

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: P520416

Luminaire Tested: **SQ4-F-150U-100D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520416  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-100D-835-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

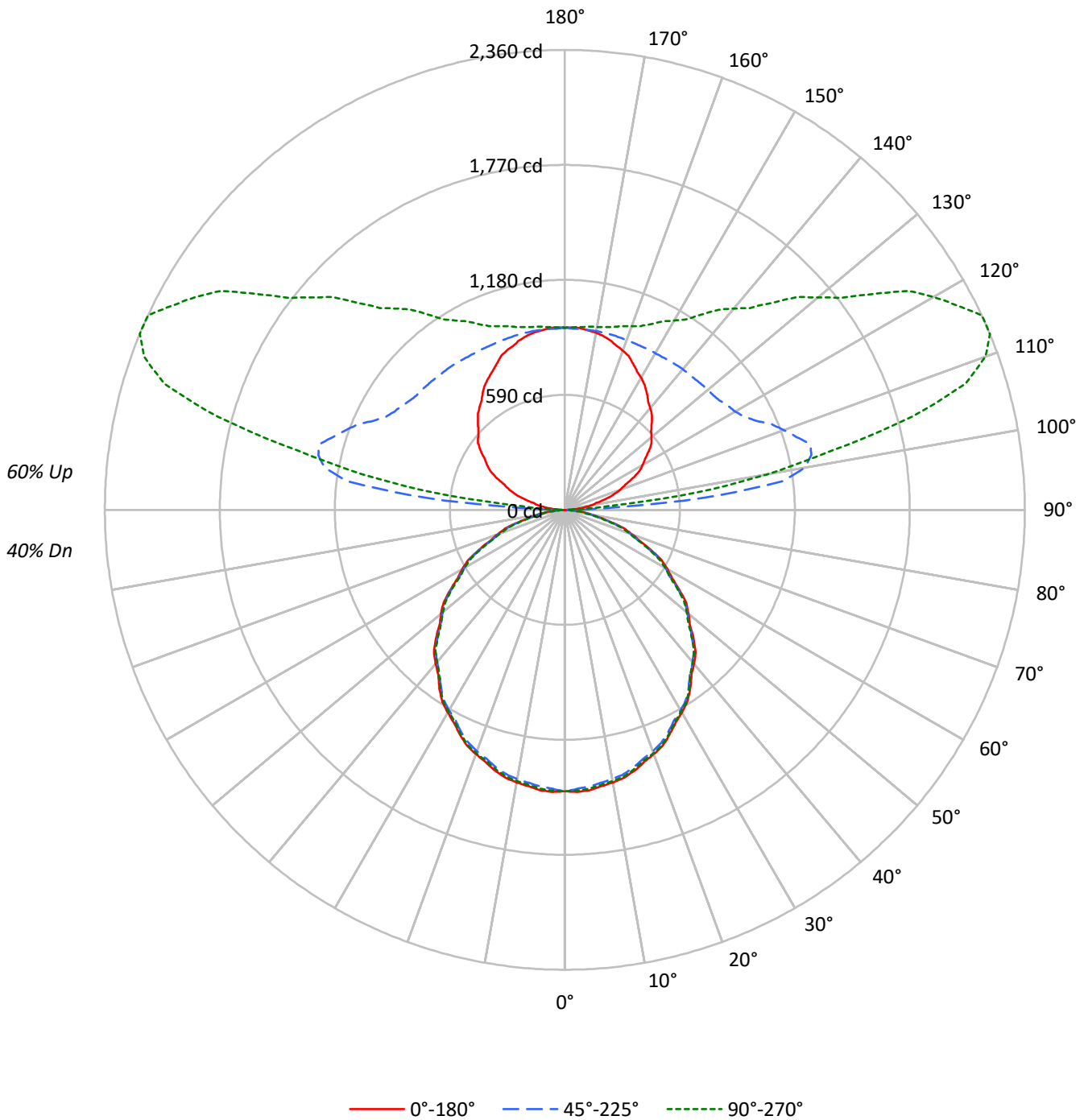
Lumens per Lamp: N/A  
Luminaire Lumens: 9963.3 lumens  
Efficiency: N/A  
Efficacy: 137.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 72.3  
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	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33	28
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12
9	48	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12	10

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

	0°	45°	90°
0°	13319	13319	13319
5°	13379	13196	13297
10°	13311	13144	13246
15°	13231	13050	13155
20°	13094	12939	13046
25°	12951	12800	12901
30°	12794	12656	12719
35°	12633	12476	12544
40°	12422	12280	12291
45°	12204	12037	11997
50°	11889	11747	11718
55°	11540	11411	11332
60°	11190	10988	10952
65°	10643	10405	10317
70°	9889	9649	9463
75°	8830	8548	8370
80°	7263	7003	6684
85°	4298	4721	4827



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.3	1.4
10°-20°	388.0	3.9
20°-30°	582.7	5.8
30°-40°	695.4	7.0
40°-50°	712.8	7.2
50°-60°	634.7	6.4
60°-70°	473.1	4.7
70°-80°	256.2	2.6
80°-90°	60.3	0.6
90°-100°	434.2	4.4
100°-110°	1174.0	11.8
110°-120°	1234.3	12.4
120°-130°	1002.6	10.1
130°-140°	786.5	7.9
140°-150°	603.6	6.1
150°-160°	434.1	4.4
160°-170°	265.2	2.7
170°-180°	89.4	0.9
0°-30°	1106.9	11.1
0°-40°	1802.3	18.1
0°-60°	3149.8	31.6
0°-90°	3939.4	39.5
90°-120°	2842.5	28.5
90°-150°	5235.2	52.5
90°-180°	6024.0	60.5
0°-180°	9963.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1444	1444	1444	1444	1444	
5°	1445	1442	1425	1438	1436	137
15°	1385	1380	1366	1377	1377	390
25°	1272	1269	1257	1264	1267	586
35°	1122	1117	1108	1110	1114	700
45°	935	930	922	918	920	720
55°	717	718	709	702	704	642
65°	488	486	477	472	473	482
75°	248	245	240	235	235	264
85°	41	44	45	46	46	57
90°	2	6	13	14	13	5
95°	67	236	722	374	222	71
105°	218	337	1302	1921	1842	230
115°	384	470	1080	2091	2360	379
125°	526	603	974	1643	1930	469
135°	631	705	947	1326	1502	487
145°	733	788	934	1136	1222	459
155°	828	860	926	1019	1052	382
165°	901	910	930	967	972	254
175°	935	934	931	943	941	89
180°	934	934	934	934	934	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1443.6	1443.6	1443.6	1443.6	1443.6
2.5°	1449.2	1446.1	1433.3	1443.6	1442.0
5°	1444.6	1441.7	1424.8	1437.7	1435.7
7.5°	1431.1	1428.3	1413.3	1425.2	1423.4
10°	1420.8	1418.0	1403.0	1414.9	1413.9
12.5°	1407.4	1404.5	1389.5	1401.4	1400.4
15°	1385.2	1380.3	1366.3	1377.2	1377.2
17.5°	1355.8	1352.2	1339.2	1348.3	1348.5
20°	1333.6	1330.8	1317.8	1327.7	1328.7
22.5°	1311.5	1308.6	1294.0	1303.1	1304.9
25°	1272.2	1269.3	1257.4	1264.4	1267.3
27.5°	1231.8	1227.5	1215.7	1221.9	1224.1
30°	1200.9	1198.9	1188.0	1191.1	1193.9
32.5°	1168.4	1166.4	1157.1	1158.6	1163.8
35°	1121.6	1116.8	1107.7	1109.8	1113.7
37.5°	1066.3	1064.0	1055.2	1054.1	1057.8
40°	1031.4	1027.6	1019.6	1017.7	1020.5
42.5°	993.4	989.5	979.9	978.0	981.7
45°	935.3	930.5	922.5	917.5	919.5
47.5°	870.3	870.3	862.0	856.4	859.2
50°	828.3	828.3	818.4	813.6	816.4
52.5°	784.7	785.5	774.8	772.2	771.3
55°	717.4	718.3	709.4	702.5	704.5
57.5°	652.4	650.2	639.9	635.3	636.3
60°	606.4	603.5	595.5	588.6	593.5
62.5°	559.6	558.2	550.3	542.6	542.0
65°	487.5	485.5	476.6	471.6	472.6
67.5°	415.7	413.5	405.2	398.2	400.7
70°	366.6	366.6	357.7	353.6	350.8
72.5°	321.4	317.6	310.9	305.4	303.2
75°	247.7	244.8	239.8	234.8	234.8
77.5°	180.3	177.9	174.6	171.2	170.2
80°	136.7	135.7	131.8	130.7	125.8
82.5°	96.3	96.1	93.7	91.2	91.0
85°	40.6	44.5	44.6	45.6	45.6
87.5°	7.5	13.0	13.7	12.3	12.1
90°	2.0	5.9	13.1	14.1	13.1
92.5°	28.6	104.1	205.3	89.1	64.6
95°	67.4	236.5	722.1	373.7	222.2
97.5°	108.2	271.2	1125.6	931.5	684.1
100°	138.8	285.3	1251.1	1304.8	1055.0
102.5°	167.0	304.8	1295.4	1587.8	1401.0
105°	218.2	337.2	1302.5	1921.1	1842.5
107.5°	265.7	374.3	1245.5	2129.2	2155.3
110°	302.7	401.1	1194.8	2185.0	2296.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	335.7	427.7	1148.1	2173.8	2360.4
115°	384.2	469.7	1080.1	2091.0	2360.4
117.5°	431.7	511.9	1035.3	1964.5	2269.9
120°	460.6	539.3	1008.7	1873.7	2185.5
122.5°	488.0	565.1	992.7	1776.5	2090.5
125°	526.0	602.7	973.6	1642.9	1930.0
127.5°	561.0	636.3	962.3	1533.8	1786.4
130°	580.4	658.0	957.5	1466.5	1694.7
132.5°	600.5	677.3	952.7	1405.8	1615.8
135°	630.6	705.3	947.4	1326.5	1501.5
137.5°	660.9	731.6	943.0	1262.2	1404.8
140°	681.9	747.7	941.4	1220.9	1347.7
142.5°	702.0	763.9	938.2	1183.4	1294.6
145°	733.2	788.3	934.4	1135.5	1222.0
147.5°	761.5	810.3	929.9	1091.9	1158.4
150°	782.5	825.7	928.3	1068.3	1121.4
152.5°	801.8	839.5	927.5	1046.3	1090.0
155°	827.7	860.2	926.3	1018.6	1052.0
157.5°	854.7	877.3	926.5	999.1	1021.2
160°	870.0	888.7	927.3	987.0	1002.8
162.5°	882.0	897.5	928.1	977.2	989.1
165°	901.2	910.0	930.3	966.7	971.6
167.5°	914.2	920.3	930.5	957.5	959.9
170°	922.3	925.2	931.3	953.5	953.5
172.5°	928.7	929.3	931.3	948.5	947.8
175°	935.4	934.4	931.3	943.3	941.4
177.5°	937.6	935.2	931.1	939.1	936.8
180°	934.4	934.4	934.4	934.4	934.4

(END OF REPORT)