

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: P564680

Luminaire Tested: **SQ4-PW1-050U-100D-930-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564680
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-050U-100D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

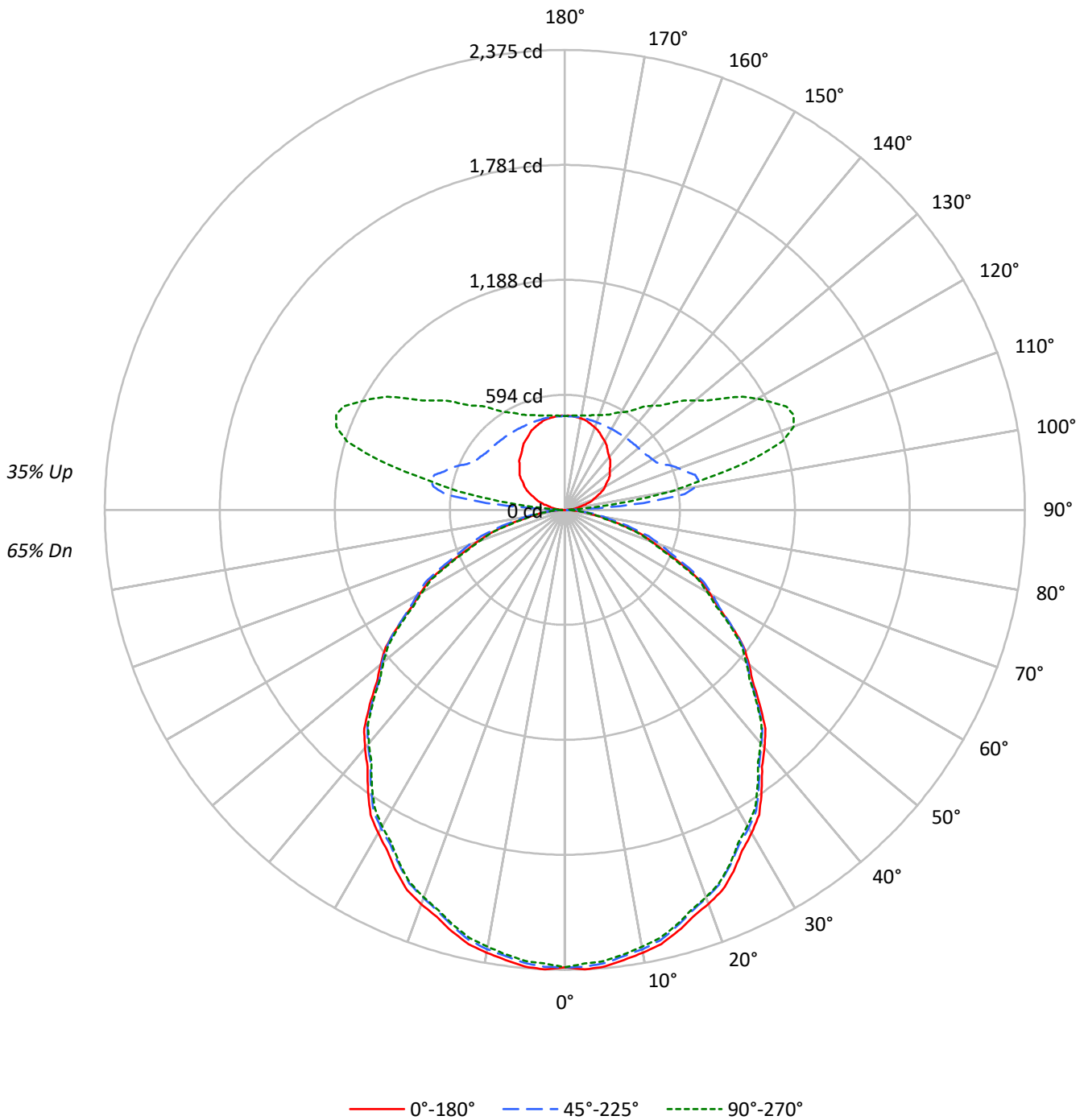
Lumens per Lamp: N/A
Luminaire Lumens: 9181.2 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 95.4
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	65
1	101	97	93	90	95	91	88	85	81	78	76	71	69	68	62	61	60	55
2	92	85	79	73	87	80	75	70	71	67	63	63	59	57	55	53	50	47
3	84	75	67	61	79	71	64	59	63	58	53	56	51	48	49	46	43	40
4	77	66	58	52	72	63	55	50	56	50	45	50	45	41	44	40	37	34
5	71	59	51	45	67	56	48	43	50	44	39	45	40	36	39	36	32	30
6	66	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	29	26
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25	23
8	56	44	36	30	53	42	34	29	38	31	27	34	29	25	30	26	23	21
9	53	40	32	27	49	38	31	26	34	29	24	31	26	22	28	24	21	19
10	49	37	29	24	46	35	28	24	32	26	22	29	24	20	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10896	10896	10896
5°	10966	10879	10831
10°	10878	10791	10732
15°	10763	10644	10604
20°	10635	10471	10451
25°	10486	10296	10263
30°	10265	10109	10043
35°	9973	9832	9774
40°	9662	9511	9474
45°	9286	9163	9123
50°	8901	8826	8766
55°	8485	8485	8352
60°	7968	8121	7833
65°	7292	7655	7109
70°	6427	7045	6260
75°	5490	6306	5342
80°	4256	5308	4312
85°	2752	4076	3636



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.4	2.4
10°-20°	627.9	6.8
20°-30°	931.4	10.1
30°-40°	1089.8	11.9
40°-50°	1085.0	11.8
50°-60°	936.9	10.2
60°-70°	674.4	7.3
70°-80°	353.7	3.9
80°-90°	89.5	1.0
90°-100°	233.1	2.5
100°-110°	633.2	6.9
110°-120°	651.0	7.1
120°-130°	520.5	5.7
130°-140°	409.0	4.5
140°-150°	313.6	3.4
150°-160°	225.5	2.5
160°-170°	137.9	1.5
170°-180°	46.5	0.5
0°-30°	1781.7	19.4
0°-40°	2871.6	31.3
0°-60°	4893.5	53.3
0°-90°	6011.1	65.5
90°-120°	1517.2	16.5
90°-150°	2760.3	30.1
90°-180°	3170.0	34.5
0°-180°	9181.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2362	2362	2362	2362	2362	
5°	2368	2342	2349	2343	2339	224
15°	2254	2225	2229	2224	2220	635
25°	2060	2026	2023	2010	2016	947
35°	1771	1746	1746	1729	1736	1107
45°	1423	1411	1405	1400	1398	1098
55°	1055	1053	1055	1040	1038	941
65°	668	688	701	674	651	662
75°	308	336	354	330	300	330
85°	52	68	77	73	69	69
90°	2	6	11	14	14	4
95°	34	128	406	177	119	36
105°	112	175	696	1060	998	119
115°	200	243	557	1109	1263	197
125°	275	313	504	850	1002	245
135°	331	368	490	692	781	256
145°	382	410	484	588	632	240
155°	432	448	481	528	543	199
165°	468	474	482	503	504	132
175°	486	487	484	490	489	46
180°	486	486	486	486	486	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2361.9	2361.9	2361.9	2361.9	2361.9
2.5°	2375.2	2355.7	2361.9	2356.6	2345.2
5°	2368.1	2341.7	2349.4	2343.0	2339.0
7.5°	2344.0	2319.6	2325.2	2318.5	2316.1
10°	2322.3	2297.9	2303.6	2295.2	2291.1
12.5°	2297.4	2271.3	2277.0	2268.6	2266.1
15°	2253.7	2225.2	2228.7	2224.4	2220.4
17.5°	2202.9	2174.0	2174.6	2167.9	2167.1
20°	2166.3	2135.7	2133.0	2124.7	2128.8
22.5°	2126.3	2094.2	2091.3	2079.8	2085.5
25°	2060.1	2025.5	2022.7	2010.3	2016.4
27.5°	1983.6	1949.4	1949.4	1932.1	1938.6
30°	1927.0	1894.4	1897.8	1877.2	1885.3
32.5°	1867.0	1837.7	1839.6	1818.9	1827.1
35°	1770.9	1746.5	1745.9	1729.4	1735.5
37.5°	1672.7	1651.1	1647.7	1638.2	1639.8
40°	1604.4	1586.1	1579.4	1573.2	1573.2
42.5°	1532.8	1516.1	1509.5	1504.9	1503.3
45°	1423.4	1411.2	1404.6	1400.4	1398.4
47.5°	1315.2	1303.8	1298.1	1295.1	1293.1
50°	1240.2	1232.1	1229.8	1223.5	1221.5
52.5°	1165.3	1160.4	1158.3	1150.3	1148.3
55°	1055.0	1053.0	1055.0	1040.4	1038.4
57.5°	940.2	943.4	950.2	930.5	925.6
60°	863.6	871.7	880.2	857.2	849.0
62.5°	785.3	798.4	810.3	783.8	772.4
65°	668.0	688.3	701.3	673.7	651.3
67.5°	554.8	580.0	595.6	565.9	540.6
70°	476.5	505.0	522.3	492.5	464.1
72.5°	408.3	440.0	454.1	425.9	397.5
75°	308.0	336.5	353.8	330.2	299.7
77.5°	218.5	245.4	259.7	239.2	213.9
80°	160.2	188.7	199.8	182.7	162.3
82.5°	113.6	137.2	144.8	134.5	120.7
85°	52.0	68.3	77.0	72.7	68.7
87.5°	13.6	25.9	33.8	34.5	36.1
90°	1.6	6.1	10.9	14.1	14.1
92.5°	14.1	63.8	110.8	47.6	40.3
95°	34.3	127.5	405.9	176.7	118.7
97.5°	56.8	140.8	622.3	484.1	340.0
100°	71.8	149.7	688.5	697.9	563.6
102.5°	86.8	158.5	706.0	863.1	744.7
105°	112.4	175.0	696.3	1060.2	997.6
107.5°	138.9	194.2	656.0	1161.9	1179.3
110°	157.7	208.1	626.0	1182.0	1256.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	173.9	221.8	596.1	1165.3	1278.0
115°	199.8	242.6	557.3	1108.8	1263.0
117.5°	224.2	265.1	532.7	1028.7	1202.4
120°	240.4	280.1	521.4	975.0	1147.5
122.5°	254.2	293.8	513.9	921.1	1087.5
125°	274.8	312.9	504.3	849.6	1002.3
127.5°	293.2	331.0	499.0	795.4	926.4
130°	304.4	341.1	496.5	761.4	878.9
132.5°	315.7	352.3	494.0	732.4	836.5
135°	331.0	367.6	490.2	692.1	780.6
137.5°	347.5	380.8	488.3	656.5	730.9
140°	357.5	389.6	487.1	633.8	701.0
142.5°	367.5	397.1	485.8	616.1	672.2
145°	382.5	410.0	484.0	588.0	632.3
147.5°	399.4	422.9	482.4	565.9	600.7
150°	410.6	430.4	482.4	553.3	580.8
152.5°	419.3	436.7	481.2	541.9	564.5
155°	432.4	447.7	480.8	528.0	543.3
157.5°	445.3	457.2	480.8	518.6	530.2
160°	452.7	463.4	480.8	512.3	521.4
162.5°	460.2	468.5	482.1	507.2	513.9
165°	468.4	474.5	482.4	502.7	504.3
167.5°	476.8	479.8	484.0	497.4	498.6
170°	479.3	482.3	484.0	494.9	494.9
172.5°	481.8	483.6	484.0	492.4	492.4
175°	485.5	487.1	484.0	490.2	488.7
177.5°	486.8	486.8	483.0	488.0	485.5
180°	485.5	485.5	485.5	485.5	485.5

(END OF REPORT)