

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: P523857

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

Issue Date: 5/24/2021

Test Information

Test Method: LM-79-2019
Report Number: P523857
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-100D-92765-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS
DOWNLIGHT 1000 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

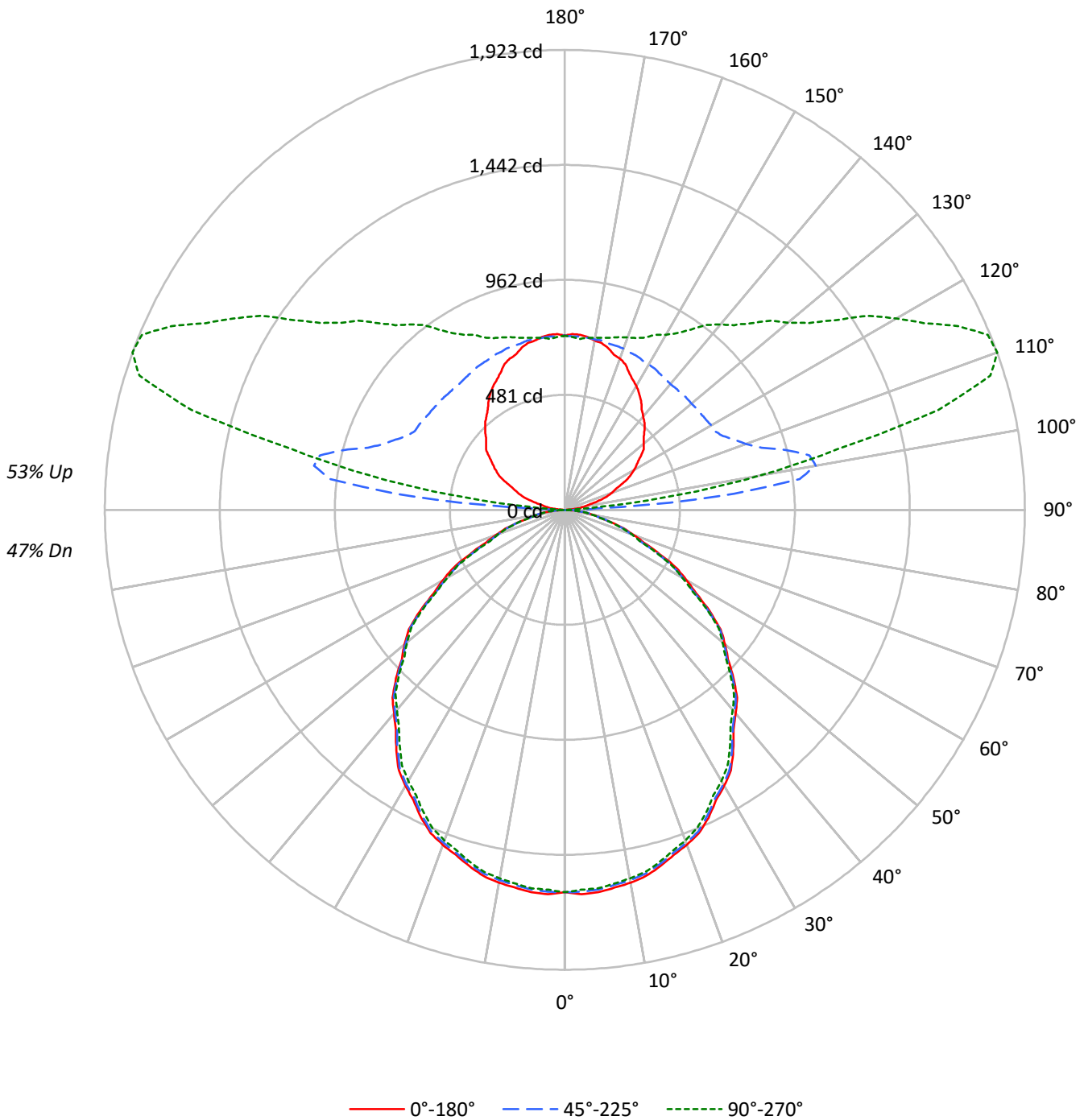
Lumens per Lamp: N/A
Luminaire Lumens: 8615.8 lumens
Efficiency: N/A
Efficacy: 115.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 74.7
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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	47				47
1	97	93	89	86	89	86	83	80	72	70	68	60	58	56	48	47	46				40	
2	89	82	76	71	81	75	70	66	63	60	56	52	50	47	42	41	39				34	
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	38	35	33				29	
4	74	64	56	50	68	59	52	47	50	45	41	41	38	35	34	31	29				25	
5	68	57	49	43	62	52	45	40	45	39	35	37	33	30	30	27	25				22	
6	63	51	43	37	58	47	40	35	40	35	31	34	29	26	28	24	22				19	
7	58	46	38	32	53	43	36	31	36	31	27	31	26	23	25	22	20				17	
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18				15	
9	50	38	31	26	46	35	29	24	30	25	21	26	22	19	21	18	16				14	
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14				12	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14749	14749	14749
5°	14857	14766	14715
10°	14832	14727	14662
15°	14734	14653	14573
20°	14636	14554	14444
25°	14463	14363	14219
30°	14195	14120	13941
35°	13823	13729	13555
40°	13381	13297	13145
45°	13015	12924	12796
50°	12549	12467	12347
55°	11900	11741	11651
60°	10832	10522	10470
65°	9542	9145	9114
70°	8238	7898	7898
75°	7090	6990	6891
80°	6254	6328	6179
85°	4891	5335	5335



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.2	1.8
10°-20°	431.6	5.0
20°-30°	646.5	7.5
30°-40°	758.3	8.8
40°-50°	760.7	8.8
50°-60°	648.9	7.5
60°-70°	423.2	4.9
70°-80°	212.3	2.5
80°-90°	58.8	0.7
90°-100°	331.9	3.9
100°-110°	944.4	11.0
110°-120°	904.8	10.5
120°-130°	716.1	8.3
130°-140°	574.8	6.7
140°-150°	450.0	5.2
150°-160°	329.3	3.8
160°-170°	203.9	2.4
170°-180°	69.2	0.8
0°-30°	1229.3	14.3
0°-40°	1987.6	23.1
0°-60°	3397.2	39.4
0°-90°	4091.5	47.5
90°-120°	2181.1	25.3
90°-150°	3921.9	45.5
90°-180°	4524.0	52.5
0°-180°	8615.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1599	1599	1599	1599	1599	
5°	1604	1589	1594	1589	1589	152
15°	1543	1528	1534	1528	1526	435
25°	1421	1404	1411	1398	1397	653
35°	1227	1215	1219	1205	1204	767
45°	998	991	990	981	981	768
55°	740	737	730	726	724	657
65°	437	429	419	416	418	436
75°	199	199	196	195	193	216
85°	46	50	50	50	50	54
90°	0	0	0	0	0	3
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°	1598.6	1598.6	1598.6	1598.6	1598.6
2.5°	1608.7	1595.5	1598.6	1596.2	1589.6
5°	1604.2	1589.1	1594.4	1588.8	1588.8
7.5°	1593.3	1576.8	1582.1	1576.4	1576.2
10°	1583.2	1566.7	1572.0	1566.3	1565.0
12.5°	1568.6	1552.2	1558.5	1551.8	1551.5
15°	1542.6	1527.5	1534.1	1528.5	1525.7
17.5°	1513.1	1496.7	1504.7	1496.9	1495.8
20°	1490.7	1474.3	1482.3	1471.1	1471.1
22.5°	1463.8	1447.4	1456.5	1442.0	1442.0
25°	1420.7	1404.2	1410.9	1398.2	1396.8
27.5°	1369.4	1353.2	1360.1	1345.8	1345.6
30°	1332.4	1317.3	1325.4	1309.9	1308.6
32.5°	1292.0	1278.1	1283.9	1268.5	1267.1
35°	1227.3	1215.0	1218.9	1204.9	1203.5
37.5°	1159.2	1146.6	1151.1	1139.0	1138.5
40°	1111.0	1102.8	1104.0	1094.2	1091.4
42.5°	1066.2	1056.9	1058.1	1048.2	1047.7
45°	997.5	990.7	990.5	980.7	980.7
47.5°	924.7	919.5	918.0	909.8	909.6
50°	874.3	870.1	868.6	861.6	860.2
52.5°	821.6	819.7	814.8	809.0	808.7
55°	739.8	737.0	729.9	725.7	724.3
57.5°	650.9	645.4	637.5	631.3	632.4
60°	587.0	581.6	570.2	567.4	567.4
62.5°	525.4	518.8	507.5	503.6	505.8
65°	437.1	428.9	418.9	416.1	417.5
67.5°	357.0	349.6	338.8	338.7	337.7
70°	305.4	301.3	292.8	292.8	292.8
72.5°	259.5	257.6	251.3	251.3	250.2
75°	198.9	198.9	196.1	194.7	193.3
77.5°	149.1	149.6	148.2	146.8	144.3
80°	117.7	120.4	119.1	117.7	116.3
82.5°	88.5	91.3	91.1	88.5	88.3
85°	46.2	50.3	50.4	50.4	50.4
87.5°	12.3	16.7	17.9	18.0	19.1
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)