

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: P518689

Luminaire Tested: **SQ4-BB-100U-050D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518689
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-6
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

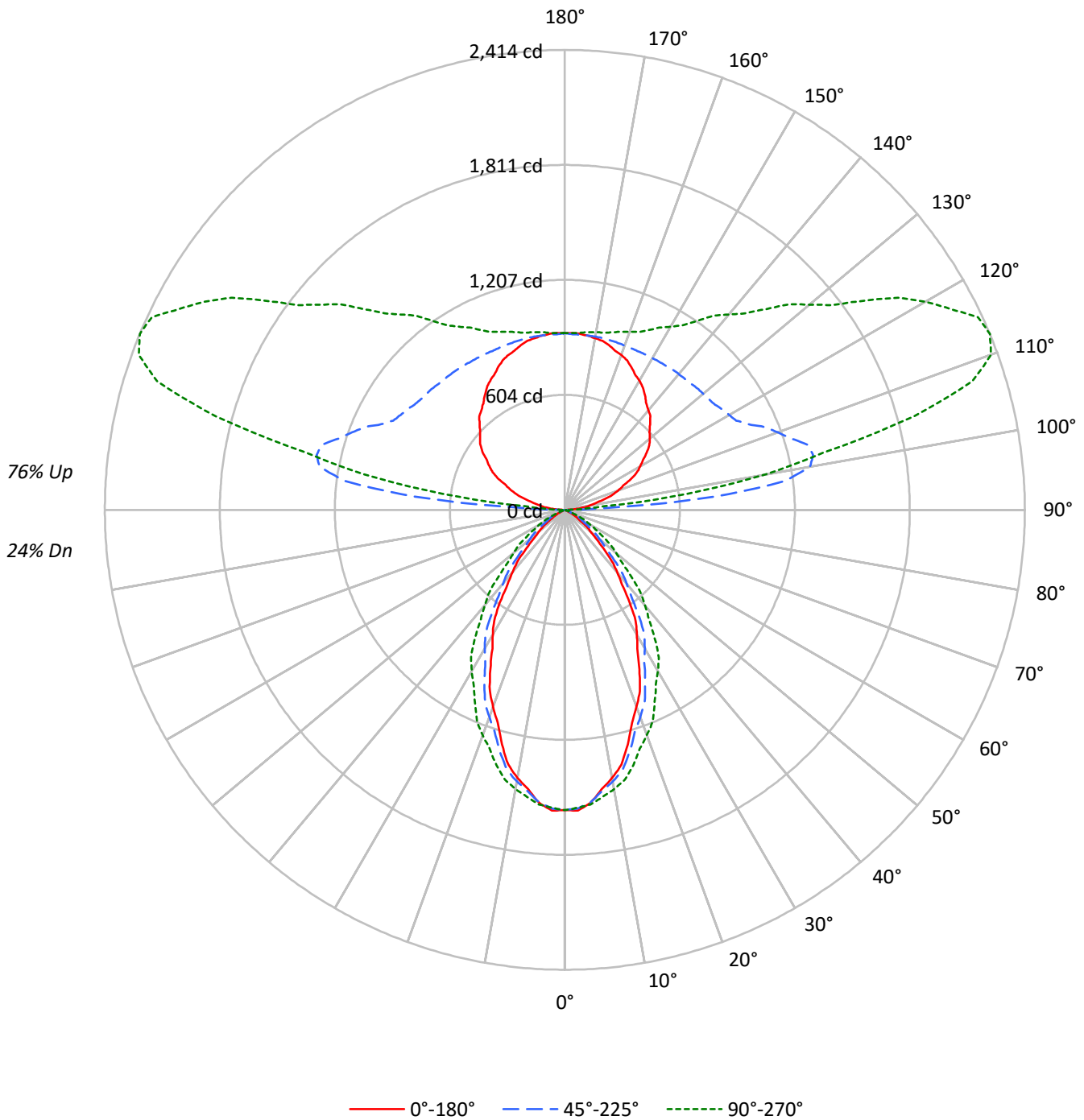
Lumens per Lamp: N/A
Luminaire Lumens: 7906.6 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 64.3
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°	8924	9044	9296
15°	8114	8371	8837
20°	7202	7576	8240
25°	6272	6769	7571
30°	5372	5962	6938
35°	4454	5062	6172
40°	3422	4047	5259
45°	2474	3064	4232
50°	1685	2284	3357
55°	1096	1651	2608
60°	629	1164	1886
65°	166	710	955
70°	83	219	275
75°	36	19	0
80°	28	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.8	1.8
10°-20°	367.8	4.7
20°-30°	460.5	5.8
30°-40°	425.3	5.4
40°-50°	285.8	3.6
50°-60°	147.6	1.9
60°-70°	46.2	0.6
70°-80°	2.9	0.0
80°-90°	2.0	0.0
90°-100°	434.2	5.5
100°-110°	1198.7	15.2
110°-120°	1236.3	15.6
120°-130°	993.5	12.6
130°-140°	780.8	9.9
140°-150°	598.8	7.6
150°-160°	430.4	5.4
160°-170°	263.2	3.3
170°-180°	88.7	1.1
0°-30°	972.2	12.3
0°-40°	1397.5	17.7
0°-60°	1831.0	23.2
0°-90°	1882.1	23.8
90°-120°	2869.2	36.3
90°-150°	5242.2	66.3
90°-180°	6024.0	76.2
0°-180°	7906.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1576	1576	1576	1576	1576	
5°	1545	1529	1541	1546	1552	143
15°	1274	1270	1315	1359	1388	355
25°	924	932	997	1066	1116	424
35°	593	608	674	753	822	367
45°	284	302	352	421	486	223
55°	102	119	154	198	243	95
65°	11	22	49	59	66	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	3	6	12	13	15	5
95°	64	235	788	324	211	68
105°	214	330	1319	2013	1896	227
115°	383	462	1062	2103	2391	376
125°	525	598	963	1629	1912	467
135°	632	700	936	1320	1488	489
145°	733	784	924	1124	1209	459
155°	826	854	917	1008	1040	381
165°	895	906	921	957	964	252
175°	927	929	923	936	933	88
180°	927	927	927	927	927	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1576.1	1576.1	1576.1	1576.1	1576.1
2.5°	1579.8	1564.9	1568.8	1568.7	1564.5
5°	1544.8	1529.2	1541.0	1546.5	1552.5
7.5°	1479.6	1467.3	1490.1	1507.2	1519.5
10°	1428.9	1418.5	1448.0	1471.3	1488.4
12.5°	1370.4	1362.3	1398.0	1429.9	1451.8
15°	1274.2	1269.7	1314.6	1358.7	1387.8
17.5°	1171.1	1170.9	1222.1	1276.9	1312.0
20°	1100.3	1102.5	1157.5	1217.9	1258.9
22.5°	1029.5	1034.8	1093.4	1156.4	1203.4
25°	924.2	931.6	997.4	1065.6	1115.5
27.5°	822.9	833.8	903.0	973.9	1034.7
30°	756.4	769.1	839.5	914.1	976.8
32.5°	691.1	706.2	774.9	853.8	917.6
35°	593.2	608.1	674.1	753.4	822.0
37.5°	492.1	506.7	571.1	649.2	723.3
40°	426.2	442.6	504.0	579.7	655.0
42.5°	366.5	382.9	440.6	514.9	586.1
45°	284.4	301.6	352.3	420.9	486.5
47.5°	216.4	235.0	279.5	341.6	401.4
50°	176.1	194.8	238.7	293.3	350.8
52.5°	143.8	161.9	201.5	253.0	305.6
55°	102.2	119.3	154.0	197.8	243.2
57.5°	70.6	85.4	116.5	153.0	188.6
60°	51.1	65.3	94.6	124.2	153.3
62.5°	34.0	47.0	75.6	98.4	117.9
65°	11.4	21.9	48.8	58.9	65.6
67.5°	5.8	7.0	25.6	27.0	29.3
70°	4.6	4.6	12.2	13.0	15.3
72.5°	3.4	3.4	4.9	6.3	6.7
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°	0.6	1.2	2.4	2.7	3.0
90°	3.0	5.9	11.9	13.4	14.8
92.5°	26.7	110.8	198.2	72.3	56.4
95°	63.8	235.0	787.8	323.8	210.7
97.5°	105.6	263.2	1166.9	898.4	650.7
100°	136.5	280.1	1307.0	1316.2	1069.6
102.5°	166.2	299.3	1334.3	1626.3	1392.4
105°	213.6	329.7	1318.9	2013.4	1895.9
107.5°	264.1	367.3	1245.3	2200.2	2243.1
110°	299.7	392.5	1188.3	2240.3	2379.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	331.7	421.1	1134.9	2208.6	2414.0
115°	382.7	462.5	1062.2	2102.8	2391.4
117.5°	427.3	506.7	1014.4	1953.8	2282.3
120°	456.9	535.3	995.4	1853.0	2183.7
122.5°	485.4	560.3	980.0	1758.9	2072.2
125°	525.2	597.7	962.8	1629.4	1912.3
127.5°	559.0	631.5	952.7	1519.9	1763.9
130°	581.5	654.1	948.0	1453.0	1674.9
132.5°	602.9	672.0	943.2	1396.7	1597.8
135°	632.0	700.2	936.1	1319.7	1488.0
137.5°	664.6	726.7	932.5	1255.1	1398.7
140°	682.4	743.3	930.2	1211.9	1338.1
142.5°	702.6	758.9	927.8	1173.6	1284.7
145°	732.9	783.6	924.2	1123.5	1209.1
147.5°	761.9	806.3	921.0	1081.2	1147.7
150°	783.3	819.6	919.8	1056.0	1109.7
152.5°	799.9	833.9	918.6	1034.4	1078.8
155°	826.3	853.9	916.8	1008.0	1040.0
157.5°	850.7	871.8	917.1	988.8	1010.6
160°	864.9	883.8	918.3	978.0	994.0
162.5°	876.8	893.3	919.5	968.4	980.9
165°	894.6	906.2	921.3	957.0	964.3
167.5°	908.2	915.2	922.8	950.1	952.4
170°	915.3	921.1	922.8	946.5	946.5
172.5°	921.3	924.7	922.8	941.7	940.6
175°	927.2	928.7	922.8	936.0	933.1
177.5°	929.6	928.4	922.5	930.7	928.4
180°	927.2	927.2	927.2	927.2	927.2

(END OF REPORT)