

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: P519843

Luminaire Tested: **SQ4-F-025U-100D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519843
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-100D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

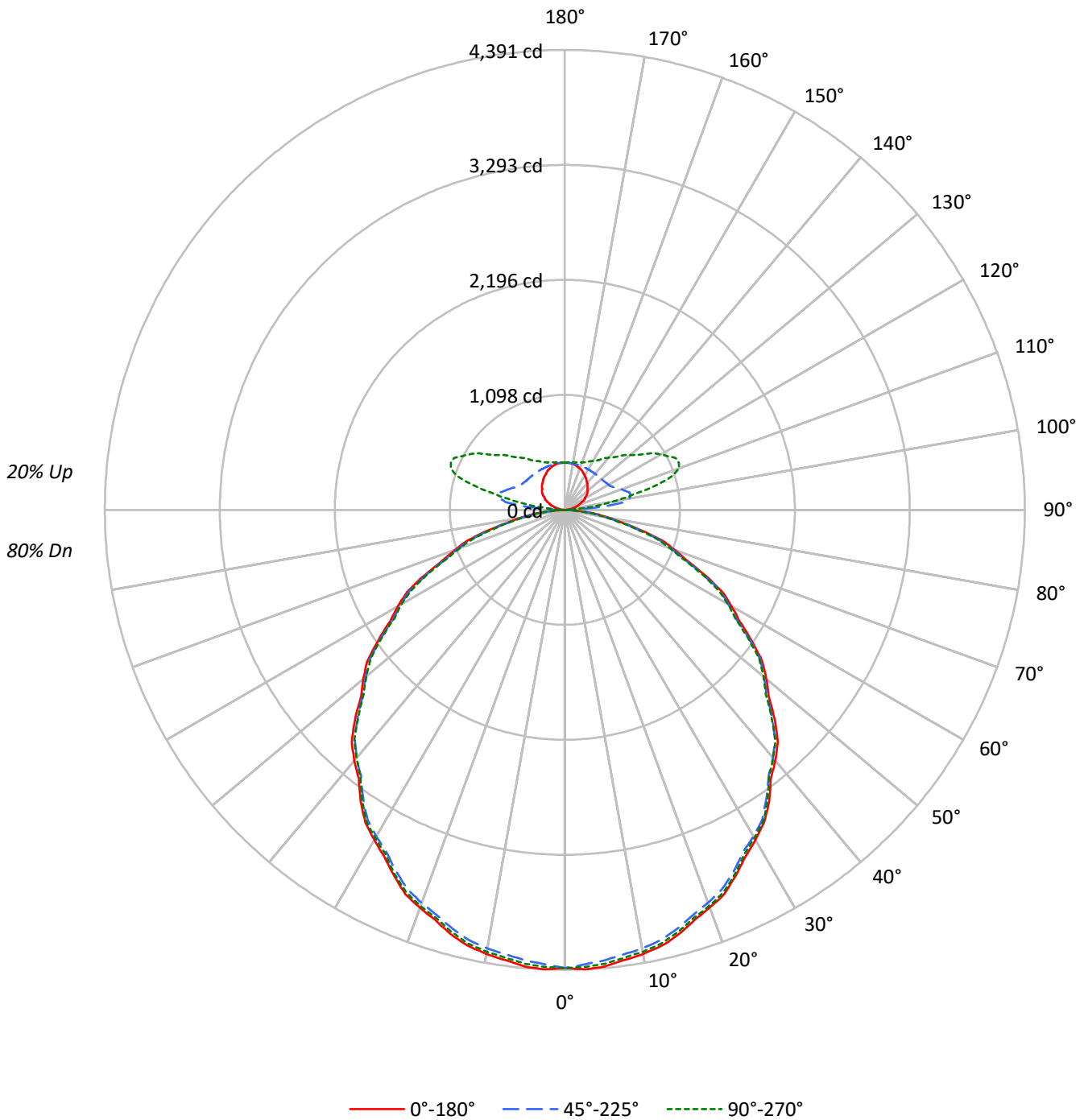
Lumens per Lamp: N/A
Luminaire Lumens: 14860.5 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 122
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	114	114	114	114	109	109	109	109	100	100	100	92	92	92	84	84	84	80
1	105	100	96	92	100	96	92	89	88	85	83	81	79	77	74	73	71	68
2	95	87	81	75	91	84	78	73	77	72	68	71	67	64	65	62	60	56
3	87	77	69	63	83	74	67	61	68	62	57	63	58	54	58	54	51	48
4	79	68	59	53	76	65	58	52	60	54	49	56	50	46	51	47	43	41
5	73	61	52	46	70	58	50	44	54	47	42	50	44	40	46	42	38	35
6	67	54	46	40	64	52	45	39	49	42	37	45	39	35	42	37	33	31
7	62	49	41	35	59	48	40	34	44	38	33	41	35	31	38	33	30	27
8	58	45	37	31	55	43	36	30	40	34	29	38	32	28	35	30	26	24
9	54	41	33	28	52	40	32	27	37	31	26	35	29	25	32	28	24	22
10	51	38	30	25	48	37	29	25	34	28	24	32	27	23	30	25	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13453	13453	13453
5°	13514	13328	13430
10°	13445	13276	13380
15°	13364	13182	13287
20°	13226	13069	13177
25°	13082	12929	13030
30°	12922	12784	12848
35°	12760	12602	12670
40°	12548	12403	12415
45°	12327	12157	12118
50°	12009	11865	11837
55°	11655	11526	11446
60°	11302	11099	11062
65°	10750	10509	10421
70°	9989	9746	9557
75°	8918	8634	8456
80°	7339	7072	6753
85°	4344	4767	4873



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	412.9	2.8
10°-20°	1175.7	7.9
20°-30°	1765.6	11.9
30°-40°	2107.1	14.2
40°-50°	2159.8	14.5
50°-60°	1923.3	12.9
60°-70°	1433.7	9.6
70°-80°	776.2	5.2
80°-90°	179.1	1.2
90°-100°	220.1	1.5
100°-110°	578.6	3.9
110°-120°	600.0	4.0
120°-130°	481.3	3.2
130°-140°	377.6	2.5
140°-150°	289.8	2.0
150°-160°	208.7	1.4
160°-170°	127.7	0.9
170°-180°	43.1	0.3
0°-30°	3354.2	22.6
0°-40°	5461.4	36.8
0°-60°	9544.5	64.2
0°-90°	11933.6	80.3
90°-120°	1398.7	9.4
90°-150°	2547.3	17.1
90°-180°	2927.0	19.7
0°-180°	14860.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4374	4374	4374	4374	4374	
5°	4378	4369	4317	4356	4350	415
15°	4197	4183	4140	4173	4173	1182
25°	3855	3846	3810	3831	3840	1776
35°	3399	3384	3357	3363	3375	2122
45°	2834	2820	2795	2780	2786	2181
55°	2174	2177	2150	2129	2135	1946
65°	1477	1471	1444	1429	1432	1461
75°	750	742	727	712	712	799
85°	123	135	135	138	138	172
90°	3	9	23	12	12	5
95°	29	114	379	195	133	32
105°	104	158	640	971	906	110
115°	185	225	512	1022	1166	183
125°	258	289	466	788	929	229
135°	307	338	452	636	721	237
145°	356	379	446	542	585	223
155°	402	414	446	490	504	185
165°	434	440	446	463	469	123
175°	452	452	449	454	454	43
180°	452	452	452	452	452	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4374.5	4374.5	4374.5	4374.5	4374.5
2.5°	4391.3	4381.9	4343.3	4374.4	4369.6
5°	4377.5	4368.6	4317.4	4356.3	4350.4
7.5°	4336.6	4327.8	4282.6	4318.5	4313.2
10°	4305.4	4296.6	4251.3	4287.3	4284.4
12.5°	4264.6	4255.8	4210.5	4246.5	4243.6
15°	4197.3	4182.7	4140.3	4173.3	4173.3
17.5°	4108.4	4097.3	4058.0	4085.7	4086.3
20°	4041.2	4032.4	3993.2	4023.2	4026.2
22.5°	3974.0	3965.2	3921.1	3948.8	3954.2
25°	3855.1	3846.3	3810.0	3831.2	3840.0
27.5°	3732.5	3719.6	3683.9	3702.7	3709.1
30°	3638.9	3633.0	3599.9	3609.1	3617.9
32.5°	3540.4	3534.6	3506.2	3510.8	3526.6
35°	3398.7	3384.1	3356.7	3363.0	3374.6
37.5°	3231.2	3224.1	3197.6	3194.2	3205.3
40°	3125.5	3113.8	3089.5	3083.6	3092.5
42.5°	3010.2	2998.4	2969.4	2963.6	2974.7
45°	2834.2	2819.6	2795.2	2780.3	2786.2
47.5°	2637.3	2637.3	2612.1	2594.9	2603.7
50°	2510.0	2510.0	2479.9	2465.2	2474.0
52.5°	2377.9	2380.3	2347.9	2340.0	2337.1
55°	2173.8	2176.6	2149.7	2128.8	2134.7
57.5°	1976.8	1970.3	1938.9	1925.2	1928.1
60°	1837.5	1828.7	1804.4	1783.8	1798.4
62.5°	1695.8	1691.6	1667.6	1644.1	1642.3
65°	1477.2	1471.3	1444.1	1429.2	1432.1
67.5°	1259.8	1252.8	1227.9	1206.5	1214.2
70°	1110.9	1110.9	1083.9	1071.7	1062.9
72.5°	974.0	962.2	942.2	925.2	918.7
75°	750.5	741.8	726.6	711.6	711.6
77.5°	546.4	538.8	529.0	518.7	515.8
80°	414.4	411.4	399.3	395.9	381.3
82.5°	291.8	291.2	284.1	276.2	275.6
85°	123.1	134.9	135.1	138.1	138.1
87.5°	22.2	37.5	38.4	31.2	31.2
90°	2.9	8.6	23.1	11.6	11.6
92.5°	12.1	58.6	129.7	57.4	37.1
95°	29.0	113.8	379.2	195.4	133.2
97.5°	50.4	125.1	567.4	451.2	332.4
100°	66.6	134.5	625.2	633.6	492.1
102.5°	80.5	143.9	641.5	789.3	668.1
105°	104.2	158.0	639.8	971.2	906.1
107.5°	128.6	178.4	603.2	1065.6	1081.5
110°	144.7	190.0	573.1	1090.0	1157.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	161.0	204.0	545.3	1074.6	1178.8
115°	185.2	224.9	512.3	1022.2	1166.5
117.5°	209.0	245.3	489.8	949.6	1109.8
120°	222.9	256.8	480.5	900.9	1056.6
122.5°	236.8	270.8	473.5	852.2	1005.7
125°	257.6	288.8	466.1	787.7	929.2
127.5°	274.4	306.2	459.7	735.6	855.1
130°	283.7	317.6	457.4	703.0	813.4
132.5°	293.0	326.9	455.1	674.9	774.1
135°	306.8	338.0	451.5	635.8	720.8
137.5°	321.3	351.9	451.0	606.6	676.2
140°	332.9	361.2	448.7	583.4	648.5
142.5°	342.2	368.2	448.7	566.9	622.9
145°	356.1	378.7	445.8	542.3	584.7
147.5°	369.9	392.0	445.8	521.8	557.0
150°	379.2	399.0	445.8	510.1	538.4
152.5°	388.5	403.8	445.8	500.7	522.2
155°	402.3	413.7	445.8	489.5	503.6
157.5°	412.7	423.5	445.8	479.6	489.8
160°	419.7	428.2	445.8	474.9	480.5
162.5°	426.7	432.9	445.8	470.2	475.9
165°	434.2	439.9	445.8	463.3	468.9
167.5°	441.1	444.0	448.7	460.3	462.5
170°	445.8	448.6	448.7	460.2	460.2
172.5°	448.1	448.7	448.7	457.9	455.7
175°	451.5	451.5	448.7	454.5	454.5
177.5°	451.5	451.5	449.3	453.8	451.5
180°	451.5	451.5	451.5	451.5	451.5

(END OF REPORT)