

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: P518737

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518737
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-6
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

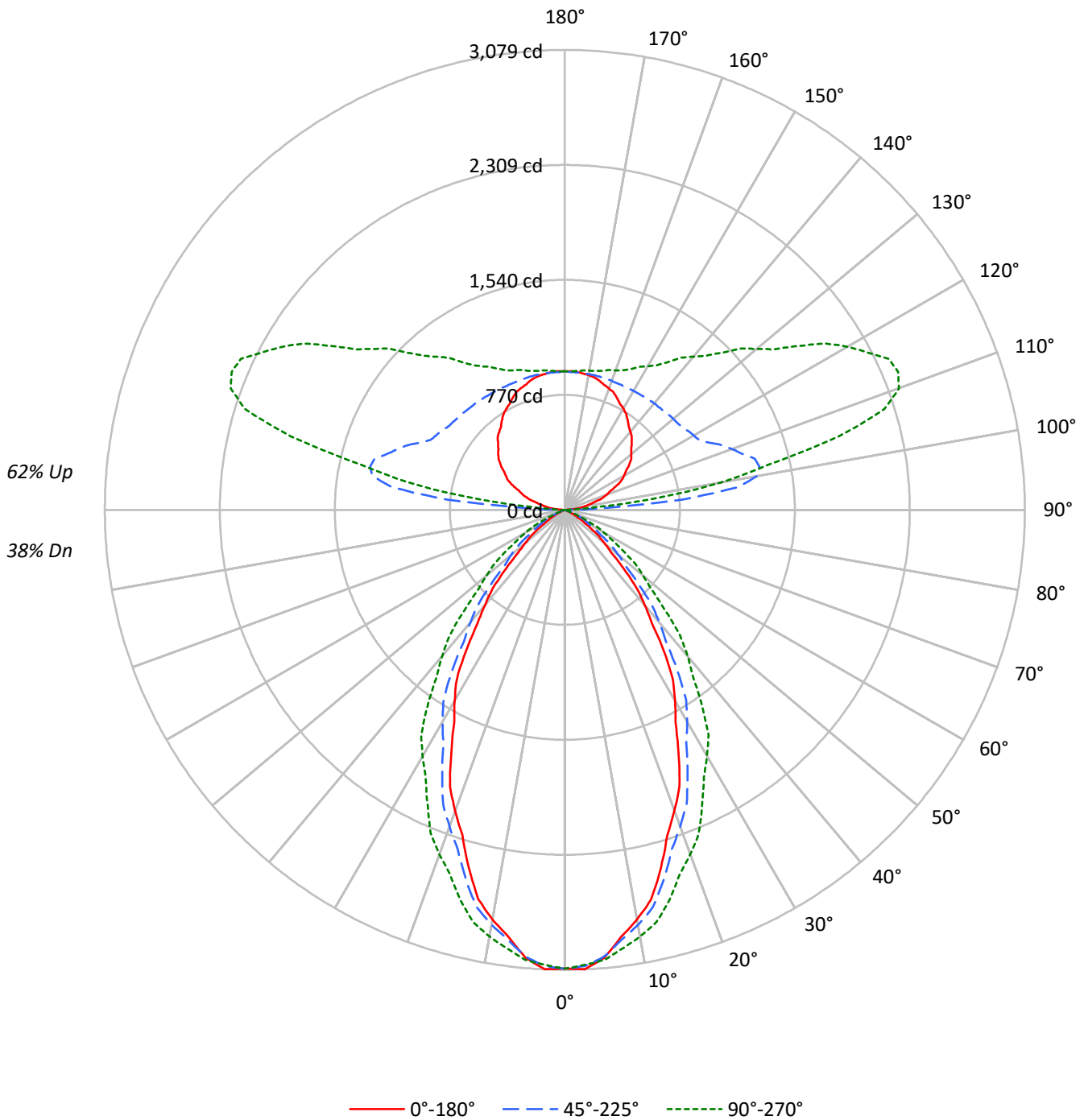
Lumens per Lamp: N/A
Luminaire Lumens: 9690.7 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 92.9
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	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	18544	18682
10°	17394	17626	18117
15°	15812	16314	17223
20°	14036	14766	16059
25°	12223	13192	14755
30°	10470	11621	13521
35°	8682	9864	12029
40°	6670	7887	10249
45°	4822	5972	8247
50°	3285	4451	6541
55°	2135	3219	5084
60°	1225	2267	3674
65°	325	1384	1860
70°	160	428	534
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.3	2.9
10°-20°	716.9	7.4
20°-30°	897.5	9.3
30°-40°	829.0	8.6
40°-50°	557.0	5.7
50°-60°	287.7	3.0
60°-70°	90.1	0.9
70°-80°	5.7	0.1
80°-90°	2.0	0.0
90°-100°	434.2	4.5
100°-110°	1198.7	12.4
110°-120°	1236.3	12.8
120°-130°	993.5	10.3
130°-140°	780.8	8.1
140°-150°	598.8	6.2
150°-160°	430.4	4.4
160°-170°	263.2	2.7
170°-180°	88.7	0.9
0°-30°	1894.7	19.6
0°-40°	2723.7	28.1
0°-60°	3568.4	36.8
0°-90°	3666.2	37.8
90°-120°	2869.2	29.6
90°-150°	5242.2	54.1
90°-180°	6024.0	62.2
0°-180°	9690.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3072	3072	3072	3072	3072	
5°	3011	2980	3003	3014	3026	279
15°	2483	2474	2562	2648	2705	692
25°	1801	1816	1944	2077	2174	826
35°	1156	1185	1314	1468	1602	716
45°	554	588	687	820	948	435
55°	199	233	300	385	474	186
65°	22	43	95	115	128	38
75°	3	3	2	0	0	4
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°	3071.7	3071.7	3071.7	3071.7	3071.7
2.5°	3078.9	3049.8	3057.5	3057.3	3049.1
5°	3010.8	2980.3	3003.4	3014.0	3025.7
7.5°	2883.6	2859.8	2904.1	2937.3	2961.5
10°	2784.9	2764.6	2822.1	2867.4	2900.8
12.5°	2670.8	2655.1	2724.6	2786.8	2829.5
15°	2483.2	2474.5	2562.0	2648.0	2704.7
17.5°	2282.3	2282.0	2381.9	2488.7	2556.9
20°	2144.4	2148.8	2255.9	2373.6	2453.5
22.5°	2006.5	2016.7	2131.0	2253.8	2345.3
25°	1801.1	1815.7	1943.8	2076.8	2174.1
27.5°	1603.8	1625.0	1759.8	1898.0	2016.6
30°	1474.2	1498.9	1636.2	1781.6	1903.7
32.5°	1347.0	1376.3	1510.2	1664.0	1788.3
35°	1156.2	1185.2	1313.7	1468.3	1602.0
37.5°	959.1	987.6	1113.1	1265.3	1409.7
40°	830.7	862.7	982.3	1129.8	1276.5
42.5°	714.2	746.2	858.7	1003.6	1142.2
45°	554.3	587.7	686.6	820.2	948.1
47.5°	421.7	458.1	544.8	665.7	782.3
50°	343.3	379.6	465.1	571.7	683.6
52.5°	280.3	315.4	392.6	493.0	595.6
55°	199.1	232.6	300.2	385.4	474.1
57.5°	137.6	166.4	227.1	298.2	367.7
60°	99.6	127.2	184.3	242.0	298.7
62.5°	66.3	91.6	147.4	191.7	229.7
65°	22.3	42.6	95.1	114.7	127.8
67.5°	11.3	13.6	49.9	52.7	57.1
70°	8.9	8.9	23.8	25.4	29.7
72.5°	6.5	6.5	9.5	12.2	13.1
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	0.0	0.0	0.0
82.5°	0.3	0.3	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)