

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: P564429

Luminaire Tested: **SQ4-PR1-150U-050D-835-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564429
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-835-1D-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

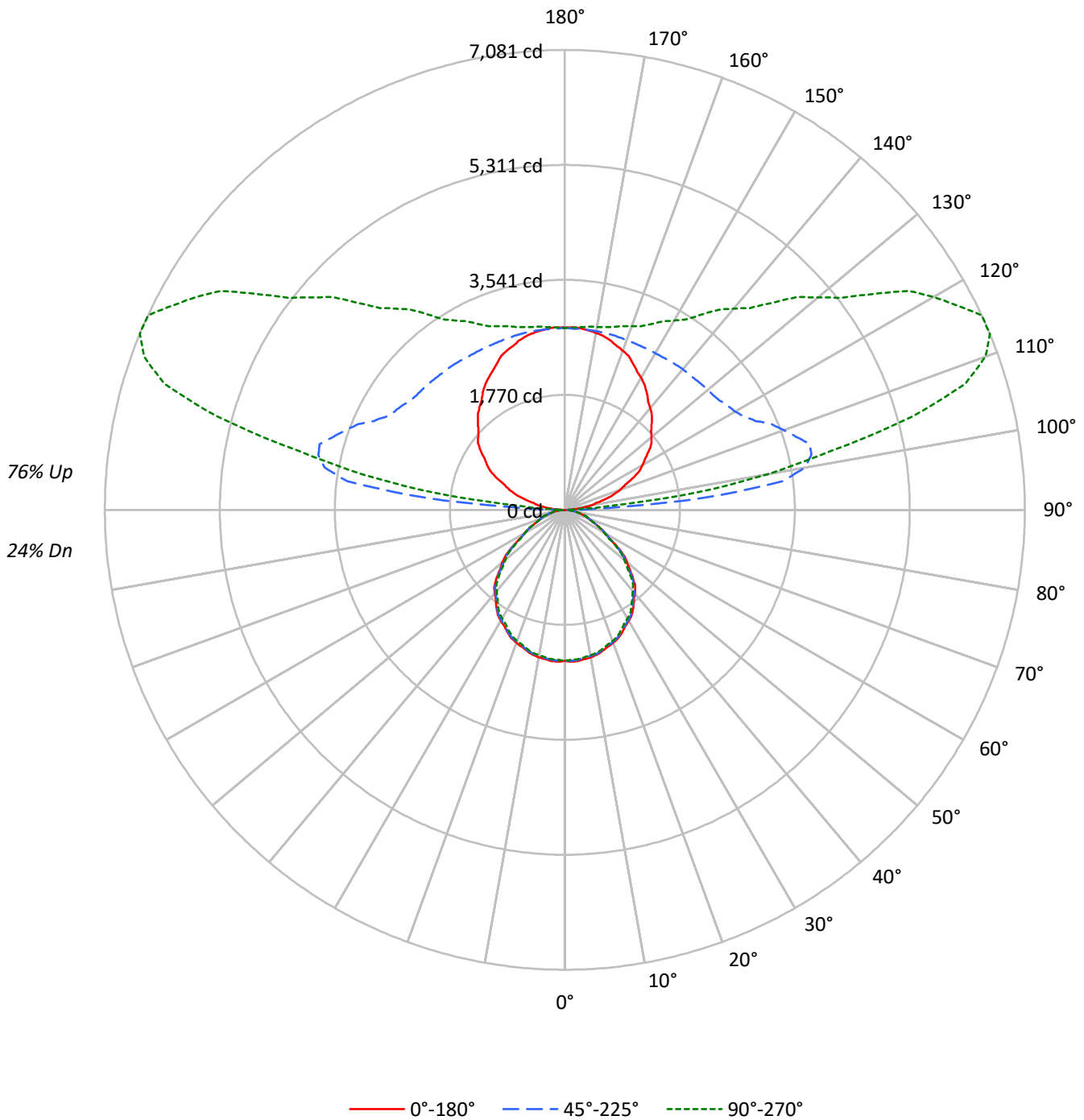
Lumens per Lamp: N/A
Luminaire Lumens: 23891.2 lumens
Efficiency: N/A
Efficacy: 141.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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°	7152	7152	7152
5°	7216	7161	7123
10°	7193	7143	7106
15°	7162	7117	7079
20°	7126	7080	7027
25°	7075	7028	6946
30°	6999	6949	6850
35°	6896	6836	6738
40°	6739	6666	6545
45°	6464	6351	6220
50°	5980	5836	5721
55°	5220	5101	4994
60°	4398	4362	4275
65°	3804	3819	3790
70°	3494	3512	3512
75°	3356	3356	3379
80°	3158	3193	3158
85°	2544	2826	2826



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.9	0.9
10°-20°	629.2	2.6
20°-30°	949.0	4.0
30°-40°	1130.7	4.7
40°-50°	1114.8	4.7
50°-60°	852.0	3.6
60°-70°	527.3	2.2
70°-80°	299.5	1.3
80°-90°	96.9	0.4
90°-100°	1302.7	5.5
100°-110°	3522.1	14.7
110°-120°	3703.0	15.5
120°-130°	3007.8	12.6
130°-140°	2359.4	9.9
140°-150°	1810.8	7.6
150°-160°	1302.3	5.5
160°-170°	795.6	3.3
170°-180°	268.2	1.1
0°-30°	1798.1	7.5
0°-40°	2928.8	12.3
0°-60°	4895.6	20.5
0°-90°	5819.3	24.4
90°-120°	8527.7	35.7
90°-150°	15705.8	65.7
90°-180°	18072.0	75.6
0°-180°	23891.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2326	2326	2326	2326	2326	
5°	2338	2312	2320	2311	2307	222
15°	2249	2226	2235	2227	2223	635
25°	2085	2060	2071	2049	2047	960
35°	1837	1815	1821	1797	1795	1146
45°	1486	1467	1460	1434	1430	1139
55°	974	958	951	935	931	872
65°	523	519	525	521	521	530
75°	282	282	282	284	284	298
85°	72	76	80	80	80	84
90°	6	18	39	42	39	16
95°	202	710	2166	1121	667	212
105°	655	1012	3907	5764	5528	690
115°	1153	1409	3240	6273	7081	1138
125°	1578	1808	2921	4929	5790	1407
135°	1892	2116	2842	3980	4505	1462
145°	2200	2365	2803	3406	3666	1376
155°	2483	2580	2779	3056	3156	1145
165°	2703	2730	2791	2900	2915	762
175°	2806	2803	2794	2830	2824	266
180°	2803	2803	2803	2803	2803	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2325.5	2325.5	2325.5	2325.5	2325.5
2.5°	2339.9	2319.5	2325.5	2320.4	2309.5
5°	2337.5	2312.0	2319.5	2311.4	2307.4
7.5°	2319.5	2294.4	2301.8	2293.8	2291.4
10°	2303.4	2279.9	2287.4	2279.3	2275.4
12.5°	2285.8	2260.7	2269.8	2260.1	2256.2
15°	2249.4	2225.9	2235.3	2227.2	2223.3
17.5°	2209.3	2184.2	2193.7	2184.3	2179.3
20°	2177.3	2153.8	2163.2	2149.2	2147.2
22.5°	2142.0	2118.5	2128.0	2109.1	2108.8
25°	2085.1	2059.7	2071.1	2049.0	2047.1
27.5°	2017.4	1993.9	2003.4	1980.9	1978.6
30°	1970.9	1947.4	1956.9	1932.8	1928.9
32.5°	1918.1	1896.1	1904.0	1880.0	1877.6
35°	1836.7	1815.2	1820.7	1796.6	1794.7
37.5°	1744.2	1724.6	1727.8	1701.3	1699.3
40°	1678.5	1658.9	1660.5	1632.4	1630.4
42.5°	1606.4	1586.8	1585.2	1557.1	1555.1
45°	1486.2	1466.6	1460.2	1434.1	1430.1
47.5°	1349.2	1329.6	1317.6	1296.3	1293.5
50°	1249.9	1230.3	1219.8	1201.7	1195.8
52.5°	1142.5	1122.9	1114.1	1097.5	1091.6
55°	973.5	957.8	951.4	935.3	931.4
57.5°	812.8	802.2	800.4	784.7	783.2
60°	715.1	709.2	709.1	695.0	695.0
62.5°	631.7	627.4	630.5	621.3	619.7
65°	522.8	518.9	524.8	520.8	520.8
67.5°	436.7	436.7	440.3	438.7	438.7
70°	388.6	388.6	390.6	390.6	390.6
72.5°	345.3	343.7	348.9	348.9	347.3
75°	282.4	282.4	282.4	284.4	284.4
77.5°	219.9	220.3	221.9	221.5	219.9
80°	178.3	180.2	180.3	178.3	178.3
82.5°	136.6	138.6	138.6	138.2	136.6
85°	72.1	76.0	80.1	80.1	80.1
87.5°	22.0	30.7	39.9	40.4	38.3
90°	6.0	17.8	39.2	42.2	39.2
92.5°	85.7	312.3	616.1	267.5	193.7
95°	202.2	709.6	2166.4	1121.1	666.8
97.5°	324.7	813.8	3376.9	2794.6	2052.3
100°	416.4	855.9	3753.4	3914.4	3165.0
102.5°	500.9	914.5	3886.2	4763.5	4203.0
105°	654.7	1011.7	3907.3	5763.5	5527.5
107.5°	797.1	1122.8	3736.5	6387.4	6465.9
110°	908.2	1203.2	3584.4	6554.9	6888.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1007.1	1283.3	3444.4	6521.4	7081.4
115°	1152.6	1409.2	3240.5	6273.0	7081.4
117.5°	1295.0	1535.7	3105.9	5893.5	6809.8
120°	1381.9	1617.9	3026.3	5621.2	6556.4
122.5°	1463.9	1695.2	2978.0	5329.3	6271.6
125°	1578.0	1808.1	2920.7	4928.6	5790.0
127.5°	1683.0	1909.0	2886.9	4601.6	5359.2
130°	1740.9	1974.0	2872.4	4399.5	5084.0
132.5°	1801.3	2032.0	2857.9	4217.3	4847.4
135°	1891.8	2116.0	2842.2	3979.6	4504.7
137.5°	1982.9	2194.7	2828.9	3786.7	4214.4
140°	2045.7	2243.3	2824.1	3662.5	4043.1
142.5°	2106.0	2291.9	2814.4	3550.4	3883.7
145°	2199.5	2364.7	2803.0	3406.3	3665.9
147.5°	2284.6	2431.0	2789.7	3275.8	3475.2
150°	2347.4	2477.2	2784.9	3204.9	3364.2
152.5°	2405.3	2518.6	2782.5	3139.1	3270.0
155°	2483.2	2580.5	2778.8	3055.7	3156.0
157.5°	2564.0	2631.9	2779.4	2997.6	3063.7
160°	2609.9	2665.9	2781.9	2960.9	3008.2
162.5°	2646.1	2692.7	2784.3	2931.7	2967.1
165°	2703.4	2730.0	2790.9	2899.9	2914.6
167.5°	2742.6	2760.9	2791.5	2872.5	2879.6
170°	2766.8	2775.6	2793.9	2860.3	2860.3
172.5°	2786.1	2787.9	2793.9	2845.8	2843.4
175°	2806.0	2803.0	2793.9	2830.0	2824.1
177.5°	2812.6	2805.6	2793.3	2817.3	2810.2
180°	2803.0	2803.0	2803.0	2803.0	2803.0

(END OF REPORT)