

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: P518736

Luminaire Tested: **SQ4-BB-100U-100D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518736
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-100D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

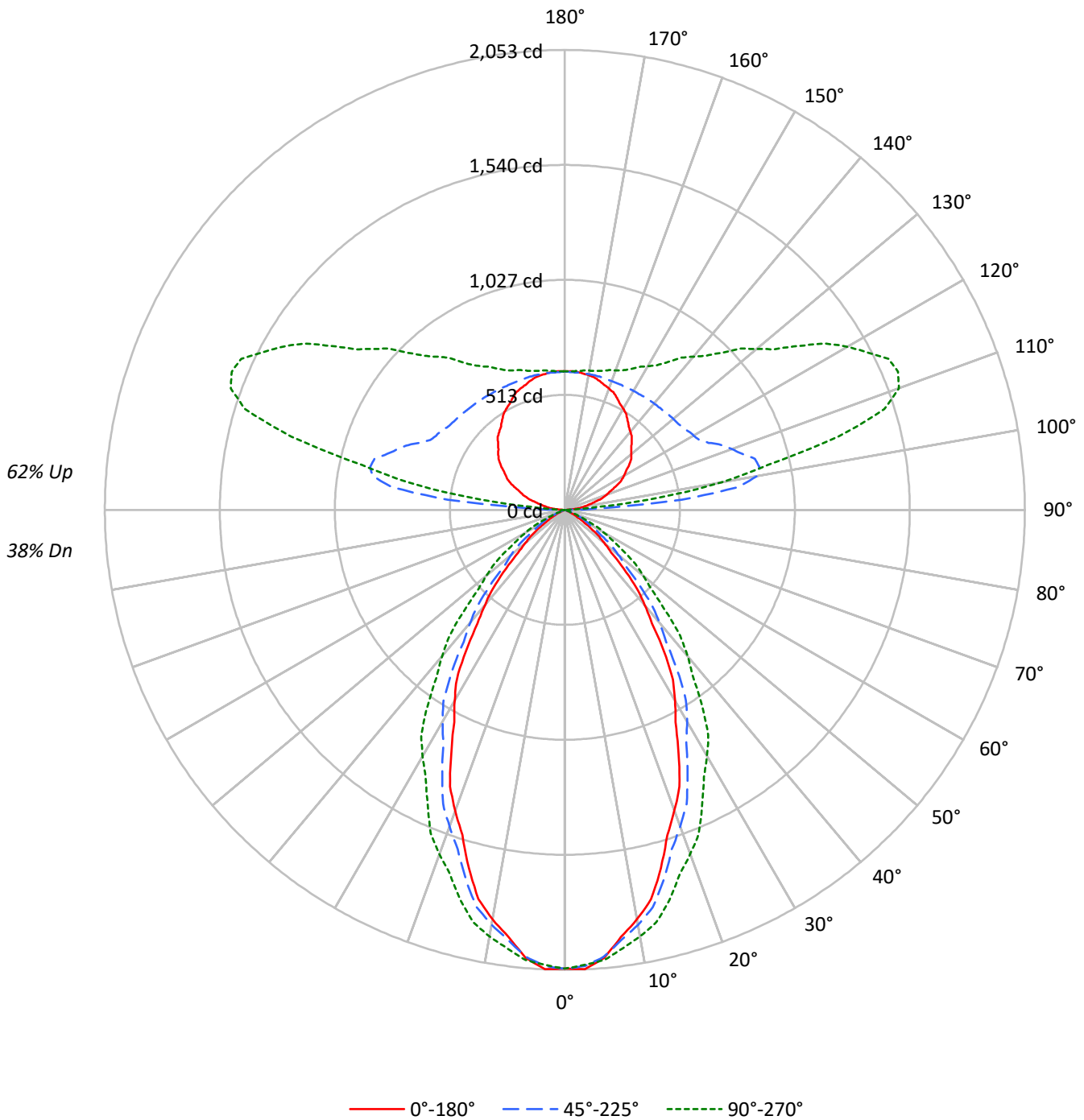
Lumens per Lamp: N/A
Luminaire Lumens: 6460.5 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 57.9
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	87	84	82	79	69	67	65	55	54	53	42	41	41	35
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	38	37	36	31
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28
4	76	66	59	54	69	61	55	50	51	46	43	41	38	36	33	31	29	25
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	37	34	35	31	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	41	35	30	48	38	32	28	33	28	25	28	24	22	23	20	19	16
10	49	38	32	27	45	36	30	26	30	26	23	26	22	20	21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18893	18893	18893
5°	18590	18543	18681
10°	17394	17626	18118
15°	15813	16314	17223
20°	14036	14766	16060
25°	12224	13192	14755
30°	10470	11621	13520
35°	8682	9864	12029
40°	6670	7888	10249
45°	4821	5972	8248
50°	3285	4451	6541
55°	2136	3219	5083
60°	1225	2266	3674
65°	325	1384	1860
70°	159	429	534
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.9	2.9
10°-20°	477.9	7.4
20°-30°	598.3	9.3
30°-40°	552.6	8.6
40°-50°	371.3	5.7
50°-60°	191.8	3.0
60°-70°	60.1	0.9
70°-80°	3.8	0.1
80°-90°	1.4	0.0
90°-100°	289.5	4.5
100°-110°	799.1	12.4
110°-120°	824.2	12.8
120°-130°	662.3	10.3
130°-140°	520.5	8.1
140°-150°	399.2	6.2
150°-160°	286.9	4.4
160°-170°	175.5	2.7
170°-180°	59.2	0.9
0°-30°	1263.1	19.6
0°-40°	1815.8	28.1
0°-60°	2378.9	36.8
0°-90°	2444.1	37.8
90°-120°	1912.8	29.6
90°-150°	3494.8	54.1
90°-180°	4016.0	62.2
0°-180°	6460.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2048	2048	2048	2048	2048	
5°	2007	1987	2002	2009	2017	186
15°	1656	1650	1708	1765	1803	461
25°	1201	1210	1296	1384	1449	551
35°	771	790	876	979	1068	477
45°	370	392	458	547	632	290
55°	133	155	200	257	316	124
65°	15	28	63	76	85	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	4	8	9	10	3
95°	42	157	525	216	140	45
105°	142	220	879	1342	1264	152
115°	255	308	708	1402	1594	251
125°	350	398	642	1086	1275	312
135°	421	467	624	880	992	326
145°	489	522	616	749	806	306
155°	551	569	611	672	693	254
165°	596	604	614	638	643	168
175°	618	619	615	624	622	59
180°	618	618	618	618	618	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2047.8	2047.8	2047.8	2047.8	2047.8
2.5°	2052.6	2033.2	2038.3	2038.2	2032.8
5°	2007.2	1986.9	2002.2	2009.4	2017.1
7.5°	1922.4	1906.5	1936.1	1958.2	1974.3
10°	1856.6	1843.0	1881.4	1911.6	1933.9
12.5°	1780.5	1770.1	1816.4	1857.8	1886.3
15°	1655.5	1649.7	1708.0	1765.3	1803.1
17.5°	1521.5	1521.4	1587.9	1659.1	1704.6
20°	1429.6	1432.5	1503.9	1582.4	1635.7
22.5°	1337.7	1344.4	1420.7	1502.5	1563.6
25°	1200.8	1210.4	1295.9	1384.5	1449.4
27.5°	1069.2	1083.3	1173.2	1265.4	1344.4
30°	982.8	999.3	1090.8	1187.7	1269.1
32.5°	898.0	917.6	1006.8	1109.3	1192.2
35°	770.8	790.2	875.8	978.9	1068.0
37.5°	639.4	658.4	742.0	843.5	939.8
40°	553.8	575.1	654.9	753.2	851.0
42.5°	476.1	497.5	572.4	669.1	761.5
45°	369.5	391.8	457.7	546.8	632.1
47.5°	281.2	305.4	363.2	443.8	521.5
50°	228.9	253.1	310.1	381.1	455.7
52.5°	186.8	210.3	261.7	328.7	397.1
55°	132.8	155.0	200.1	256.9	316.0
57.5°	91.7	110.9	151.4	198.8	245.1
60°	66.4	84.8	122.8	161.4	199.1
62.5°	44.2	61.0	98.3	127.8	153.2
65°	14.9	28.4	63.4	76.5	85.2
67.5°	7.5	9.1	33.3	35.1	38.0
70°	5.9	5.9	15.9	16.9	19.8
72.5°	4.4	4.4	6.3	8.1	8.7
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°	0.4	0.8	1.6	1.8	2.0
90°	2.0	3.9	7.9	8.9	9.9
92.5°	17.8	73.9	132.1	48.2	37.6
95°	42.5	156.6	525.2	215.9	140.4
97.5°	70.4	175.4	778.0	599.0	433.8
100°	91.0	186.7	871.3	877.5	713.1
102.5°	110.8	199.5	889.5	1084.2	928.3
105°	142.4	219.8	879.2	1342.3	1264.0
107.5°	176.0	244.9	830.2	1466.8	1495.4
110°	199.8	261.7	792.2	1493.5	1586.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.1	280.7	756.6	1472.4	1609.3
115°	255.2	308.4	708.1	1401.9	1594.3
117.5°	284.8	337.8	676.3	1302.6	1521.5
120°	304.6	356.8	663.6	1235.3	1455.8
122.5°	323.6	373.5	653.3	1172.6	1381.5
125°	350.1	398.5	641.9	1086.3	1274.8
127.5°	372.7	421.0	635.1	1013.3	1175.9
130°	387.7	436.0	632.0	968.6	1116.6
132.5°	401.9	448.0	628.8	931.1	1065.2
135°	421.3	466.8	624.1	879.8	992.0
137.5°	443.1	484.5	621.7	836.7	932.4
140°	454.9	495.6	620.1	808.0	892.1
142.5°	468.4	505.9	618.5	782.4	856.5
145°	488.6	522.4	616.2	749.0	806.0
147.5°	508.0	537.5	614.0	720.8	765.1
150°	522.2	546.4	613.2	704.0	739.8
152.5°	533.3	555.9	612.4	689.6	719.2
155°	550.9	569.3	611.2	672.0	693.3
157.5°	567.1	581.2	611.4	659.2	673.7
160°	576.6	589.2	612.2	652.0	662.6
162.5°	584.5	595.5	613.0	645.6	653.9
165°	596.4	604.1	614.2	638.0	642.9
167.5°	605.5	610.1	615.2	633.4	634.9
170°	610.2	614.1	615.2	631.0	631.0
172.5°	614.2	616.5	615.2	627.8	627.0
175°	618.1	619.1	615.2	624.0	622.1
177.5°	619.7	618.9	615.0	620.5	618.9
180°	618.1	618.1	618.1	618.1	618.1

(END OF REPORT)