

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: P519938

Luminaire Tested: **SQ4-F-050U-100D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519938
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-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

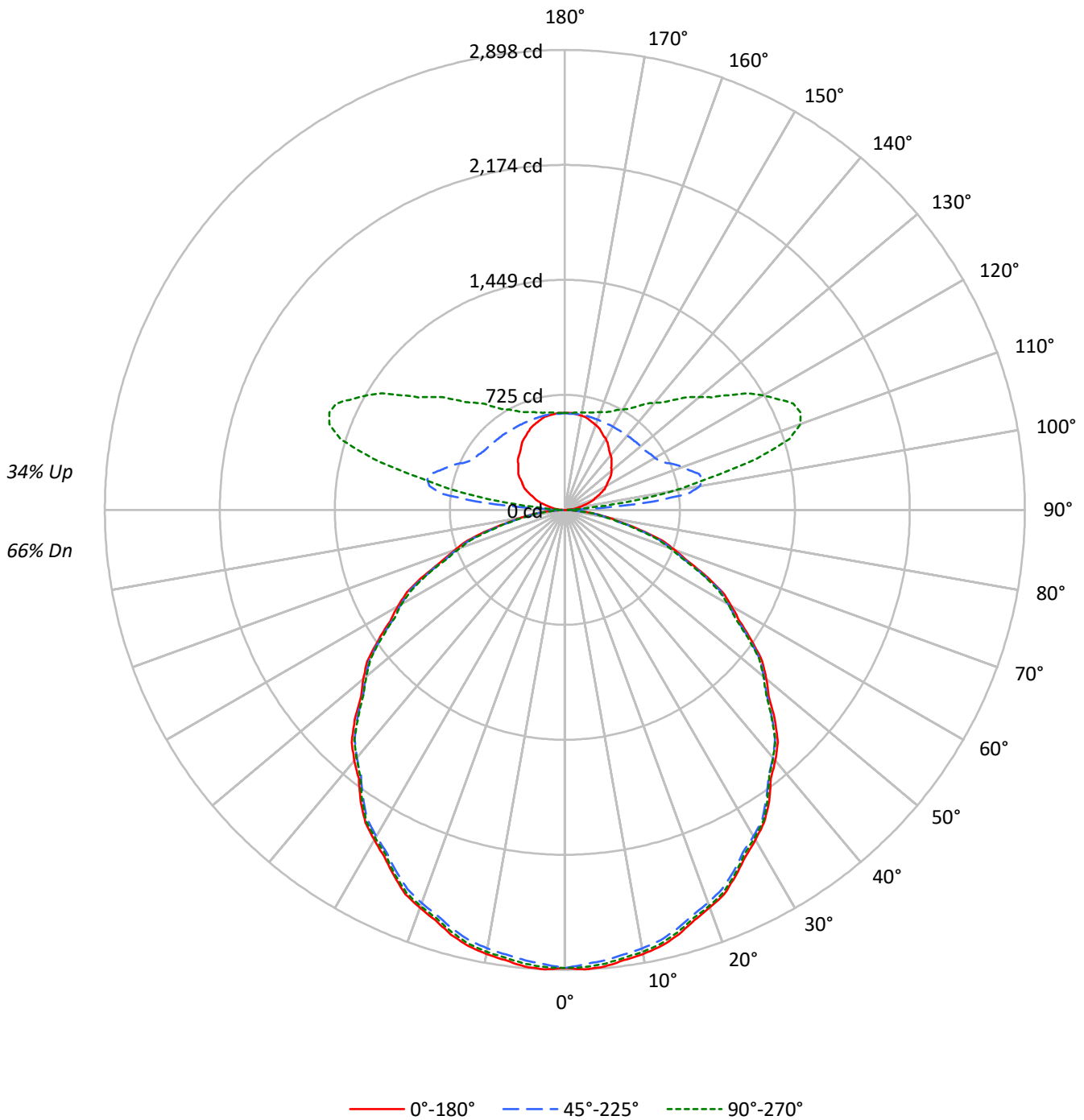
Lumens per Lamp: N/A
Luminaire Lumens: 11861.1 lumens
Efficiency: N/A
Efficacy: 128.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 92.6
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	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°	13319	13319	13319
5°	13379	13196	13297
10°	13311	13144	13246
15°	13230	13051	13155
20°	13094	12939	13046
25°	12951	12800	12901
30°	12794	12656	12720
35°	12633	12477	12544
40°	12423	12279	12291
45°	12204	12036	11997
50°	11890	11747	11719
55°	11539	11412	11331
60°	11190	10988	10952
65°	10643	10405	10317
70°	9889	9649	9462
75°	8830	8548	8370
80°	7266	7003	6687
85°	4298	4721	4827



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.5	2.3
10°-20°	776.0	6.5
20°-30°	1165.4	9.8
30°-40°	1390.7	11.7
40°-50°	1425.5	12.0
50°-60°	1269.4	10.7
60°-70°	946.3	8.0
70°-80°	512.3	4.3
80°-90°	119.0	1.0
90°-100°	292.9	2.5
100°-110°	795.7	6.7
110°-120°	818.1	6.9
120°-130°	654.1	5.5
130°-140°	514.0	4.3
140°-150°	394.1	3.3
150°-160°	283.4	2.4
160°-170°	173.3	1.5
170°-180°	58.4	0.5
0°-30°	2213.9	18.7
0°-40°	3604.6	30.4
0°-60°	6299.6	53.1
0°-90°	7877.2	66.4
90°-120°	1906.7	16.1
90°-150°	3468.8	29.2
90°-180°	3984.0	33.6
0°-180°	11861.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2887	2887	2887	2887	2887	
5°	2889	2883	2850	2875	2871	274
15°	2770	2761	2733	2754	2754	780
25°	2544	2539	2515	2529	2534	1172
35°	2243	2234	2216	2220	2227	1400
45°	1871	1861	1845	1835	1839	1439
55°	1435	1437	1419	1405	1409	1284
65°	975	971	953	943	945	964
75°	495	490	480	470	470	528
85°	81	89	89	91	91	114
90°	2	8	14	18	18	5
95°	43	160	510	222	149	46
105°	141	220	875	1332	1254	150
115°	251	305	700	1393	1587	248
125°	345	393	634	1068	1260	308
135°	416	462	616	870	981	322
145°	481	515	608	739	794	302
155°	543	563	604	664	683	251
165°	589	596	606	632	634	166
175°	610	612	608	616	614	58
180°	610	610	610	610	610	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2887.3	2887.3	2887.3	2887.3	2887.3
2.5°	2898.4	2892.1	2866.6	2887.2	2884.1
5°	2889.2	2883.4	2849.6	2875.3	2871.4
7.5°	2862.3	2856.4	2826.6	2850.3	2846.8
10°	2841.7	2835.8	2806.0	2829.8	2827.8
12.5°	2814.7	2808.9	2779.1	2802.8	2800.9
15°	2770.3	2760.6	2732.7	2754.5	2754.5
17.5°	2711.7	2704.4	2678.4	2696.6	2697.0
20°	2667.3	2661.4	2635.6	2655.4	2657.4
22.5°	2622.9	2617.1	2588.0	2606.4	2609.8
25°	2544.4	2538.6	2514.7	2528.7	2534.5
27.5°	2463.6	2455.1	2431.5	2443.9	2448.1
30°	2401.8	2397.9	2376.0	2382.0	2387.9
32.5°	2336.8	2332.9	2314.2	2317.1	2327.6
35°	2243.2	2233.5	2215.5	2219.6	2227.4
37.5°	2132.6	2128.0	2110.5	2108.3	2115.6
40°	2062.9	2055.2	2039.1	2035.2	2041.1
42.5°	1986.8	1979.1	1959.8	1956.1	1963.4
45°	1870.7	1861.0	1844.9	1835.1	1839.0
47.5°	1740.7	1740.7	1724.0	1712.6	1718.5
50°	1656.7	1656.7	1636.8	1627.0	1632.9
52.5°	1569.5	1571.0	1549.6	1544.5	1542.5
55°	1434.7	1436.7	1418.9	1405.1	1408.9
57.5°	1304.7	1300.5	1279.7	1270.6	1272.6
60°	1212.8	1206.9	1191.0	1177.3	1187.0
62.5°	1119.2	1116.6	1100.6	1085.1	1084.0
65°	975.0	971.1	953.2	943.3	945.2
67.5°	831.5	826.8	810.5	796.3	801.4
70°	733.2	733.2	715.4	707.3	701.5
72.5°	642.8	635.1	621.8	610.6	606.4
75°	495.4	489.6	479.6	469.6	469.6
77.5°	360.7	355.6	349.2	342.4	340.4
80°	273.5	271.5	263.6	261.4	251.7
82.5°	192.6	192.2	187.5	182.3	181.9
85°	81.2	89.0	89.2	91.2	91.2
87.5°	14.7	25.2	25.0	22.6	22.6
90°	2.0	7.8	13.7	17.7	17.7
92.5°	17.7	80.2	139.3	59.9	50.6
95°	43.2	160.1	510.1	222.0	149.1
97.5°	71.4	176.9	782.0	608.4	427.3
100°	90.3	188.1	865.2	877.1	708.3
102.5°	109.1	199.2	887.2	1084.7	935.9
105°	141.3	219.9	875.0	1332.3	1253.7
107.5°	174.6	244.0	824.4	1460.2	1482.0
110°	198.1	261.4	786.7	1485.4	1579.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	218.5	278.8	749.0	1464.5	1606.0
115°	251.1	304.8	700.4	1393.4	1587.1
117.5°	281.7	333.1	669.4	1292.7	1511.1
120°	302.1	352.0	655.3	1225.2	1442.0
122.5°	319.4	369.3	645.9	1157.5	1366.6
125°	345.3	393.3	633.7	1067.7	1259.6
127.5°	368.5	416.1	627.0	999.6	1164.2
130°	382.6	428.6	623.9	956.9	1104.5
132.5°	396.7	442.8	620.8	920.3	1051.2
135°	416.0	462.0	616.1	869.7	981.0
137.5°	436.7	478.6	613.7	825.0	918.6
140°	449.2	489.6	612.1	796.5	880.9
142.5°	461.8	499.1	610.6	774.2	844.8
145°	480.6	515.2	608.2	738.9	794.5
147.5°	501.8	531.4	606.2	711.2	754.9
150°	516.0	540.9	606.2	695.3	729.8
152.5°	527.0	548.8	604.7	681.0	709.4
155°	543.4	562.7	604.3	663.5	682.8
157.5°	559.5	574.5	604.3	651.7	666.3
160°	568.9	582.4	604.3	643.7	655.3
162.5°	578.4	588.8	605.8	637.4	645.9
165°	588.6	596.2	606.2	631.8	633.7
167.5°	599.2	603.0	608.2	625.1	626.6
170°	602.3	606.1	608.2	621.9	621.9
172.5°	605.5	607.7	608.2	618.8	618.8
175°	610.2	612.0	608.2	616.0	614.1
177.5°	611.7	611.7	607.0	613.2	610.2
180°	610.2	610.2	610.2	610.2	610.2

(END OF REPORT)