

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: P519970

Luminaire Tested: **SQ4-F-050U-125D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519970
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-125D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

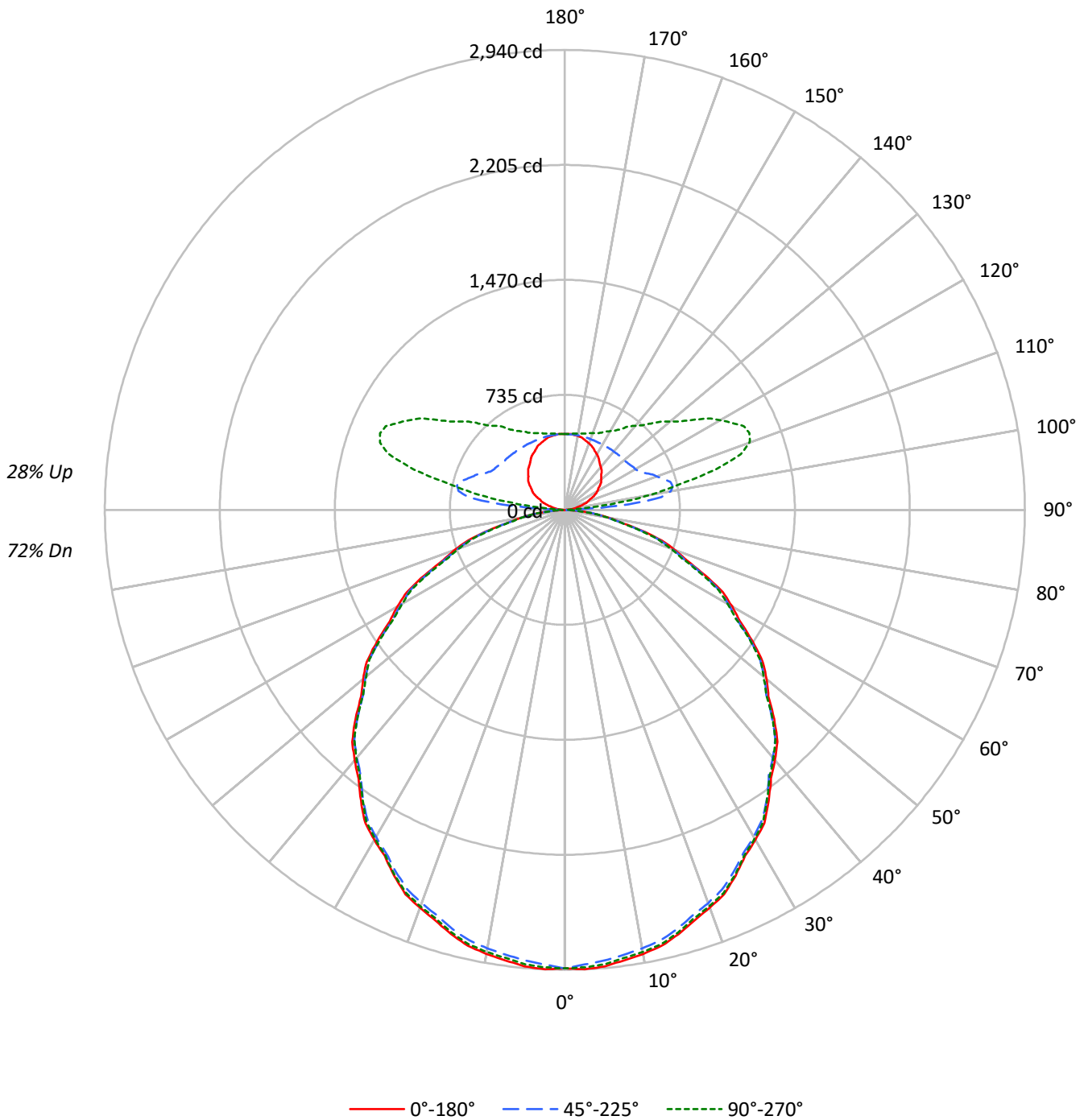
Lumens per Lamp: N/A
Luminaire Lumens: 11168.3 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 111.4
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	72
1	103	98	94	90	97	93	90	86	84	81	78	75	73	71	67	66	64	60
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54	50
3	85	75	68	61	80	72	65	59	65	59	54	58	54	50	52	49	46	42
4	78	67	58	52	73	63	56	50	57	51	46	52	47	43	47	43	39	36
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	38	34	31
6	66	53	45	39	62	51	43	37	46	40	35	42	37	32	38	34	30	28
7	61	48	40	34	58	46	38	33	42	36	31	38	33	29	35	30	27	24
8	57	44	36	30	54	42	34	29	38	32	27	35	30	26	32	27	24	22
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	22	20
10	49	37	29	24	47	35	28	24	33	26	22	30	25	21	27	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13521	13521	13521
5°	13565	13393	13505
10°	13502	13336	13442
15°	13412	13250	13358
20°	13288	13137	13240
25°	13136	12997	13103
30°	12974	12863	12931
35°	12790	12681	12690
40°	12579	12443	12482
45°	12343	12208	12228
50°	12073	11935	11900
55°	11766	11598	11572
60°	11385	11131	11072
65°	10793	10564	10423
70°	10051	9791	9660
75°	8942	8739	8480
80°	7287	7069	7027
85°	4356	4949	4949



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.5	2.5
10°-20°	787.6	7.1
20°-30°	1183.3	10.6
30°-40°	1411.9	12.6
40°-50°	1447.2	13.0
50°-60°	1289.9	11.5
60°-70°	960.3	8.6
70°-80°	520.2	4.7
80°-90°	121.3	1.1
90°-100°	233.1	2.1
100°-110°	633.2	5.7
110°-120°	651.0	5.8
120°-130°	520.5	4.7
130°-140°	409.0	3.7
140°-150°	313.6	2.8
150°-160°	225.5	2.0
160°-170°	137.9	1.2
170°-180°	46.5	0.4
0°-30°	2247.4	20.1
0°-40°	3659.3	32.8
0°-60°	6396.4	57.3
0°-90°	7998.2	71.6
90°-120°	1517.2	13.6
90°-150°	2760.3	24.7
90°-180°	3170.0	28.4
0°-180°	11168.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2931	2931	2931	2931	2931	
5°	2929	2924	2892	2918	2916	278
15°	2808	2802	2774	2798	2797	792
25°	2581	2576	2554	2568	2574	1189
35°	2271	2270	2252	2252	2253	1420
45°	1892	1887	1871	1868	1874	1458
55°	1463	1458	1442	1431	1439	1307
65°	989	982	968	961	955	979
75°	502	502	490	481	476	533
85°	82	93	94	95	94	114
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°	2930.9	2930.9	2930.9	2930.9	2930.9
2.5°	2939.9	2934.8	2908.9	2930.8	2927.0
5°	2929.3	2924.5	2892.2	2917.9	2916.3
7.5°	2904.4	2898.5	2869.0	2893.1	2890.2
10°	2882.4	2877.8	2847.0	2871.2	2869.6
12.5°	2855.4	2850.6	2819.9	2844.0	2843.7
15°	2808.3	2802.0	2774.4	2798.5	2797.0
17.5°	2751.8	2744.6	2717.3	2736.4	2739.5
20°	2706.7	2701.9	2676.0	2693.8	2697.0
22.5°	2660.2	2654.2	2626.9	2647.4	2650.6
25°	2580.8	2576.1	2553.5	2568.1	2574.3
27.5°	2493.8	2493.8	2472.8	2483.2	2487.0
30°	2435.7	2435.7	2414.7	2421.3	2427.6
32.5°	2373.8	2368.7	2348.9	2354.2	2360.5
35°	2271.1	2269.6	2251.7	2251.8	2253.4
37.5°	2165.0	2160.6	2141.2	2142.6	2150.2
40°	2088.9	2085.7	2066.3	2066.5	2072.7
42.5°	2011.4	2008.3	1991.5	1988.9	1991.5
45°	1892.0	1887.4	1871.2	1868.0	1874.3
47.5°	1764.9	1766.3	1746.9	1742.4	1745.9
50°	1682.3	1682.3	1663.0	1653.5	1658.2
52.5°	1595.9	1593.4	1574.0	1563.2	1574.3
55°	1463.0	1458.2	1442.0	1430.9	1438.8
57.5°	1326.9	1319.6	1303.3	1291.1	1295.6
60°	1234.0	1222.9	1206.5	1197.0	1200.1
62.5°	1137.2	1131.2	1113.7	1099.0	1105.8
65°	988.8	982.5	967.8	961.2	954.9
67.5°	843.2	839.2	822.7	815.8	811.6
70°	745.2	737.3	725.9	717.8	716.2
72.5°	649.8	640.5	629.1	622.2	618.1
75°	501.7	501.7	490.3	480.6	475.8
77.5°	360.7	361.9	352.6	349.4	347.1
80°	274.3	274.3	266.1	263.0	264.5
82.5°	191.7	195.4	192.6	188.0	185.8
85°	82.3	93.3	93.5	95.2	93.5
87.5°	14.5	24.3	26.8	24.8	22.3
90°	1.6	6.2	10.9	14.0	14.0
92.5°	14.0	63.8	110.9	47.6	40.2
95°	34.3	127.5	405.9	176.6	118.6
97.5°	56.8	140.8	622.3	484.2	340.0
100°	71.8	149.6	688.5	697.9	563.6
102.5°	86.8	158.6	705.9	863.1	744.7
105°	112.4	175.0	696.3	1060.2	997.6
107.5°	139.0	194.2	656.0	1161.9	1179.3
110°	157.7	208.0	626.1	1182.0	1256.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	173.9	221.9	596.0	1165.4	1278.0
115°	199.8	242.6	557.4	1108.9	1263.0
117.5°	224.2	265.1	532.6	1028.7	1202.5
120°	240.4	280.2	521.5	975.0	1147.5
122.5°	254.2	293.9	513.9	921.1	1087.6
125°	274.8	312.9	504.3	849.6	1002.3
127.5°	293.2	331.1	499.0	795.4	926.4
130°	304.4	341.1	496.4	761.4	878.9
132.5°	315.7	352.3	494.0	732.3	836.4
135°	331.0	367.6	490.3	692.1	780.6
137.5°	347.5	380.8	488.4	656.5	731.0
140°	357.5	389.6	487.1	633.8	700.9
142.5°	367.5	397.1	485.8	616.1	672.3
145°	382.5	410.0	484.0	588.0	632.2
147.5°	399.4	422.8	482.4	565.9	600.7
150°	410.6	430.4	482.4	553.2	580.7
152.5°	419.3	436.8	481.1	542.0	564.5
155°	432.5	447.8	480.8	528.0	543.3
157.5°	445.2	457.2	480.8	518.6	530.2
160°	452.8	463.5	480.8	512.2	521.5
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	498.7
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	487.0	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)