

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: P518897

Luminaire Tested: **SQ4-BB-150U-050D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518897  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-940-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

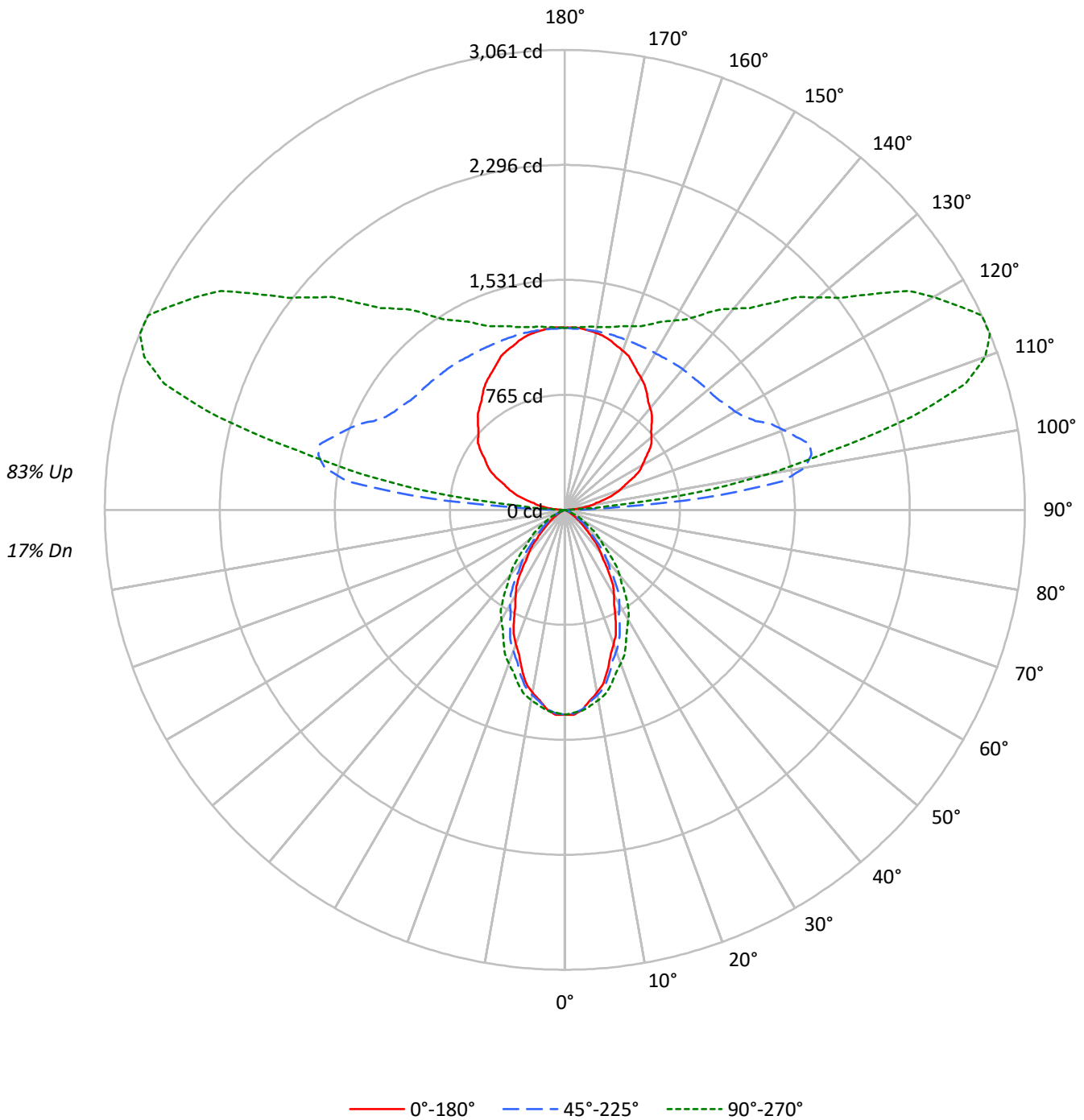
Lumens per Lamp: N/A  
Luminaire Lumens: 9439.3 lumens  
Efficiency: N/A  
Efficacy: 112.2 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 84.1  
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	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	51	46	42	39	32	30	29	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	30	26	24	22	17	15	14	11
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10
7	55	44	37	32	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	18	16	13	12	11	8
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	8
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°	8380	8380	8380
5°	8246	8225	8287
10°	7715	7818	8036
15°	7014	7236	7639
20°	6226	6549	7124
25°	5422	5851	6545
30°	4644	5155	5997
35°	3850	4375	5336
40°	2959	3498	4546
45°	2139	2649	3659
50°	1457	1974	2901
55°	947	1428	2255
60°	544	1005	1630
65°	144	614	825
70°	72	189	237
75°	31	17	0
80°	25	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.3	1.3
10°-20°	318.0	3.4
20°-30°	398.1	4.2
30°-40°	367.7	3.9
40°-50°	247.1	2.6
50°-60°	127.6	1.4
60°-70°	40.0	0.4
70°-80°	2.5	0.0
80°-90°	2.6	0.0
90°-100°	563.1	6.0
100°-110°	1522.4	16.1
110°-120°	1600.6	17.0
120°-130°	1300.1	13.8
130°-140°	1019.8	10.8
140°-150°	782.7	8.3
150°-160°	562.9	6.0
160°-170°	343.9	3.6
170°-180°	115.9	1.2
0°-30°	840.4	8.9
0°-40°	1208.1	12.8
0°-60°	1582.8	16.8
0°-90°	1627.9	17.2
90°-120°	3686.0	39.1
90°-150°	6788.7	71.9
90°-180°	7811.0	82.7
0°-180°	9439.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1362	1362	1362	1362	1362	
5°	1336	1322	1332	1337	1342	124
15°	1102	1098	1136	1175	1200	307
25°	799	805	862	921	964	366
35°	513	526	583	651	711	318
45°	246	261	304	364	421	193
55°	88	103	133	171	210	82
65°	10	19	42	51	57	17
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	3	8	17	18	17	6
95°	87	307	936	485	288	91
105°	283	437	1689	2491	2389	298
115°	498	609	1401	2712	3061	492
125°	682	782	1262	2130	2503	608
135°	818	915	1228	1720	1947	632
145°	951	1022	1212	1472	1585	595
155°	1073	1115	1201	1321	1364	495
165°	1168	1180	1206	1253	1260	329
175°	1213	1212	1208	1223	1221	115
180°	1212	1212	1212	1212	1212	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1362.5	1362.5	1362.5	1362.5	1362.5
2.5°	1365.7	1352.8	1356.2	1356.1	1352.5
5°	1335.5	1322.0	1332.2	1336.9	1342.1
7.5°	1279.1	1268.5	1288.2	1302.9	1313.6
10°	1235.3	1226.3	1251.8	1271.9	1286.7
12.5°	1184.7	1177.7	1208.5	1236.1	1255.1
15°	1101.5	1097.6	1136.4	1174.6	1199.7
17.5°	1012.4	1012.2	1056.5	1103.9	1134.2
20°	951.2	953.1	1000.6	1052.8	1088.3
22.5°	890.0	894.5	945.3	999.7	1040.3
25°	798.9	805.4	862.2	921.2	964.4
27.5°	711.4	720.8	780.6	841.9	894.5
30°	653.9	664.9	725.8	790.3	844.4
32.5°	597.5	610.5	669.9	738.1	793.2
35°	512.8	525.7	582.7	651.3	710.6
37.5°	425.4	438.1	493.7	561.2	625.3
40°	368.5	382.7	435.7	501.1	566.2
42.5°	316.8	331.0	380.9	445.2	506.6
45°	245.9	260.7	304.5	363.8	420.6
47.5°	187.1	203.2	241.7	295.3	347.0
50°	152.3	168.4	206.3	253.6	303.2
52.5°	124.3	139.9	174.2	218.7	264.2
55°	88.3	103.2	133.2	171.0	210.3
57.5°	61.0	73.8	100.7	132.3	163.1
60°	44.2	56.4	81.7	107.4	132.5
62.5°	29.4	40.6	65.4	85.0	101.9
65°	9.9	18.9	42.2	50.9	56.7
67.5°	5.0	6.0	22.1	23.4	25.3
70°	4.0	4.0	10.5	11.2	13.2
72.5°	2.9	2.9	4.2	5.4	5.8
75°	1.3	1.3	0.7	0.0	0.0
77.5°	0.7	0.7	0.5	0.0	0.0
80°	0.7	0.7	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°	0.5	1.5	3.4	3.6	3.4
90°	2.6	7.7	17.0	18.2	17.0
92.5°	37.0	135.0	266.3	115.6	83.7
95°	87.4	306.7	936.4	484.6	288.2
97.5°	140.3	351.8	1459.6	1207.9	887.1
100°	180.0	370.0	1622.4	1692.0	1368.1
102.5°	216.5	395.3	1679.8	2059.0	1816.7
105°	283.0	437.3	1688.9	2491.2	2389.2
107.5°	344.6	485.3	1615.1	2760.9	2794.8
110°	392.6	520.1	1549.3	2833.3	2977.4



TEST NUMBER: P518897

CATALOG NUMBER: SQ4-BB-150U-050D-940-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	435.3	554.7	1488.8	2818.8	3060.9
115°	498.2	609.1	1400.7	2711.5	3060.9
117.5°	559.7	663.8	1342.5	2547.4	2943.5
120°	597.3	699.3	1308.1	2429.7	2833.9
122.5°	632.8	732.8	1287.2	2303.5	2710.8
125°	682.1	781.5	1262.4	2130.3	2502.7
127.5°	727.5	825.1	1247.8	1989.0	2316.4
130°	752.5	853.2	1241.6	1901.7	2197.5
132.5°	778.6	878.3	1235.3	1822.9	2095.3
135°	817.7	914.6	1228.5	1720.1	1947.1
137.5°	857.1	948.6	1222.8	1636.7	1821.6
140°	884.2	969.7	1220.7	1583.1	1747.6
142.5°	910.3	990.6	1216.5	1534.6	1678.7
145°	950.7	1022.1	1211.6	1472.3	1584.6
147.5°	987.5	1050.8	1205.8	1415.9	1502.1
150°	1014.6	1070.7	1203.7	1385.3	1454.1
152.5°	1039.7	1088.6	1202.7	1356.8	1413.4
155°	1073.3	1115.4	1201.1	1320.8	1364.1
157.5°	1108.3	1137.6	1201.4	1295.7	1324.2
160°	1128.1	1152.3	1202.4	1279.8	1300.2
162.5°	1143.7	1163.9	1203.5	1267.2	1282.5
165°	1168.5	1180.0	1206.3	1253.4	1259.8
167.5°	1185.5	1193.4	1206.6	1241.6	1244.7
170°	1195.9	1199.7	1207.6	1236.3	1236.3
172.5°	1204.3	1205.0	1207.6	1230.1	1229.0
175°	1212.9	1211.6	1207.6	1223.2	1220.7
177.5°	1215.7	1212.7	1207.4	1217.8	1214.7
180°	1211.6	1211.6	1211.6	1211.6	1211.6

(END OF REPORT)