

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: P518693

Luminaire Tested: **SQ4-BB-100U-050D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518693
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-840-1D-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

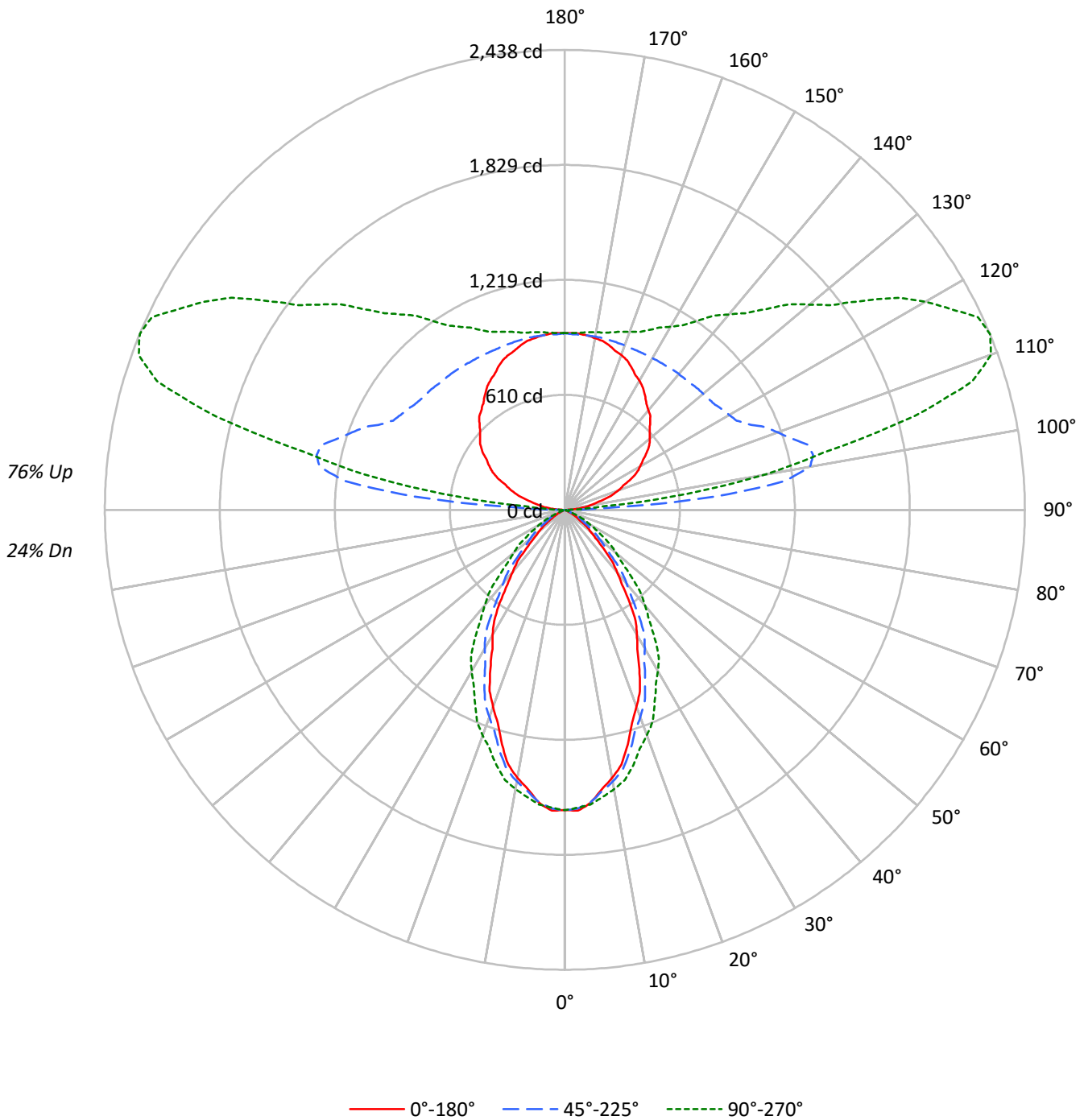
Lumens per Lamp: N/A
Luminaire Lumens: 7986.1 lumens
Efficiency: N/A
Efficacy: 124.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 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°	9792	9792	9792
5°	9634	9610	9682
10°	9014	9135	9390
15°	8195	8455	8926
20°	7275	7652	8323
25°	6335	6837	7647
30°	5426	6023	7007
35°	4499	5112	6235
40°	3457	4088	5312
45°	2499	3095	4274
50°	1702	2307	3390
55°	1107	1669	2635
60°	635	1175	1904
65°	169	718	963
70°	83	221	277
75°	36	19	0
80°	28	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.3	1.8
10°-20°	371.5	4.7
20°-30°	465.1	5.8
30°-40°	429.6	5.4
40°-50°	288.7	3.6
50°-60°	149.1	1.9
60°-70°	46.7	0.6
70°-80°	2.9	0.0
80°-90°	2.0	0.0
90°-100°	438.6	5.5
100°-110°	1210.8	15.2
110°-120°	1248.7	15.6
120°-130°	1003.5	12.6
130°-140°	788.6	9.9
140°-150°	604.8	7.6
150°-160°	434.7	5.4
160°-170°	265.8	3.3
170°-180°	89.6	1.1
0°-30°	982.0	12.3
0°-40°	1411.6	17.7
0°-60°	1849.4	23.2
0°-90°	1901.0	23.8
90°-120°	2898.1	36.3
90°-150°	5295.0	66.3
90°-180°	6085.0	76.2
0°-180°	7986.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1592	1592	1592	1592	1592	
5°	1560	1545	1556	1562	1568	145
15°	1287	1282	1328	1372	1402	358
25°	934	941	1007	1076	1127	428
35°	599	614	681	761	830	371
45°	287	305	356	425	491	226
55°	103	120	156	200	246	96
65°	12	22	49	60	66	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	3	6	12	14	15	5
95°	64	237	796	327	213	69
105°	216	333	1332	2034	1915	230
115°	387	467	1073	2124	2416	380
125°	530	604	972	1646	1932	472
135°	638	707	946	1333	1503	494
145°	740	792	934	1135	1221	463
155°	835	862	926	1018	1050	385
165°	904	915	930	967	974	255
175°	936	938	932	946	942	89
180°	936	936	936	936	936	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1592.0	1592.0	1592.0	1592.0	1592.0
2.5°	1595.7	1580.6	1584.6	1584.5	1580.3
5°	1560.4	1544.6	1556.5	1562.1	1568.1
7.5°	1494.5	1482.1	1505.1	1522.3	1534.8
10°	1443.3	1432.8	1462.6	1486.1	1503.4
12.5°	1384.2	1376.0	1412.0	1444.3	1466.4
15°	1287.0	1282.5	1327.8	1372.4	1401.7
17.5°	1182.8	1182.7	1234.4	1289.8	1325.2
20°	1111.4	1113.6	1169.1	1230.2	1271.6
22.5°	1039.9	1045.2	1104.4	1168.1	1215.5
25°	933.5	941.0	1007.4	1076.3	1126.8
27.5°	831.2	842.2	912.0	983.7	1045.1
30°	764.0	776.8	848.0	923.3	986.6
32.5°	698.1	713.3	782.7	862.4	926.8
35°	599.2	614.3	680.8	761.0	830.3
37.5°	497.1	511.8	576.9	655.7	730.6
40°	430.5	447.1	509.1	585.5	661.6
42.5°	370.1	386.7	445.0	520.1	592.0
45°	287.3	304.6	355.8	425.1	491.4
47.5°	218.6	237.4	282.3	345.0	405.4
50°	177.9	196.7	241.1	296.3	354.3
52.5°	145.3	163.5	203.5	255.5	308.7
55°	103.2	120.5	155.6	199.8	245.7
57.5°	71.3	86.2	117.7	154.5	190.5
60°	51.6	65.9	95.5	125.4	154.8
62.5°	34.4	47.5	76.4	99.3	119.1
65°	11.6	22.1	49.3	59.5	66.2
67.5°	5.9	7.1	25.9	27.3	29.6
70°	4.6	4.6	12.3	13.1	15.4
72.5°	3.4	3.4	4.9	6.3	6.8
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	12.0	13.5	15.0
92.5°	27.0	112.0	200.2	73.1	56.9
95°	64.4	237.3	795.7	327.1	212.8
97.5°	106.7	265.8	1178.7	907.5	657.2
100°	137.9	282.9	1320.1	1329.5	1080.4
102.5°	167.8	302.3	1347.7	1642.6	1406.4
105°	215.8	333.0	1332.1	2033.7	1915.0
107.5°	266.7	371.0	1257.8	2222.3	2265.7
110°	302.7	396.5	1200.3	2262.9	2403.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	335.1	425.3	1146.3	2230.8	2438.3
115°	386.6	467.2	1072.9	2123.9	2415.5
117.5°	431.6	511.8	1024.6	1973.5	2305.2
120°	461.5	540.6	1005.5	1871.7	2205.7
122.5°	490.3	565.9	989.9	1776.6	2093.0
125°	530.5	603.7	972.5	1645.8	1931.5
127.5°	564.6	637.9	962.3	1535.2	1781.7
130°	587.4	660.7	957.5	1467.6	1691.8
132.5°	609.0	678.7	952.7	1410.8	1613.8
135°	638.3	707.2	945.5	1333.0	1502.9
137.5°	671.3	734.0	941.9	1267.7	1412.7
140°	689.3	750.8	939.5	1224.1	1351.6
142.5°	709.7	766.5	937.1	1185.4	1297.7
145°	740.2	791.5	933.5	1134.8	1221.2
147.5°	769.6	814.4	930.2	1092.1	1159.2
150°	791.2	827.8	929.0	1066.6	1120.8
152.5°	808.0	842.2	927.8	1044.8	1089.7
155°	834.6	862.5	926.0	1018.2	1050.4
157.5°	859.2	880.6	926.3	998.8	1020.7
160°	873.6	892.6	927.5	987.8	1004.0
162.5°	885.6	902.3	928.7	978.2	990.8
165°	903.6	915.3	930.5	966.7	974.0
167.5°	917.4	924.4	932.0	959.7	962.0
170°	924.5	930.4	932.0	956.0	956.0
172.5°	930.5	934.1	932.0	951.2	950.0
175°	936.5	938.0	932.0	945.5	942.5
177.5°	938.9	937.8	931.7	940.1	937.7
180°	936.5	936.5	936.5	936.5	936.5

(END OF REPORT)