

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: P518744

Luminaire Tested: **SQ4-BB-100U-100D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518744
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-930-1D-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

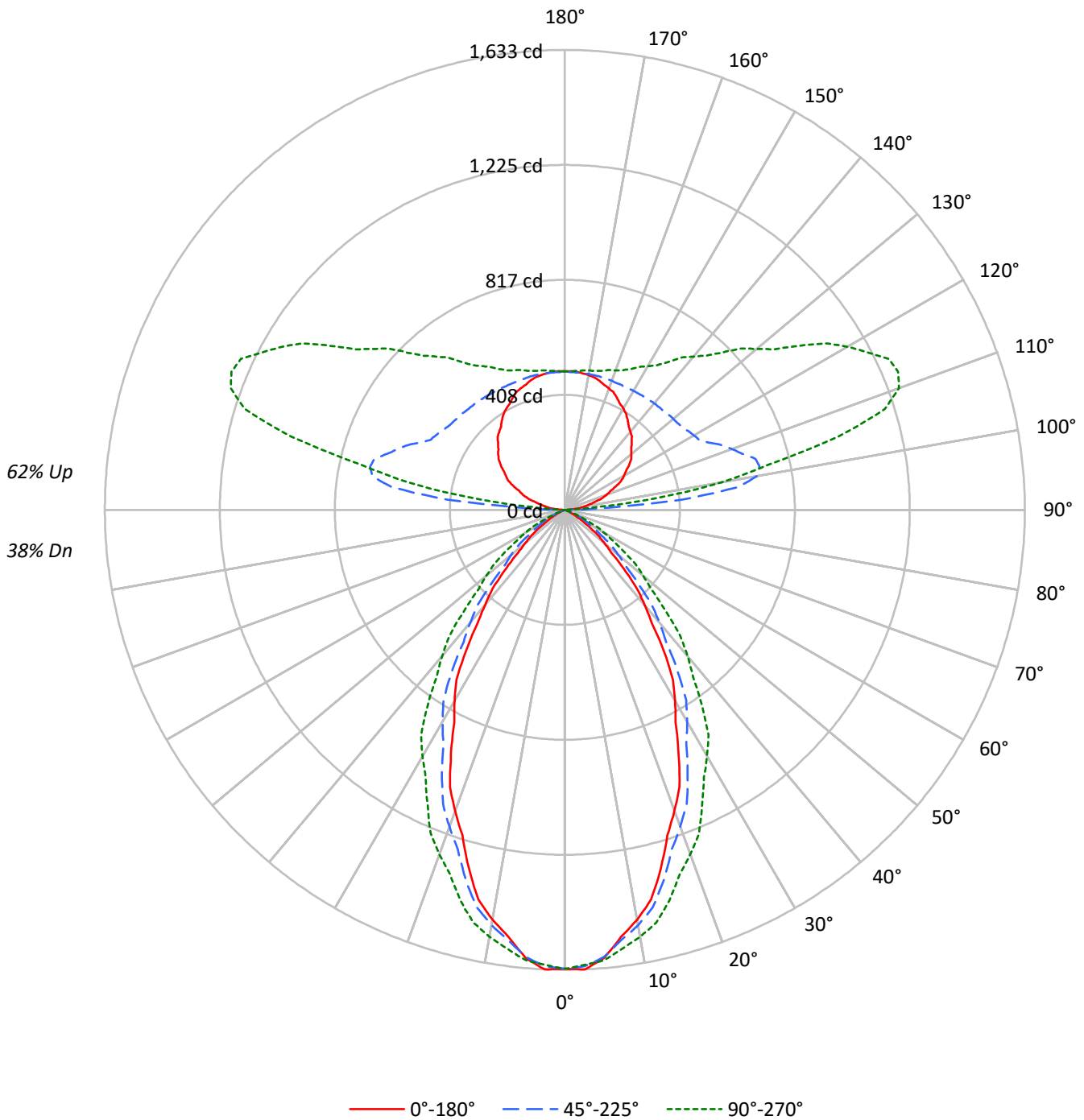
Lumens per Lamp: N/A
Luminaire Lumens: 5141.0 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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°	15035	15035	15035
5°	14792	14756	14866
10°	13841	14026	14417
15°	12583	12982	13705
20°	11169	11750	12780
25°	9727	10498	11742
30°	8332	9247	10759
35°	6909	7849	9573
40°	5308	6276	8156
45°	3837	4752	6563
50°	2614	3542	5205
55°	1699	2562	4045
60°	974	1805	2925
65°	258	1102	1480
70°	127	340	426
75°	57	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.7	2.9
10°-20°	380.3	7.4
20°-30°	476.1	9.3
30°-40°	439.8	8.6
40°-50°	295.5	5.7
50°-60°	152.6	3.0
60°-70°	47.8	0.9
70°-80°	3.0	0.1
80°-90°	1.1	0.0
90°-100°	230.4	4.5
100°-110°	635.9	12.4
110°-120°	655.9	12.8
120°-130°	527.0	10.3
130°-140°	414.2	8.1
140°-150°	317.7	6.2
150°-160°	228.3	4.4
160°-170°	139.6	2.7
170°-180°	47.1	0.9
0°-30°	1005.1	19.6
0°-40°	1444.9	28.1
0°-60°	1893.0	36.8
0°-90°	1945.0	37.8
90°-120°	1522.1	29.6
90°-150°	2781.0	54.1
90°-180°	3196.0	62.2
0°-180°	5141.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1630	1630	1630	1630	1630	
5°	1597	1581	1593	1599	1605	148
15°	1317	1313	1359	1405	1435	367
25°	956	963	1031	1102	1153	438
35°	613	629	697	779	850	380
45°	294	312	364	435	503	231
55°	106	123	159	204	252	99
65°	12	23	50	61	68	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	2	3	6	7	8	2
95°	34	125	418	172	112	36
105°	113	175	700	1068	1006	121
115°	203	245	564	1116	1269	200
125°	279	317	511	864	1014	248
135°	335	371	497	700	789	259
145°	389	416	490	596	641	243
155°	438	453	486	535	552	202
165°	475	481	489	508	512	134
175°	492	493	490	497	495	47
180°	492	492	492	492	492	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1629.6	1629.6	1629.6	1629.6	1629.6
2.5°	1633.3	1617.9	1622.0	1621.9	1617.6
5°	1597.2	1581.0	1593.3	1599.0	1605.1
7.5°	1529.8	1517.1	1540.6	1558.3	1571.1
10°	1477.4	1466.6	1497.1	1521.2	1538.9
12.5°	1416.9	1408.5	1445.4	1478.4	1501.1
15°	1317.4	1312.7	1359.1	1404.8	1434.8
17.5°	1210.8	1210.6	1263.6	1320.2	1356.5
20°	1137.6	1139.9	1196.7	1259.2	1301.6
22.5°	1064.5	1069.9	1130.5	1195.6	1244.2
25°	955.5	963.2	1031.2	1101.7	1153.4
27.5°	850.8	862.1	933.6	1006.9	1069.8
30°	782.1	795.2	868.0	945.1	1009.9
32.5°	714.6	730.1	801.1	882.7	948.7
35°	613.4	628.8	696.9	778.9	849.9
37.5°	508.8	523.9	590.5	671.2	747.8
40°	440.7	457.7	521.1	599.4	677.2
42.5°	378.9	395.8	455.5	532.4	605.9
45°	294.1	311.8	364.2	435.1	503.0
47.5°	223.7	243.0	289.0	353.2	415.0
50°	182.1	201.4	246.8	303.3	362.6
52.5°	148.7	167.3	208.3	261.6	316.0
55°	105.6	123.4	159.3	204.5	251.5
57.5°	73.0	88.3	120.5	158.2	195.0
60°	52.8	67.5	97.8	128.4	158.5
62.5°	35.2	48.6	78.2	101.7	121.9
65°	11.8	22.6	50.5	60.9	67.8
67.5°	6.0	7.2	26.5	28.0	30.3
70°	4.7	4.7	12.6	13.5	15.8
72.5°	3.5	3.5	5.0	6.5	6.9
75°	1.6	1.6	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°	0.3	0.6	1.3	1.4	1.6
90°	1.6	3.1	6.3	7.1	7.9
92.5°	14.2	58.8	105.1	38.4	29.9
95°	33.8	124.6	417.9	171.8	111.8
97.5°	56.0	139.6	619.1	476.6	345.2
100°	72.4	148.6	693.4	698.3	567.4
102.5°	88.1	158.8	707.8	862.7	738.7
105°	113.3	174.9	699.7	1068.1	1005.8
107.5°	140.1	194.9	660.6	1167.2	1190.0
110°	159.0	208.2	630.4	1188.5	1262.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	176.0	223.4	602.1	1171.7	1280.6
115°	203.0	245.4	563.5	1115.5	1268.7
117.5°	226.7	268.8	538.2	1036.5	1210.7
120°	242.4	284.0	528.1	983.0	1158.5
122.5°	257.5	297.2	519.9	933.1	1099.3
125°	278.6	317.1	510.8	864.4	1014.5
127.5°	296.5	335.0	505.4	806.3	935.8
130°	308.5	347.0	502.9	770.8	888.5
132.5°	319.8	356.5	500.4	741.0	847.6
135°	335.3	371.4	496.6	700.1	789.4
137.5°	352.6	385.5	494.7	665.8	742.0
140°	362.0	394.3	493.5	642.9	709.9
142.5°	372.7	402.6	492.2	622.6	681.6
145°	388.8	415.7	490.3	596.0	641.4
147.5°	404.2	427.8	488.6	573.6	608.8
150°	415.5	434.8	487.9	560.2	588.7
152.5°	424.4	442.4	487.3	548.8	572.3
155°	438.4	453.0	486.4	534.8	551.7
157.5°	451.3	462.5	486.5	524.6	536.1
160°	458.8	468.8	487.2	518.8	527.3
162.5°	465.1	473.9	487.8	513.8	520.4
165°	474.6	480.7	488.7	507.7	511.6
167.5°	481.8	485.5	489.5	504.0	505.3
170°	485.6	488.7	489.5	502.1	502.1
172.5°	488.7	490.6	489.5	499.6	499.0
175°	491.9	492.7	489.5	496.6	495.0
177.5°	493.1	492.5	489.4	493.7	492.5
180°	491.9	491.9	491.9	491.9	491.9

(END OF REPORT)