

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: P519836

Luminaire Tested: **SQ4-F-025U-100D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519836  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-100D-830-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

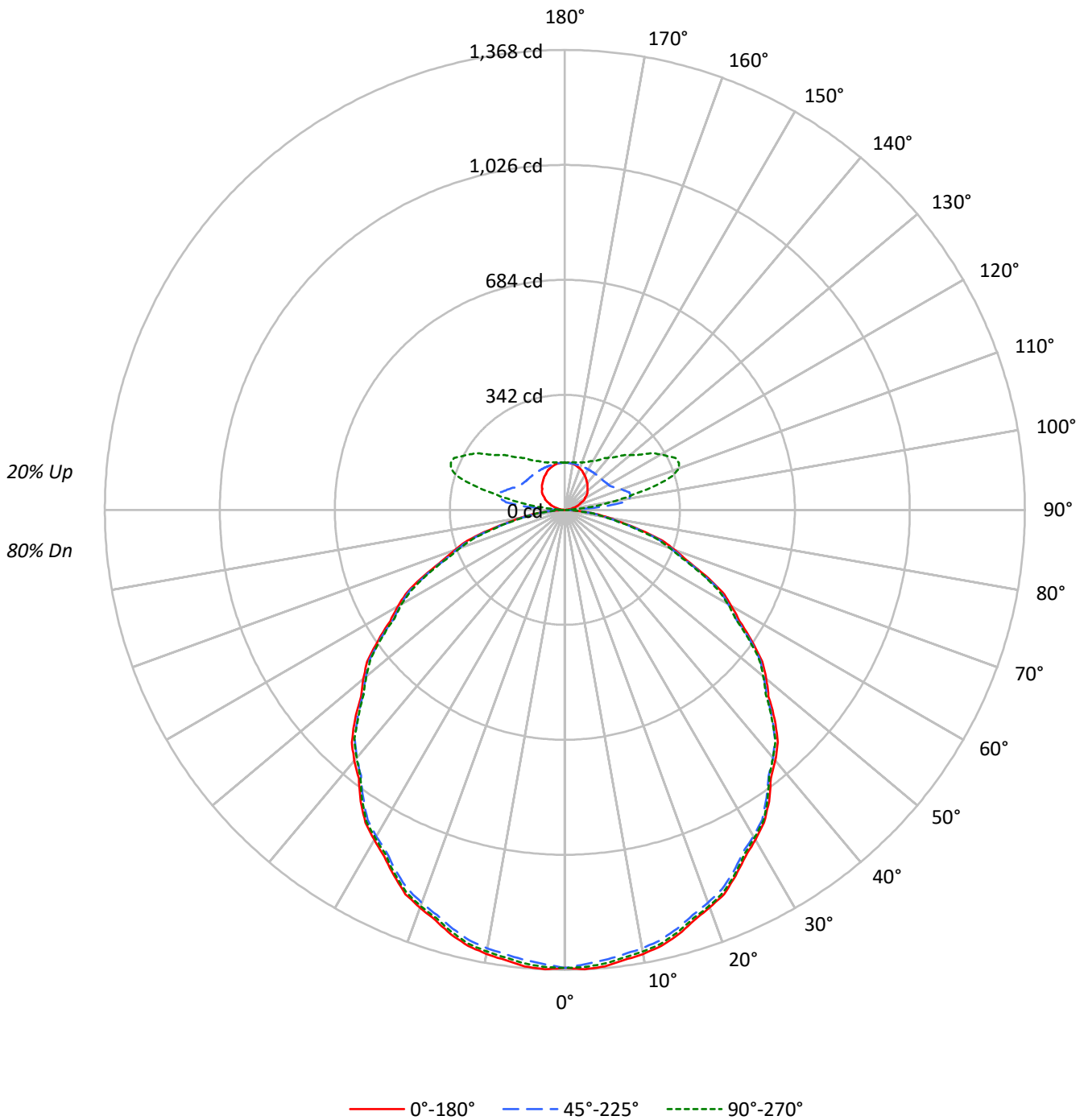
Lumens per Lamp: N/A  
Luminaire Lumens: 4629.0 lumens  
Efficiency: N/A  
Efficacy: 119.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 38.7  
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	114	114	114	114	109	109	109	109	100	100	100	92	92	92	84	84	84	80
1	105	100	96	92	100	96	92	89	88	85	83	81	79	77	74	73	71	68
2	95	87	81	75	91	84	78	73	77	72	68	71	67	64	65	62	60	56
3	87	77	69	63	83	74	67	61	68	62	57	63	58	54	58	54	51	48
4	79	68	59	53	76	65	58	52	60	54	49	56	50	46	51	47	43	41
5	73	61	52	46	70	58	50	44	54	47	42	50	44	40	46	42	38	35
6	67	54	46	40	64	52	45	39	49	42	37	45	39	35	42	37	33	31
7	62	49	41	35	59	48	40	34	44	38	33	41	35	31	38	33	30	27
8	58	45	37	31	55	43	36	30	40	34	29	38	32	28	35	30	26	24
9	54	41	33	28	52	40	32	27	37	31	26	35	29	25	32	28	24	22
10	51	38	30	25	48	37	29	25	34	28	24	32	27	23	30	25	22	20

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

	0°	45°	90°
0°	12573	12573	12573
5°	12629	12455	12550
10°	12564	12407	12502
15°	12489	12319	12417
20°	12359	12213	12314
25°	12225	12082	12176
30°	12076	11946	12006
35°	11924	11777	11840
40°	11726	11591	11602
45°	11519	11361	11324
50°	11223	11088	11062
55°	10891	10771	10695
60°	10562	10372	10337
65°	10044	9820	9739
70°	9334	9107	8929
75°	8334	8067	7899
80°	6859	6604	6312
85°	4054	4457	4552



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.6	2.8
10°-20°	366.2	7.9
20°-30°	550.0	11.9
30°-40°	656.4	14.2
40°-50°	672.8	14.5
50°-60°	599.1	12.9
60°-70°	446.6	9.6
70°-80°	241.8	5.2
80°-90°	55.8	1.2
90°-100°	68.6	1.5
100°-110°	180.2	3.9
110°-120°	186.9	4.0
120°-130°	149.9	3.2
130°-140°	117.6	2.5
140°-150°	90.3	2.0
150°-160°	65.0	1.4
160°-170°	39.8	0.9
170°-180°	13.4	0.3
0°-30°	1044.8	22.6
0°-40°	1701.2	36.8
0°-60°	2973.1	64.2
0°-90°	3717.2	80.3
90°-120°	435.7	9.4
90°-150°	793.5	17.1
90°-180°	912.0	19.7
0°-180°	4629.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1363	1363	1363	1363	1363	
5°	1364	1361	1345	1357	1355	129
15°	1308	1303	1290	1300	1300	368
25°	1201	1198	1187	1193	1196	553
35°	1059	1054	1046	1048	1051	661
45°	883	878	871	866	868	679
55°	677	678	670	663	665	606
65°	460	458	450	445	446	455
75°	234	231	226	222	222	249
85°	38	42	42	43	43	54
90°	1	3	7	4	4	2
95°	9	36	118	61	42	10
105°	32	49	199	302	282	34
115°	58	70	160	318	363	57
125°	80	90	145	245	289	71
135°	96	105	141	198	224	74
145°	111	118	139	169	182	69
155°	125	129	139	152	157	58
165°	135	137	139	144	146	38
175°	141	141	140	142	142	13
180°	141	141	141	141	141	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1362.7	1362.7	1362.7	1362.7	1362.7
2.5°	1367.8	1365.0	1352.9	1362.6	1361.1
5°	1363.6	1360.8	1344.8	1356.9	1355.1
7.5°	1350.9	1348.1	1334.0	1345.2	1343.6
10°	1341.1	1338.4	1324.3	1335.5	1334.5
12.5°	1328.4	1325.6	1311.6	1322.7	1321.9
15°	1307.5	1302.8	1289.7	1300.0	1300.0
17.5°	1279.7	1276.3	1264.1	1272.7	1272.8
20°	1258.8	1256.1	1243.9	1253.2	1254.2
22.5°	1237.8	1235.2	1221.4	1230.0	1231.7
25°	1200.9	1198.1	1186.8	1193.4	1196.1
27.5°	1162.6	1158.7	1147.6	1153.4	1155.4
30°	1133.5	1131.7	1121.3	1124.2	1127.0
32.5°	1102.8	1101.0	1092.2	1093.6	1098.5
35°	1058.7	1054.1	1045.6	1047.5	1051.2
37.5°	1006.5	1004.3	996.0	995.0	998.5
40°	973.6	969.9	962.4	960.5	963.3
42.5°	937.6	934.0	924.9	923.1	926.6
45°	882.8	878.3	870.7	866.1	867.9
47.5°	821.5	821.5	813.7	808.3	811.0
50°	781.9	781.9	772.5	767.9	770.7
52.5°	740.7	741.4	731.3	728.8	728.0
55°	677.1	678.0	669.6	663.2	664.9
57.5°	615.8	613.7	604.0	599.6	600.6
60°	572.4	569.6	562.1	555.7	560.2
62.5°	528.2	526.9	519.4	512.2	511.6
65°	460.1	458.3	449.8	445.2	446.1
67.5°	392.5	390.2	382.6	375.8	378.2
70°	346.0	346.0	337.6	333.8	331.0
72.5°	303.4	299.7	293.5	288.2	286.1
75°	233.8	231.1	226.3	221.6	221.6
77.5°	170.2	167.8	164.8	161.6	160.7
80°	129.1	128.1	124.3	123.4	118.8
82.5°	90.9	90.8	88.5	86.0	85.8
85°	38.3	42.0	42.1	43.0	43.0
87.5°	6.9	11.7	12.0	9.7	9.7
90°	0.9	2.7	7.2	3.6	3.6
92.5°	3.8	18.3	40.4	17.9	11.6
95°	9.0	35.5	118.1	60.9	41.5
97.5°	15.7	39.0	176.7	140.5	103.5
100°	20.7	41.9	194.8	197.4	153.3
102.5°	25.0	44.8	199.8	245.8	208.1
105°	32.5	49.2	199.3	302.5	282.3
107.5°	40.1	55.5	187.9	332.0	336.8
110°	45.1	59.2	178.6	339.5	360.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	50.1	63.6	169.9	334.7	367.1
115°	57.7	70.1	159.6	318.4	363.4
117.5°	65.1	76.4	152.6	295.8	345.7
120°	69.4	80.0	149.7	280.6	329.1
122.5°	73.8	84.3	147.5	265.4	313.2
125°	80.3	89.9	145.2	245.4	289.4
127.5°	85.5	95.4	143.2	229.1	266.4
130°	88.3	98.9	142.4	219.0	253.4
132.5°	91.3	101.8	141.8	210.3	241.1
135°	95.6	105.2	140.7	198.1	224.5
137.5°	100.1	109.6	140.5	189.0	210.7
140°	103.7	112.5	139.7	181.7	202.0
142.5°	106.6	114.7	139.7	176.5	194.0
145°	110.9	118.0	138.9	168.9	182.2
147.5°	115.3	122.2	138.9	162.6	173.5
150°	118.1	124.3	138.9	158.9	167.8
152.5°	121.0	125.8	138.9	156.0	162.7
155°	125.3	128.8	138.9	152.5	156.9
157.5°	128.6	131.9	138.9	149.4	152.6
160°	130.8	133.3	138.9	147.9	149.7
162.5°	132.9	134.9	138.9	146.4	148.3
165°	135.3	137.0	138.9	144.3	146.1
167.5°	137.5	138.3	139.7	143.4	144.0
170°	138.9	139.7	139.7	143.4	143.4
172.5°	139.6	139.7	139.7	142.6	141.9
175°	140.7	140.7	139.7	141.6	141.6
177.5°	140.7	140.7	139.9	141.4	140.7
180°	140.7	140.7	140.7	140.7	140.7

(END OF REPORT)