

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: P565157

Luminaire Tested: **SQ4-PW1-150U-100D-930-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565157
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-100D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

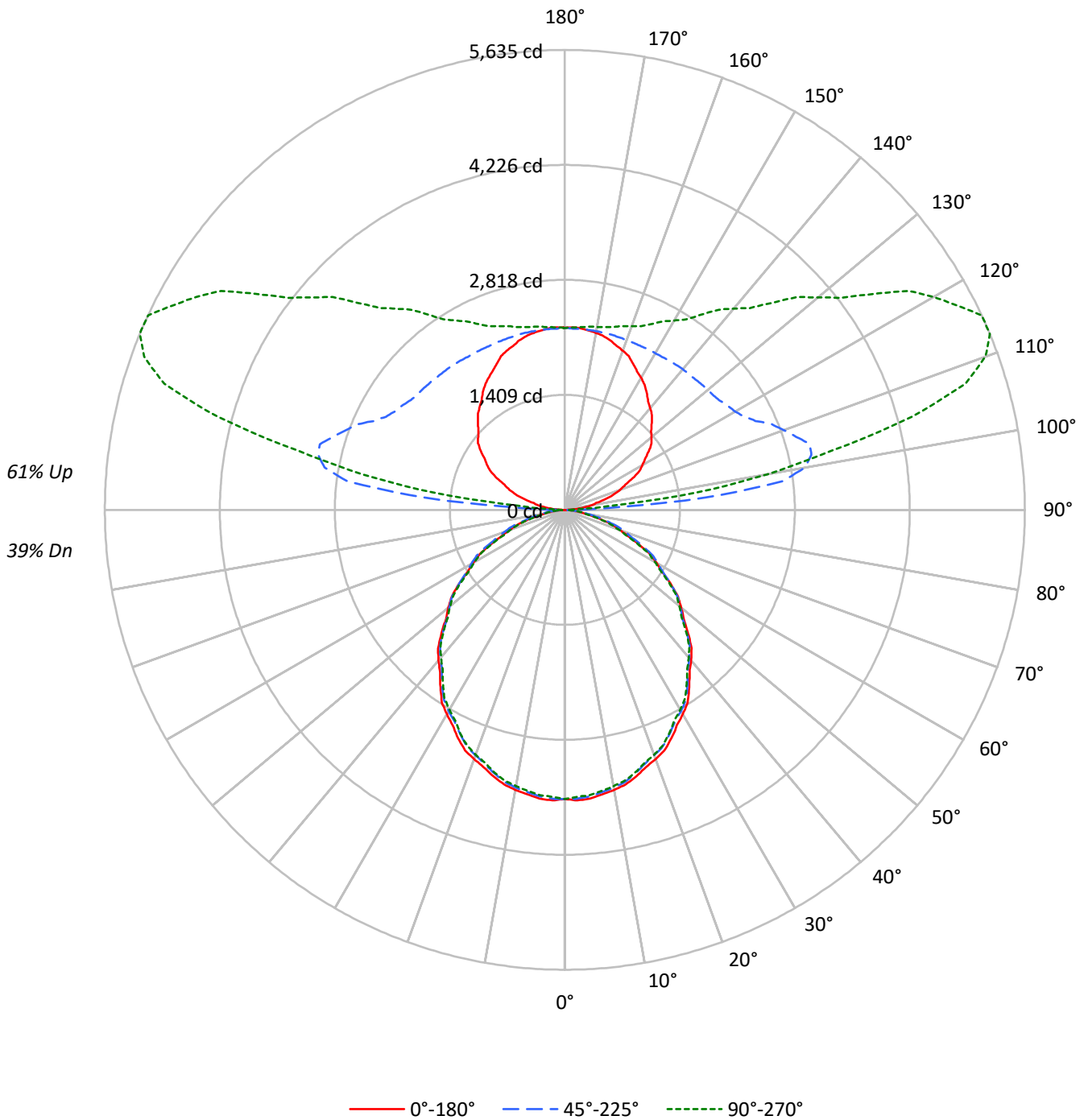
Lumens per Lamp: N/A
Luminaire Lumens: 23399.2 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 223.7
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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	80	77	68	65	63	53	52	51	40	39	39	33
2	87	80	74	69	79	73	67	63	59	56	52	47	44	42	36	34	33	27
3	79	70	63	57	72	64	58	53	52	48	44	42	38	36	32	30	28	23
4	72	62	54	48	66	57	50	45	46	41	38	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	27	25	23	21	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	37	31	51	41	34	29	34	29	25	27	23	20	21	18	16	14
8	52	40	33	27	47	37	30	26	31	26	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10896	10896	10896
5°	10966	10879	10831
10°	10878	10791	10732
15°	10763	10644	10604
20°	10635	10471	10451
25°	10486	10295	10263
30°	10264	10109	10043
35°	9973	9832	9774
40°	9662	9512	9474
45°	9286	9164	9123
50°	8901	8826	8767
55°	8486	8486	8352
60°	7968	8122	7833
65°	7292	7655	7110
70°	6427	7045	6259
75°	5490	6305	5341
80°	4256	5308	4313
85°	2752	4076	3634



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	333.6	1.4
10°-20°	941.9	4.0
20°-30°	1397.1	6.0
30°-40°	1634.8	7.0
40°-50°	1627.5	7.0
50°-60°	1405.4	6.0
60°-70°	1011.6	4.3
70°-80°	530.5	2.3
80°-90°	136.2	0.6
90°-100°	1036.6	4.4
100°-110°	2802.7	12.0
110°-120°	2946.7	12.6
120°-130°	2393.5	10.2
130°-140°	1877.5	8.0
140°-150°	1441.0	6.2
150°-160°	1036.3	4.4
160°-170°	633.1	2.7
170°-180°	213.4	0.9
0°-30°	2672.6	11.4
0°-40°	4307.3	18.4
0°-60°	7340.2	31.4
0°-90°	9018.5	38.5
90°-120°	6786.0	29.0
90°-150°	12497.9	53.4
90°-180°	14381.0	61.5
0°-180°	23399.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3543	3543	3543	3543	3543	
5°	3552	3512	3524	3515	3508	336
15°	3380	3338	3343	3337	3330	953
25°	3090	3038	3034	3016	3025	1421
35°	2656	2620	2619	2594	2603	1661
45°	2135	2117	2107	2101	2098	1647
55°	1583	1580	1583	1561	1558	1412
65°	1002	1032	1052	1011	977	993
75°	462	505	531	495	450	495
85°	78	102	116	109	103	103
90°	5	14	31	34	31	14
95°	161	565	1724	892	531	168
105°	521	805	3109	4586	4398	549
115°	917	1121	2579	4992	5635	906
125°	1256	1439	2324	3922	4607	1119
135°	1505	1684	2262	3167	3585	1163
145°	1750	1882	2230	2711	2917	1095
155°	1976	2054	2211	2432	2511	911
165°	2151	2172	2221	2308	2319	606
175°	2233	2230	2223	2252	2247	212
180°	2230	2230	2230	2230	2230	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3542.8	3542.8	3542.8	3542.8	3542.8
2.5°	3562.8	3533.5	3542.8	3534.9	3517.8
5°	3552.2	3512.5	3524.1	3514.6	3508.5
7.5°	3516.0	3479.3	3487.9	3477.8	3474.1
10°	3483.5	3446.9	3455.4	3442.8	3436.7
12.5°	3446.0	3407.0	3415.5	3402.9	3399.2
15°	3380.5	3337.8	3343.0	3336.7	3330.5
17.5°	3304.3	3261.0	3261.9	3251.9	3250.6
20°	3249.4	3203.6	3199.4	3187.1	3193.2
22.5°	3189.5	3141.2	3137.0	3119.7	3128.3
25°	3090.2	3038.3	3034.0	3015.5	3024.6
27.5°	2975.3	2924.1	2924.1	2898.1	2907.9
30°	2890.4	2841.6	2846.7	2815.8	2828.0
32.5°	2800.5	2756.6	2759.3	2728.4	2740.6
35°	2656.3	2619.7	2618.9	2594.1	2603.3
37.5°	2509.0	2476.6	2471.5	2457.2	2459.7
40°	2406.6	2379.1	2369.2	2359.8	2359.8
42.5°	2299.2	2274.2	2264.3	2257.4	2254.9
45°	2135.0	2116.7	2107.0	2100.6	2097.6
47.5°	1972.7	1955.6	1947.1	1942.7	1939.6
50°	1860.4	1848.2	1844.8	1835.3	1832.3
52.5°	1748.0	1740.7	1737.4	1725.4	1722.4
55°	1582.6	1579.5	1582.6	1560.6	1557.6
57.5°	1410.3	1415.1	1425.2	1395.7	1388.4
60°	1295.4	1307.6	1320.4	1285.7	1273.5
62.5°	1178.0	1197.6	1215.5	1175.8	1158.7
65°	1002.0	1032.5	1051.9	1010.6	977.0
67.5°	832.2	870.0	893.3	848.8	810.9
70°	714.8	757.5	783.5	738.8	696.1
72.5°	612.4	660.0	681.1	638.9	596.2
75°	462.0	504.7	530.6	495.3	449.5
77.5°	327.7	368.0	389.6	358.7	320.9
80°	240.3	283.1	299.7	274.0	243.5
82.5°	170.4	205.8	217.3	201.8	181.0
85°	78.0	102.5	115.5	109.1	103.0
87.5°	20.9	39.9	53.7	54.2	56.2
90°	4.8	14.2	31.2	33.6	31.2
92.5°	68.2	248.5	490.3	212.8	154.1
95°	160.9	564.7	1723.9	892.1	530.6
97.5°	258.3	647.6	2687.1	2223.8	1633.1
100°	331.3	681.1	2986.8	3114.9	2518.6
102.5°	398.6	727.7	3092.4	3790.6	3344.5
105°	521.0	805.1	3109.2	4586.4	4398.5
107.5°	634.3	893.5	2973.3	5082.8	5145.2
110°	722.7	957.4	2852.3	5216.1	5481.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	801.4	1021.2	2740.9	5189.5	5635.0
115°	917.2	1121.4	2578.6	4991.8	5635.0
117.5°	1030.5	1222.1	2471.5	4689.8	5419.0
120°	1099.6	1287.4	2408.2	4473.1	5217.3
122.5°	1164.9	1349.0	2369.7	4240.8	4990.6
125°	1255.7	1438.8	2324.1	3921.9	4607.4
127.5°	1339.3	1519.1	2297.2	3661.7	4264.6
130°	1385.4	1570.8	2285.7	3501.0	4045.6
132.5°	1433.4	1617.0	2274.2	3355.9	3857.4
135°	1505.4	1683.8	2261.7	3166.8	3584.6
137.5°	1577.9	1746.5	2251.1	3013.2	3353.7
140°	1627.8	1785.1	2247.3	2914.4	3217.3
142.5°	1675.9	1823.8	2239.6	2825.2	3090.5
145°	1750.3	1881.8	2230.5	2710.6	2917.2
147.5°	1818.0	1934.4	2219.9	2606.7	2765.4
150°	1867.9	1971.2	2216.1	2550.3	2677.1
152.5°	1914.0	2004.2	2214.2	2497.9	2602.2
155°	1976.0	2053.5	2211.3	2431.6	2511.4
157.5°	2040.3	2094.3	2211.8	2385.3	2437.9
160°	2076.8	2121.4	2213.7	2356.2	2393.8
162.5°	2105.6	2142.7	2215.6	2332.9	2361.1
165°	2151.3	2172.4	2220.9	2307.6	2319.3
167.5°	2182.5	2197.0	2221.4	2285.8	2291.5
170°	2201.7	2208.7	2223.3	2276.1	2276.1
172.5°	2217.0	2218.4	2223.3	2264.5	2262.7
175°	2232.9	2230.5	2223.3	2252.0	2247.3
177.5°	2238.2	2232.5	2222.8	2241.9	2236.2
180°	2230.5	2230.5	2230.5	2230.5	2230.5

(END OF REPORT)