

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: P518697

Luminaire Tested: **SQ4-BB-100U-050D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518697
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-930-1D-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

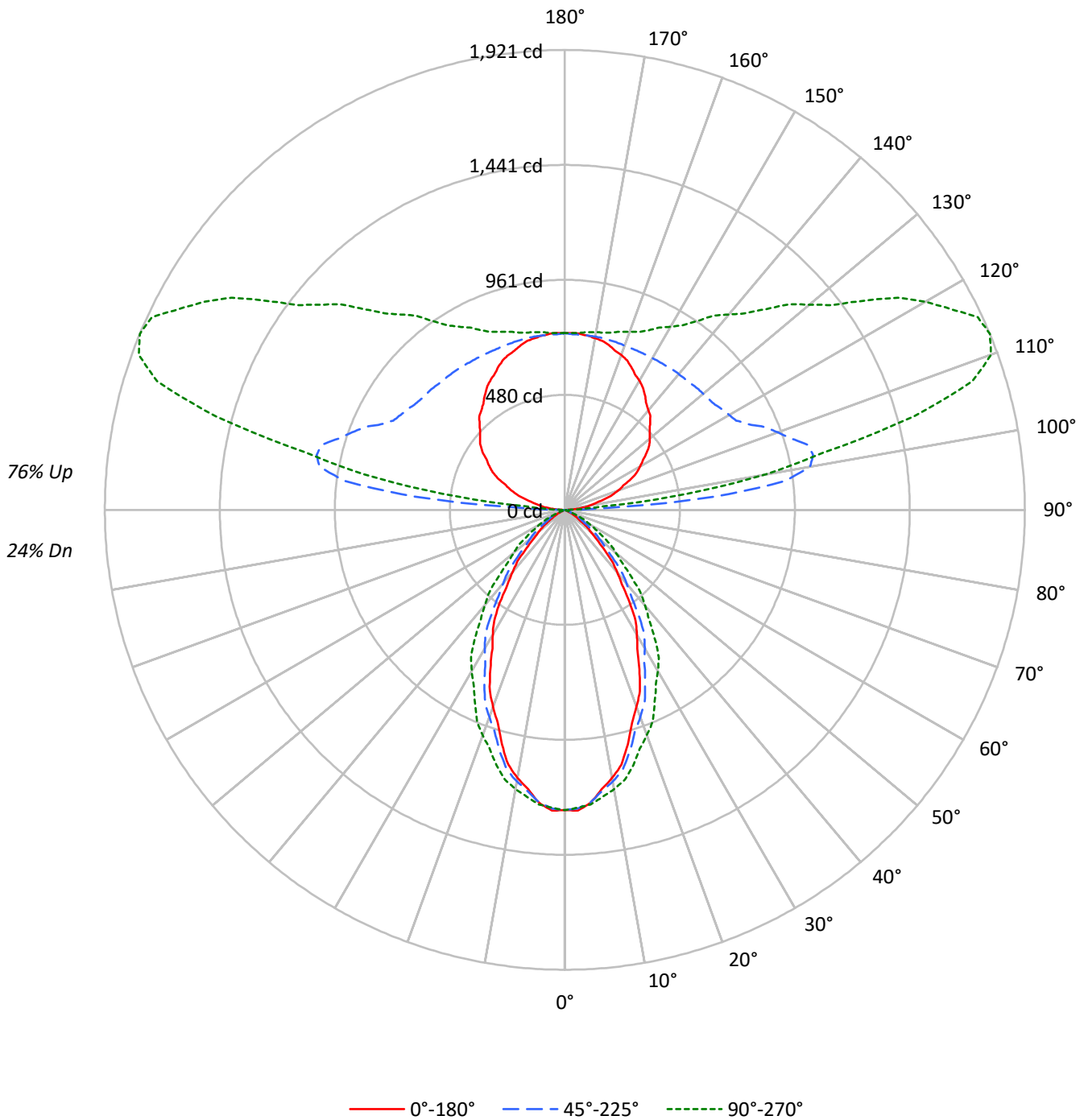
Lumens per Lamp: N/A
Luminaire Lumens: 6291.7 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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°	7714	7714	7714
5°	7590	7572	7628
10°	7102	7197	7397
15°	6456	6661	7032
20°	5731	6029	6557
25°	4991	5387	6025
30°	4275	4745	5521
35°	3545	4028	4911
40°	2724	3221	4185
45°	1968	2438	3367
50°	1342	1817	2671
55°	872	1315	2076
60°	501	925	1501
65°	132	565	760
70°	65	174	218
75°	29	14	0
80°	21	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.5	1.8
10°-20°	292.7	4.7
20°-30°	366.4	5.8
30°-40°	338.5	5.4
40°-50°	227.4	3.6
50°-60°	117.5	1.9
60°-70°	36.8	0.6
70°-80°	2.3	0.0
80°-90°	1.6	0.0
90°-100°	345.5	5.5
100°-110°	953.9	15.2
110°-120°	983.8	15.6
120°-130°	790.5	12.6
130°-140°	621.3	9.9
140°-150°	476.5	7.6
150°-160°	342.5	5.4
160°-170°	209.4	3.3
170°-180°	70.6	1.1
0°-30°	773.6	12.3
0°-40°	1112.1	17.7
0°-60°	1457.0	23.2
0°-90°	1497.7	23.8
90°-120°	2283.2	36.3
90°-150°	4171.5	66.3
90°-180°	4794.0	76.2
0°-180°	6291.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1254	1254	1254	1254	1254	
5°	1229	1217	1226	1231	1235	114
15°	1014	1010	1046	1081	1104	282
25°	735	741	794	848	888	337
35°	472	484	536	600	654	292
45°	226	240	280	335	387	178
55°	81	95	123	157	194	76
65°	9	17	39	47	52	15
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	2	5	9	11	12	4
95°	51	187	627	258	168	54
105°	170	262	1050	1602	1509	181
115°	305	368	845	1673	1903	299
125°	418	476	766	1297	1522	372
135°	503	557	745	1050	1184	389
145°	583	624	736	894	962	365
155°	658	680	730	802	828	303
165°	712	721	733	762	767	201
175°	738	739	734	745	742	70
180°	738	738	738	738	738	

TEST NUMBER: P518697

CATALOG NUMBER: SQ4-BB-100U-050D-930-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1254.2	1254.2	1254.2	1254.2	1254.2
2.5°	1257.1	1245.2	1248.4	1248.3	1245.0
5°	1229.3	1216.9	1226.3	1230.6	1235.4
7.5°	1177.4	1167.6	1185.7	1199.3	1209.2
10°	1137.1	1128.8	1152.3	1170.8	1184.4
12.5°	1090.5	1084.1	1112.5	1137.8	1155.3
15°	1013.9	1010.4	1046.1	1081.2	1104.3
17.5°	931.9	931.8	972.5	1016.1	1044.0
20°	875.6	877.3	921.1	969.1	1001.8
22.5°	819.3	823.4	870.1	920.2	957.6
25°	735.4	741.3	793.7	848.0	887.7
27.5°	654.8	663.5	718.5	775.0	823.4
30°	601.9	612.0	668.1	727.4	777.3
32.5°	550.0	562.0	616.6	679.4	730.2
35°	472.1	483.9	536.4	599.5	654.1
37.5°	391.6	403.2	454.5	516.6	575.6
40°	339.2	352.2	401.1	461.3	521.2
42.5°	291.6	304.7	350.6	409.8	466.4
45°	226.3	240.0	280.3	334.9	387.1
47.5°	172.2	187.0	222.4	271.8	319.4
50°	140.2	155.0	189.9	233.4	279.1
52.5°	114.4	128.8	160.3	201.3	243.2
55°	81.3	95.0	122.6	157.4	193.6
57.5°	56.2	67.9	92.7	121.8	150.1
60°	40.7	51.9	75.2	98.8	122.0
62.5°	27.1	37.4	60.2	78.3	93.8
65°	9.1	17.4	38.8	46.8	52.2
67.5°	4.6	5.6	20.4	21.5	23.3
70°	3.6	3.6	9.7	10.4	12.1
72.5°	2.7	2.7	3.9	5.0	5.3
75°	1.2	1.2	0.6	0.0	0.0
77.5°	0.6	0.6	0.5	0.0	0.0
80°	0.6	0.6	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	0.9	1.9	2.1	2.4
90°	2.4	4.7	9.4	10.7	11.8
92.5°	21.2	88.2	157.7	57.6	44.9
95°	50.8	187.0	626.9	257.7	167.6
97.5°	84.1	209.4	928.6	714.9	517.8
100°	108.6	222.9	1040.0	1047.4	851.2
102.5°	132.2	238.2	1061.8	1294.1	1108.0
105°	170.0	262.3	1049.5	1602.2	1508.7
107.5°	210.1	292.3	990.9	1750.8	1784.9
110°	238.5	312.3	945.6	1782.7	1893.6

TEST NUMBER: P518697

CATALOG NUMBER: SQ4-BB-100U-050D-930-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	264.0	335.1	903.1	1757.5	1920.9
115°	304.6	368.1	845.3	1673.3	1903.0
117.5°	340.0	403.2	807.2	1554.8	1816.1
120°	363.6	425.9	792.1	1474.6	1737.7
122.5°	386.3	445.8	779.9	1399.6	1649.0
125°	417.9	475.6	766.2	1296.6	1521.7
127.5°	444.8	502.5	758.1	1209.5	1403.6
130°	462.8	520.5	754.4	1156.2	1332.8
132.5°	479.8	534.7	750.6	1111.4	1271.4
135°	502.9	557.2	744.9	1050.2	1184.1
137.5°	528.9	578.3	742.1	998.7	1113.0
140°	543.0	591.5	740.2	964.4	1064.8
142.5°	559.1	603.9	738.3	933.9	1022.3
145°	583.2	623.6	735.5	894.0	962.1
147.5°	606.3	641.6	732.9	860.4	913.3
150°	623.3	652.2	731.9	840.3	883.0
152.5°	636.5	663.5	731.0	823.2	858.5
155°	657.6	679.5	729.6	802.2	827.5
157.5°	676.9	693.8	729.8	786.9	804.2
160°	688.2	703.2	730.7	778.3	790.9
162.5°	697.7	710.8	731.7	770.6	780.6
165°	711.9	721.1	733.1	761.6	767.3
167.5°	722.7	728.3	734.3	756.0	757.9
170°	728.4	733.0	734.3	753.2	753.2
172.5°	733.1	735.9	734.3	749.4	748.5
175°	737.8	739.0	734.3	744.9	742.5
177.5°	739.7	738.8	734.0	740.6	738.8
180°	737.8	737.8	737.8	737.8	737.8

(END OF REPORT)