

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: P565113

Luminaire Tested: **SQ4-PW1-150U-050D-935-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565113
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-050D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20733.4 lumens
Efficiency: N/A
Efficacy: 122.8 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

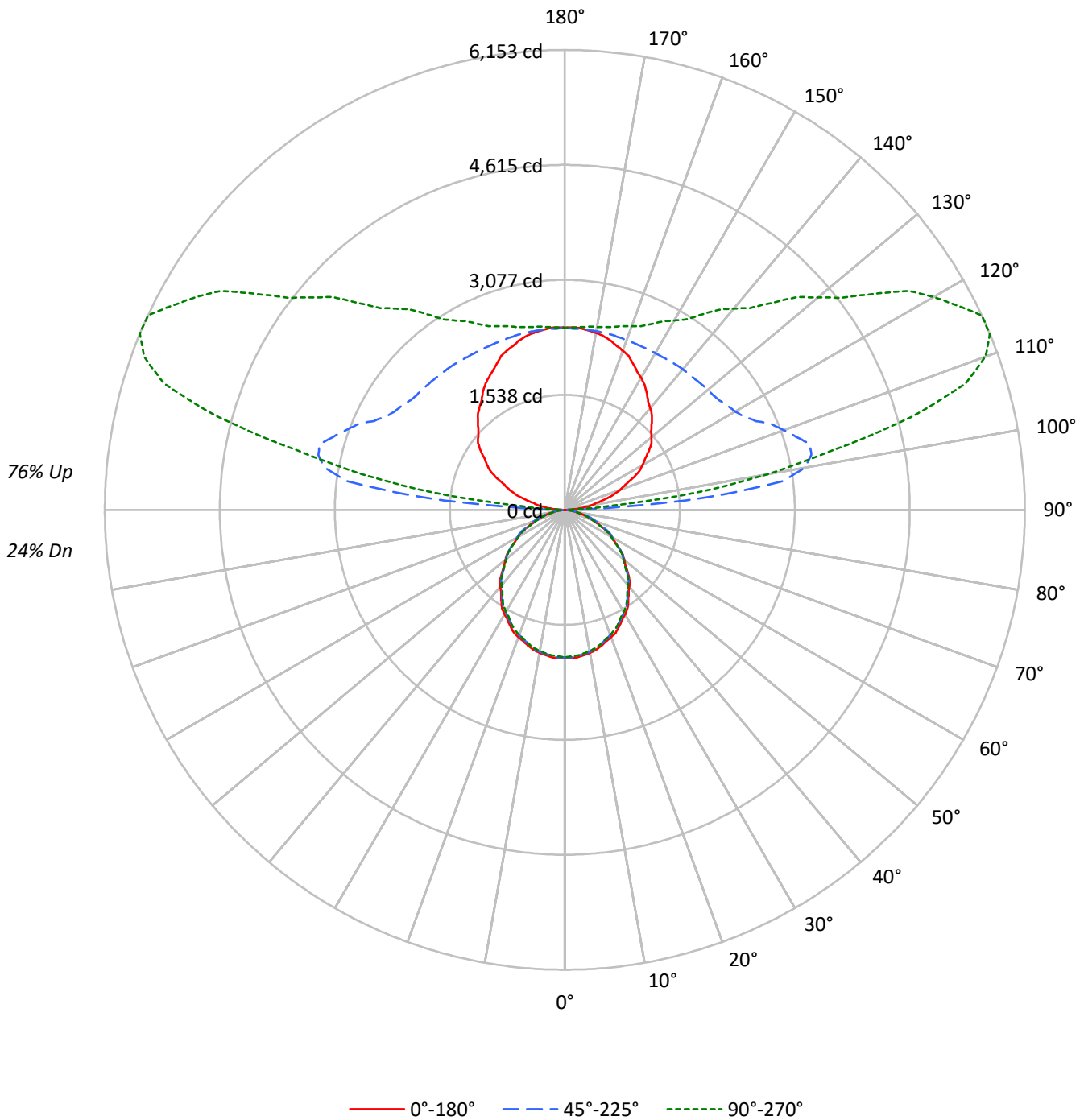
Input Watts (W): 168.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	57	44	43	42	29	28	27	21
2	84	77	71	66	74	68	64	59	53	50	47	39	37	35	25	24	23	17
3	76	67	60	55	68	60	54	50	47	43	39	34	32	29	22	21	20	15
4	70	60	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	40	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	11	9
8	50	38	31	26	45	35	28	24	27	22	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6075	6075	6075
5°	6114	6066	6039
10°	6065	6016	5984
15°	6001	5935	5912
20°	5929	5838	5827
25°	5847	5740	5723
30°	5723	5636	5599
35°	5561	5482	5449
40°	5387	5303	5282
45°	5177	5110	5086
50°	4963	4921	4888
55°	4731	4731	4657
60°	4443	4528	4368
65°	4066	4268	3964
70°	3583	3928	3490
75°	3061	3516	2978
80°	2373	2959	2405
85°	1535	2272	2025



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.0	0.9
10°-20°	525.2	2.5
20°-30°	779.0	3.8
30°-40°	911.5	4.4
40°-50°	907.4	4.4
50°-60°	783.6	3.8
60°-70°	564.1	2.7
70°-80°	295.8	1.4
80°-90°	78.4	0.4
90°-100°	1131.9	5.5
100°-110°	3060.3	14.8
110°-120°	3217.5	15.5
120°-130°	2613.5	12.6
130°-140°	2050.0	9.9
140°-150°	1573.4	7.6
150°-160°	1131.6	5.5
160°-170°	691.3	3.3
170°-180°	233.1	1.1
0°-30°	1490.1	7.2
0°-40°	2401.6	11.6
0°-60°	4092.6	19.7
0°-90°	5030.9	24.3
90°-120°	7409.7	35.7
90°-150°	13646.6	65.8
90°-180°	15703.0	75.7
0°-180°	20733.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1975	1975	1975	1975	1975	
5°	1981	1958	1965	1960	1956	188
15°	1885	1861	1864	1860	1857	531
25°	1723	1694	1692	1681	1686	792
35°	1481	1461	1460	1446	1452	926
45°	1190	1180	1175	1171	1170	918
55°	882	881	882	870	868	787
65°	559	576	586	564	545	554
75°	258	281	296	276	251	276
85°	44	57	64	61	57	58
90°	5	16	34	37	34	13
95°	176	616	1882	974	579	184
105°	569	879	3395	5008	4803	599
115°	1002	1224	2816	5451	6153	989
125°	1371	1571	2538	4282	5031	1222
135°	1644	1839	2470	3458	3914	1270
145°	1911	2055	2436	2960	3185	1196
155°	2158	2242	2414	2655	2742	995
165°	2349	2372	2425	2520	2532	662
175°	2438	2436	2428	2459	2454	231
180°	2436	2436	2436	2436	2436	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1975.3	1975.3	1975.3	1975.3	1975.3
2.5°	1986.5	1970.1	1975.3	1971.0	1961.4
5°	1980.6	1958.4	1964.9	1959.6	1956.2
7.5°	1960.4	1940.0	1944.7	1939.1	1937.1
10°	1942.3	1921.9	1926.6	1919.6	1916.2
12.5°	1921.4	1899.6	1904.3	1897.3	1895.3
15°	1884.8	1861.0	1864.0	1860.4	1857.0
17.5°	1842.4	1818.2	1818.7	1813.1	1812.4
20°	1811.7	1786.2	1783.9	1777.0	1780.4
22.5°	1778.3	1751.4	1749.1	1739.5	1744.2
25°	1723.0	1694.1	1691.7	1681.3	1686.4
27.5°	1658.9	1630.4	1630.4	1615.9	1621.3
30°	1611.6	1584.4	1587.2	1570.0	1576.8
32.5°	1561.5	1537.0	1538.5	1521.3	1528.1
35°	1481.1	1460.7	1460.2	1446.4	1451.5
37.5°	1398.9	1380.9	1378.0	1370.1	1371.4
40°	1341.8	1326.5	1321.0	1315.7	1315.7
42.5°	1282.0	1268.0	1262.5	1258.6	1257.3
45°	1190.4	1180.2	1174.8	1171.2	1169.5
47.5°	1099.9	1090.4	1085.7	1083.2	1081.5
50°	1037.3	1030.5	1028.6	1023.3	1021.6
52.5°	974.6	970.5	968.7	962.0	960.3
55°	882.4	880.7	882.4	870.2	868.5
57.5°	786.3	789.0	794.7	778.2	774.1
60°	722.3	729.1	736.2	716.9	710.1
62.5°	656.8	667.7	677.7	655.6	646.0
65°	558.7	575.7	586.5	563.5	544.7
67.5°	464.0	485.1	498.1	473.3	452.2
70°	398.5	422.4	436.8	411.9	388.1
72.5°	341.5	368.0	379.8	356.2	332.4
75°	257.6	281.4	295.9	276.1	250.6
77.5°	182.7	205.2	217.2	200.0	178.9
80°	134.0	157.8	167.1	152.8	135.8
82.5°	95.0	114.8	121.1	112.5	100.9
85°	43.5	57.1	64.4	60.8	57.4
87.5°	12.2	23.8	33.3	33.8	34.7
90°	5.2	15.5	34.1	36.6	34.1
92.5°	74.5	271.3	535.3	232.4	168.3
95°	175.6	616.5	1882.3	974.1	579.4
97.5°	282.1	707.1	2934.1	2428.2	1783.2
100°	361.8	743.7	3261.3	3401.2	2750.1
102.5°	435.2	794.6	3376.7	4139.0	3651.9
105°	568.9	879.1	3395.0	5007.9	4802.8
107.5°	692.6	975.6	3246.6	5550.0	5618.1
110°	789.1	1045.4	3114.5	5695.5	5985.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	875.1	1115.0	2992.8	5666.4	6153.0
115°	1001.5	1224.5	2815.6	5450.6	6153.0
117.5°	1125.2	1334.4	2698.7	5120.8	5917.0
120°	1200.7	1405.8	2629.5	4884.2	5696.8
122.5°	1272.0	1473.0	2587.5	4630.6	5449.3
125°	1371.1	1571.1	2537.7	4282.4	5030.9
127.5°	1462.3	1658.7	2508.4	3998.3	4656.5
130°	1512.7	1715.2	2495.8	3822.7	4417.4
132.5°	1565.1	1765.6	2483.2	3664.4	4211.9
135°	1643.8	1838.6	2469.6	3457.8	3914.1
137.5°	1722.9	1907.0	2458.0	3290.2	3661.9
140°	1777.5	1949.2	2453.8	3182.3	3513.0
142.5°	1829.9	1991.4	2445.5	3084.9	3374.6
145°	1911.2	2054.7	2435.5	2959.7	3185.3
147.5°	1985.1	2112.2	2424.0	2846.3	3019.6
150°	2039.6	2152.4	2419.8	2784.7	2923.1
152.5°	2090.0	2188.4	2417.7	2727.5	2841.3
155°	2157.6	2242.2	2414.5	2655.1	2742.2
157.5°	2227.9	2286.8	2415.0	2604.6	2662.0
160°	2267.7	2316.4	2417.1	2572.7	2613.8
162.5°	2299.2	2339.7	2419.2	2547.3	2578.1
165°	2349.0	2372.0	2425.0	2519.7	2532.5
167.5°	2383.1	2399.0	2425.5	2495.9	2502.1
170°	2404.0	2411.7	2427.6	2485.3	2485.3
172.5°	2420.8	2422.3	2427.6	2472.7	2470.6
175°	2438.1	2435.5	2427.6	2459.0	2453.8
177.5°	2443.9	2437.7	2427.1	2447.9	2441.8
180°	2435.5	2435.5	2435.5	2435.5	2435.5

(END OF REPORT)