

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: P520419

Luminaire Tested: **SQ4-F-150U-100D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520419
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-100D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

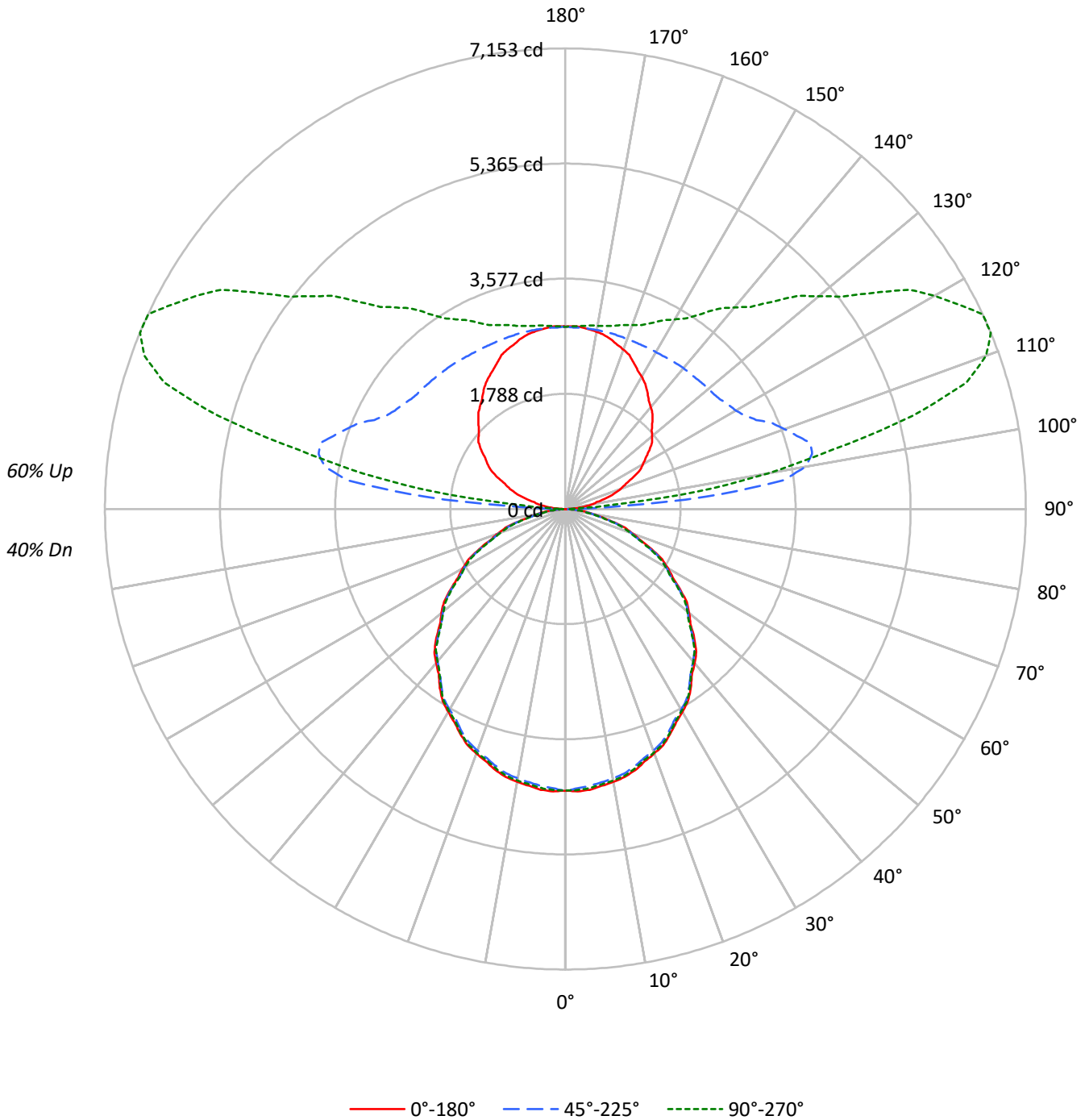
Lumens per Lamp: N/A
Luminaire Lumens: 30190.8 lumens
Efficiency: N/A
Efficacy: 132.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 228.3
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	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33	28
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12
9	48	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12	10

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	1.4
10°-20°	1175.7	3.9
20°-30°	1765.6	5.8
30°-40°	2107.1	7.0
40°-50°	2159.8	7.2
50°-60°	1923.3	6.4
60°-70°	1433.7	4.7
70°-80°	776.2	2.6
80°-90°	182.5	0.6
90°-100°	1315.8	4.4
100°-110°	3557.5	11.8
110°-120°	3740.2	12.4
120°-130°	3038.1	10.1
130°-140°	2383.1	7.9
140°-150°	1829.1	6.1
150°-160°	1315.4	4.4
160°-170°	803.6	2.7
170°-180°	270.9	0.9
0°-30°	3354.2	11.1
0°-40°	5461.4	18.1
0°-60°	9544.5	31.6
0°-90°	11937.0	39.5
90°-120°	8613.5	28.5
90°-150°	15863.8	52.5
90°-180°	18254.0	60.5
0°-180°	30190.8	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°	6	18	40	43	40	17
95°	204	717	2188	1132	674	214
105°	661	1022	3947	5822	5583	697
115°	1164	1423	3273	6336	7153	1150
125°	1594	1826	2950	4978	5848	1421
135°	1911	2137	2871	4020	4550	1477
145°	2222	2388	2831	3441	3703	1390
155°	2508	2606	2807	3086	3188	1157
165°	2731	2757	2819	2929	2944	769
175°	2834	2831	2822	2858	2852	269
180°	2831	2831	2831	2831	2831	

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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°	22.8	39.2	41.4	37.3	36.7
90°	6.1	18.0	39.6	42.6	39.6
92.5°	86.5	315.4	622.3	270.1	195.7
95°	204.2	716.8	2188.1	1132.4	673.5
97.5°	328.0	822.0	3410.8	2822.7	2072.9
100°	420.6	864.5	3791.2	3953.7	3196.9
102.5°	505.9	923.7	3925.3	4811.4	4245.3
105°	661.3	1021.9	3946.6	5821.5	5583.1
107.5°	805.2	1134.1	3774.1	6451.7	6531.0
110°	917.4	1215.3	3620.5	6620.9	6957.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1017.3	1296.2	3479.1	6587.1	7152.7
115°	1164.1	1423.4	3273.1	6336.2	7152.7
117.5°	1308.0	1551.1	3137.2	5952.8	6878.3
120°	1395.8	1634.1	3056.7	5677.8	6622.3
122.5°	1478.7	1712.3	3007.9	5382.9	6334.7
125°	1593.9	1826.3	2950.1	4978.1	5848.3
127.5°	1699.9	1928.2	2916.0	4647.9	5413.1
130°	1758.5	1993.9	2901.3	4443.8	5135.2
132.5°	1819.4	2052.4	2886.7	4259.7	4896.2
135°	1910.9	2137.3	2870.8	4019.6	4550.0
137.5°	2002.8	2216.8	2857.4	3824.8	4256.8
140°	2066.3	2265.9	2852.5	3699.3	4083.7
142.5°	2127.2	2315.0	2842.8	3586.1	3922.8
145°	2221.7	2388.5	2831.1	3440.6	3702.8
147.5°	2307.6	2455.4	2817.8	3308.8	3510.2
150°	2371.0	2502.1	2812.9	3237.2	3398.0
152.5°	2429.6	2543.9	2810.4	3170.7	3303.0
155°	2508.1	2606.5	2806.8	3086.5	3187.8
157.5°	2589.8	2658.3	2807.4	3027.7	3094.5
160°	2636.2	2692.7	2809.8	2990.7	3038.4
162.5°	2672.7	2719.8	2812.3	2961.2	2996.9
165°	2730.6	2757.4	2819.0	2929.0	2943.9
167.5°	2770.3	2788.7	2819.6	2901.5	2908.6
170°	2794.6	2803.6	2822.1	2889.1	2889.1
172.5°	2814.1	2816.0	2822.1	2874.4	2872.0
175°	2834.3	2831.2	2822.1	2858.5	2852.5
177.5°	2840.9	2833.8	2821.4	2845.6	2838.5
180°	2831.1	2831.1	2831.1	2831.1	2831.1

(END OF REPORT)