

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: P518690

Luminaire Tested: **SQ4-BB-100U-050D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518690  
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-050D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

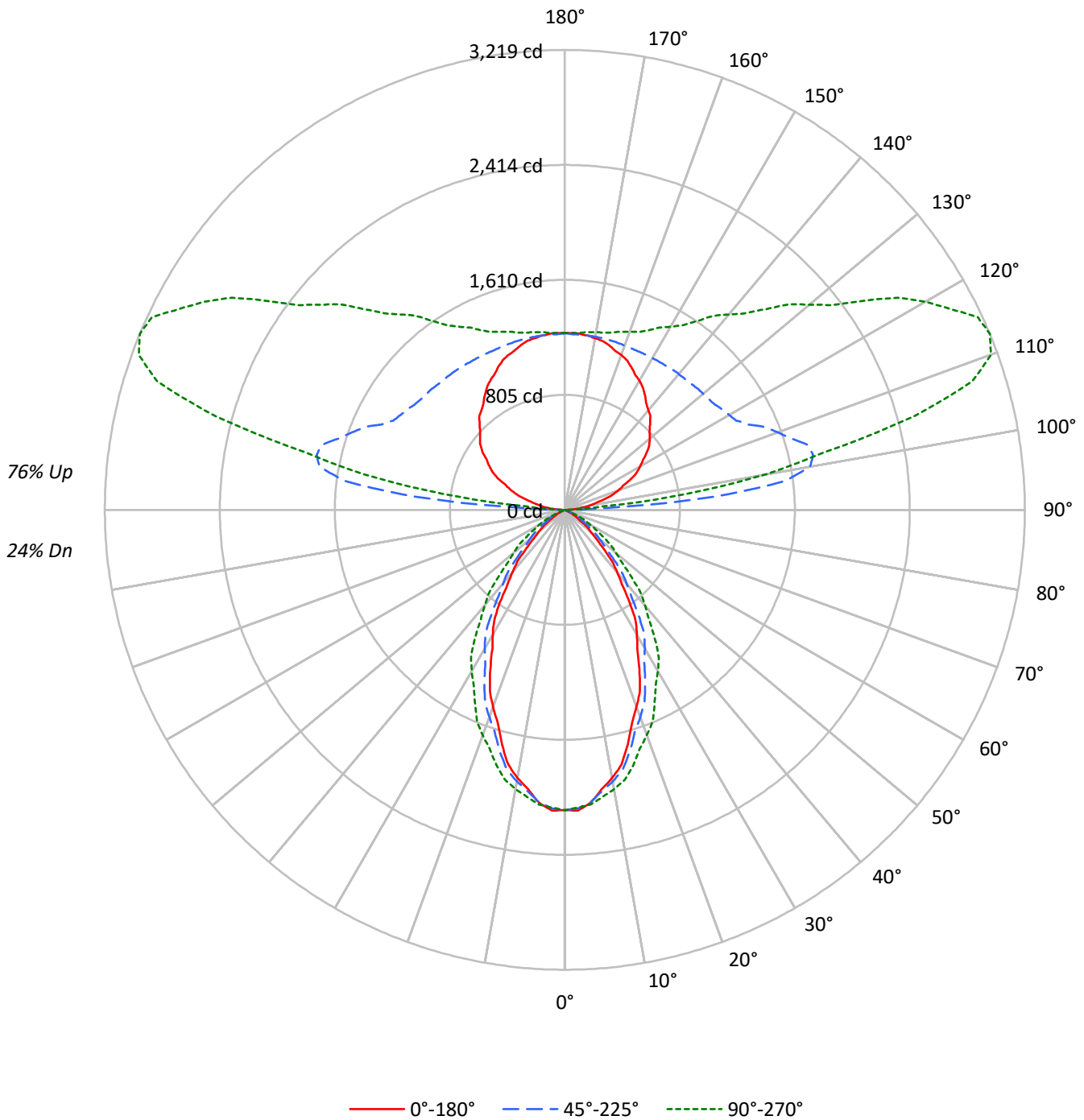
Lumens per Lamp: N/A  
Luminaire Lumens: 10542.1 lumens  
Efficiency: N/A  
Efficacy: 124.5 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 84.7  
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	50	50	50	32	32	32	24
1	93	89	86	82	82	79	77	74	61	60	58	45	44	43	30	29	29	22
2	85	79	73	69	76	70	66	62	55	52	49	40	39	37	27	26	25	20
3	78	70	63	58	70	63	57	53	49	45	42	36	34	32	25	24	23	18
4	72	62	55	50	64	56	50	45	44	40	37	33	31	28	23	21	20	16
5	66	56	49	43	59	50	44	39	40	36	32	30	27	25	21	19	18	15
6	61	50	43	38	55	45	39	35	36	32	28	27	25	22	19	18	17	13
7	57	46	38	33	51	41	35	31	33	29	25	25	22	20	18	16	15	12
8	53	41	34	30	47	38	31	27	30	26	23	23	20	18	17	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	19	17	16	14	13	10
10	46	35	28	24	41	32	26	22	26	21	19	20	17	15	15	13	12	10

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

	0°	45°	90°
0°	9694	9694	9694
5°	9538	9515	9586
10°	8925	9044	9296
15°	8114	8371	8837
20°	7202	7576	8240
25°	6272	6769	7571
30°	5372	5963	6938
35°	4455	5061	6172
40°	3422	4047	5259
45°	2474	3064	4231
50°	1686	2284	3357
55°	1095	1652	2608
60°	628	1163	1886
65°	167	711	954
70°	82	220	274
75°	36	18	0
80°	27	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.8	1.8
10°-20°	490.4	4.7
20°-30°	614.0	5.8
30°-40°	567.1	5.4
40°-50°	381.1	3.6
50°-60°	196.8	1.9
60°-70°	61.7	0.6
70°-80°	3.9	0.0
80°-90°	2.6	0.0
90°-100°	579.0	5.5
100°-110°	1598.3	15.2
110°-120°	1648.4	15.6
120°-130°	1324.6	12.6
130°-140°	1041.0	9.9
140°-150°	798.4	7.6
150°-160°	573.8	5.4
160°-170°	350.9	3.3
170°-180°	118.3	1.1
0°-30°	1296.2	12.3
0°-40°	1863.3	17.7
0°-60°	2441.3	23.2
0°-90°	2509.4	23.8
90°-120°	3825.6	36.3
90°-150°	6989.6	66.3
90°-180°	8033.0	76.2
0°-180°	10542.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2102	2102	2102	2102	2102	
5°	2060	2039	2055	2062	2070	191
15°	1699	1693	1753	1812	1850	473
25°	1232	1242	1330	1421	1487	565
35°	791	811	899	1004	1096	490
45°	379	402	470	561	649	298
55°	136	159	205	264	324	127
65°	15	29	65	78	87	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	4	8	16	18	20	6
95°	85	313	1050	432	281	91
105°	285	440	1758	2685	2528	303
115°	510	617	1416	2804	3189	501
125°	700	797	1284	2172	2550	623
135°	843	934	1248	1760	1984	652
145°	977	1045	1232	1498	1612	612
155°	1102	1138	1222	1344	1387	508
165°	1193	1208	1228	1276	1286	336
175°	1236	1238	1230	1248	1244	117
180°	1236	1236	1236	1236	1236	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2101.5	2101.5	2101.5	2101.5	2101.5
2.5°	2106.4	2086.5	2091.7	2091.6	2086.0
5°	2059.8	2038.9	2054.7	2062.0	2070.0
7.5°	1972.8	1956.5	1986.8	2009.5	2026.0
10°	1905.3	1891.3	1930.7	1961.7	1984.6
12.5°	1827.2	1816.4	1864.0	1906.5	1935.8
15°	1698.9	1692.9	1752.8	1811.6	1850.4
17.5°	1561.4	1561.2	1629.5	1702.6	1749.3
20°	1467.1	1470.0	1543.3	1623.9	1678.5
22.5°	1372.7	1379.7	1457.9	1541.9	1604.5
25°	1232.2	1242.2	1329.8	1420.8	1487.4
27.5°	1097.2	1111.7	1203.9	1298.5	1379.6
30°	1008.5	1025.4	1119.4	1218.9	1302.4
32.5°	921.5	941.6	1033.1	1138.4	1223.5
35°	791.0	810.9	898.7	1004.5	1096.0
37.5°	656.2	675.6	761.5	865.6	964.4
40°	568.3	590.2	672.0	772.9	873.3
42.5°	488.6	510.5	587.4	686.6	781.4
45°	379.2	402.1	469.7	561.2	648.6
47.5°	288.5	313.4	372.7	455.5	535.2
50°	234.9	259.7	318.2	391.1	467.7
52.5°	191.7	215.8	268.6	337.3	407.5
55°	136.2	159.1	205.4	263.7	324.3
57.5°	94.1	113.8	155.3	204.0	251.5
60°	68.1	87.0	126.1	165.6	204.4
62.5°	45.3	62.6	100.9	131.1	157.2
65°	15.3	29.2	65.1	78.5	87.4
67.5°	7.7	9.3	34.2	36.1	39.0
70°	6.1	6.1	16.3	17.4	20.3
72.5°	4.5	4.5	6.5	8.4	8.9
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.8	1.6	3.2	3.6	4.0
90°	4.0	7.8	15.8	17.8	19.8
92.5°	35.6	147.8	264.3	96.4	75.2
95°	85.1	313.3	1050.3	431.7	280.9
97.5°	140.8	350.9	1555.9	1197.9	867.6
100°	182.0	373.5	1742.6	1755.0	1426.2
102.5°	221.5	399.1	1779.0	2168.4	1856.6
105°	284.8	439.6	1758.5	2684.6	2527.9
107.5°	352.1	489.8	1660.4	2933.5	2990.8
110°	399.6	523.3	1584.4	2987.1	3172.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	442.3	561.4	1513.2	2944.8	3218.7
115°	510.3	616.7	1416.3	2803.7	3188.6
117.5°	569.7	675.7	1352.6	2605.1	3043.0
120°	609.2	713.7	1327.3	2470.7	2911.7
122.5°	647.2	747.0	1306.7	2345.2	2762.9
125°	700.2	796.9	1283.7	2172.5	2549.7
127.5°	745.3	842.0	1270.3	2026.6	2351.9
130°	775.4	872.1	1264.0	1937.3	2233.2
132.5°	803.9	895.9	1257.6	1862.3	2130.3
135°	842.6	933.5	1248.1	1759.6	1984.0
137.5°	886.2	968.9	1243.4	1673.4	1864.9
140°	909.9	991.1	1240.2	1615.9	1784.2
142.5°	936.8	1011.8	1237.1	1564.8	1713.0
145°	977.1	1044.8	1232.3	1498.0	1612.1
147.5°	1015.9	1075.1	1228.0	1441.6	1530.2
150°	1044.4	1092.8	1226.4	1408.0	1479.6
152.5°	1066.6	1111.8	1224.8	1379.2	1438.4
155°	1101.8	1138.5	1222.4	1344.1	1386.6
157.5°	1134.2	1162.4	1222.8	1318.4	1347.4
160°	1153.2	1178.3	1224.4	1304.0	1325.3
162.5°	1169.0	1191.1	1226.0	1291.2	1307.9
165°	1192.8	1208.2	1228.4	1276.1	1285.7
167.5°	1211.0	1220.2	1230.3	1266.8	1269.9
170°	1220.4	1228.2	1230.3	1262.0	1262.0
172.5°	1228.4	1233.0	1230.3	1255.6	1254.1
175°	1236.3	1238.2	1230.3	1248.1	1244.2
177.5°	1239.4	1237.9	1229.9	1240.9	1237.9
180°	1236.3	1236.3	1236.3	1236.3	1236.3

(END OF REPORT)