

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: P518904

Luminaire Tested: **SQ4-BB-150U-075D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518904  
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-075D-835-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

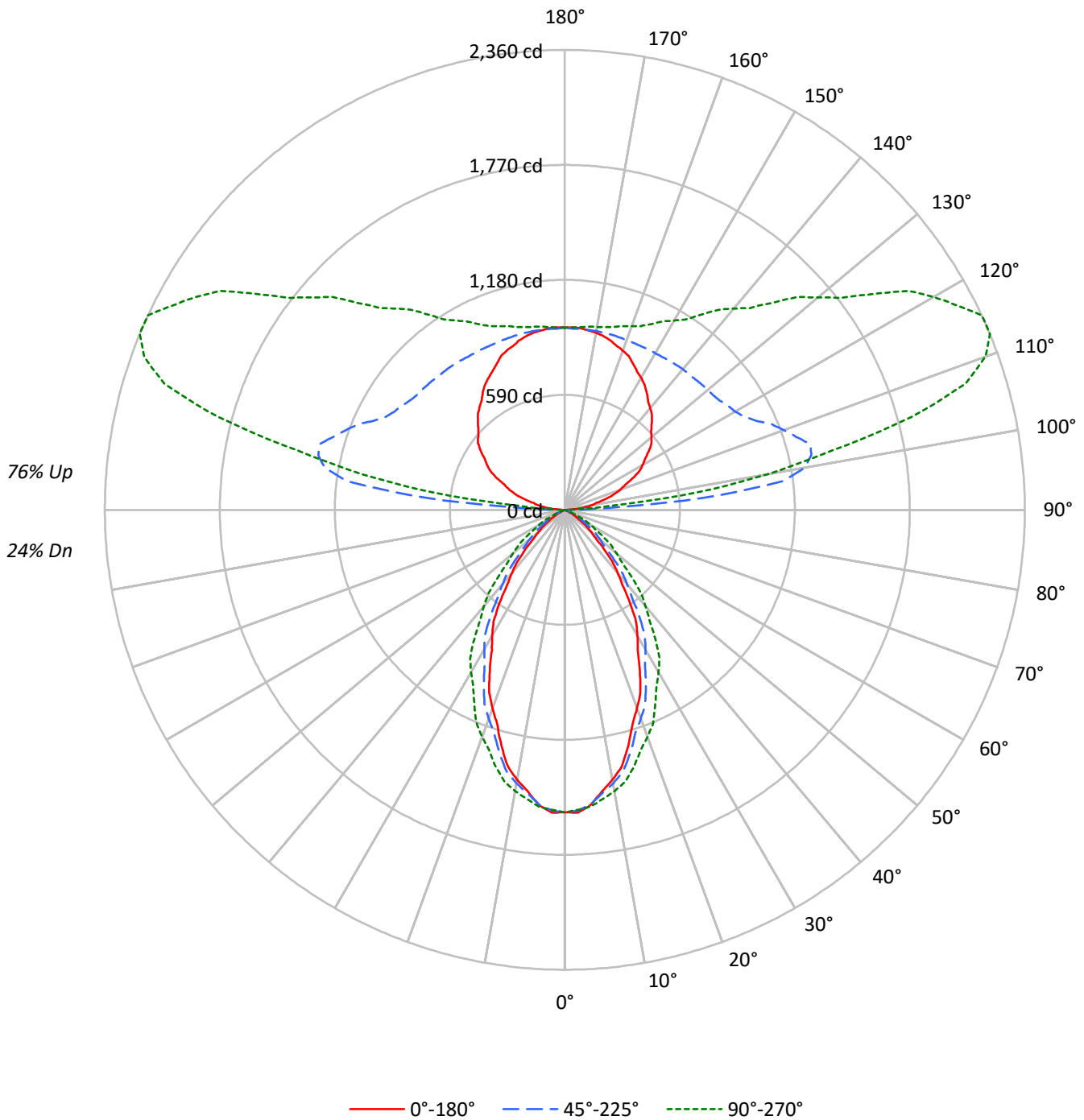
Lumens per Lamp: N/A  
Luminaire Lumens: 7877.1 lumens  
Efficiency: N/A  
Efficacy: 124.0 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 63.5  
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	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	24
1	93	89	85	82	82	79	76	74	61	59	58	45	44	43	29	29	28	21
2	85	79	73	69	76	70	66	62	55	52	49	40	38	37	27	26	25	19
3	78	70	63	58	69	63	57	53	49	45	42	36	34	32	25	23	23	17
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	23	21	20	16
5	66	56	48	43	59	50	44	39	40	35	32	30	27	25	21	19	18	14
6	61	50	43	38	54	45	39	35	36	32	28	27	24	22	19	18	16	13
7	57	45	38	33	50	41	35	31	33	28	25	25	22	20	18	16	15	12
8	53	41	34	30	47	37	31	27	30	26	23	23	20	18	16	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	18	16	15	14	13	10
10	46	35	28	24	41	32	26	22	26	21	18	20	17	15	14	13	12	10

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

	0°	45°	90°
0°	14317	14317	14317
5°	14087	14052	14156
10°	13181	13357	13730
15°	11983	12363	13051
20°	10636	11189	12170
25°	9263	9997	11181
30°	7934	8806	10245
35°	6579	7475	9115
40°	5055	5976	7767
45°	3653	4525	6250
50°	2489	3373	4956
55°	1618	2440	3852
60°	928	1718	2784
65°	247	1048	1410
70°	121	324	405
75°	53	29	0
80°	43	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.6	1.8
10°-20°	362.2	4.6
20°-30°	453.4	5.8
30°-40°	418.8	5.3
40°-50°	281.4	3.6
50°-60°	145.3	1.8
60°-70°	45.5	0.6
70°-80°	2.9	0.0
80°-90°	2.0	0.0
90°-100°	434.2	5.5
100°-110°	1174.0	14.9
110°-120°	1234.3	15.7
120°-130°	1002.6	12.7
130°-140°	786.5	10.0
140°-150°	603.6	7.7
150°-160°	434.1	5.5
160°-170°	265.2	3.4
170°-180°	89.4	1.1
0°-30°	957.2	12.2
0°-40°	1376.0	17.5
0°-60°	1802.7	22.9
0°-90°	1853.1	23.5
90°-120°	2842.6	36.1
90°-150°	5235.3	66.5
90°-180°	6024.0	76.5
0°-180°	7877.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1552	1552	1552	1552	1552	
5°	1521	1506	1517	1523	1528	141
15°	1254	1250	1294	1338	1366	349
25°	910	917	982	1049	1098	417
35°	584	599	664	742	809	362
45°	280	297	347	414	479	220
55°	101	118	152	195	240	94
65°	11	22	48	58	65	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	2	6	13	14	13	5
95°	67	236	722	374	222	71
105°	218	337	1302	1921	1842	230
115°	384	470	1080	2091	2360	379
125°	526	603	974	1643	1930	469
135°	631	705	947	1326	1502	487
145°	733	788	934	1135	1222	459
155°	828	860	926	1019	1052	382
165°	901	910	930	967	972	254
175°	935	934	931	943	941	89
180°	934	934	934	934	934	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1551.8	1551.8	1551.8	1551.8	1551.8
2.5°	1555.4	1540.7	1544.6	1544.5	1540.4
5°	1521.0	1505.6	1517.3	1522.7	1528.5
7.5°	1456.8	1444.7	1467.1	1483.9	1496.1
10°	1406.9	1396.6	1425.7	1448.6	1465.5
12.5°	1349.3	1341.3	1376.4	1407.8	1429.4
15°	1254.5	1250.1	1294.3	1337.7	1366.4
17.5°	1153.0	1152.9	1203.3	1257.2	1291.7
20°	1083.3	1085.5	1139.6	1199.1	1239.5
22.5°	1013.7	1018.8	1076.6	1138.6	1184.8
25°	909.9	917.3	982.0	1049.2	1098.3
27.5°	810.2	820.9	889.0	958.9	1018.8
30°	744.7	757.2	826.6	900.1	961.7
32.5°	680.5	695.3	762.9	840.6	903.5
35°	584.1	598.8	663.7	741.8	809.3
37.5°	484.5	498.9	562.3	639.2	712.2
40°	419.7	435.8	496.2	570.8	644.9
42.5°	360.8	377.0	433.8	507.0	577.0
45°	280.0	296.9	346.8	414.4	479.0
47.5°	213.1	231.4	275.2	336.3	395.2
50°	173.4	191.8	235.0	288.8	345.3
52.5°	141.6	159.4	198.3	249.1	300.9
55°	100.6	117.5	151.7	194.7	239.5
57.5°	69.5	84.1	114.7	150.6	185.7
60°	50.3	64.2	93.1	122.3	150.9
62.5°	33.5	46.3	74.5	96.8	116.1
65°	11.3	21.5	48.0	58.0	64.6
67.5°	5.7	6.9	25.2	26.6	28.8
70°	4.5	4.5	12.0	12.8	15.0
72.5°	3.3	3.3	4.8	6.2	6.6
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	1.2	2.6	2.8	2.6
90°	2.0	5.9	13.1	14.1	13.1
92.5°	28.6	104.1	205.4	89.2	64.6
95°	67.4	236.5	722.1	373.7	222.3
97.5°	108.2	271.3	1125.6	931.5	684.1
100°	138.8	285.3	1251.1	1304.8	1055.0
102.5°	167.0	304.8	1295.4	1587.8	1401.0
105°	218.2	337.2	1302.4	1921.2	1842.5
107.5°	265.7	374.3	1245.5	2129.1	2155.3
110°	302.7	401.1	1194.8	2185.0	2296.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	335.7	427.8	1148.1	2173.8	2360.5
115°	384.2	469.7	1080.2	2091.0	2360.5
117.5°	431.7	511.9	1035.3	1964.5	2269.9
120°	460.6	539.3	1008.8	1873.7	2185.5
122.5°	488.0	565.1	992.7	1776.4	2090.5
125°	526.0	602.7	973.6	1642.9	1930.0
127.5°	561.0	636.3	962.3	1533.9	1786.4
130°	580.3	658.0	957.5	1466.5	1694.7
132.5°	600.4	677.3	952.6	1405.8	1615.8
135°	630.6	705.3	947.4	1326.5	1501.6
137.5°	661.0	731.6	943.0	1262.2	1404.8
140°	681.9	747.8	941.4	1220.8	1347.7
142.5°	702.0	764.0	938.1	1183.5	1294.6
145°	733.2	788.2	934.3	1135.4	1222.0
147.5°	761.5	810.3	929.9	1091.9	1158.4
150°	782.5	825.7	928.3	1068.3	1121.4
152.5°	801.8	839.5	927.5	1046.4	1090.0
155°	827.7	860.2	926.3	1018.6	1052.0
157.5°	854.7	877.3	926.5	999.2	1021.2
160°	870.0	888.6	927.3	987.0	1002.7
162.5°	882.0	897.6	928.1	977.2	989.0
165°	901.1	910.0	930.3	966.6	971.5
167.5°	914.2	920.3	930.5	957.5	959.9
170°	922.3	925.2	931.3	953.4	953.4
172.5°	928.7	929.3	931.3	948.6	947.8
175°	935.3	934.3	931.3	943.3	941.4
177.5°	937.5	935.2	931.1	939.1	936.7
180°	934.3	934.3	934.3	934.3	934.3

(END OF REPORT)