

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: P519947

Luminaire Tested: **SQ4-F-050U-100D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519947
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-100D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

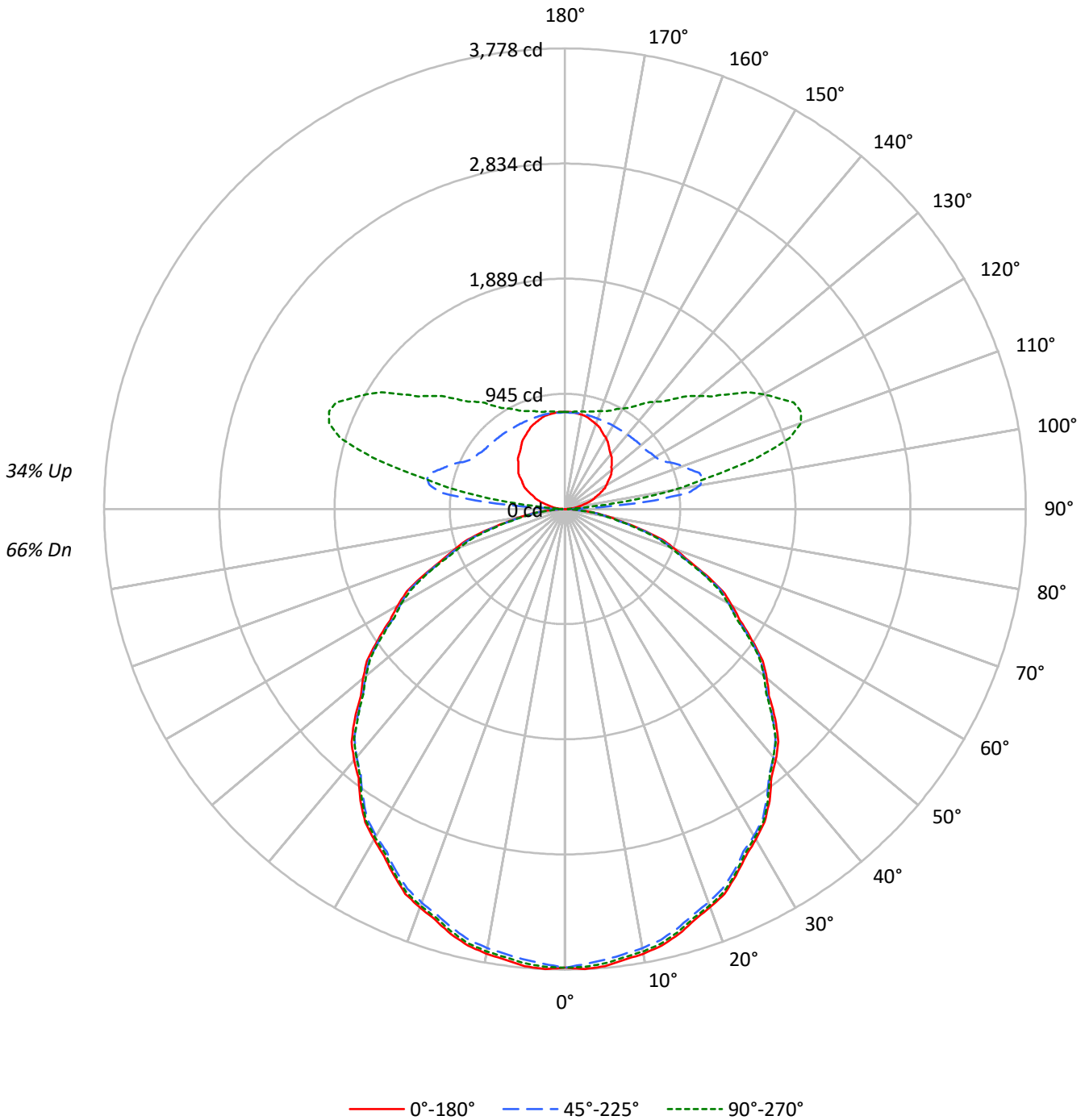
Lumens per Lamp: N/A
Luminaire Lumens: 15458.9 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 141.9
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									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	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66																												
1	101	97	93	89	95	91	88	85	81	79	76	72	70	68	63	61	60	56																												
2	92	85	78	73	87	80	74	69	71	67	63	63	59	57	55	53	51	47																												
3	84	74	67	61	79	70	63	58	63	57	53	55	51	48	49	46	43	39																												
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37	34																												
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32	29																												
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	31	28	26																												
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	23																												
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	30	26	22	20																												
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18																												
10	49	36	29	24	46	35	28	23	31	26	21	28	23	20	25	21	18	16																												

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	2.3
10°-20°	1011.4	6.5
20°-30°	1518.9	9.8
30°-40°	1812.6	11.7
40°-50°	1857.9	12.0
50°-60°	1654.5	10.7
60°-70°	1233.3	8.0
70°-80°	667.7	4.3
80°-90°	155.0	1.0
90°-100°	381.8	2.5
100°-110°	1037.0	6.7
110°-120°	1066.3	6.9
120°-130°	852.5	5.5
130°-140°	669.8	4.3
140°-150°	513.6	3.3
150°-160°	369.4	2.4
160°-170°	225.9	1.5
170°-180°	76.1	0.5
0°-30°	2885.4	18.7
0°-40°	4698.1	30.4
0°-60°	8210.5	53.1
0°-90°	10266.6	66.4
90°-120°	2485.0	16.1
90°-150°	4521.0	29.2
90°-180°	5192.0	33.6
0°-180°	15458.9	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°	3	10	18	23	23	6
95°	56	209	665	289	194	60
105°	184	287	1140	1736	1634	196
115°	327	397	913	1816	2069	323
125°	450	512	826	1392	1642	401
135°	542	602	803	1134	1278	419
145°	626	672	793	963	1036	393
155°	708	733	788	865	890	327
165°	767	777	790	823	826	217
175°	795	798	793	803	800	76
180°	795	795	795	795	795	

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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°	2.6	10.0	17.9	23.1	23.1
92.5°	23.1	104.5	181.5	78.0	65.9
95°	56.2	208.7	664.8	289.4	194.3
97.5°	93.1	230.6	1019.3	793.0	556.9
100°	117.7	245.1	1127.6	1143.1	923.1
102.5°	142.2	259.6	1156.2	1413.7	1219.7
105°	184.1	286.6	1140.5	1736.5	1633.9
107.5°	227.6	318.0	1074.4	1903.1	1931.6
110°	258.3	340.8	1025.3	1935.9	2058.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.9	363.4	976.3	1908.7	2093.2
115°	327.3	397.3	912.9	1816.1	2068.6
117.5°	367.2	434.2	872.5	1684.9	1969.4
120°	393.8	458.8	854.0	1596.8	1879.4
122.5°	416.3	481.3	841.7	1508.7	1781.2
125°	450.0	512.5	825.9	1391.6	1641.6
127.5°	480.2	542.3	817.2	1302.9	1517.4
130°	498.6	558.6	813.1	1247.1	1439.6
132.5°	517.0	577.0	809.1	1199.5	1370.1
135°	542.1	602.1	802.9	1133.5	1278.5
137.5°	569.1	623.7	799.8	1075.2	1197.2
140°	585.5	638.0	797.8	1038.1	1148.1
142.5°	601.9	650.4	795.7	1009.1	1101.0
145°	626.5	671.5	792.7	963.1	1035.6
147.5°	654.1	692.6	790.1	926.9	983.9
150°	672.5	705.0	790.1	906.2	951.2
152.5°	686.8	715.4	788.1	887.6	924.6
155°	708.3	733.3	787.6	864.8	889.8
157.5°	729.3	748.7	787.6	849.4	868.3
160°	741.6	759.0	787.6	839.0	854.0
162.5°	753.8	767.3	789.6	830.8	841.7
165°	767.1	777.1	790.1	823.4	825.9
167.5°	780.9	785.9	792.7	814.7	816.7
170°	785.0	790.0	792.7	810.5	810.5
172.5°	789.1	792.1	792.7	806.5	806.5
175°	795.2	797.7	792.7	802.9	800.3
177.5°	797.3	797.3	791.1	799.3	795.2
180°	795.2	795.2	795.2	795.2	795.2

(END OF REPORT)