

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: P518733

Luminaire Tested: **SQ4-BB-100U-100D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518733
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

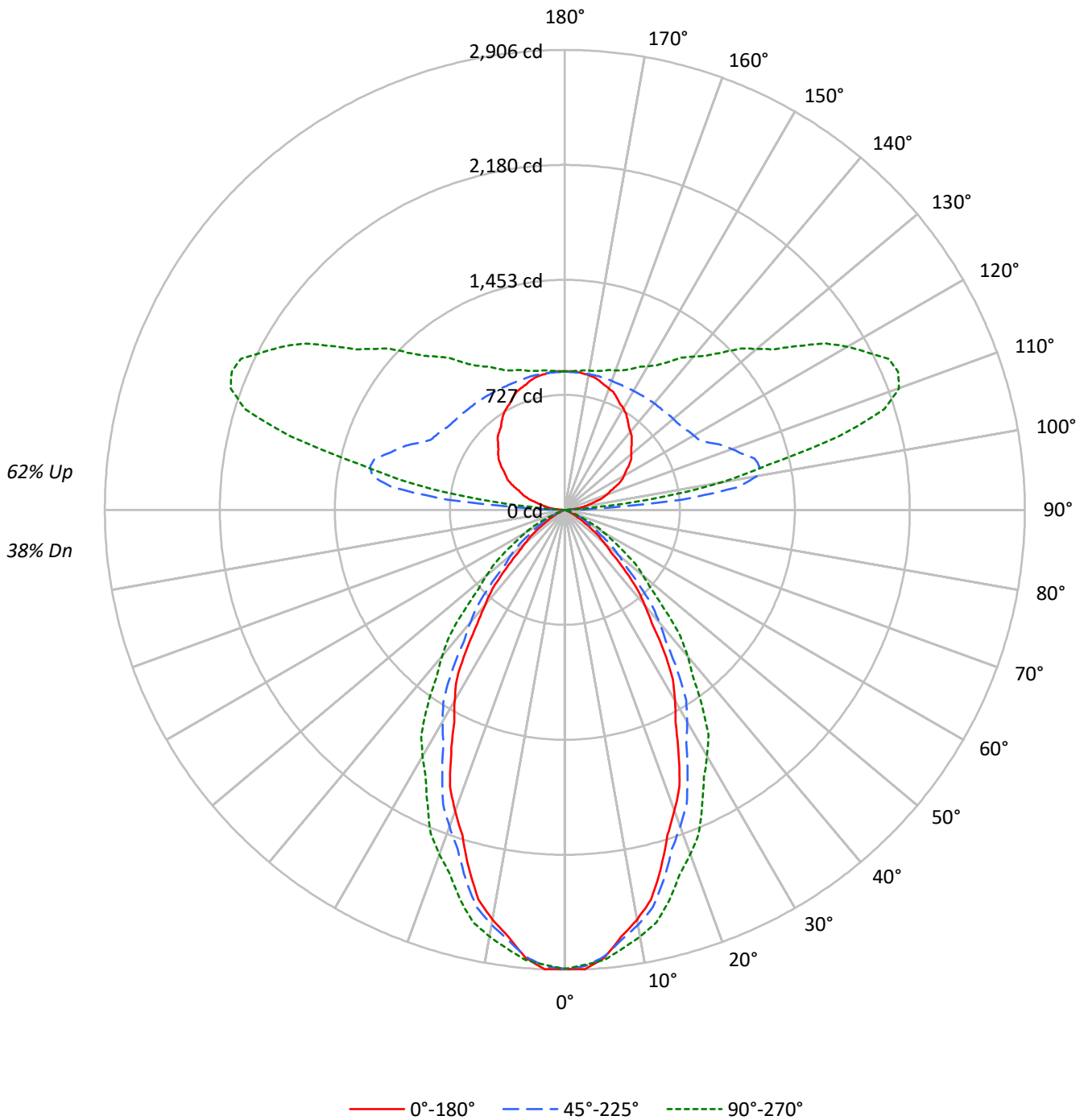
Lumens per Lamp: N/A
Luminaire Lumens: 9147.0 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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°	17834	17834	17834
5°	17547	17504	17633
10°	16418	16637	17101
15°	14925	15399	16256
20°	13249	13937	15159
25°	11538	12451	13927
30°	9883	10969	12762
35°	8194	9311	11354
40°	6296	7445	9675
45°	4551	5637	7784
50°	3100	4201	6174
55°	2016	3038	4799
60°	1156	2139	3468
65°	306	1307	1755
70°	151	403	505
75°	67	33	0
80°	50	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.6	2.9
10°-20°	676.7	7.4
20°-30°	847.1	9.3
30°-40°	782.5	8.6
40°-50°	525.8	5.7
50°-60°	271.6	3.0
60°-70°	85.0	0.9
70°-80°	5.4	0.1
80°-90°	1.9	0.0
90°-100°	409.9	4.5
100°-110°	1131.5	12.4
110°-120°	1166.9	12.8
120°-130°	937.7	10.3
130°-140°	736.9	8.1
140°-150°	565.2	6.2
150°-160°	406.2	4.4
160°-170°	248.4	2.7
170°-180°	83.8	0.9
0°-30°	1788.4	19.6
0°-40°	2570.8	28.1
0°-60°	3368.2	36.8
0°-90°	3460.5	37.8
90°-120°	2708.2	29.6
90°-150°	4948.1	54.1
90°-180°	5686.0	62.2
0°-180°	9147.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2899	2899	2899	2899	2899	
5°	2842	2813	2835	2845	2856	263
15°	2344	2336	2418	2499	2553	653
25°	1700	1714	1835	1960	2052	779
35°	1091	1119	1240	1386	1512	676
45°	523	555	648	774	895	411
55°	188	220	283	364	448	175
65°	21	40	90	108	121	36
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	3	6	11	13	14	4
95°	60	222	744	306	199	64
105°	202	311	1245	1900	1790	215
115°	361	437	1003	1985	2257	355
125°	496	564	909	1538	1805	441
135°	596	661	884	1246	1404	462
145°	692	740	872	1060	1141	433
155°	780	806	865	952	982	359
165°	844	855	870	903	910	238
175°	875	876	871	884	881	83
180°	875	875	875	875	875	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2899.4	2899.4	2899.4	2899.4	2899.4
2.5°	2906.1	2878.7	2885.9	2885.7	2878.1
5°	2841.9	2813.1	2834.9	2844.9	2855.9
7.5°	2721.8	2699.3	2741.2	2772.5	2795.3
10°	2628.7	2609.5	2663.7	2706.5	2738.1
12.5°	2520.9	2506.1	2571.7	2630.4	2670.7
15°	2343.9	2335.7	2418.3	2499.4	2552.9
17.5°	2154.3	2154.0	2248.2	2349.0	2413.5
20°	2024.1	2028.2	2129.3	2240.4	2315.9
22.5°	1893.9	1903.5	2011.5	2127.3	2213.7
25°	1700.1	1713.8	1834.7	1960.3	2052.1
27.5°	1513.8	1533.8	1661.1	1791.5	1903.5
30°	1391.5	1414.8	1544.4	1681.6	1796.9
32.5°	1271.4	1299.1	1425.4	1570.6	1688.0
35°	1091.3	1118.7	1240.0	1385.9	1512.1
37.5°	905.3	932.2	1050.6	1194.3	1330.6
40°	784.1	814.3	927.2	1066.4	1204.9
42.5°	674.1	704.3	810.5	947.3	1078.1
45°	523.2	554.8	648.0	774.2	894.9
47.5°	398.1	432.4	514.2	628.4	738.4
50°	324.0	358.3	439.0	539.6	645.2
52.5°	264.5	297.7	370.6	465.4	562.2
55°	188.0	219.5	283.3	363.8	447.5
57.5°	129.9	157.0	214.3	281.5	347.0
60°	94.0	120.0	173.9	228.5	281.9
62.5°	62.6	86.4	139.1	180.9	216.9
65°	21.0	40.2	89.8	108.3	120.6
67.5°	10.7	12.9	47.1	49.7	53.9
70°	8.4	8.4	22.4	23.9	28.1
72.5°	6.2	6.2	9.0	11.5	12.3
75°	2.8	2.8	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	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	1.1	2.2	2.5	2.8
90°	2.8	5.5	11.2	12.6	14.0
92.5°	25.2	104.6	187.1	68.3	53.2
95°	60.2	221.8	743.6	305.6	198.8
97.5°	99.7	248.4	1101.5	848.0	614.2
100°	128.8	264.4	1233.7	1242.4	1009.6
102.5°	156.8	282.5	1259.4	1535.0	1314.3
105°	201.6	311.2	1244.9	1900.5	1789.6
107.5°	249.3	346.7	1175.4	2076.7	2117.2
110°	282.9	370.5	1121.6	2114.6	2246.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	313.1	397.4	1071.2	2084.7	2278.5
115°	361.3	436.6	1002.6	1984.8	2257.3
117.5°	403.3	478.3	957.5	1844.2	2154.2
120°	431.3	505.2	939.6	1749.1	2061.2
122.5°	458.2	528.8	925.0	1660.2	1955.9
125°	495.7	564.2	908.8	1538.0	1805.0
127.5°	527.6	596.1	899.3	1434.6	1664.9
130°	548.9	617.4	894.8	1371.4	1580.9
132.5°	569.1	634.2	890.3	1318.3	1508.1
135°	596.5	660.9	883.6	1245.7	1404.5
137.5°	627.3	685.9	880.2	1184.6	1320.2
140°	644.1	701.6	878.0	1143.9	1263.1
142.5°	663.2	716.3	875.7	1107.8	1212.6
145°	691.7	739.7	872.4	1060.5	1141.2
147.5°	719.2	761.1	869.3	1020.6	1083.3
150°	739.4	773.6	868.2	996.8	1047.4
152.5°	755.0	787.1	867.1	976.4	1018.3
155°	780.0	806.0	865.4	951.5	981.6
157.5°	802.9	822.9	865.7	933.3	953.9
160°	816.4	834.2	866.8	923.1	938.2
162.5°	827.6	843.2	867.9	914.1	925.9
165°	844.4	855.3	869.6	903.3	910.2
167.5°	857.3	863.8	871.0	896.8	899.0
170°	864.0	869.5	871.0	893.4	893.4
172.5°	869.6	872.9	871.0	888.9	887.8
175°	875.2	876.5	871.0	883.5	880.8
177.5°	877.4	876.3	870.7	878.5	876.3
180°	875.2	875.2	875.2	875.2	875.2

(END OF REPORT)