

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: P518741

Luminaire Tested: **SQ4-BB-100U-100D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518741  
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-840-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

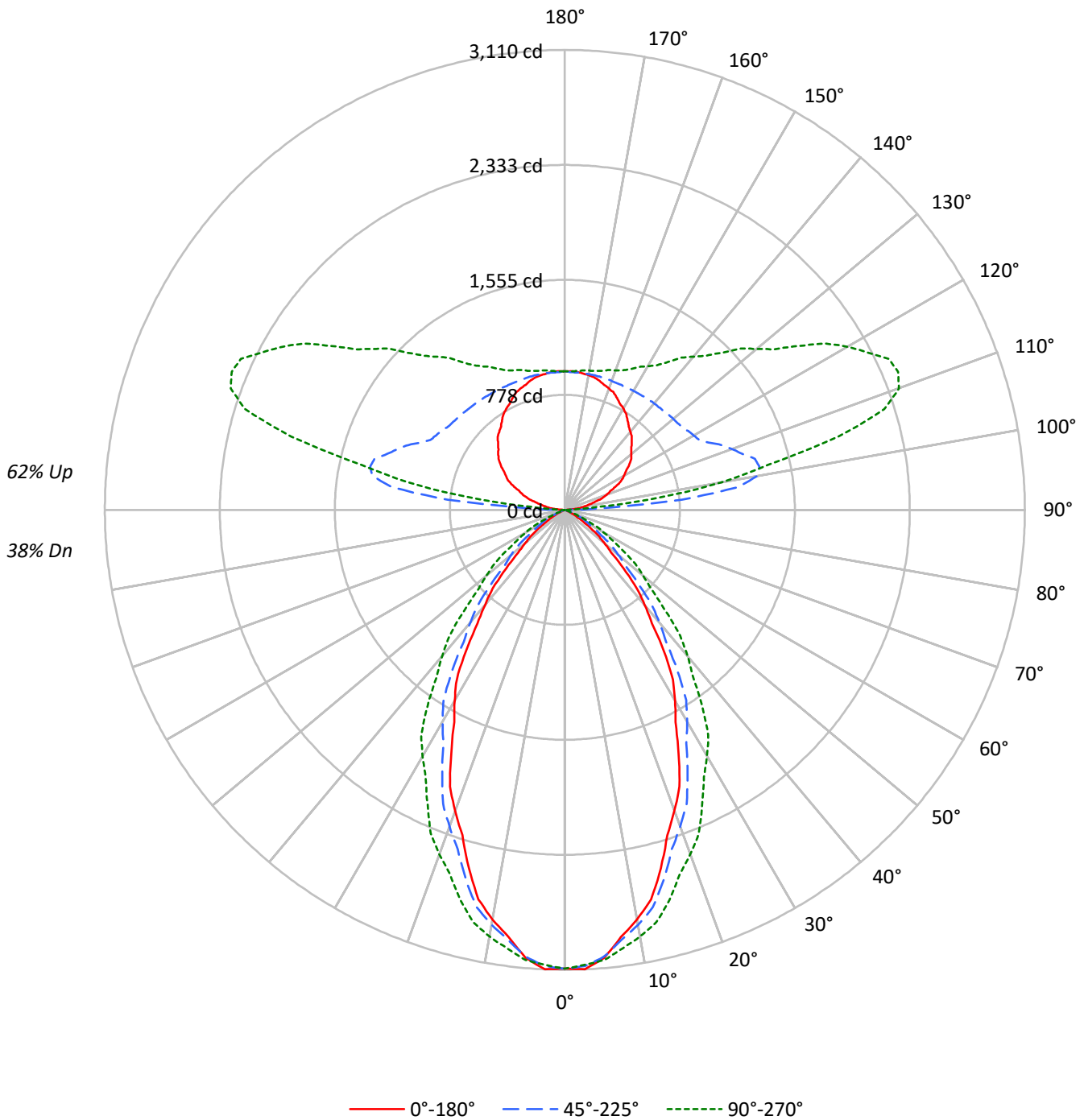
Lumens per Lamp: N/A  
Luminaire Lumens: 9788.2 lumens  
Efficiency: N/A  
Efficacy: 105.4 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 92.9  
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	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°	19083	19083	19083
5°	18777	18730	18869
10°	17568	17803	18300
15°	15972	16479	17396
20°	14178	14915	16221
25°	12347	13325	14904
30°	10575	11737	13656
35°	8769	9963	12150
40°	6737	7967	10353
45°	4870	6032	8331
50°	3318	4495	6607
55°	2157	3251	5134
60°	1238	2289	3711
65°	327	1399	1879
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	283.2	2.9
10°-20°	724.1	7.4
20°-30°	906.5	9.3
30°-40°	837.3	8.6
40°-50°	562.6	5.7
50°-60°	290.6	3.0
60°-70°	91.0	0.9
70°-80°	5.7	0.1
80°-90°	2.0	0.0
90°-100°	438.6	4.5
100°-110°	1210.8	12.4
110°-120°	1248.7	12.8
120°-130°	1003.5	10.3
130°-140°	788.6	8.1
140°-150°	604.8	6.2
150°-160°	434.7	4.4
160°-170°	265.8	2.7
170°-180°	89.6	0.9
0°-30°	1913.8	19.6
0°-40°	2751.1	28.1
0°-60°	3604.3	36.8
0°-90°	3703.1	37.8
90°-120°	2898.1	29.6
90°-150°	5295.0	54.1
90°-180°	6085.0	62.2
0°-180°	9788.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3103	3103	3103	3103	3103	
5°	3041	3010	3034	3044	3056	282
15°	2508	2499	2588	2675	2732	699
25°	1819	1834	1963	2098	2196	834
35°	1168	1197	1327	1483	1618	723
45°	560	594	694	828	958	440
55°	201	235	303	389	479	188
65°	22	43	96	116	129	38
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
90°	3	6	12	14	15	5
95°	64	237	796	327	213	69
105°	216	333	1332	2034	1915	230
115°	387	467	1073	2124	2416	380
125°	530	604	972	1646	1932	472
135°	638	707	946	1333	1503	494
145°	740	792	934	1135	1221	463
155°	835	862	926	1018	1050	385
165°	904	915	930	967	974	255
175°	936	938	932	946	942	89
180°	936	936	936	936	936	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3102.6	3102.6	3102.6	3102.6	3102.6
2.5°	3109.8	3080.5	3088.2	3088.0	3079.8
5°	3041.1	3010.3	3033.6	3044.4	3056.1
7.5°	2912.6	2888.5	2933.3	2966.9	2991.3
10°	2812.9	2792.4	2850.5	2896.3	2930.0
12.5°	2697.7	2681.8	2752.0	2814.8	2858.0
15°	2508.2	2499.4	2587.8	2674.6	2731.9
17.5°	2305.3	2305.0	2405.9	2513.7	2582.7
20°	2166.0	2170.4	2278.6	2397.5	2478.2
22.5°	2026.7	2037.0	2152.5	2276.5	2368.9
25°	1819.3	1833.9	1963.4	2097.7	2196.0
27.5°	1619.9	1641.3	1777.5	1917.1	2036.9
30°	1489.0	1514.0	1652.6	1799.5	1922.8
32.5°	1360.5	1390.2	1525.3	1680.7	1806.3
35°	1167.8	1197.2	1326.9	1483.1	1618.1
37.5°	968.8	997.5	1124.3	1278.0	1423.9
40°	839.1	871.4	992.2	1141.2	1289.4
42.5°	721.4	753.7	867.3	1013.7	1153.7
45°	559.9	593.6	693.5	828.5	957.7
47.5°	426.0	462.7	550.3	672.4	790.1
50°	346.7	383.4	469.8	577.5	690.5
52.5°	283.1	318.6	396.6	498.0	601.6
55°	201.1	234.9	303.2	389.3	478.8
57.5°	139.0	168.1	229.4	301.2	371.4
60°	100.6	128.5	186.1	244.5	301.7
62.5°	66.9	92.5	148.9	193.6	232.1
65°	22.5	43.1	96.1	115.9	129.1
67.5°	11.4	13.8	50.4	53.2	57.6
70°	9.0	9.0	24.0	25.6	30.0
72.5°	6.6	6.6	9.6	12.3	13.2
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	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	2.4	2.7	3.0
90°	3.0	5.9	12.0	13.5	15.0
92.5°	27.0	112.0	200.2	73.1	56.9
95°	64.4	237.3	795.7	327.1	212.8
97.5°	106.7	265.8	1178.7	907.5	657.2
100°	137.9	282.9	1320.1	1329.5	1080.4
102.5°	167.8	302.3	1347.7	1642.6	1406.4
105°	215.8	333.0	1332.1	2033.7	1915.0
107.5°	266.7	371.0	1257.8	2222.3	2265.7
110°	302.7	396.5	1200.3	2262.9	2403.5

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	335.1	425.3	1146.3	2230.8	2438.3
115°	386.6	467.2	1072.9	2123.9	2415.5
117.5°	431.6	511.8	1024.6	1973.5	2305.2
120°	461.5	540.6	1005.5	1871.7	2205.7
122.5°	490.3	565.9	989.9	1776.6	2093.0
125°	530.5	603.7	972.5	1645.8	1931.5
127.5°	564.6	637.9	962.3	1535.2	1781.7
130°	587.4	660.7	957.5	1467.6	1691.8
132.5°	609.0	678.7	952.7	1410.8	1613.8
135°	638.3	707.2	945.5	1333.0	1502.9
137.5°	671.3	734.0	941.9	1267.7	1412.7
140°	689.3	750.8	939.5	1224.1	1351.6
142.5°	709.7	766.5	937.1	1185.4	1297.7
145°	740.2	791.5	933.5	1134.8	1221.2
147.5°	769.6	814.4	930.2	1092.1	1159.2
150°	791.2	827.8	929.0	1066.6	1120.8
152.5°	808.0	842.2	927.8	1044.8	1089.7
155°	834.6	862.5	926.0	1018.2	1050.4
157.5°	859.2	880.6	926.3	998.8	1020.7
160°	873.6	892.6	927.5	987.8	1004.0
162.5°	885.6	902.3	928.7	978.2	990.8
165°	903.6	915.3	930.5	966.7	974.0
167.5°	917.4	924.4	932.0	959.7	962.0
170°	924.5	930.4	932.0	956.0	956.0
172.5°	930.5	934.1	932.0	951.2	950.0
175°	936.5	938.0	932.0	945.5	942.5
177.5°	938.9	937.8	931.7	940.1	937.7
180°	936.5	936.5	936.5	936.5	936.5

(END OF REPORT)