

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521300

Luminaire Tested: **SQ4-BB-150U-050D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521300  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-150U-050D-93050-1D-UNV-STD-W-4 (5000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

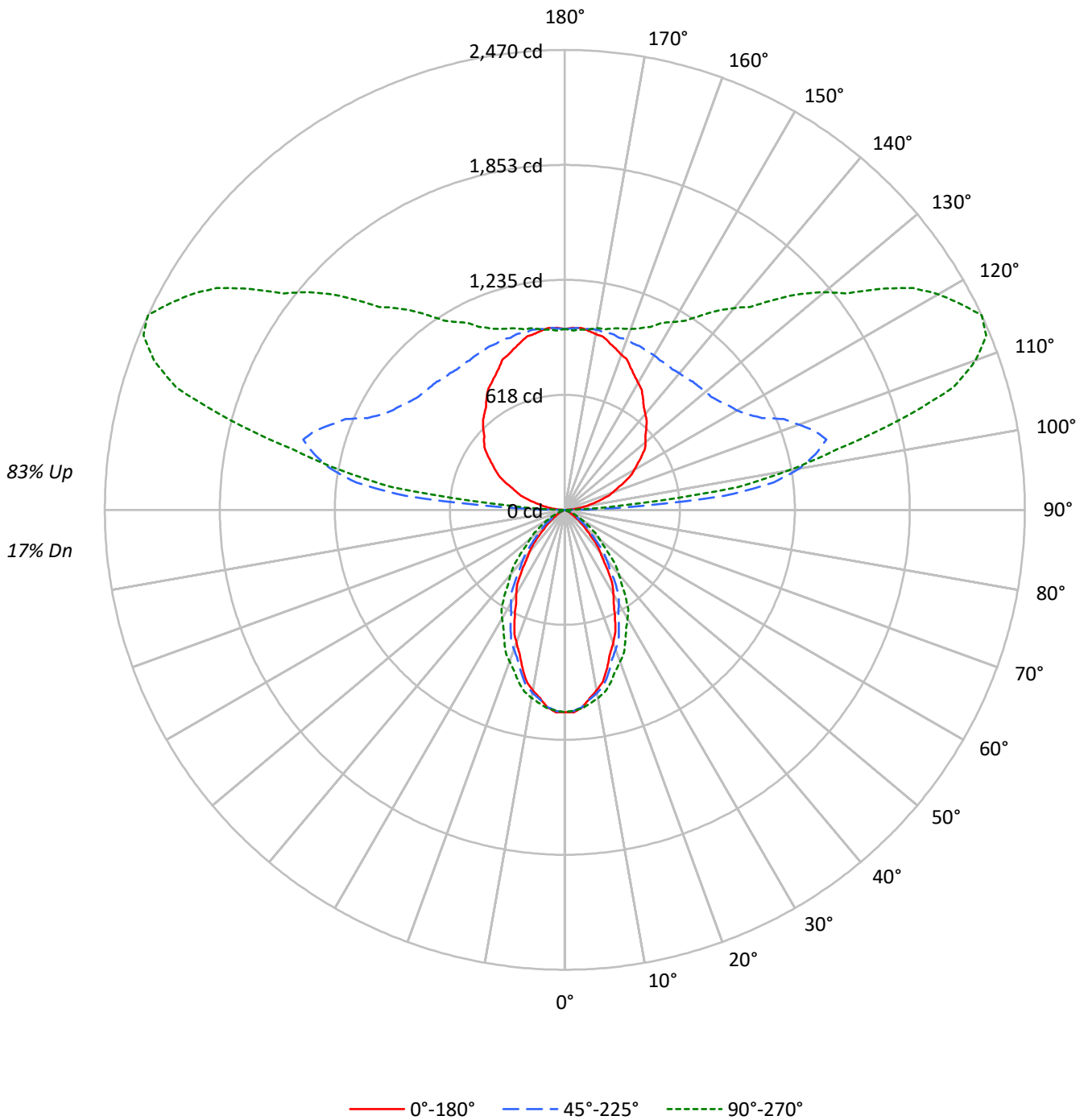
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7584.3 lumens  
Efficiency: N/A  
Efficacy: 105.6 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 71.8  
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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26	17
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	23	23	16
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20	14
3	76	68	61	56	67	60	55	50	46	42	39	32	30	28	20	19	18	13
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16	12
5	64	54	47	41	57	48	42	37	37	33	29	26	24	22	17	15	14	10
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10
7	55	44	37	31	48	39	33	29	30	26	23	22	19	17	14	13	12	9
8	51	40	33	28	45	36	30	25	28	23	20	20	17	16	13	12	11	8
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	7
10	44	33	27	22	39	30	24	20	23	19	16	17	15	13	11	10	9	7

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

	0°	45°	90°
0°	10025	10025	10025
5°	9864	9839	9913
10°	9230	9353	9614
15°	8391	8657	9139
20°	7448	7835	8521
25°	6487	7000	7829
30°	5556	6166	7174
35°	4607	5234	6383
40°	3540	4185	5439
45°	2559	3169	4376
50°	1743	2361	3471
55°	1132	1708	2698
60°	650	1203	1950
65°	172	734	987
70°	86	227	283
75°	39	18	0
80°	27	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.2	1.3
10°-20°	253.6	3.3
20°-30°	317.5	4.2
30°-40°	293.3	3.9
40°-50°	197.1	2.6
50°-60°	101.8	1.3
60°-70°	31.9	0.4
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	500.6	6.6
100°-110°	1209.9	16.0
110°-120°	1290.5	17.0
120°-130°	1045.2	13.8
130°-140°	809.2	10.7
140°-150°	617.3	8.1
150°-160°	446.9	5.9
160°-170°	275.2	3.6
170°-180°	93.2	1.2
0°-30°	670.2	8.8
0°-40°	963.5	12.7
0°-60°	1262.3	16.6
0°-90°	1296.3	17.1
90°-120°	3001.0	39.6
90°-150°	5472.7	72.2
90°-180°	6288.0	82.9
0°-180°	7584.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1087	1087	1087	1087	1087	
5°	1065	1054	1062	1066	1070	99
15°	878	875	906	937	957	245
25°	637	642	688	735	769	292
35°	409	419	465	519	567	253
45°	196	208	243	290	335	154
55°	70	82	106	136	168	66
65°	8	15	34	41	45	13
75°	1	1	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	49	250	858	558	391	55
105°	193	334	1454	1882	1857	204
115°	354	452	1168	2215	2470	350
125°	504	580	1014	1762	2069	450
135°	619	692	973	1389	1598	478
145°	732	787	954	1181	1273	458
155°	839	875	967	1046	1084	387
165°	928	942	979	994	1008	262
175°	981	977	981	973	971	93
180°	971	971	971	971	971	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1086.6	1086.6	1086.6	1086.6	1086.6
2.5°	1089.2	1078.9	1081.6	1081.5	1078.6
5°	1065.1	1054.3	1062.4	1066.2	1070.3
7.5°	1020.1	1011.6	1027.3	1039.1	1047.6
10°	985.2	978.0	998.3	1014.4	1026.2
12.5°	944.8	939.2	963.8	985.8	1000.9
15°	878.5	875.4	906.3	936.7	956.8
17.5°	807.4	807.3	842.6	880.4	904.5
20°	758.6	760.1	798.0	839.7	867.9
22.5°	709.8	713.4	753.9	797.3	829.7
25°	637.2	642.3	687.6	734.7	769.1
27.5°	567.3	574.8	622.5	671.4	713.4
30°	521.5	530.2	578.8	630.2	673.4
32.5°	476.5	486.9	534.2	588.6	632.6
35°	409.0	419.3	464.7	519.4	566.7
37.5°	339.3	349.4	393.8	447.6	498.7
40°	293.9	305.2	347.5	399.7	451.6
42.5°	252.7	264.0	303.8	355.0	404.1
45°	196.1	207.9	242.9	290.2	335.4
47.5°	149.2	162.0	192.7	235.5	276.7
50°	121.4	134.3	164.5	202.2	241.8
52.5°	99.1	111.6	138.9	174.4	210.7
55°	70.4	82.3	106.2	136.3	167.7
57.5°	48.7	58.9	80.3	105.5	130.1
60°	35.2	45.0	65.2	85.6	105.7
62.5°	23.4	32.4	52.1	67.8	81.3
65°	7.9	15.1	33.6	40.6	45.2
67.5°	4.0	4.8	17.7	18.6	20.2
70°	3.2	3.2	8.4	9.0	10.5
72.5°	2.3	2.3	3.4	4.3	4.6
75°	1.1	1.1	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.5	135.5	319.2	155.2	105.3
95°	49.4	250.5	857.7	557.7	390.8
97.5°	87.6	277.5	1129.6	1088.3	934.2
100°	117.2	294.2	1279.4	1350.6	1223.9
102.5°	145.2	309.3	1378.1	1568.9	1493.7
105°	193.3	334.1	1454.2	1881.5	1857.4
107.5°	240.7	363.3	1409.4	2132.2	2189.0
110°	273.6	388.2	1337.0	2240.3	2346.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	306.5	413.1	1272.8	2266.7	2448.9
115°	353.8	452.3	1168.3	2214.9	2470.3
117.5°	400.7	493.6	1107.0	2095.8	2395.1
120°	431.9	518.4	1067.5	2002.3	2316.1
122.5°	464.9	544.9	1042.8	1906.8	2215.7
125°	503.9	580.4	1014.1	1761.5	2069.2
127.5°	542.6	614.6	993.9	1638.5	1908.8
130°	565.6	636.0	987.3	1552.8	1818.3
132.5°	587.0	660.6	977.4	1491.0	1716.3
135°	619.1	691.5	972.9	1389.0	1598.2
137.5°	649.6	722.4	958.5	1320.0	1477.7
140°	672.6	739.0	958.5	1270.3	1415.1
142.5°	695.6	762.0	950.3	1227.0	1349.3
145°	732.3	786.6	954.4	1180.7	1273.2
147.5°	766.4	819.1	951.9	1127.3	1203.7
150°	787.8	834.0	958.5	1103.9	1164.2
152.5°	810.8	855.5	956.9	1079.0	1132.9
155°	839.2	875.4	966.7	1045.8	1084.0
157.5°	873.4	904.3	964.7	1033.1	1055.6
160°	886.5	912.7	972.9	1016.5	1032.6
162.5°	907.9	930.8	969.6	1011.4	1021.0
165°	927.7	941.7	979.1	993.8	1007.9
167.5°	951.9	961.2	976.6	992.7	993.1
170°	958.5	964.5	983.2	981.4	991.4
172.5°	970.0	974.5	978.3	982.6	976.6
175°	981.1	977.1	981.1	972.9	970.9
177.5°	979.1	979.1	975.8	972.3	964.3
180°	970.9	970.9	970.9	970.9	970.9

(END OF REPORT)