

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: P523870

Luminaire Tested: **SQ4-PP3-100U-125D-92765-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/24/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P523870  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2103-172-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/24/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PP3-100U-125D-92765-1D-UNV-STD-W-4 (4500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9704.5 lumens  
Efficiency: N/A  
Efficacy: 110.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

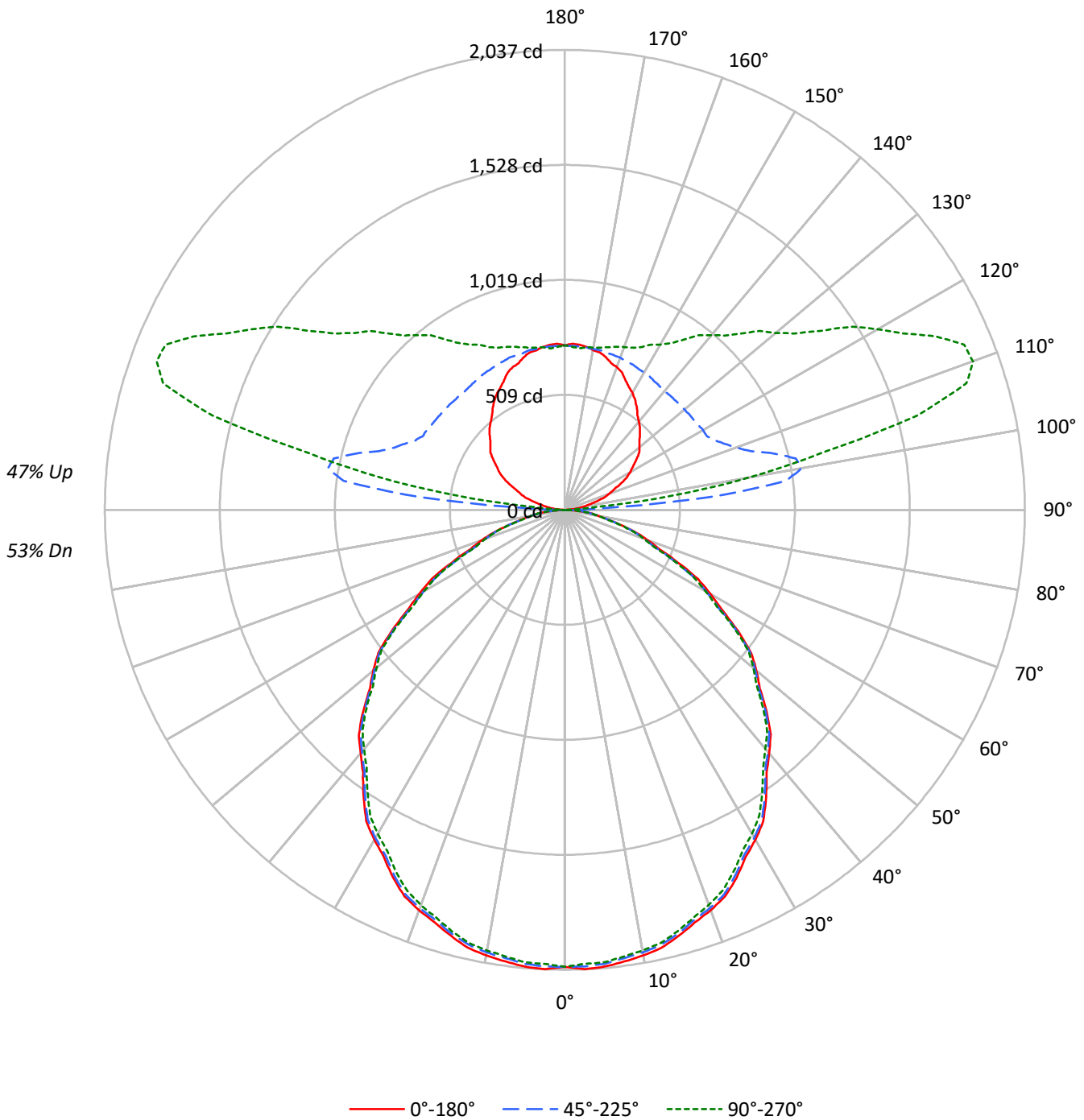
Input Watts (W): 88.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	53
1	99	95	91	87	91	88	84	81	75	73	70	63	62	60	53	52	50	45
2	90	83	77	72	83	77	72	67	66	62	59	56	53	51	47	45	43	38
3	82	73	66	60	76	68	61	56	58	54	50	50	46	43	41	39	37	33
4	75	65	57	51	70	60	53	48	52	47	42	44	40	37	37	34	32	28
5	69	58	49	44	64	54	47	41	47	41	37	40	35	32	33	30	28	24
6	64	52	44	38	59	48	41	36	42	36	32	36	31	28	30	27	24	22
7	59	47	39	33	55	44	37	31	38	32	28	33	28	25	28	24	22	19
8	55	42	35	29	51	40	33	28	35	29	25	30	25	22	25	22	19	17
9	51	39	31	26	47	36	30	25	32	26	22	28	23	20	24	20	18	15
10	48	36	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16	14

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	18673	18673	18673
5°	18810	18695	18629
10°	18778	18645	18563
15°	18654	18552	18451
20°	18530	18426	18287
25°	18311	18183	18003
30°	17971	17877	17651
35°	17502	17381	17162
40°	16941	16835	16642
45°	16479	16363	16201
50°	15888	15786	15632
55°	15066	14866	14752
60°	13714	13321	13256
65°	12081	11579	11540
70°	10431	10000	10000
75°	8980	8851	8726
80°	7917	8012	7821
85°	6193	6764	6764



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.4	2.0
10°-20°	546.5	5.6
20°-30°	818.5	8.4
30°-40°	960.1	9.9
40°-50°	963.1	9.9
50°-60°	821.6	8.5
60°-70°	535.8	5.5
70°-80°	268.8	2.8
80°-90°	74.4	0.8
90°-100°	331.9	3.4
100°-110°	944.4	9.7
110°-120°	904.8	9.3
120°-130°	716.1	7.4
130°-140°	574.8	5.9
140°-150°	450.0	4.6
150°-160°	329.3	3.4
160°-170°	203.9	2.1
170°-180°	69.2	0.7
0°-30°	1556.4	16.0
0°-40°	2516.4	25.9
0°-60°	4301.1	44.3
0°-90°	5180.2	53.4
90°-120°	2181.1	22.5
90°-150°	3921.9	40.4
90°-180°	4524.0	46.6
0°-180°	9704.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2024	2024	2024	2024	2024	
5°	2031	2012	2019	2012	2012	193
15°	1953	1934	1942	1935	1932	551
25°	1799	1778	1786	1770	1768	827
35°	1554	1538	1543	1525	1524	971
45°	1263	1254	1254	1242	1242	972
55°	937	933	924	919	917	832
65°	553	543	530	527	529	552
75°	252	252	248	246	245	273
85°	58	64	64	64	64	69
90°	0	0	0	0	0	4
95°	36	143	642	222	137	41
105°	147	223	962	1700	1616	155
115°	273	330	730	1546	1815	269
125°	385	427	696	1156	1382	345
135°	471	510	688	976	1104	363
145°	555	584	694	845	921	347
155°	634	649	710	764	795	293
165°	701	703	719	734	745	197
175°	734	730	727	723	717	70
180°	728	728	728	728	728	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2023.9	2023.9	2023.9	2023.9	2023.9
2.5°	2036.7	2020.1	2023.9	2020.9	2012.6
5°	2031.0	2011.9	2018.6	2011.5	2011.5
7.5°	2017.2	1996.4	2003.0	1995.9	1995.6
10°	2004.4	1983.6	1990.2	1983.1	1981.4
12.5°	1986.0	1965.2	1973.2	1964.7	1964.3
15°	1953.0	1933.9	1942.3	1935.2	1931.7
17.5°	1915.7	1894.9	1905.1	1895.1	1893.7
20°	1887.3	1866.5	1876.7	1862.5	1862.5
22.5°	1853.3	1832.5	1844.1	1825.6	1825.6
25°	1798.7	1777.8	1786.2	1770.2	1768.5
27.5°	1733.7	1713.3	1722.0	1703.9	1703.6
30°	1686.9	1667.8	1678.0	1658.5	1656.8
32.5°	1635.8	1618.1	1625.5	1606.0	1604.2
35°	1553.9	1538.3	1543.2	1525.4	1523.7
37.5°	1467.7	1451.7	1457.4	1442.1	1441.4
40°	1406.6	1396.2	1397.8	1385.3	1381.8
42.5°	1349.9	1338.1	1339.6	1327.2	1326.5
45°	1263.0	1254.3	1254.1	1241.7	1241.7
47.5°	1170.7	1164.1	1162.2	1151.9	1151.6
50°	1106.9	1101.7	1099.8	1090.9	1089.1
52.5°	1040.2	1037.7	1031.7	1024.2	1023.9
55°	936.6	933.1	924.2	918.8	917.1
57.5°	824.1	817.2	807.1	799.3	800.7
60°	743.2	736.3	721.9	718.4	718.4
62.5°	665.2	656.9	642.5	637.6	640.4
65°	553.4	543.0	530.4	526.9	528.6
67.5°	452.0	442.6	428.9	428.9	427.5
70°	386.7	381.5	370.7	370.7	370.7
72.5°	328.5	326.1	318.2	318.2	316.8
75°	251.9	251.9	248.3	246.5	244.8
77.5°	188.7	189.4	187.7	185.8	182.7
80°	149.0	152.5	150.8	149.0	147.2
82.5°	112.1	115.6	115.3	112.1	111.8
85°	58.5	63.7	63.9	63.9	63.9
87.5°	15.6	21.2	22.7	22.7	24.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.1	58.7	136.3	39.7	29.9
95°	36.0	143.0	642.5	222.4	137.1
97.5°	66.2	167.5	989.5	708.1	485.2
100°	87.2	182.0	1064.8	1078.6	830.8
102.5°	110.5	197.7	1048.2	1380.6	1164.3
105°	146.8	222.6	962.4	1699.9	1616.0
107.5°	183.6	251.6	862.1	1789.9	1864.7
110°	209.1	272.7	804.5	1755.5	1923.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	233.5	293.8	765.7	1674.0	1913.4
115°	272.8	329.7	729.7	1545.9	1815.4
117.5°	307.4	360.8	708.4	1405.9	1691.3
120°	335.1	379.8	706.2	1325.8	1599.3
122.5°	357.3	401.9	700.7	1255.6	1509.6
125°	385.0	426.9	696.5	1155.8	1381.9
127.5°	415.1	454.4	694.3	1096.2	1282.5
130°	430.6	469.9	691.0	1054.7	1217.2
132.5°	447.3	485.4	691.0	1022.3	1171.7
135°	470.8	510.1	688.2	976.3	1103.6
137.5°	493.0	531.1	687.9	937.5	1047.4
140°	509.6	548.8	686.8	905.2	1010.8
142.5°	528.4	561.2	690.1	879.5	974.3
145°	555.3	583.7	693.7	845.0	920.8
147.5°	578.3	605.9	699.8	810.2	875.7
150°	598.2	617.2	702.0	798.6	844.7
152.5°	613.7	633.7	704.3	783.1	825.8
155°	634.2	649.1	710.4	763.7	794.8
157.5°	659.7	668.6	711.7	754.9	777.1
160°	673.0	679.7	717.3	748.2	767.1
162.5°	680.7	688.6	718.4	742.5	757.2
165°	700.7	703.4	718.7	734.1	745.0
167.5°	714.2	711.8	725.0	732.1	736.4
170°	718.7	717.3	722.8	724.3	729.7
172.5°	728.6	724.0	726.1	722.1	726.4
175°	733.9	729.8	727.0	722.7	717.3
177.5°	736.1	729.6	726.1	721.7	722.8
180°	728.4	728.4	728.4	728.4	728.4

(END OF REPORT)