16.5	19.1	19.5	20.9
90°	3.7	7.4	14.9	16.8	18.7
92.5°	33.6	139.5	249.4	91.0	70.9
95°	80.3	295.7	991.4	407.5	265.1
97.5°	132.9	331.2	1468.6	1130.7	818.9
100°	171.8	352.5	1644.9	1656.5	1346.1
102.5°	209.1	376.7	1679.2	2046.7	1752.4
105°	268.9	414.9	1659.8	2534.0	2386.1
107.5°	332.3	462.3	1567.2	2768.9	2823.0
110°	377.1	494.0	1495.5	2819.5	2994.7



TEST NUMBER: P563564

CATALOG NUMBER: SQ4-PP3-100U-050D-830-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	417.5	529.9	1428.3	2779.6	3038.1
115°	481.7	582.1	1336.8	2646.4	3009.7
117.5°	537.7	637.8	1276.7	2459.0	2872.3
120°	575.1	673.6	1252.8	2332.1	2748.3
122.5°	610.9	705.1	1233.4	2213.6	2607.9
125°	660.9	752.2	1211.7	2050.6	2406.6
127.5°	703.5	794.8	1199.0	1912.9	2219.9
130°	731.9	823.2	1193.0	1828.6	2107.9
132.5°	758.8	845.7	1187.1	1757.8	2010.8
135°	795.4	881.2	1178.1	1660.9	1872.7
137.5°	836.4	914.6	1173.6	1579.5	1760.3
140°	858.8	935.5	1170.6	1525.3	1684.1
142.5°	884.2	955.1	1167.7	1477.0	1616.9
145°	922.3	986.2	1163.2	1413.9	1521.6
147.5°	958.9	1014.8	1159.1	1360.7	1444.3
150°	985.8	1031.4	1157.6	1329.0	1396.6
152.5°	1006.7	1049.4	1156.1	1301.9	1357.7
155°	1039.9	1074.6	1153.8	1268.6	1308.8
157.5°	1070.6	1097.2	1154.2	1244.5	1271.8
160°	1088.5	1112.2	1155.7	1230.8	1250.9
162.5°	1103.4	1124.2	1157.2	1218.8	1234.5
165°	1125.8	1140.4	1159.4	1204.5	1213.6
167.5°	1143.0	1151.8	1161.3	1195.7	1198.6
170°	1152.0	1159.3	1161.3	1191.2	1191.2
172.5°	1159.4	1163.8	1161.3	1185.2	1183.7
175°	1166.9	1168.7	1161.3	1178.0	1174.4
177.5°	1169.9	1168.4	1160.9	1171.3	1168.4
180°	1166.9	1166.9	1166.9	1166.9	1166.9

(END OF REPORT)