

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: P562896

Luminaire Tested: **SQ4-PC3-100U-050D-835-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P562896  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PC3-100U-050D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

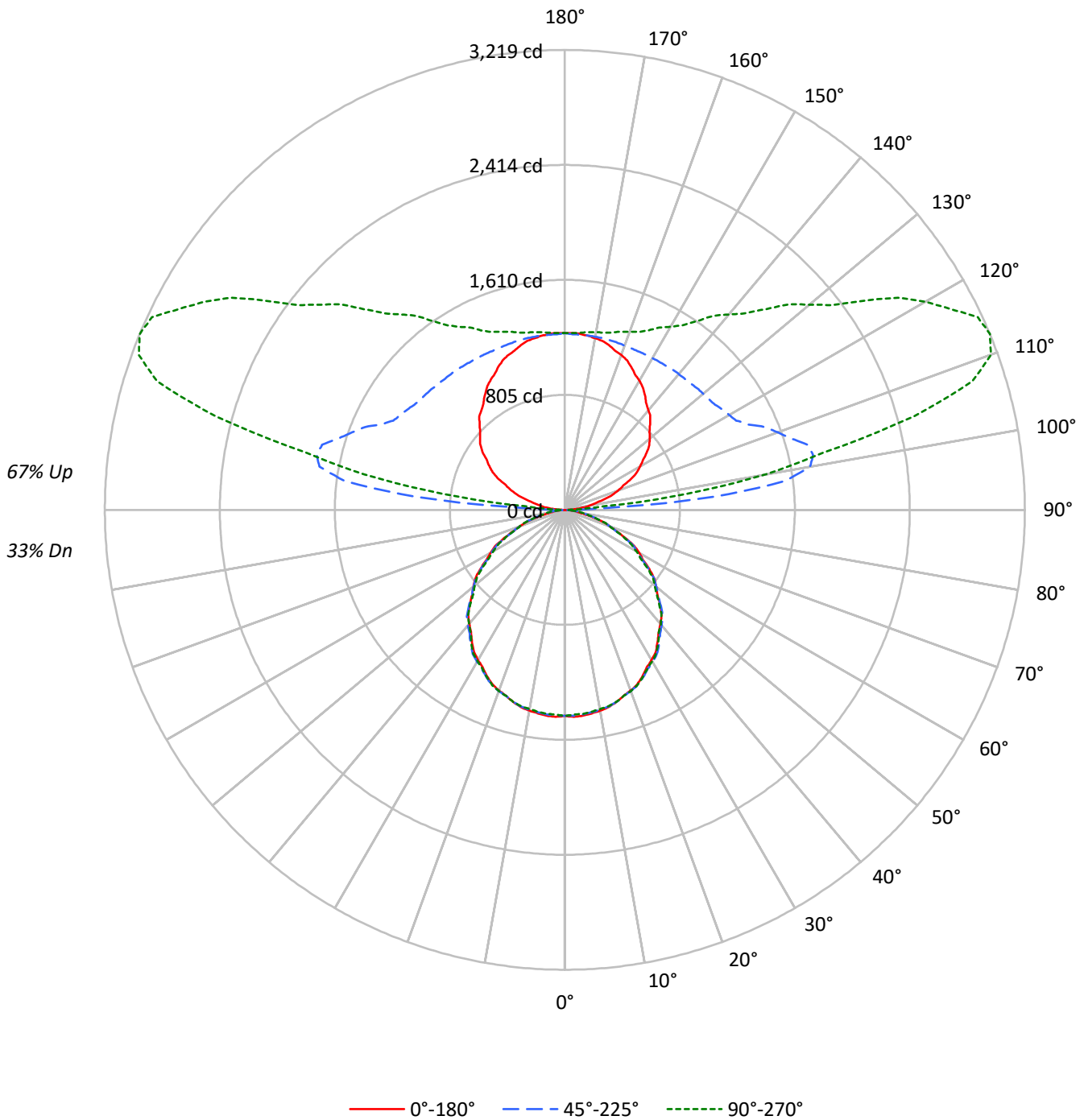
Lumens per Lamp: N/A  
Luminaire Lumens: 11971.1 lumens  
Efficiency: N/A  
Efficacy: 141.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

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	78	72	67	77	71	66	62	57	53	50	44	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	36	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18	15
6	60	48	40	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	43	36	30	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	14	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

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

	0°	45°	90°
0°	6653	6653	6653
5°	6703	6660	6635
10°	6687	6655	6637
15°	6652	6652	6645
20°	6608	6627	6627
25°	6545	6593	6573
30°	6466	6544	6516
35°	6369	6467	6422
40°	6264	6353	6288
45°	6150	6194	6098
50°	5990	5990	5894
55°	5800	5724	5638
60°	5519	5408	5323
65°	5102	4999	4956
70°	4467	4502	4485
75°	3593	3975	3998
80°	2553	3371	3406
85°	1556	2826	2826



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.5	1.1
10°-20°	391.7	3.3
20°-30°	593.1	5.0
30°-40°	711.1	5.9
40°-50°	725.1	6.1
50°-60°	632.9	5.3
60°-70°	453.1	3.8
70°-80°	233.4	1.9
80°-90°	61.6	0.5
90°-100°	579.0	4.8
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°	1121.3	9.4
0°-40°	1832.4	15.3
0°-60°	3190.4	26.7
0°-90°	3938.5	32.9
90°-120°	3825.6	32.0
90°-150°	6989.6	58.4
90°-180°	8033.0	67.1
0°-180°	11971.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1442	1442	1442	1442	1442	
5°	1448	1433	1438	1434	1433	137
15°	1393	1381	1393	1393	1391	393
25°	1286	1277	1295	1291	1291	592
35°	1131	1128	1148	1140	1140	707
45°	943	940	949	937	935	726
55°	721	712	712	701	701	643
65°	467	457	458	454	454	462
75°	202	211	223	224	224	218
85°	29	45	53	55	53	40
90°	4	8	16	18	20	7
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°	1442.2	1442.2	1442.2	1442.2	1442.2
2.5°	1450.7	1438.2	1442.2	1438.8	1433.6
5°	1447.5	1433.1	1438.2	1434.1	1432.8
7.5°	1437.1	1422.7	1429.3	1426.6	1425.3
10°	1427.5	1413.1	1420.8	1418.1	1416.8
12.5°	1414.7	1401.3	1410.1	1407.4	1407.2
15°	1392.8	1381.0	1392.8	1392.7	1391.4
17.5°	1365.2	1354.5	1367.1	1367.9	1367.1
20°	1346.0	1334.3	1350.0	1348.7	1350.0
22.5°	1322.5	1312.9	1329.7	1326.3	1327.6
25°	1285.9	1276.8	1295.3	1291.3	1291.3
27.5°	1242.7	1236.1	1256.3	1252.0	1252.0
30°	1213.8	1207.3	1228.5	1223.2	1223.2
32.5°	1181.8	1177.3	1197.5	1191.1	1191.1
35°	1131.0	1128.4	1148.4	1140.4	1140.4
37.5°	1078.7	1076.3	1094.4	1084.8	1081.6
40°	1040.2	1038.9	1054.9	1044.2	1044.2
42.5°	1001.8	1000.5	1014.3	1001.5	1001.5
45°	942.7	940.1	949.4	937.3	934.7
47.5°	878.4	875.8	881.6	868.5	867.2
50°	834.6	832.0	834.6	822.5	821.2
52.5°	789.7	785.0	785.4	773.4	773.2
55°	721.1	711.9	711.7	701.0	701.0
57.5°	648.4	636.4	637.5	628.4	627.1
60°	598.2	585.2	586.2	578.2	576.9
62.5°	549.1	533.9	537.1	528.0	527.7
65°	467.4	456.9	458.0	454.0	454.0
67.5°	388.8	379.2	386.2	383.0	382.7
70°	331.2	324.6	333.8	333.8	332.5
72.5°	277.7	277.5	289.0	289.0	289.8
75°	201.6	210.8	223.0	224.3	224.3
77.5°	134.6	150.8	164.2	164.8	164.5
80°	96.1	114.4	126.9	129.5	128.2
82.5°	65.2	84.5	94.8	97.4	96.1
85°	29.4	45.0	53.4	54.7	53.4
87.5°	9.3	19.5	24.5	24.9	23.2
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)