

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: P564240

Luminaire Tested: **SQ4-PR1-100U-050D-835-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564240  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PR1-100U-050D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

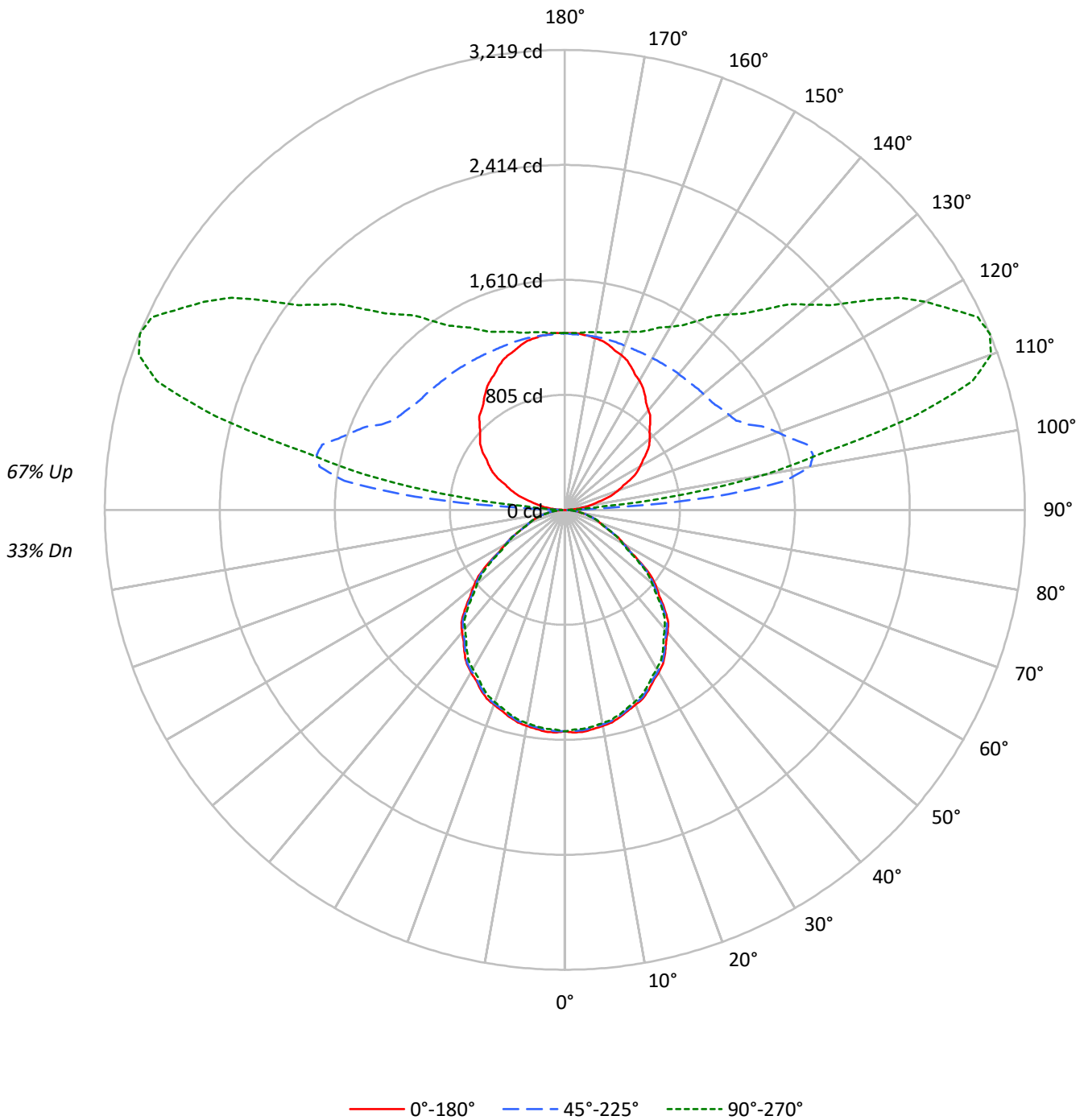
Lumens per Lamp: N/A  
Luminaire Lumens: 11910.8 lumens  
Efficiency: N/A  
Efficacy: 140.6 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

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



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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	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	42	40	32	30	29	24
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	26	25	20
4	72	61	54	48	64	56	49	44	45	40	36	35	31	29	25	23	22	17
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	38	33	36	31	27	28	25	22	21	18	17	13
7	56	44	36	31	50	40	33	29	33	28	24	25	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11	9

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

	0°	45°	90°
0°	7152	7152	7152
5°	7216	7160	7123
10°	7193	7143	7106
15°	7162	7117	7079
20°	7126	7080	7027
25°	7076	7028	6946
30°	6999	6949	6850
35°	6896	6836	6738
40°	6739	6666	6546
45°	6464	6351	6220
50°	5980	5836	5721
55°	5220	5101	4994
60°	4398	4361	4275
65°	3804	3819	3790
70°	3495	3512	3512
75°	3356	3356	3379
80°	3156	3193	3156
85°	2546	2826	2826



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	146.6	1.2
10°-20°	419.5	3.5
20°-30°	632.7	5.3
30°-40°	753.8	6.3
40°-50°	743.2	6.2
50°-60°	568.0	4.8
60°-70°	351.5	3.0
70°-80°	199.6	1.7
80°-90°	63.3	0.5
90°-100°	579.0	4.9
100°-110°	1598.3	13.4
110°-120°	1648.4	13.8
120°-130°	1324.6	11.1
130°-140°	1041.0	8.7
140°-150°	798.4	6.7
150°-160°	573.8	4.8
160°-170°	350.9	2.9
170°-180°	118.3	1.0
0°-30°	1198.7	10.1
0°-40°	1952.6	16.4
0°-60°	3263.8	27.4
0°-90°	3878.2	32.6
90°-120°	3825.6	32.1
90°-150°	6989.6	58.7
90°-180°	8033.0	67.4
0°-180°	11910.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1550	1550	1550	1550	1550	
5°	1558	1541	1546	1541	1538	148
15°	1500	1484	1490	1485	1482	423
25°	1390	1373	1381	1366	1365	640
35°	1224	1210	1214	1198	1196	764
45°	991	978	974	956	953	759
55°	649	638	634	624	621	582
65°	348	346	350	347	347	353
75°	188	188	188	190	190	199
85°	48	51	53	53	53	56
90°	4	8	16	18	20	8
95°	85	313	1050	432	281	91
105°	285	440	1758	2685	2528	303
115°	510	617	1416	2804	3189	501
125°	700	797	1284	2172	2550	623
135°	843	934	1248	1760	1984	652
145°	977	1045	1232	1498	1612	612
155°	1102	1138	1222	1344	1387	508
165°	1193	1208	1228	1276	1286	336
175°	1236	1238	1230	1248	1244	117
180°	1236	1236	1236	1236	1236	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1550.3	1550.3	1550.3	1550.3	1550.3
2.5°	1559.9	1546.4	1550.3	1546.9	1539.6
5°	1558.3	1541.4	1546.3	1540.9	1538.3
7.5°	1546.3	1529.6	1534.6	1529.2	1527.6
10°	1535.6	1520.0	1524.9	1519.5	1516.9
12.5°	1523.9	1507.2	1513.2	1506.7	1504.1
15°	1499.6	1483.9	1490.2	1484.8	1482.2
17.5°	1472.9	1456.2	1462.5	1456.2	1452.8
20°	1451.5	1435.8	1442.2	1432.8	1431.5
22.5°	1428.0	1412.3	1418.7	1406.1	1405.8
25°	1390.1	1373.1	1380.7	1366.0	1364.7
27.5°	1344.9	1329.3	1335.6	1320.6	1319.0
30°	1314.0	1298.3	1304.6	1288.5	1285.9
32.5°	1278.7	1264.1	1269.4	1253.3	1251.7
35°	1224.5	1210.1	1213.8	1197.8	1196.5
37.5°	1162.8	1149.7	1151.9	1134.2	1132.9
40°	1119.0	1105.9	1107.0	1088.3	1087.0
42.5°	1070.9	1057.9	1056.8	1038.1	1036.7
45°	990.8	977.8	973.5	956.0	953.4
47.5°	899.5	886.4	878.4	864.2	862.4
50°	833.2	820.2	813.2	801.1	797.2
52.5°	761.7	748.6	742.7	731.7	727.8
55°	649.0	638.5	634.3	623.5	620.9
57.5°	541.9	534.8	533.6	523.2	522.1
60°	476.7	472.8	472.7	463.4	463.4
62.5°	421.2	418.3	420.4	414.2	413.2
65°	348.5	345.9	349.9	347.2	347.2
67.5°	291.1	291.1	293.5	292.4	292.4
70°	259.1	259.1	260.4	260.4	260.4
72.5°	230.2	229.2	232.6	232.6	231.5
75°	188.3	188.3	188.3	189.6	189.6
77.5°	146.6	146.9	148.0	147.7	146.6
80°	118.8	120.1	120.2	118.8	118.8
82.5°	91.1	92.4	92.4	92.1	91.1
85°	48.1	50.7	53.4	53.4	53.4
87.5°	14.7	19.6	24.5	24.9	24.3
90°	4.0	7.8	15.8	17.8	19.8
92.5°	35.6	147.8	264.3	96.4	75.2
95°	85.1	313.3	1050.3	431.7	280.9
97.5°	140.8	350.9	1555.9	1197.9	867.6
100°	182.0	373.5	1742.6	1755.0	1426.2
102.5°	221.5	399.1	1779.0	2168.4	1856.6
105°	284.8	439.6	1758.5	2684.6	2527.9
107.5°	352.1	489.8	1660.4	2933.5	2990.8
110°	399.6	523.3	1584.4	2987.1	3172.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	442.3	561.4	1513.2	2944.8	3218.7
115°	510.3	616.7	1416.3	2803.7	3188.6
117.5°	569.7	675.7	1352.6	2605.1	3043.0
120°	609.2	713.7	1327.3	2470.7	2911.7
122.5°	647.2	747.0	1306.7	2345.2	2762.9
125°	700.2	796.9	1283.7	2172.5	2549.7
127.5°	745.3	842.0	1270.3	2026.6	2351.9
130°	775.4	872.1	1264.0	1937.3	2233.2
132.5°	803.9	895.9	1257.6	1862.3	2130.3
135°	842.6	933.5	1248.1	1759.6	1984.0
137.5°	886.2	968.9	1243.4	1673.4	1864.9
140°	909.9	991.1	1240.2	1615.9	1784.2
142.5°	936.8	1011.8	1237.1	1564.8	1713.0
145°	977.1	1044.8	1232.3	1498.0	1612.1
147.5°	1015.9	1075.1	1228.0	1441.6	1530.2
150°	1044.4	1092.8	1226.4	1408.0	1479.6
152.5°	1066.6	1111.8	1224.8	1379.2	1438.4
155°	1101.8	1138.5	1222.4	1344.1	1386.6
157.5°	1134.2	1162.4	1222.8	1318.4	1347.4
160°	1153.2	1178.3	1224.4	1304.0	1325.3
162.5°	1169.0	1191.1	1226.0	1291.2	1307.9
165°	1192.8	1208.2	1228.4	1276.1	1285.7
167.5°	1211.0	1220.2	1230.3	1266.8	1269.9
170°	1220.4	1228.2	1230.3	1262.0	1262.0
172.5°	1228.4	1233.0	1230.3	1255.6	1254.1
175°	1236.3	1238.2	1230.3	1248.1	1244.2
177.5°	1239.4	1237.9	1229.9	1240.9	1237.9
180°	1236.3	1236.3	1236.3	1236.3	1236.3

(END OF REPORT)