

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: P520186

Luminaire Tested: **SQ4-F-100U-050D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520186
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-050D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

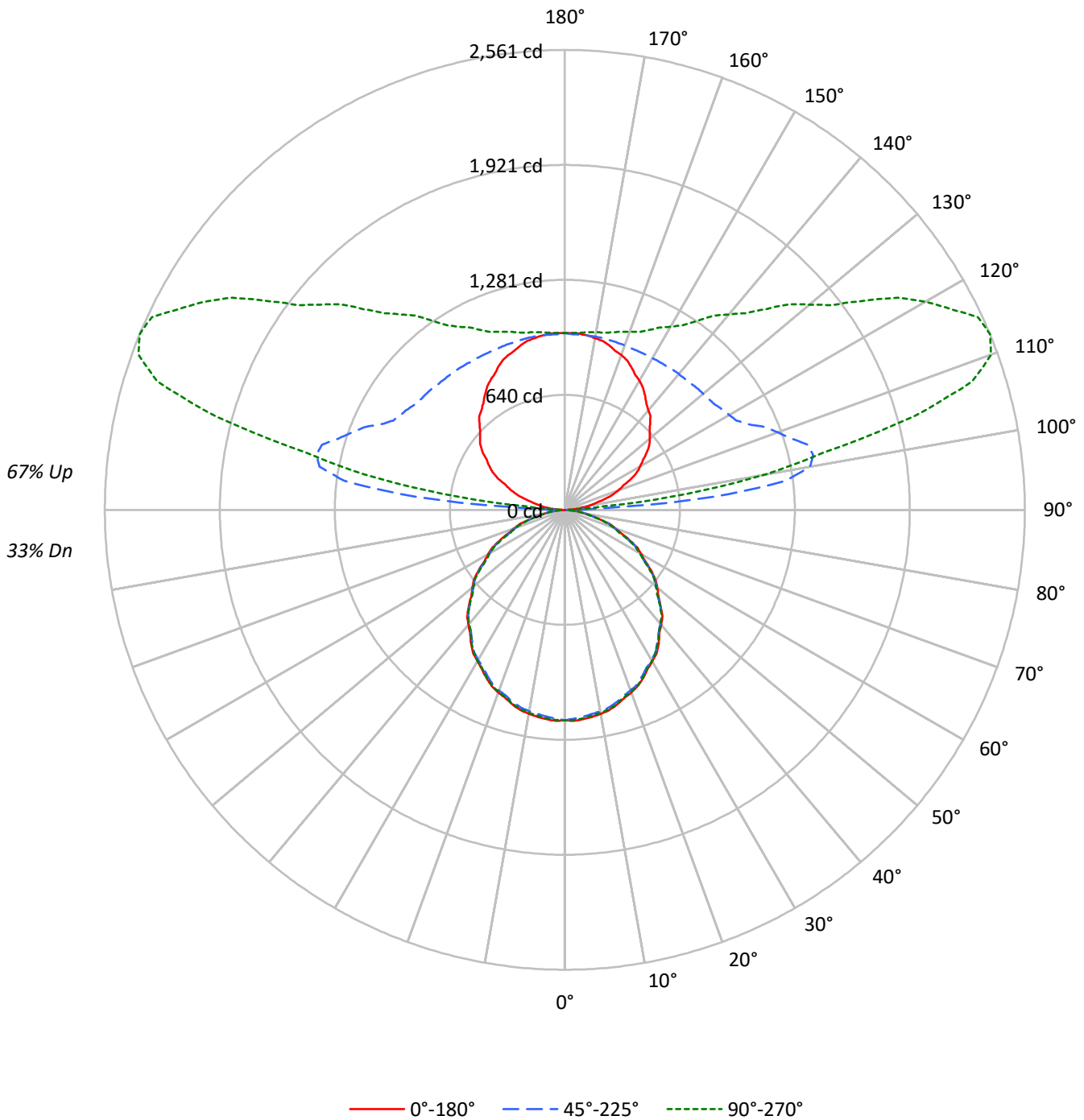
Lumens per Lamp: N/A
Luminaire Lumens: 9593.5 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 85.7
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	57	57	57	41	41	41	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	61	57	53	50	44	41	39	32	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25	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	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	20	23	19	17	17	14	13	10
9	48	36	28	23	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°	5408	5408	5408
5°	5421	5355	5399
10°	5403	5337	5374
15°	5366	5299	5344
20°	5316	5254	5293
25°	5256	5192	5240
30°	5182	5141	5174
35°	5126	5064	5090
40°	5028	4980	4990
45°	4924	4883	4883
50°	4821	4775	4752
55°	4707	4645	4620
60°	4532	4460	4430
65°	4317	4231	4180
70°	4022	3937	3853
75°	3608	3495	3413
80°	2917	2877	2792
85°	1741	1995	2075



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.6	1.2
10°-20°	315.0	3.3
20°-30°	473.1	4.9
30°-40°	564.7	5.9
40°-50°	578.7	6.0
50°-60°	516.1	5.4
60°-70°	384.4	4.0
70°-80°	208.7	2.2
80°-90°	50.3	0.5
90°-100°	460.7	4.8
100°-110°	1271.9	13.3
110°-120°	1311.7	13.7
120°-130°	1054.1	11.0
130°-140°	828.4	8.6
140°-150°	635.3	6.6
150°-160°	456.6	4.8
160°-170°	279.2	2.9
170°-180°	94.1	1.0
0°-30°	898.7	9.4
0°-40°	1463.4	15.3
0°-60°	2558.2	26.7
0°-90°	3201.5	33.4
90°-120°	3044.3	31.7
90°-150°	5562.0	58.0
90°-180°	6392.0	66.6
0°-180°	9593.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1172	1172	1172	1172	1172	
5°	1171	1169	1156	1168	1166	111
15°	1124	1121	1110	1119	1119	317
25°	1033	1030	1020	1026	1029	475
35°	910	907	899	899	904	568
45°	755	756	748	747	748	583
55°	585	585	578	573	574	521
65°	396	394	388	383	383	392
75°	202	201	196	193	192	214
85°	33	36	38	39	39	46
90°	3	6	13	14	16	6
95°	68	249	836	344	224	72
105°	227	350	1399	2136	2012	241
115°	406	491	1127	2231	2537	399
125°	557	634	1022	1729	2029	496
135°	670	743	993	1400	1579	519
145°	778	831	981	1192	1283	487
155°	877	906	973	1070	1103	404
165°	949	961	977	1015	1023	268
175°	984	985	979	993	990	93
180°	984	984	984	984	984	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1172.3	1172.3	1172.3	1172.3	1172.3
2.5°	1176.1	1173.6	1163.4	1172.2	1171.0
5°	1170.7	1169.2	1156.5	1167.5	1166.0
7.5°	1162.3	1159.2	1146.9	1157.5	1156.0
10°	1153.5	1150.3	1139.3	1148.7	1147.2
12.5°	1142.1	1140.3	1128.0	1137.4	1137.1
15°	1123.6	1120.6	1109.5	1118.9	1118.9
17.5°	1099.2	1097.3	1086.6	1095.7	1094.4
20°	1082.8	1079.7	1070.3	1078.2	1078.2
22.5°	1062.8	1060.9	1051.4	1058.0	1059.3
25°	1032.6	1029.5	1020.1	1026.4	1029.4
27.5°	999.4	996.9	989.0	993.2	995.2
30°	972.9	972.9	965.2	966.8	971.4
32.5°	949.1	949.1	940.0	941.7	943.8
35°	910.2	907.2	899.2	899.3	903.9
37.5°	865.0	863.5	858.5	857.5	858.8
40°	834.9	833.3	827.0	828.6	828.6
42.5°	804.7	803.2	796.9	794.8	797.2
45°	754.8	756.4	748.5	747.0	748.5
47.5°	705.5	705.5	699.3	695.0	697.4
50°	671.7	671.7	665.4	662.2	662.2
52.5°	636.5	637.8	630.2	625.9	627.1
55°	585.3	585.3	577.5	572.8	574.4
57.5°	528.8	528.8	521.0	516.4	519.2
60°	491.2	491.2	483.4	478.6	480.2
62.5°	453.5	453.5	445.7	441.0	441.3
65°	395.5	393.9	387.6	382.9	382.9
67.5°	339.6	335.7	330.8	324.5	324.5
70°	298.2	296.6	291.9	285.7	285.7
72.5°	260.5	257.8	253.0	248.0	248.0
75°	202.4	200.9	196.1	193.0	191.5
77.5°	145.0	143.8	143.5	139.0	140.3
80°	109.8	109.8	108.3	105.1	105.1
82.5°	78.5	79.7	76.9	76.2	75.0
85°	32.9	36.0	37.7	39.2	39.2
87.5°	6.9	11.2	11.3	12.9	13.2
90°	3.2	6.2	12.6	14.2	15.7
92.5°	28.3	117.6	210.3	76.8	59.8
95°	67.7	249.3	835.8	343.6	223.5
97.5°	112.1	279.3	1238.1	953.2	690.4
100°	144.8	297.2	1386.7	1396.5	1134.8
102.5°	176.3	317.5	1415.7	1725.5	1477.4
105°	226.6	349.8	1399.3	2136.3	2011.6
107.5°	280.1	389.8	1321.2	2334.4	2380.0
110°	317.9	416.5	1260.8	2377.0	2524.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	352.0	446.7	1204.2	2343.4	2561.3
115°	406.1	490.8	1127.0	2231.1	2537.3
117.5°	453.4	537.6	1076.4	2073.0	2421.5
120°	484.8	567.9	1056.2	1966.1	2316.9
122.5°	515.0	594.4	1039.8	1866.2	2198.6
125°	557.2	634.2	1021.6	1728.9	2028.9
127.5°	593.1	670.0	1010.9	1612.6	1871.5
130°	617.0	693.9	1005.8	1541.6	1777.0
132.5°	639.7	712.9	1000.8	1481.9	1695.2
135°	670.5	742.9	993.2	1400.2	1578.8
137.5°	705.2	771.0	989.4	1331.6	1484.0
140°	724.0	788.7	986.9	1285.9	1419.7
142.5°	745.5	805.2	984.4	1245.2	1363.1
145°	777.5	831.4	980.6	1192.0	1282.8
147.5°	808.4	855.5	977.1	1147.2	1217.6
150°	831.0	869.5	975.9	1120.4	1177.4
152.5°	848.7	884.8	974.7	1097.5	1144.6
155°	876.7	906.0	972.8	1069.5	1103.4
157.5°	902.6	925.0	973.1	1049.2	1072.2
160°	917.7	937.7	974.3	1037.7	1054.6
162.5°	930.3	947.8	975.6	1027.5	1040.8
165°	949.2	961.4	977.4	1015.4	1023.1
167.5°	963.6	971.0	979.0	1008.1	1010.5
170°	971.2	977.3	979.0	1004.3	1004.3
172.5°	977.4	981.2	979.0	999.2	997.9
175°	983.8	985.3	979.0	993.2	990.1
177.5°	986.3	985.1	978.7	987.5	985.1
180°	983.8	983.8	983.8	983.8	983.8

(END OF REPORT)