

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

Brand: CORELITE

Report Number: P521203

Luminaire Tested: SQ4-BB-100U-075D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521203
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-100U-075D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6696.2 lumens
Efficiency: N/A
Efficacy: 104.5 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

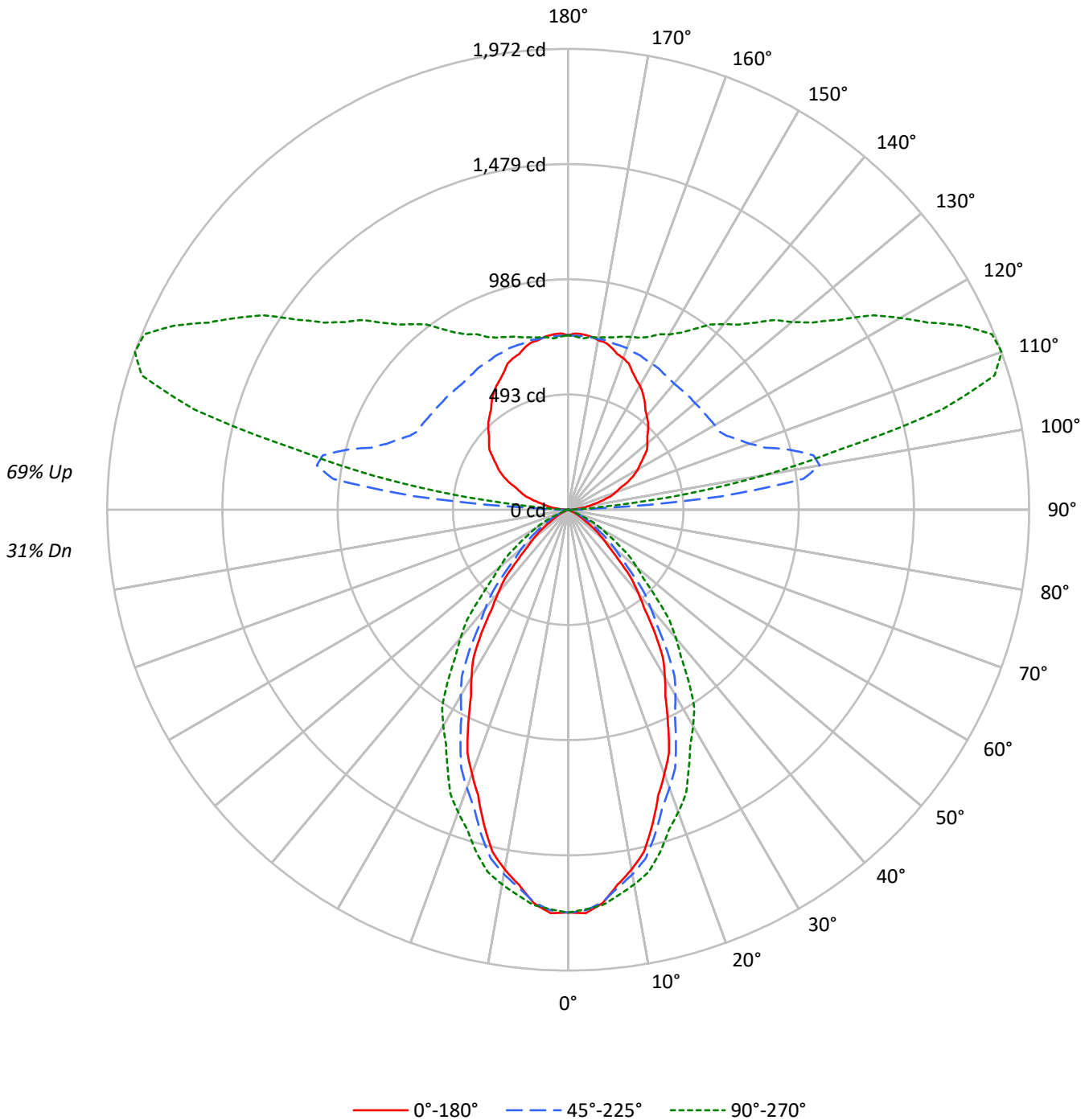
Input Watts (W): 64.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	103	103	103	103	92	92	92	92	73	73	73		55	55	55		38	38	38	31
1	95	91	87	84	85	82	79	77	65	63	62		50	49	48		36	35	35	28
2	87	81	75	71	78	73	68	65	58	55	53		45	43	42		33	32	31	25
3	80	72	65	60	72	65	60	55	53	49	46		41	38	36		30	29	28	23
4	74	64	57	52	66	58	52	48	47	43	40		37	34	32		28	26	25	21
5	68	58	51	45	61	53	46	42	43	39	35		34	31	29		25	24	22	19
6	63	52	45	40	57	48	41	37	39	35	31		31	28	26		24	22	20	17
7	58	47	40	35	53	43	37	33	36	31	28		29	25	23		22	20	18	16
8	54	43	36	31	49	40	34	29	33	28	25		26	23	21		20	18	17	14
9	51	40	33	28	46	36	30	26	30	26	23		24	21	19		19	17	16	13
10	48	36	30	25	43	34	28	24	28	24	21		23	20	18		18	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15906	15906	15906
5°	15650	15612	15728
10°	14644	14839	15253
15°	13312	13734	14499
20°	11817	12431	13521
25°	10291	11106	12423
30°	8815	9783	11383
35°	7309	8304	10127
40°	5615	6640	8629
45°	4059	5027	6943
50°	2766	3748	5507
55°	1798	2710	4280
60°	1031	1908	3093
65°	273	1166	1565
70°	135	359	450
75°	61	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6943 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.3	2.3
10°-20°	402.4	6.0
20°-30°	503.7	7.5
30°-40°	465.3	6.9
40°-50°	312.6	4.7
50°-60°	161.5	2.4
60°-70°	50.6	0.8
70°-80°	3.2	0.0
80°-90°	0.1	0.0
90°-100°	340.3	5.1
100°-110°	968.4	14.5
110°-120°	927.8	13.9
120°-130°	734.4	11.0
130°-140°	589.4	8.8
140°-150°	461.5	6.9
150°-160°	337.6	5.0
160°-170°	209.1	3.1
170°-180°	71.0	1.1
0°-30°	1063.4	15.9
0°-40°	1528.7	22.8
0°-60°	2002.8	29.9
0°-90°	2056.6	30.7
90°-120°	2236.6	33.4
90°-150°	4021.8	60.1
90°-180°	4640.0	69.3
0°-180°	6696.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1724	1724	1724	1724	1724	
5°	1690	1673	1686	1692	1698	157
15°	1394	1389	1438	1486	1518	388
25°	1011	1019	1091	1166	1220	463
35°	649	665	737	824	899	402
45°	311	330	385	460	532	244
55°	112	130	168	216	266	104
65°	12	24	53	64	72	21
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	37	147	659	228	141	42
105°	150	228	987	1743	1657	159
115°	280	338	748	1585	1862	275
125°	395	438	714	1185	1417	353
135°	483	523	706	1001	1132	373
145°	569	599	711	866	944	356
155°	650	666	728	783	815	301
165°	718	721	737	753	764	202
175°	753	748	746	741	736	71
180°	747	747	747	747	747	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1724.0	1724.0	1724.0	1724.0	1724.0
2.5°	1728.0	1711.7	1716.0	1715.9	1711.4
5°	1689.8	1672.7	1685.7	1691.7	1698.2
7.5°	1618.4	1605.1	1629.9	1648.6	1662.1
10°	1563.1	1551.6	1583.9	1609.4	1628.1
12.5°	1499.0	1490.2	1529.2	1564.1	1588.1
15°	1393.7	1388.8	1437.9	1486.2	1518.0
17.5°	1281.0	1280.8	1336.9	1396.8	1435.1
20°	1203.6	1206.0	1266.1	1332.2	1377.1
22.5°	1126.2	1131.9	1196.1	1265.0	1316.3
25°	1010.9	1019.1	1091.0	1165.6	1220.3
27.5°	900.1	912.0	987.7	1065.3	1131.8
30°	827.4	841.3	918.3	999.9	1068.5
32.5°	756.0	772.5	847.6	933.9	1003.7
35°	648.9	665.2	737.3	824.1	899.1
37.5°	538.3	554.3	624.7	710.1	791.2
40°	466.2	484.2	551.3	634.1	716.5
42.5°	400.9	418.8	481.9	563.3	641.1
45°	311.1	329.9	385.3	460.4	532.1
47.5°	236.7	257.1	305.8	373.7	439.1
50°	192.7	213.1	261.1	320.9	383.7
52.5°	157.3	177.0	220.4	276.7	334.3
55°	111.8	130.5	168.5	216.3	266.1
57.5°	77.2	93.4	127.4	167.4	206.4
60°	55.9	71.4	103.4	135.8	167.6
62.5°	37.2	51.4	82.7	107.6	128.9
65°	12.5	23.9	53.4	64.4	71.7
67.5°	6.3	7.6	28.0	29.6	32.0
70°	5.0	5.0	13.3	14.2	16.7
72.5°	3.7	3.7	5.3	6.9	7.3
75°	1.7	1.7	0.8	0.0	0.0
77.5°	0.8	0.8	0.7	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.4	60.2	139.7	40.7	30.7
95°	36.9	146.6	658.9	228.0	140.6
97.5°	67.9	171.7	1014.7	726.1	497.6
100°	89.5	186.6	1092.0	1106.1	852.0
102.5°	113.3	202.7	1074.9	1415.8	1193.9
105°	150.5	228.3	986.9	1743.2	1657.1
107.5°	188.3	258.0	884.1	1835.5	1912.1
110°	214.4	279.7	825.0	1800.2	1972.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	239.4	301.3	785.2	1716.7	1962.1
115°	279.7	338.0	748.3	1585.3	1861.6
117.5°	315.2	369.9	726.5	1441.7	1734.4
120°	343.6	389.5	724.2	1359.6	1640.1
122.5°	366.4	412.2	718.5	1287.6	1548.1
125°	394.8	437.8	714.2	1185.3	1417.1
127.5°	425.7	466.0	712.0	1124.1	1315.2
130°	441.6	481.9	708.6	1081.5	1248.2
132.5°	458.7	497.8	708.6	1048.3	1201.6
135°	482.8	523.1	705.7	1001.2	1131.7
137.5°	505.5	544.7	705.4	961.3	1074.1
140°	522.6	562.8	704.3	928.3	1036.6
142.5°	541.9	575.5	707.7	901.9	999.1
145°	569.4	598.6	711.4	866.5	944.3
147.5°	593.0	621.3	717.7	830.8	898.0
150°	613.4	632.9	719.9	819.0	866.2
152.5°	629.3	649.9	722.2	803.0	846.9
155°	650.3	665.6	728.4	783.1	815.1
157.5°	676.5	685.6	729.9	774.1	796.9
160°	690.1	697.1	735.5	767.2	786.7
162.5°	698.1	706.1	736.7	761.4	776.4
165°	718.5	721.3	737.0	752.8	763.9
167.5°	732.4	729.9	743.5	750.7	755.1
170°	737.0	735.6	741.2	742.8	748.3
172.5°	747.2	742.5	744.6	740.5	744.9
175°	752.6	748.4	745.5	741.1	735.5
177.5°	754.9	748.2	744.6	740.1	741.2
180°	746.9	746.9	746.9	746.9	746.9

(END OF REPORT)