

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: P565129

Luminaire Tested: **SQ4-PW1-150U-075D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565129
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-150U-075D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26870.5 lumens
Efficiency: N/A
Efficacy: 137.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

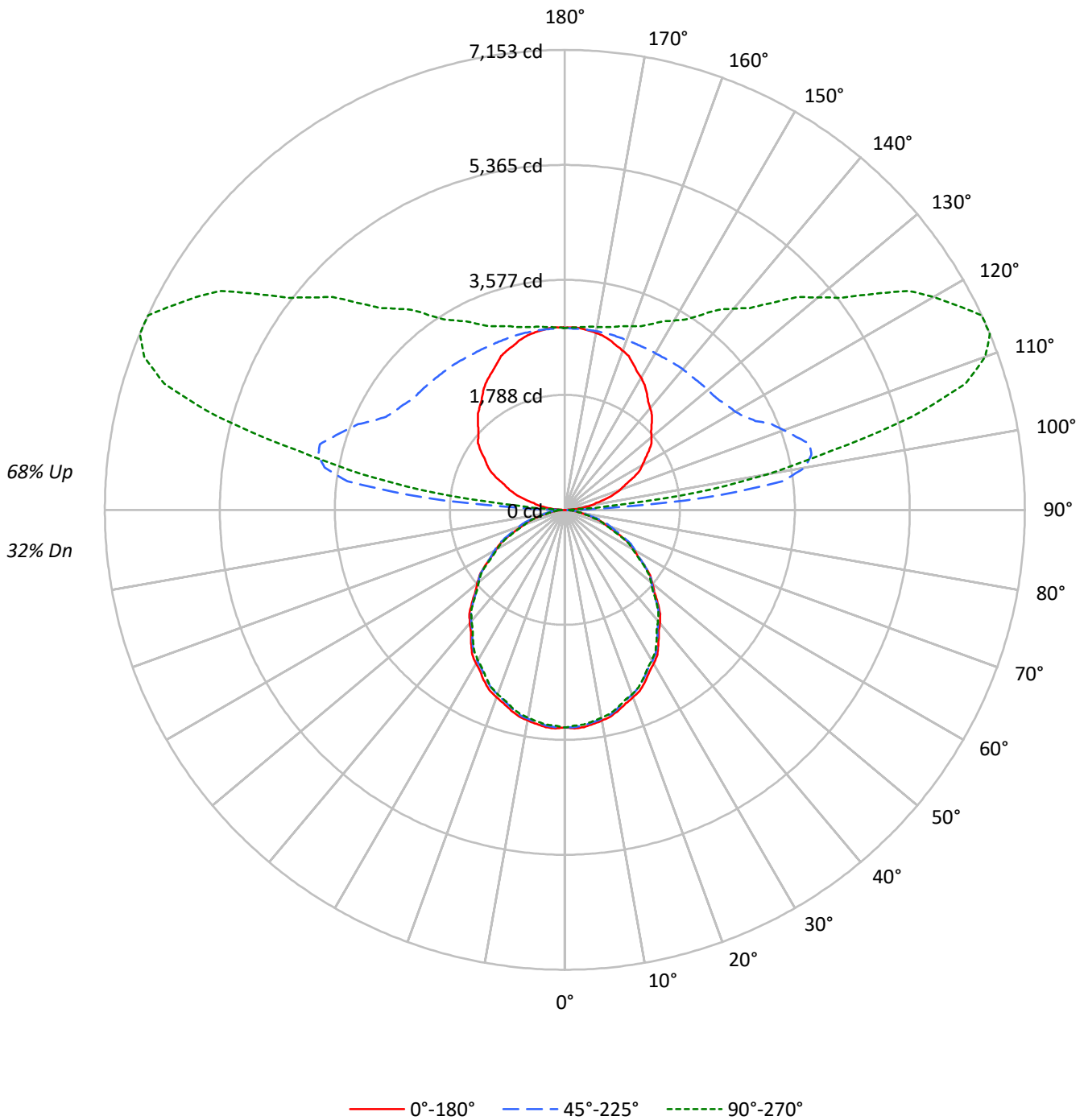
Input Watts (W): 194.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	46	35	34	34	27
2	85	78	72	67	77	71	66	61	56	53	50	43	41	39	31	30	28	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	27	26	24	19
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	22	21	17
5	65	54	46	40	59	49	42	37	39	34	31	30	27	24	22	20	18	14
6	60	48	41	35	54	44	37	32	35	30	27	27	24	21	20	18	16	13
7	55	44	36	30	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	14	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	20	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10409	10409	10409
5°	10476	10393	10347
10°	10392	10309	10253
15°	10282	10168	10130
20°	10159	10003	9984
25°	10017	9835	9805
30°	9805	9657	9594
35°	9527	9393	9337
40°	9230	9086	9050
45°	8871	8754	8715
50°	8503	8432	8375
55°	8106	8106	7978
60°	7612	7758	7483
65°	6966	7313	6792
70°	6141	6730	5980
75°	5244	6023	5102
80°	4066	5071	4119
85°	2629	3892	3472



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	318.7	1.2
10°-20°	899.8	3.3
20°-30°	1334.7	5.0
30°-40°	1561.7	5.8
40°-50°	1554.7	5.8
50°-60°	1342.6	5.0
60°-70°	966.4	3.6
70°-80°	506.8	1.9
80°-90°	131.5	0.5
90°-100°	1315.8	4.9
100°-110°	3557.5	13.2
110°-120°	3740.2	13.9
120°-130°	3038.1	11.3
130°-140°	2383.1	8.9
140°-150°	1829.1	6.8
150°-160°	1315.4	4.9
160°-170°	803.6	3.0
170°-180°	270.9	1.0
0°-30°	2553.1	9.5
0°-40°	4114.8	15.3
0°-60°	7012.1	26.1
0°-90°	8616.8	32.1
90°-120°	8613.5	32.1
90°-150°	15863.8	59.0
90°-180°	18254.0	67.9
0°-180°	26870.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3384	3384	3384	3384	3384	
5°	3393	3356	3367	3358	3352	321
15°	3229	3189	3194	3188	3182	910
25°	2952	2902	2898	2881	2890	1357
35°	2538	2503	2502	2478	2487	1586
45°	2040	2022	2013	2007	2004	1574
55°	1512	1509	1512	1491	1488	1349
65°	957	986	1005	965	933	949
75°	441	482	507	473	429	473
85°	74	98	110	104	98	98
90°	6	18	40	43	40	16
95°	204	717	2188	1132	674	214
105°	661	1022	3947	5822	5583	696
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°	3384.5	3384.5	3384.5	3384.5	3384.5
2.5°	3403.5	3375.5	3384.5	3376.9	3360.6
5°	3393.4	3355.5	3366.6	3357.5	3351.7
7.5°	3358.8	3323.8	3332.0	3322.3	3318.8
10°	3327.8	3292.8	3301.0	3288.9	3283.1
12.5°	3292.0	3254.7	3262.8	3250.8	3247.3
15°	3229.4	3188.6	3193.6	3187.5	3181.7
17.5°	3156.6	3115.2	3116.1	3106.5	3105.3
20°	3104.2	3060.4	3056.4	3044.6	3050.5
22.5°	3046.9	3000.8	2996.8	2980.3	2988.5
25°	2952.1	2902.5	2898.4	2880.7	2889.5
27.5°	2842.3	2793.4	2793.4	2768.6	2777.9
30°	2761.2	2714.6	2719.5	2689.9	2701.6
32.5°	2675.4	2633.4	2636.0	2606.4	2618.1
35°	2537.6	2502.6	2501.8	2478.2	2486.9
37.5°	2396.8	2365.9	2361.1	2347.4	2349.7
40°	2299.0	2272.8	2263.3	2254.3	2254.3
42.5°	2196.5	2172.6	2163.1	2156.5	2154.1
45°	2039.6	2022.1	2012.8	2006.7	2003.8
47.5°	1884.6	1868.2	1860.1	1855.9	1852.9
50°	1777.2	1765.5	1762.3	1753.3	1750.4
52.5°	1669.9	1662.9	1659.7	1648.3	1645.4
55°	1511.8	1508.9	1511.8	1490.9	1488.0
57.5°	1347.2	1351.9	1361.5	1333.3	1326.3
60°	1237.5	1249.1	1261.3	1228.3	1216.6
62.5°	1125.4	1144.0	1161.2	1123.2	1106.9
65°	957.2	986.3	1004.9	965.4	933.3
67.5°	795.0	831.1	853.4	810.9	774.7
70°	682.9	723.7	748.5	705.8	665.0
72.5°	585.0	630.5	650.6	610.4	569.5
75°	441.3	482.1	506.9	473.1	429.4
77.5°	313.1	351.6	372.1	342.7	306.5
80°	229.6	270.4	286.3	261.7	232.6
82.5°	162.8	196.6	207.5	192.8	172.9
85°	74.5	97.9	110.3	104.2	98.4
87.5°	20.3	39.0	53.2	53.9	55.6
90°	6.1	18.0	39.6	42.6	39.6
92.5°	86.6	315.4	622.3	270.1	195.7
95°	204.2	716.7	2188.2	1132.4	673.5
97.5°	327.9	822.0	3410.8	2822.7	2073.0
100°	420.6	864.6	3791.2	3953.8	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	6530.9
110°	917.3	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	7152.6
115°	1164.2	1423.4	3273.1	6336.2	7152.6
117.5°	1308.0	1551.2	3137.2	5952.8	6878.3
120°	1395.8	1634.2	3056.7	5677.7	6622.4
122.5°	1478.7	1712.3	3007.9	5382.9	6334.7
125°	1593.9	1826.3	2950.0	4978.2	5848.3
127.5°	1699.9	1928.2	2915.9	4647.9	5413.1
130°	1758.4	1993.9	2901.3	4443.8	5135.1
132.5°	1819.4	2052.4	2886.7	4259.7	4896.2
135°	1910.8	2137.3	2870.8	4019.6	4550.0
137.5°	2002.9	2216.8	2857.4	3824.8	4256.8
140°	2066.2	2265.9	2852.5	3699.3	4083.7
142.5°	2127.2	2314.9	2842.8	3586.1	3922.8
145°	2221.7	2388.5	2831.2	3440.6	3702.8
147.5°	2307.6	2455.4	2817.8	3308.7	3510.2
150°	2371.0	2502.1	2812.9	3237.1	3398.0
152.5°	2429.5	2543.9	2810.5	3170.6	3302.9
155°	2508.1	2606.5	2806.8	3086.4	3187.8
157.5°	2589.8	2658.4	2807.4	3027.7	3094.5
160°	2636.1	2692.8	2809.9	2990.7	3038.4
162.5°	2672.7	2719.8	2812.3	2961.2	2997.0
165°	2730.6	2757.4	2819.0	2929.0	2943.9
167.5°	2770.2	2788.7	2819.6	2901.4	2908.6
170°	2794.6	2803.6	2822.0	2889.1	2889.1
172.5°	2814.1	2815.9	2822.0	2874.4	2872.0
175°	2834.2	2831.3	2822.0	2858.5	2852.5
177.5°	2840.9	2833.8	2821.4	2845.7	2838.5
180°	2831.2	2831.2	2831.2	2831.2	2831.2

(END OF REPORT)