

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: P519998

Luminaire Tested: **SQ4-F-075U-050D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519998
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-050D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

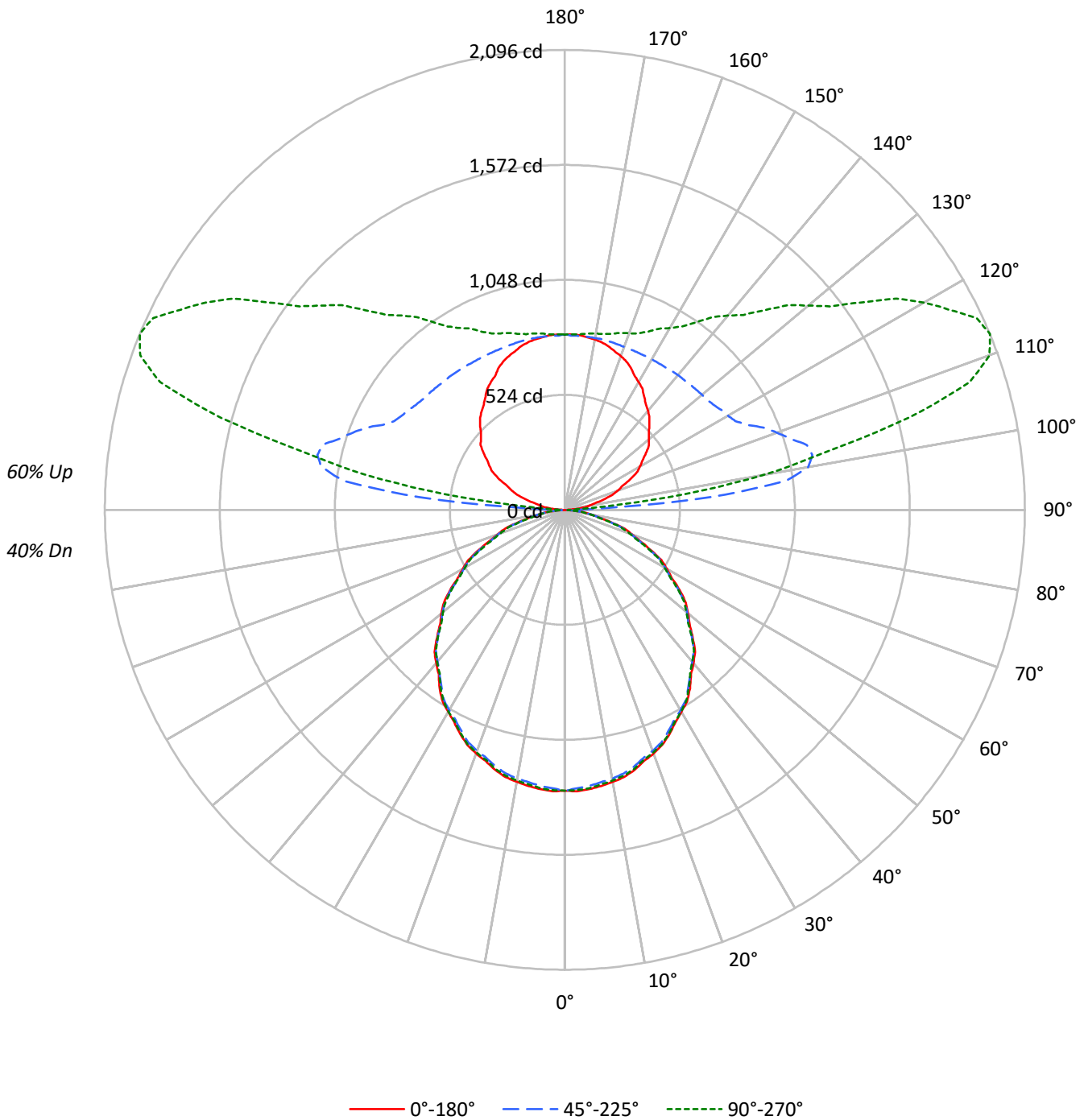
Lumens per Lamp: N/A
Luminaire Lumens: 8698.1 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 72.2
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	62	62	62	47	47	47	40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34
2	87	80	74	68	79	73	68	63	60	56	53	48	45	43	37	35	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24
4	72	62	54	48	66	56	50	44	47	42	38	37	34	31	29	26	24	20
5	66	55	47	41	60	50	43	38	42	36	32	33	30	27	26	23	21	18
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	21	19	15
7	56	44	36	31	51	41	34	29	34	28	25	27	23	20	21	19	16	14
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	20	17	15	12
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13	11
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5905	5905	5905
5°	5919	5848	5896
10°	5900	5827	5868
15°	5860	5786	5835
20°	5805	5737	5780
25°	5739	5669	5722
30°	5659	5613	5650
35°	5597	5529	5558
40°	5490	5438	5448
45°	5377	5332	5332
50°	5263	5214	5189
55°	5141	5072	5044
60°	4948	4869	4838
65°	4713	4619	4564
70°	4392	4299	4207
75°	3941	3818	3725
80°	3185	3140	3050
85°	1905	2175	2265



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.8	1.4
10°-20°	343.9	4.0
20°-30°	516.6	5.9
30°-40°	616.6	7.1
40°-50°	631.9	7.3
50°-60°	563.5	6.5
60°-70°	419.7	4.8
70°-80°	227.8	2.6
80°-90°	54.8	0.6
90°-100°	376.7	4.3
100°-110°	1036.3	11.9
110°-120°	1069.6	12.3
120°-130°	857.0	9.9
130°-140°	673.1	7.7
140°-150°	515.8	5.9
150°-160°	370.9	4.3
160°-170°	226.8	2.6
170°-180°	76.4	0.9
0°-30°	981.3	11.3
0°-40°	1597.9	18.4
0°-60°	2793.3	32.1
0°-90°	3495.6	40.2
90°-120°	2482.6	28.5
90°-150°	4528.5	52.1
90°-180°	5203.0	59.8
0°-180°	8698.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1280	1280	1280	1280	1280	
5°	1278	1277	1263	1275	1273	121
15°	1227	1224	1212	1222	1222	346
25°	1128	1124	1114	1121	1124	519
35°	994	990	982	982	987	620
45°	824	826	817	816	817	636
55°	639	639	631	626	627	569
65°	432	430	423	418	418	428
75°	221	219	214	211	209	234
85°	36	39	41	43	43	50
90°	2	7	12	15	15	5
95°	56	206	666	285	182	59
105°	185	285	1142	1739	1623	195
115°	328	399	916	1824	2070	324
125°	452	515	831	1406	1646	403
135°	545	605	807	1137	1286	421
145°	630	674	795	968	1043	395
155°	714	737	790	870	896	328
165°	771	781	794	826	831	217
175°	799	800	795	805	804	76
180°	799	799	799	799	799	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1280.0	1280.0	1280.0	1280.0	1280.0
2.5°	1284.1	1281.5	1270.4	1280.0	1278.6
5°	1278.3	1276.6	1262.8	1274.9	1273.2
7.5°	1269.1	1265.7	1252.3	1263.9	1262.3
10°	1259.5	1256.1	1244.0	1254.3	1252.6
12.5°	1247.2	1245.1	1231.7	1241.9	1241.6
15°	1227.0	1223.6	1211.5	1221.7	1221.7
17.5°	1200.1	1198.2	1186.4	1196.4	1195.0
20°	1182.4	1179.0	1168.7	1177.3	1177.3
22.5°	1160.4	1158.4	1148.1	1155.3	1156.6
25°	1127.6	1124.2	1113.8	1120.8	1124.1
27.5°	1091.2	1088.5	1079.9	1084.4	1086.7
30°	1062.4	1062.4	1053.8	1055.7	1060.7
32.5°	1036.3	1036.3	1026.4	1028.2	1030.5
35°	993.8	990.5	981.8	982.0	987.0
37.5°	944.5	942.9	937.3	936.4	937.6
40°	911.6	909.9	903.0	904.7	904.7
42.5°	878.7	877.0	870.1	867.8	870.5
45°	824.2	825.9	817.3	815.7	817.3
47.5°	770.4	770.4	763.6	758.9	761.5
50°	733.4	733.4	726.5	723.1	723.1
52.5°	695.0	696.4	688.2	683.4	684.7
55°	639.2	639.2	630.6	625.5	627.1
57.5°	577.4	577.4	568.9	563.8	566.9
60°	536.3	536.3	527.7	522.7	524.4
62.5°	495.2	495.2	486.6	481.5	481.9
65°	431.8	430.1	423.2	418.1	418.1
67.5°	370.9	366.4	361.2	354.4	354.4
70°	325.6	323.9	318.7	311.9	311.9
72.5°	284.5	281.4	276.2	270.8	270.8
75°	221.1	219.4	214.2	210.7	209.0
77.5°	158.4	157.0	156.6	151.9	153.2
80°	119.9	119.9	118.2	114.8	114.8
82.5°	85.7	87.0	84.0	83.2	81.9
85°	36.0	39.3	41.1	42.8	42.8
87.5°	7.2	12.2	12.0	14.0	14.0
90°	1.7	6.7	11.9	15.3	15.3
92.5°	23.5	100.2	173.6	66.7	54.7
95°	56.0	205.6	666.1	284.8	181.8
97.5°	91.5	228.0	1016.5	783.2	552.5
100°	117.3	241.9	1126.5	1137.1	927.7
102.5°	141.7	258.3	1155.1	1410.6	1218.6
105°	185.3	284.9	1141.9	1739.0	1622.7
107.5°	226.6	317.7	1076.9	1899.8	1934.3
110°	256.6	339.6	1028.0	1939.7	2059.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.8	364.2	979.1	1914.0	2096.1
115°	328.0	399.4	915.8	1823.7	2069.6
117.5°	370.1	435.8	875.7	1696.9	1975.1
120°	395.9	459.0	858.1	1602.1	1889.4
122.5°	419.0	482.1	845.9	1518.8	1791.6
125°	452.0	515.1	830.9	1405.6	1646.5
127.5°	483.2	543.3	821.0	1311.1	1522.4
130°	499.5	561.0	815.6	1254.9	1447.7
132.5°	518.6	580.0	811.5	1205.6	1379.7
135°	545.4	605.3	807.1	1136.8	1286.2
137.5°	570.5	626.1	803.3	1081.1	1204.4
140°	589.6	641.1	802.0	1044.1	1155.5
142.5°	605.9	653.4	799.3	1011.1	1106.4
145°	630.4	673.5	795.2	968.5	1043.3
147.5°	656.5	693.8	793.2	930.8	990.6
150°	672.8	706.1	791.8	910.1	956.6
152.5°	687.8	718.4	790.4	892.2	930.8
155°	713.6	736.9	790.1	870.5	895.5
157.5°	732.3	751.3	790.1	852.7	869.9
160°	745.9	760.9	790.1	843.0	856.3
162.5°	756.8	769.1	791.5	834.8	845.5
165°	771.4	781.4	793.5	825.9	830.9
167.5°	781.6	789.2	795.2	818.3	819.7
170°	788.4	793.4	795.2	815.6	815.6
172.5°	793.8	796.2	795.2	811.4	810.2
175°	798.6	800.3	795.2	805.4	803.7
177.5°	800.0	800.0	794.5	802.6	800.0
180°	798.6	798.6	798.6	798.6	798.6

(END OF REPORT)