

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: P564425

Luminaire Tested: **SQ4-PR1-150U-050D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564425
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-150U-050D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

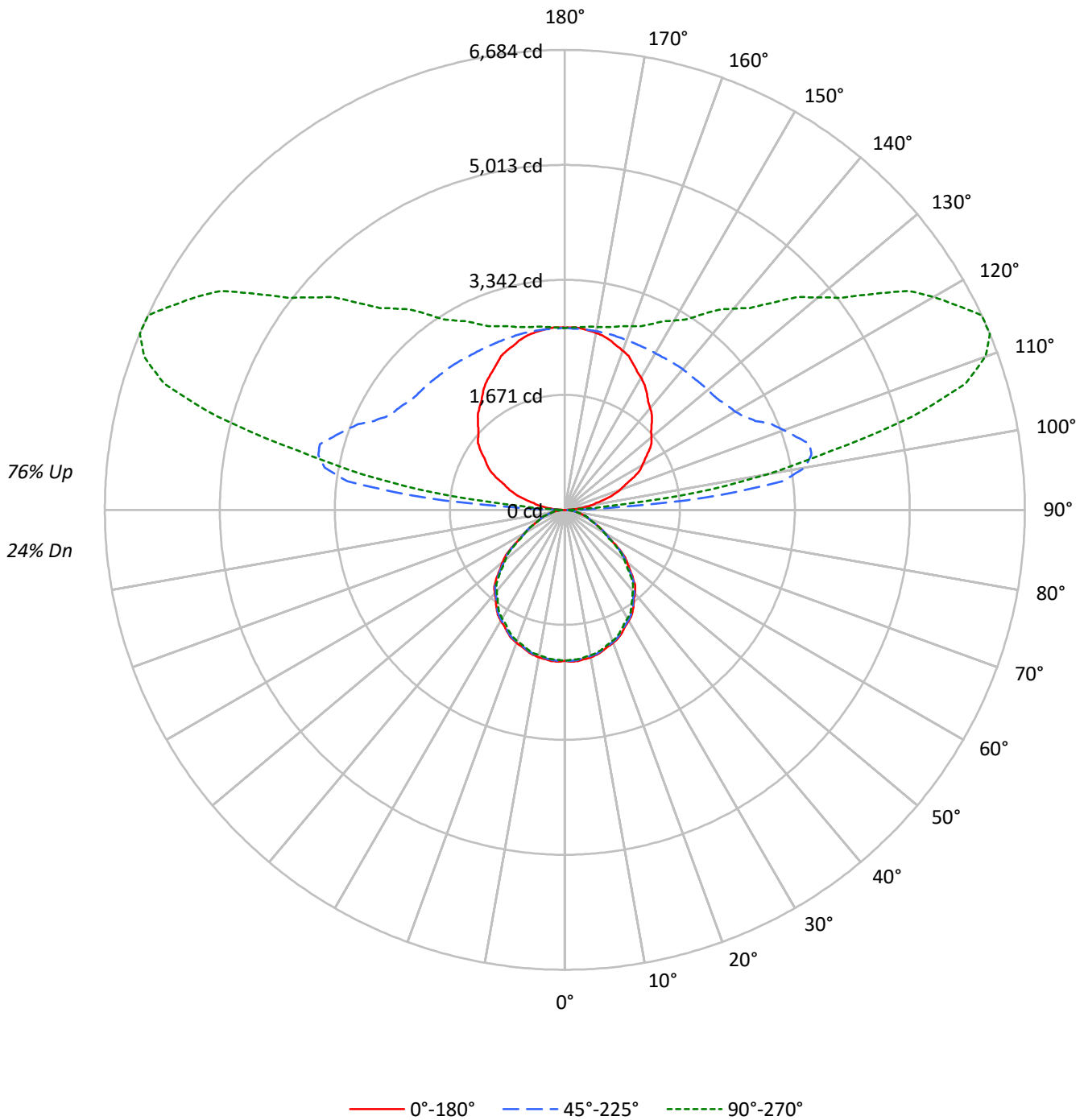
Lumens per Lamp: N/A
Luminaire Lumens: 22550.7 lumens
Efficiency: N/A
Efficacy: 133.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 168.9
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24
1	92	88	84	81	82	78	75	73	61	59	57	44	43	42	29	28	28	21
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	61	55	50	47	43	40	34	32	30	23	21	20	15
4	70	60	52	47	62	54	47	42	42	37	34	31	28	25	20	19	17	13
5	64	53	46	40	57	48	41	36	37	33	29	28	24	22	18	17	15	11
6	59	48	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13	10
7	54	43	35	30	48	38	32	27	30	26	22	22	19	17	15	13	12	9
8	50	39	31	26	45	35	28	24	27	23	19	20	17	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7
10	44	32	25	21	39	29	23	19	23	19	15	17	14	12	12	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6751	6751	6751
5°	6811	6759	6724
10°	6790	6743	6707
15°	6760	6718	6682
20°	6726	6683	6633
25°	6678	6634	6557
30°	6607	6559	6466
35°	6509	6452	6360
40°	6360	6292	6179
45°	6101	5995	5871
50°	5644	5509	5400
55°	4926	4815	4714
60°	4151	4117	4035
65°	3590	3604	3577
70°	3298	3315	3315
75°	3168	3168	3190
80°	2981	3014	2981
85°	2403	2668	2668



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.6	0.9
10°-20°	593.9	2.6
20°-30°	895.8	4.0
30°-40°	1067.3	4.7
40°-50°	1052.3	4.7
50°-60°	804.2	3.6
60°-70°	497.7	2.2
70°-80°	282.7	1.3
80°-90°	91.5	0.4
90°-100°	1229.6	5.5
100°-110°	3324.5	14.7
110°-120°	3495.2	15.5
120°-130°	2839.1	12.6
130°-140°	2227.0	9.9
140°-150°	1709.2	7.6
150°-160°	1229.3	5.5
160°-170°	750.9	3.3
170°-180°	253.2	1.1
0°-30°	1697.2	7.5
0°-40°	2764.5	12.3
0°-60°	4620.9	20.5
0°-90°	5492.8	24.4
90°-120°	8049.2	35.7
90°-150°	14824.5	65.7
90°-180°	17058.0	75.6
0°-180°	22550.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2195	2195	2195	2195	2195	
5°	2206	2182	2189	2182	2178	209
15°	2123	2101	2110	2102	2099	599
25°	1968	1944	1955	1934	1932	906
35°	1734	1713	1719	1696	1694	1082
45°	1403	1384	1378	1354	1350	1075
55°	919	904	898	883	879	823
65°	493	490	495	492	492	500
75°	267	267	267	268	268	282
85°	68	72	76	76	76	79
90°	6	17	37	40	37	15
95°	191	670	2045	1058	629	200
105°	618	955	3688	5440	5217	651
115°	1088	1330	3059	5921	6684	1074
125°	1490	1707	2757	4652	5465	1328
135°	1786	1997	2683	3756	4252	1380
145°	2076	2232	2646	3215	3460	1299
155°	2344	2436	2623	2884	2979	1081
165°	2552	2577	2634	2737	2751	719
175°	2649	2646	2637	2671	2666	251
180°	2646	2646	2646	2646	2646	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2195.0	2195.0	2195.0	2195.0	2195.0
2.5°	2208.6	2189.4	2195.0	2190.2	2179.9
5°	2206.3	2182.3	2189.3	2181.7	2178.0
7.5°	2189.3	2165.7	2172.7	2165.1	2162.9
10°	2174.2	2152.0	2159.1	2151.4	2147.7
12.5°	2157.6	2133.9	2142.4	2133.3	2129.6
15°	2123.2	2101.0	2109.9	2102.3	2098.6
17.5°	2085.3	2061.7	2070.6	2061.8	2057.0
20°	2055.1	2032.9	2041.9	2028.6	2026.7
22.5°	2021.8	1999.6	2008.6	1990.8	1990.4
25°	1968.1	1944.1	1954.9	1934.1	1932.2
27.5°	1904.2	1882.0	1891.0	1869.8	1867.5
30°	1860.4	1838.2	1847.1	1824.4	1820.7
32.5°	1810.4	1789.7	1797.2	1774.5	1772.3
35°	1733.7	1713.4	1718.6	1695.8	1694.0
37.5°	1646.3	1627.9	1630.8	1605.8	1604.0
40°	1584.3	1565.8	1567.3	1540.8	1539.0
42.5°	1516.3	1497.8	1496.2	1469.7	1467.9
45°	1402.8	1384.3	1378.3	1353.6	1349.9
47.5°	1273.5	1255.0	1243.6	1223.5	1221.0
50°	1179.7	1161.3	1151.4	1134.2	1128.7
52.5°	1078.4	1059.9	1051.6	1035.9	1030.4
55°	918.8	904.0	898.0	882.8	879.1
57.5°	767.2	757.2	755.5	740.7	739.2
60°	674.9	669.4	669.3	656.0	656.0
62.5°	596.3	592.2	595.2	586.4	585.0
65°	493.4	489.8	495.3	491.6	491.6
67.5°	412.2	412.2	415.6	414.0	414.0
70°	366.8	366.8	368.7	368.7	368.7
72.5°	325.9	324.5	329.3	329.3	327.8
75°	266.6	266.6	266.6	268.5	268.5
77.5°	207.6	208.0	209.5	209.1	207.6
80°	168.3	170.1	170.2	168.3	168.3
82.5°	128.9	130.8	130.8	130.4	128.9
85°	68.1	71.8	75.6	75.6	75.6
87.5°	20.8	28.9	37.7	38.2	36.1
90°	5.7	16.8	37.0	39.8	37.0
92.5°	80.9	294.7	581.5	252.5	182.8
95°	190.8	669.8	2044.8	1058.2	629.4
97.5°	306.4	768.1	3187.4	2637.8	1937.2
100°	393.0	807.9	3542.8	3694.8	2987.5
102.5°	472.8	863.2	3668.1	4496.2	3967.1
105°	618.0	954.9	3688.0	5440.1	5217.4
107.5°	752.4	1059.8	3526.9	6029.0	6103.1
110°	857.2	1135.7	3383.3	6187.1	6501.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	950.6	1211.3	3251.2	6155.5	6684.1
115°	1087.9	1330.2	3058.7	5921.1	6684.1
117.5°	1222.3	1449.6	2931.6	5562.8	6427.7
120°	1304.3	1527.1	2856.5	5305.8	6188.5
122.5°	1381.8	1600.1	2810.9	5030.3	5919.7
125°	1489.5	1706.7	2756.8	4652.0	5465.1
127.5°	1588.6	1801.9	2724.9	4343.4	5058.5
130°	1643.2	1863.2	2711.2	4152.7	4798.7
132.5°	1700.2	1918.0	2697.5	3980.7	4575.5
135°	1785.6	1997.3	2682.7	3756.3	4251.9
137.5°	1871.6	2071.6	2670.2	3574.2	3978.0
140°	1930.9	2117.5	2665.6	3457.0	3816.2
142.5°	1987.8	2163.3	2656.5	3351.2	3665.8
145°	2076.1	2232.1	2645.7	3215.2	3460.2
147.5°	2156.4	2294.6	2633.2	3092.0	3280.2
150°	2215.7	2338.2	2628.6	3025.1	3175.4
152.5°	2270.4	2377.3	2626.3	2962.9	3086.6
155°	2343.8	2435.7	2622.9	2884.2	2978.9
157.5°	2420.2	2484.2	2623.5	2829.4	2891.8
160°	2463.4	2516.4	2625.8	2794.8	2839.4
162.5°	2497.6	2541.6	2628.1	2767.2	2800.6
165°	2551.7	2576.8	2634.3	2737.2	2751.1
167.5°	2588.8	2606.0	2634.9	2711.4	2718.0
170°	2611.5	2619.9	2637.2	2699.8	2699.8
172.5°	2629.8	2631.4	2637.2	2686.1	2683.9
175°	2648.6	2645.8	2637.2	2671.2	2665.6
177.5°	2654.8	2648.1	2636.6	2659.2	2652.5
180°	2645.7	2645.7	2645.7	2645.7	2645.7

(END OF REPORT)