

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: P564236

Luminaire Tested: **SQ4-PR1-100U-050D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564236  
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-830-1D-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

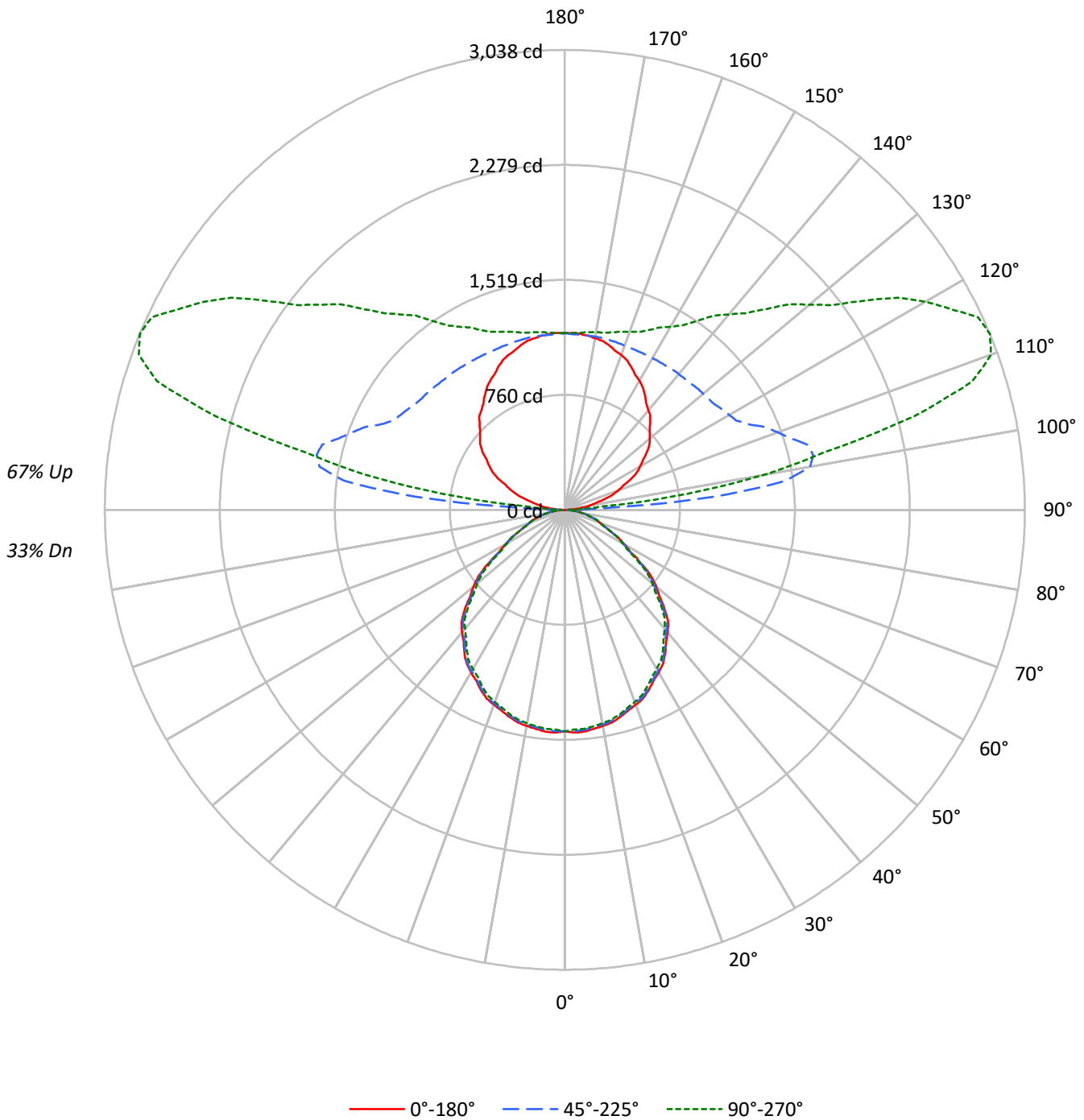
Lumens per Lamp: N/A  
Luminaire Lumens: 11242.5 lumens  
Efficiency: N/A  
Efficacy: 132.7 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

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°	6750	6750	6750
5°	6811	6759	6724
10°	6790	6743	6707
15°	6760	6718	6682
20°	6726	6682	6633
25°	6679	6634	6556
30°	6606	6559	6466
35°	6509	6452	6360
40°	6360	6292	6179
45°	6101	5994	5871
50°	5644	5509	5400
55°	4927	4815	4714
60°	4152	4117	4036
65°	3591	3604	3577
70°	3298	3315	3315
75°	3167	3167	3190
80°	2981	3013	2981
85°	2403	2668	2668



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.4	1.2
10°-20°	395.9	3.5
20°-30°	597.2	5.3
30°-40°	711.5	6.3
40°-50°	701.5	6.2
50°-60°	536.1	4.8
60°-70°	331.8	3.0
70°-80°	188.4	1.7
80°-90°	59.7	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°	1131.5	10.1
0°-40°	1843.0	16.4
0°-60°	3080.6	27.4
0°-90°	3660.6	32.6
90°-120°	3611.0	32.1
90°-150°	6597.5	58.7
90°-180°	7582.0	67.4
0°-180°	11242.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1463	1463	1463	1463	1463	
5°	1471	1455	1460	1454	1452	140
15°	1415	1401	1407	1402	1399	399
25°	1312	1296	1303	1289	1288	604
35°	1156	1142	1146	1131	1129	721
45°	935	923	919	902	900	716
55°	613	603	599	589	586	549
65°	329	326	330	328	328	333
75°	178	178	178	179	179	188
85°	45	48	50	50	50	53
90°	4	7	15	17	19	8
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1463.3	1463.3	1463.3	1463.3	1463.3
2.5°	1472.4	1459.6	1463.3	1460.2	1453.2
5°	1470.9	1454.9	1459.6	1454.5	1452.0
7.5°	1459.6	1443.8	1448.5	1443.4	1441.9
10°	1449.5	1434.7	1439.4	1434.3	1431.8
12.5°	1438.4	1422.6	1428.3	1422.2	1419.7
15°	1415.4	1400.6	1406.6	1401.5	1399.1
17.5°	1390.2	1374.5	1380.4	1374.5	1371.3
20°	1370.1	1355.3	1361.2	1352.4	1351.2
22.5°	1347.9	1333.1	1339.1	1327.2	1327.0
25°	1312.1	1296.1	1303.3	1289.4	1288.1
27.5°	1269.5	1254.7	1260.7	1246.5	1245.0
30°	1240.2	1225.5	1231.4	1216.2	1213.8
32.5°	1207.0	1193.2	1198.1	1183.0	1181.5
35°	1155.8	1142.2	1145.7	1130.6	1129.3
37.5°	1097.6	1085.2	1087.2	1070.6	1069.3
40°	1056.2	1043.9	1044.9	1027.2	1026.0
42.5°	1010.8	998.5	997.5	979.8	978.6
45°	935.2	922.9	918.8	902.4	899.9
47.5°	849.0	836.7	829.1	815.7	814.0
50°	786.5	774.2	767.6	756.2	752.5
52.5°	718.9	706.6	701.0	690.6	686.9
55°	612.6	602.7	598.7	588.6	586.1
57.5°	511.5	504.8	503.7	493.8	492.8
60°	450.0	446.3	446.2	437.4	437.4
62.5°	397.5	394.8	396.8	391.0	390.0
65°	329.0	326.5	330.2	327.7	327.7
67.5°	274.8	274.8	277.0	276.0	276.0
70°	244.5	244.5	245.8	245.8	245.8
72.5°	217.3	216.3	219.6	219.5	218.6
75°	177.7	177.7	177.7	179.0	179.0
77.5°	138.4	138.6	139.7	139.4	138.4
80°	112.2	113.4	113.4	112.2	112.2
82.5°	86.0	87.2	87.2	86.9	86.0
85°	45.4	47.8	50.4	50.4	50.4
87.5°	13.9	18.5	23.2	23.5	22.9
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



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**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)