

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: P520043

Luminaire Tested: **SQ4-F-075U-100D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520043
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

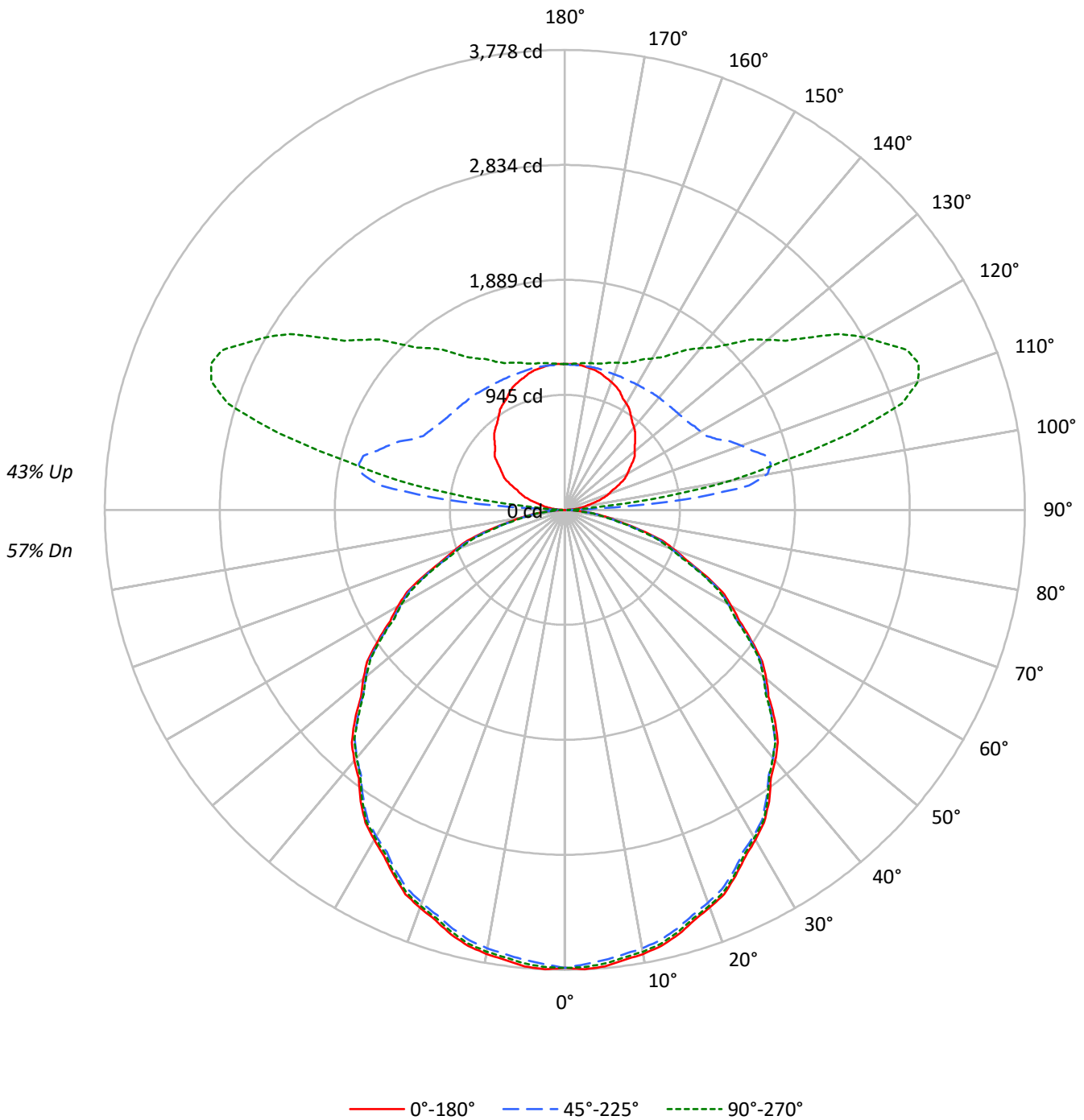
Lumens per Lamp: N/A
Luminaire Lumens: 18070.5 lumens
Efficiency: N/A
Efficacy: 111.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 162.1
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									
RC	80					70					50					30					10				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0				
RCR	0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57	57	57				
	1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53	48	48	48				
	2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44	40	40	40				
	3	82	73	65	59	76	68	61	56	59	54	50	51	47	43	43	40	38	34	34	34				
	4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32	29	29	29				
	5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28	25	25	25				
	6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25	22	22	22				
	7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22	19	19	19				
	8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	20	17	17	17				
	9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18	15	15	15				
	10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14	14	14				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11573	11573	11573
5°	11625	11466	11553
10°	11566	11421	11510
15°	11496	11340	11430
20°	11377	11242	11335
25°	11253	11122	11209
30°	11116	10997	11052
35°	10977	10841	10899
40°	10794	10670	10680
45°	10604	10458	10424
50°	10331	10207	10182
55°	10026	9916	9846
60°	9723	9547	9516
65°	9247	9040	8965
70°	8593	8384	8221
75°	7672	7427	7273
80°	6312	6084	5809
85°	3737	4100	4192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	355.2	2.0
10°-20°	1011.4	5.6
20°-30°	1518.9	8.4
30°-40°	1812.6	10.0
40°-50°	1857.9	10.3
50°-60°	1654.5	9.2
60°-70°	1233.3	6.8
70°-80°	667.7	3.7
80°-90°	155.0	0.9
90°-100°	565.0	3.1
100°-110°	1554.4	8.6
110°-120°	1604.4	8.9
120°-130°	1285.5	7.1
130°-140°	1009.6	5.6
140°-150°	773.8	4.3
150°-160°	556.3	3.1
160°-170°	340.2	1.9
170°-180°	114.7	0.6
0°-30°	2885.4	16.0
0°-40°	4698.1	26.0
0°-60°	8210.5	45.4
0°-90°	10266.6	56.8
90°-120°	3723.8	20.6
90°-150°	6792.7	37.6
90°-180°	7804.0	43.2
0°-180°	18070.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3763	3763	3763	3763	3763	
5°	3766	3758	3714	3748	3742	357
15°	3611	3598	3562	3590	3590	1017
25°	3316	3309	3278	3296	3303	1528
35°	2924	2911	2888	2893	2903	1825
45°	2438	2426	2404	2392	2397	1876
55°	1870	1872	1849	1831	1836	1674
65°	1271	1266	1242	1229	1232	1257
75°	646	638	625	612	612	688
85°	106	116	116	119	119	148
90°	2	10	18	23	23	8
95°	84	308	999	427	273	89
105°	278	427	1713	2608	2434	293
115°	492	599	1374	2736	3104	485
125°	678	773	1246	2108	2470	605
135°	818	908	1211	1705	1929	631
145°	946	1010	1193	1453	1565	593
155°	1070	1105	1185	1306	1343	492
165°	1157	1172	1190	1239	1246	326
175°	1198	1200	1193	1208	1206	114
180°	1198	1198	1198	1198	1198	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3763.0	3763.0	3763.0	3763.0	3763.0
2.5°	3777.5	3769.5	3736.2	3762.9	3759.0
5°	3765.6	3758.1	3714.0	3747.5	3742.4
7.5°	3730.5	3722.9	3684.1	3714.9	3710.4
10°	3703.7	3696.1	3657.2	3688.1	3685.6
12.5°	3668.5	3661.0	3622.1	3653.0	3650.5
15°	3610.7	3598.1	3561.6	3590.0	3590.0
17.5°	3534.3	3524.7	3490.9	3514.6	3515.1
20°	3476.4	3468.8	3435.1	3460.9	3463.5
22.5°	3418.5	3411.0	3373.1	3396.9	3401.5
25°	3316.3	3308.7	3277.5	3295.8	3303.3
27.5°	3210.9	3199.8	3169.0	3185.2	3190.7
30°	3130.3	3125.3	3096.7	3104.6	3112.2
32.5°	3045.6	3040.5	3016.2	3020.0	3033.7
35°	2923.7	2911.0	2887.6	2892.9	2903.0
37.5°	2779.6	2773.5	2750.6	2747.7	2757.4
40°	2688.7	2678.6	2657.7	2652.6	2660.3
42.5°	2589.5	2579.4	2554.3	2549.4	2559.0
45°	2438.1	2425.5	2404.5	2391.7	2396.8
47.5°	2268.7	2268.7	2247.0	2232.2	2239.8
50°	2159.2	2159.2	2133.3	2120.7	2128.2
52.5°	2045.6	2047.5	2019.7	2013.0	2010.4
55°	1869.9	1872.5	1849.3	1831.3	1836.3
57.5°	1700.4	1694.9	1668.0	1656.2	1658.6
60°	1580.7	1573.0	1552.2	1534.5	1547.1
62.5°	1458.8	1455.2	1434.4	1414.3	1412.8
65°	1270.7	1265.7	1242.3	1229.4	1232.0
67.5°	1083.8	1077.6	1056.3	1037.9	1044.4
70°	955.6	955.6	932.4	921.9	914.3
72.5°	837.8	827.7	810.5	795.9	790.3
75°	645.7	638.1	625.0	612.1	612.1
77.5°	470.0	463.5	455.1	446.3	443.7
80°	356.4	353.9	343.5	340.6	328.0
82.5°	251.1	250.6	244.3	237.6	237.1
85°	105.9	116.0	116.2	118.8	118.8
87.5°	19.1	32.8	32.5	29.4	29.4
90°	2.5	10.0	17.8	23.0	23.0
92.5°	35.2	150.3	260.5	100.0	82.1
95°	84.1	308.4	999.1	427.2	272.7
97.5°	137.1	342.0	1524.7	1174.7	828.9
100°	175.9	362.8	1689.8	1705.6	1391.6
102.5°	212.5	387.5	1732.6	2116.1	1827.9
105°	277.8	427.3	1712.8	2608.4	2434.0
107.5°	340.0	476.5	1615.4	2849.7	2901.5
110°	384.9	509.5	1542.0	2909.6	3089.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	425.7	546.3	1468.5	2871.0	3144.1
115°	491.9	599.1	1373.8	2735.5	3104.4
117.5°	555.1	653.8	1313.6	2545.5	2962.6
120°	593.8	688.6	1287.1	2403.0	2834.2
122.5°	628.5	723.2	1268.7	2278.1	2687.4
125°	677.9	772.6	1246.3	2108.3	2469.7
127.5°	724.9	815.1	1231.5	1966.7	2283.6
130°	749.3	841.6	1223.4	1882.4	2171.5
132.5°	777.9	870.0	1217.3	1808.3	2069.6
135°	818.1	907.9	1210.6	1705.1	1929.3
137.5°	855.9	939.1	1205.0	1621.6	1806.5
140°	884.4	961.7	1203.0	1566.2	1733.1
142.5°	908.9	980.2	1198.9	1516.7	1659.8
145°	945.5	1010.4	1192.8	1452.8	1564.9
147.5°	984.9	1040.6	1189.8	1396.2	1485.9
150°	1009.3	1059.1	1187.7	1365.2	1434.9
152.5°	1031.7	1077.6	1185.7	1338.4	1396.2
155°	1070.5	1105.4	1185.2	1305.8	1343.2
157.5°	1098.5	1126.9	1185.2	1279.0	1304.9
160°	1118.9	1141.3	1185.2	1264.6	1284.6
162.5°	1135.2	1153.6	1187.2	1252.3	1268.2
165°	1157.1	1172.1	1190.3	1238.9	1246.3
167.5°	1172.4	1183.9	1192.8	1227.5	1229.5
170°	1182.6	1190.1	1192.8	1223.4	1223.4
172.5°	1190.8	1194.3	1192.8	1217.3	1215.2
175°	1197.9	1200.3	1192.8	1208.1	1205.5
177.5°	1200.0	1200.0	1191.7	1204.0	1200.0
180°	1197.9	1197.9	1197.9	1197.9	1197.9

(END OF REPORT)