

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: P518746

Luminaire Tested: **SQ4-BB-100U-100D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518746
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-100U-100D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

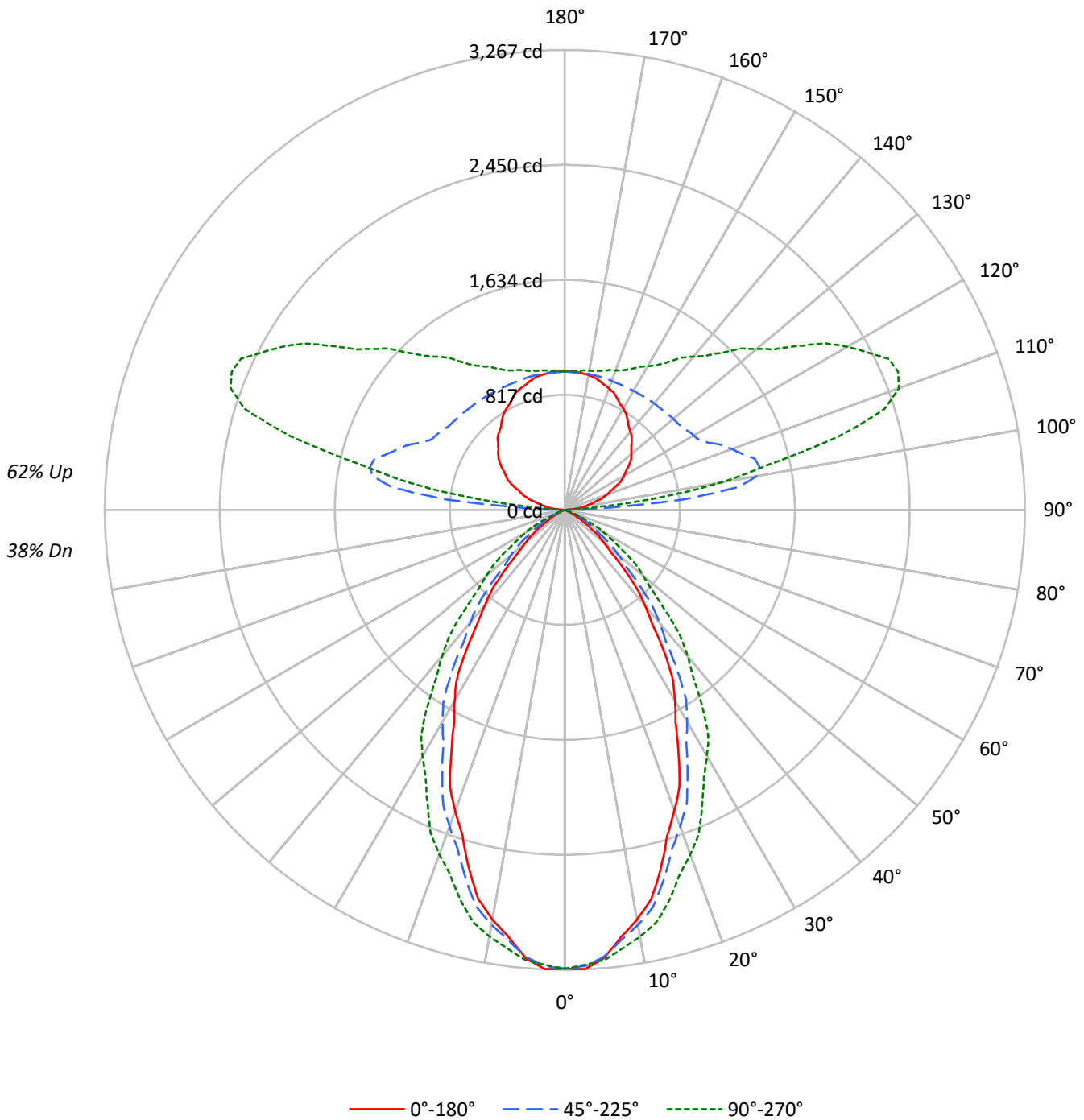
Lumens per Lamp: N/A
Luminaire Lumens: 10281.9 lumens
Efficiency: N/A
Efficacy: 84.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 121.2
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	87	84	82	79	69	67	65	55	54	53	42	41	41	35
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	38	37	36	31
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28
4	76	66	59	54	69	61	55	50	51	46	43	41	38	36	33	31	29	25
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	37	34	35	31	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	41	35	30	48	38	32	28	33	28	25	28	24	22	23	20	19	16
10	49	38	32	27	45	36	30	26	30	26	23	26	22	20	21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15035	15035	15035
5°	14793	14756	14866
10°	13841	14026	14417
15°	12583	12982	13705
20°	11169	11750	12780
25°	9727	10498	11742
30°	8332	9247	10759
35°	6908	7849	9572
40°	5308	6276	8156
45°	3837	4753	6563
50°	2614	3542	5205
55°	1699	2562	4045
60°	974	1804	2924
65°	259	1101	1480
70°	128	340	425
75°	57	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.4	2.9
10°-20°	760.6	7.4
20°-30°	952.2	9.3
30°-40°	879.5	8.6
40°-50°	591.0	5.7
50°-60°	305.3	3.0
60°-70°	95.6	0.9
70°-80°	6.1	0.1
80°-90°	2.1	0.0
90°-100°	460.7	4.5
100°-110°	1271.9	12.4
110°-120°	1311.7	12.8
120°-130°	1054.1	10.3
130°-140°	828.4	8.1
140°-150°	635.3	6.2
150°-160°	456.6	4.4
160°-170°	279.2	2.7
170°-180°	94.1	0.9
0°-30°	2010.3	19.6
0°-40°	2889.8	28.1
0°-60°	3786.1	36.8
0°-90°	3889.9	37.8
90°-120°	3044.3	29.6
90°-150°	5562.0	54.1
90°-180°	6392.0	62.2
0°-180°	10281.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3259	3259	3259	3259	3259	
5°	3194	3162	3187	3198	3210	296
15°	2635	2626	2718	2810	2870	734
25°	1911	1926	2062	2204	2307	876
35°	1227	1258	1394	1558	1700	760
45°	588	624	728	870	1006	462
55°	211	247	318	409	503	197
65°	24	45	101	122	136	40
75°	3	3	2	0	0	5
85°	0	0	0	0	0	0
90°	3	6	13	14	16	5
95°	68	249	836	344	224	72
105°	227	350	1399	2136	2012	241
115°	406	491	1127	2231	2537	399
125°	557	634	1022	1729	2029	496
135°	670	743	993	1400	1579	519
145°	778	831	981	1192	1283	487
155°	877	906	973	1070	1103	404
165°	949	962	978	1015	1023	268
175°	984	985	979	993	990	93
180°	984	984	984	984	984	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3259.1	3259.1	3259.1	3259.1	3259.1
2.5°	3266.7	3235.9	3244.0	3243.8	3235.2
5°	3194.5	3162.1	3186.6	3197.9	3210.2
7.5°	3059.5	3034.2	3081.3	3116.5	3142.1
10°	2954.8	2933.2	2994.2	3042.3	3077.8
12.5°	2833.7	2817.1	2890.8	2956.8	3002.1
15°	2634.7	2625.5	2718.3	2809.5	2869.7
17.5°	2421.6	2421.2	2527.2	2640.5	2712.9
20°	2275.2	2279.9	2393.5	2518.4	2603.2
22.5°	2128.9	2139.7	2261.0	2391.3	2488.4
25°	1911.0	1926.4	2062.4	2203.5	2306.8
27.5°	1701.6	1724.1	1867.2	2013.8	2139.6
30°	1564.1	1590.3	1736.0	1890.3	2019.8
32.5°	1429.2	1460.3	1602.3	1765.5	1897.4
35°	1226.7	1257.5	1393.8	1557.9	1699.7
37.5°	1017.6	1047.8	1181.0	1342.4	1495.7
40°	881.4	915.3	1042.2	1198.7	1354.4
42.5°	757.8	791.7	911.0	1064.8	1211.9
45°	588.1	623.6	728.5	870.3	1006.0
47.5°	447.5	486.0	578.0	706.4	830.0
50°	364.2	402.8	493.5	606.6	725.3
52.5°	297.4	334.7	416.6	523.1	632.0
55°	211.3	246.7	318.5	408.9	503.0
57.5°	146.0	176.5	240.9	316.4	390.1
60°	105.6	134.9	195.5	256.8	316.9
62.5°	70.3	97.1	156.4	203.4	243.8
65°	23.7	45.2	100.9	121.7	135.6
67.5°	12.0	14.4	53.0	55.9	60.5
70°	9.5	9.5	25.2	26.9	31.5
72.5°	6.9	6.9	10.1	13.0	13.9
75°	3.2	3.2	1.6	0.0	0.0
77.5°	1.6	1.6	1.3	0.0	0.0
80°	1.6	1.6	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	1.2	2.5	2.8	3.1
90°	3.1	6.2	12.6	14.2	15.7
92.5°	28.3	117.6	210.3	76.7	59.8
95°	67.7	249.3	835.8	343.6	223.5
97.5°	112.1	279.2	1238.1	953.2	690.4
100°	144.8	297.2	1386.7	1396.5	1134.9
102.5°	176.3	317.6	1415.7	1725.5	1477.4
105°	226.7	349.8	1399.3	2136.3	2011.6
107.5°	280.2	389.8	1321.2	2334.4	2379.9
110°	318.0	416.5	1260.8	2377.0	2524.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	352.0	446.8	1204.1	2343.3	2561.3
115°	406.1	490.7	1127.0	2231.1	2537.3
117.5°	453.3	537.7	1076.3	2073.0	2421.5
120°	484.8	567.9	1056.2	1966.1	2317.0
122.5°	515.0	594.4	1039.8	1866.2	2198.6
125°	557.2	634.2	1021.5	1728.8	2028.9
127.5°	593.1	670.0	1010.8	1612.7	1871.5
130°	617.0	694.0	1005.8	1541.6	1777.1
132.5°	639.7	712.9	1000.8	1481.9	1695.2
135°	670.5	742.9	993.2	1400.2	1578.8
137.5°	705.2	771.0	989.4	1331.6	1484.0
140°	724.1	788.7	986.9	1285.9	1419.8
142.5°	745.5	805.2	984.4	1245.2	1363.1
145°	777.6	831.4	980.6	1192.0	1282.8
147.5°	808.4	855.5	977.2	1147.2	1217.7
150°	831.1	869.6	975.9	1120.4	1177.4
152.5°	848.7	884.7	974.6	1097.5	1144.6
155°	876.7	906.0	972.7	1069.5	1103.4
157.5°	902.5	925.0	973.1	1049.1	1072.2
160°	917.7	937.7	974.3	1037.7	1054.6
162.5°	930.3	947.8	975.6	1027.5	1040.7
165°	949.1	961.5	977.5	1015.4	1023.1
167.5°	963.6	971.0	979.0	1008.1	1010.5
170°	971.2	977.3	979.0	1004.2	1004.2
172.5°	977.5	981.2	979.0	999.2	997.9
175°	983.8	985.3	979.0	993.1	990.1
177.5°	986.3	985.1	978.7	987.5	985.0
180°	983.8	983.8	983.8	983.8	983.8

(END OF REPORT)