

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: P520131

Luminaire Tested: **SQ4-F-0U-100D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520131
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (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-0U-100D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

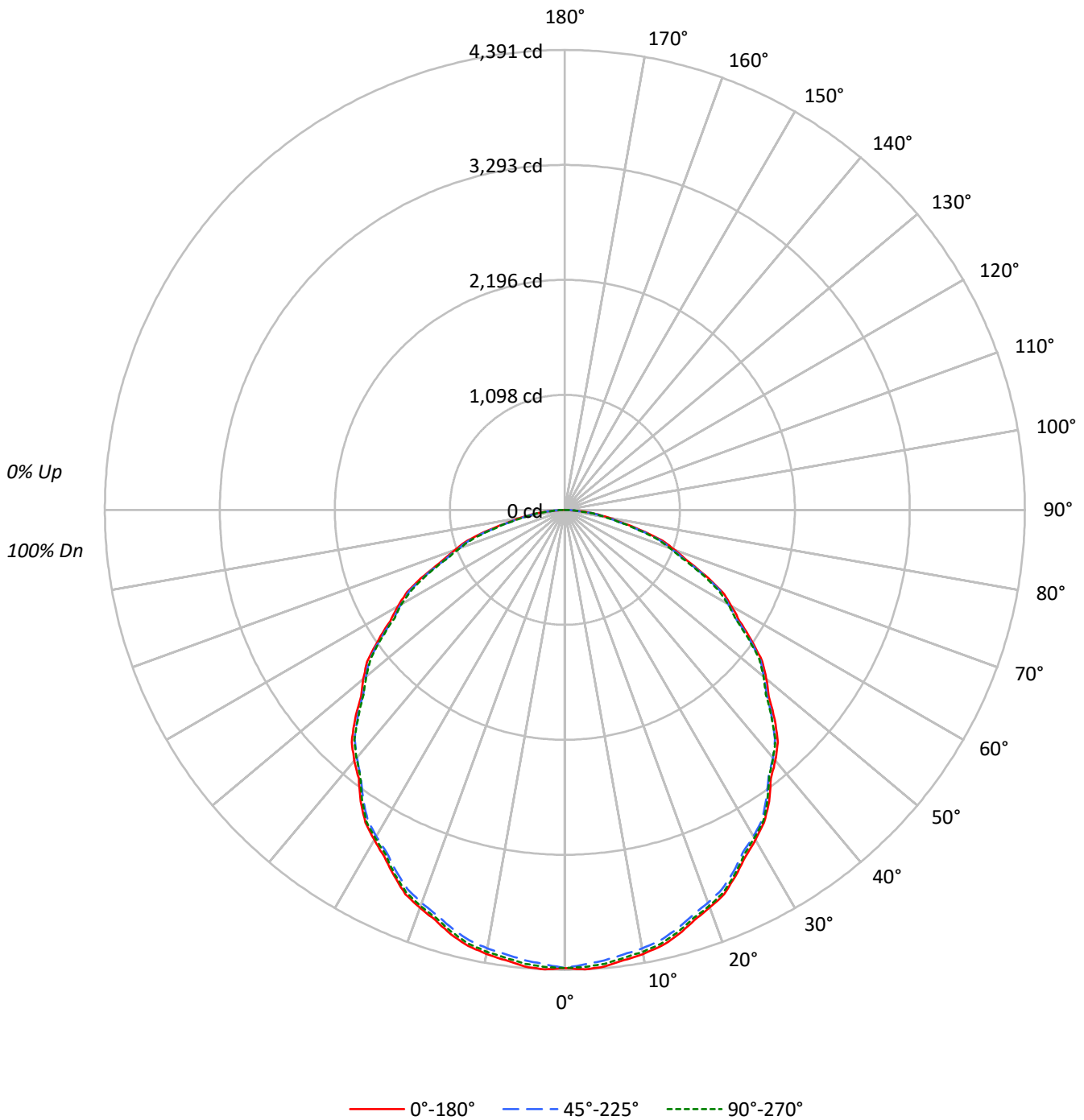
Lumens per Lamp: N/A
Luminaire Lumens: 11931.1 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

Input Watts (W): 104.1
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25

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	3.5
10°-20°	1175.7	9.9
20°-30°	1765.6	14.8
30°-40°	2107.1	17.7
40°-50°	2159.8	18.1
50°-60°	1923.3	16.1
60°-70°	1433.7	12.0
70°-80°	776.2	6.5
80°-90°	176.7	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3354.2	28.1
0°-40°	5461.4	45.8
0°-60°	9544.5	80.0
0°-90°	11931.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11931.1	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	175
90°	0	0	0	0	0	



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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°	21.6	35.7	33.6	28.8	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)