

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: P521191

Luminaire Tested: SQ4-BB-100U-050D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521191
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-050D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6069.8 lumens
Efficiency: N/A
Efficacy: 115.2 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

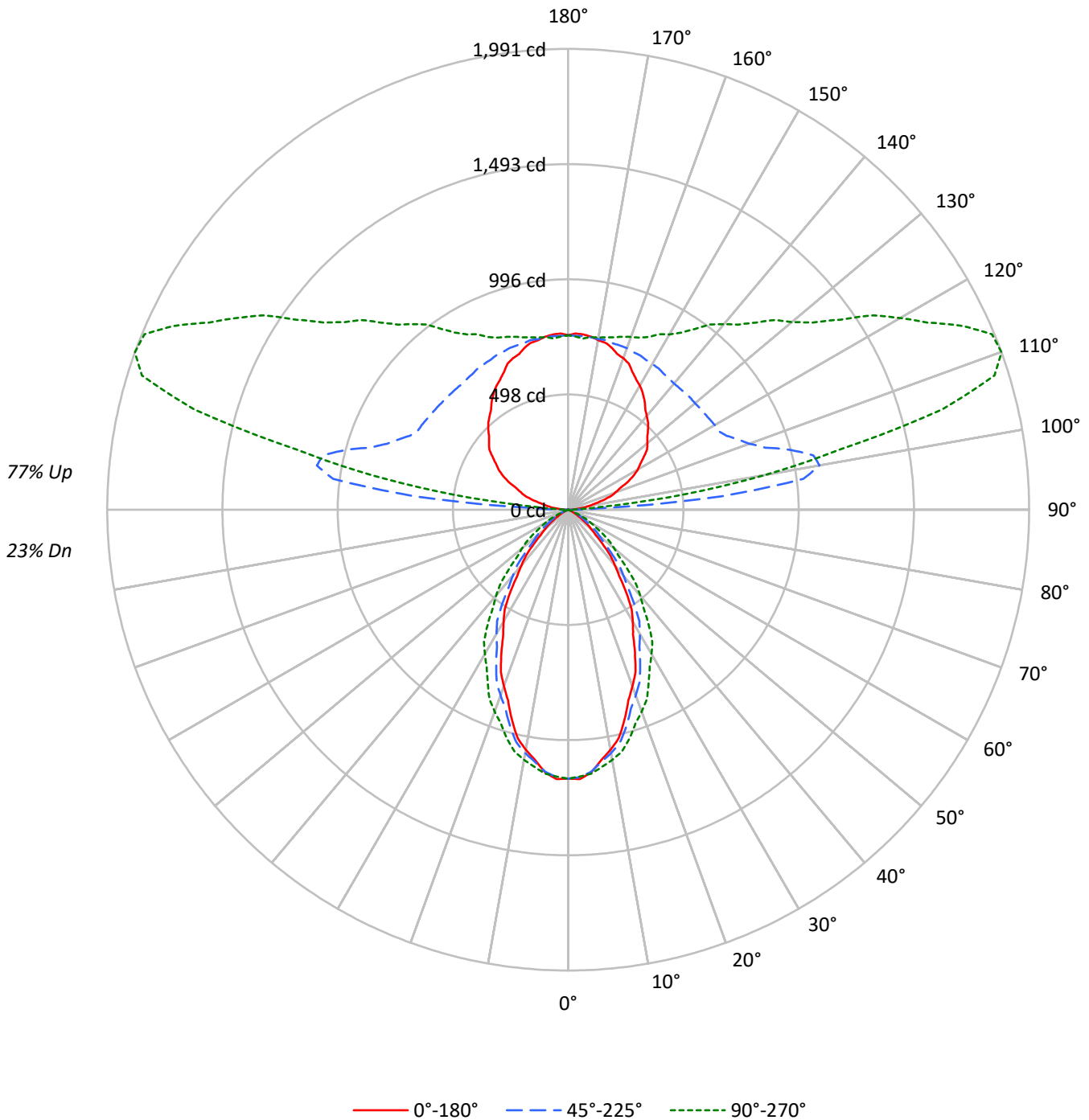
Input Watts (W): 52.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	23				
1	93	89	85	82	82	79	76	74	61	59	57	44	43	42	29	28	28	21				
2	85	78	73	68	75	70	66	62	54	51	49	40	38	37	26	25	25	19				
3	78	70	63	58	69	62	57	53	49	45	42	36	34	32	24	23	22	17				
4	72	62	55	50	64	56	50	45	44	40	36	32	30	28	22	21	20	15				
5	66	56	48	43	59	50	44	39	39	35	32	30	27	25	20	19	18	14				
6	61	50	43	37	54	45	39	34	36	31	28	27	24	22	19	17	16	13				
7	56	45	38	33	50	41	35	30	33	28	25	25	22	20	17	16	15	12				
8	52	41	34	29	47	37	31	27	30	25	22	23	20	18	16	15	13	11				
9	49	38	31	26	44	34	28	24	27	23	20	21	18	16	15	13	12	10				
10	46	35	28	24	41	31	26	22	25	21	18	20	17	15	14	12	11	9				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10722	10722	10722
5°	10549	10523	10602
10°	9871	10002	10281
15°	8974	9258	9773
20°	7966	8379	9113
25°	6937	7486	8373
30°	5941	6595	7673
35°	4926	5598	6827
40°	3785	4476	5816
45°	2736	3389	4680
50°	1865	2526	3712
55°	1211	1827	2884
60°	696	1286	2085
65°	183	786	1057
70°	92	243	302
75°	39	21	0
80°	32	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4680 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.1	1.7
10°-20°	271.2	4.5
20°-30°	339.5	5.6
30°-40°	313.6	5.2
40°-50°	210.7	3.5
50°-60°	108.8	1.8
60°-70°	34.1	0.6
70°-80°	2.2	0.0
80°-90°	0.0	0.0
90°-100°	343.6	5.7
100°-110°	977.6	16.1
110°-120°	936.6	15.4
120°-130°	741.3	12.2
130°-140°	595.0	9.8
140°-150°	465.8	7.7
150°-160°	340.8	5.6
160°-170°	211.1	3.5
170°-180°	71.6	1.2
0°-30°	716.8	11.8
0°-40°	1030.4	17.0
0°-60°	1350.0	22.2
0°-90°	1386.3	22.8
90°-120°	2257.8	37.2
90°-150°	4059.9	66.9
90°-180°	4684.0	77.2
0°-180°	6069.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1162	1162	1162	1162	1162	
5°	1139	1128	1136	1140	1145	106
15°	940	936	969	1002	1023	262
25°	681	687	735	786	822	312
35°	437	448	497	556	606	271
45°	210	222	260	310	359	165
55°	75	88	114	146	179	70
65°	8	16	36	43	48	14
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	37	148	665	230	142	43
105°	152	230	996	1760	1673	161
115°	282	341	755	1600	1879	278
125°	398	442	721	1196	1431	357
135°	487	528	712	1011	1142	376
145°	575	604	718	875	953	359
155°	656	672	735	791	823	303
165°	725	728	744	760	771	204
175°	760	756	753	748	742	72
180°	754	754	754	754	754	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1162.1	1162.1	1162.1	1162.1	1162.1
2.5°	1164.8	1153.8	1156.7	1156.6	1153.5
5°	1139.0	1127.5	1136.2	1140.3	1144.7
7.5°	1090.9	1081.9	1098.7	1111.2	1120.4
10°	1053.6	1045.9	1067.6	1084.8	1097.4
12.5°	1010.4	1004.5	1030.8	1054.3	1070.4
15°	939.5	936.2	969.3	1001.8	1023.2
17.5°	863.4	863.3	901.1	941.5	967.3
20°	811.3	812.9	853.4	898.0	928.2
22.5°	759.1	762.9	806.2	852.6	887.3
25°	681.4	686.9	735.4	785.7	822.5
27.5°	606.7	614.8	665.8	718.1	762.9
30°	557.7	567.1	619.0	674.0	720.2
32.5°	509.6	520.7	571.3	629.5	676.6
35°	437.4	448.4	497.0	555.5	606.1
37.5°	362.9	373.6	421.1	478.7	533.3
40°	314.3	326.4	371.6	427.4	482.9
42.5°	270.2	282.3	324.8	379.7	432.1
45°	209.7	222.3	259.7	310.3	358.7
47.5°	159.6	173.3	206.1	251.9	295.9
50°	129.9	143.6	176.0	216.3	258.6
52.5°	106.0	119.3	148.5	186.5	225.3
55°	75.3	88.0	113.6	145.8	179.3
57.5°	52.1	62.9	85.9	112.8	139.1
60°	37.7	48.1	69.7	91.6	113.0
62.5°	25.1	34.6	55.8	72.5	86.9
65°	8.4	16.1	36.0	43.4	48.4
67.5°	4.3	5.2	18.9	19.9	21.6
70°	3.4	3.4	9.0	9.6	11.2
72.5°	2.5	2.5	3.6	4.6	4.9
75°	1.1	1.1	0.6	0.0	0.0
77.5°	0.6	0.6	0.4	0.0	0.0
80°	0.6	0.6	0.0	0.0	0.0
82.5°	0.1	0.1	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°	11.5	60.8	141.1	41.1	31.0
95°	37.3	148.0	665.1	230.2	141.9
97.5°	68.5	173.4	1024.3	733.0	502.3
100°	90.3	188.4	1102.3	1116.6	860.1
102.5°	114.4	204.7	1085.1	1429.2	1205.2
105°	151.9	230.4	996.2	1759.7	1672.8
107.5°	190.1	260.4	892.5	1852.9	1930.3
110°	216.4	282.3	832.8	1817.3	1991.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	241.7	304.2	792.7	1732.9	1980.7
115°	282.4	341.3	755.4	1600.3	1879.2
117.5°	318.2	373.4	733.3	1455.4	1750.8
120°	346.9	393.1	731.1	1372.5	1655.6
122.5°	369.8	416.1	725.3	1299.8	1562.7
125°	398.5	441.9	721.0	1196.5	1430.6
127.5°	429.7	470.4	718.7	1134.8	1327.7
130°	445.8	486.4	715.3	1091.8	1260.0
132.5°	463.0	502.5	715.3	1058.2	1213.0
135°	487.4	528.0	712.4	1010.7	1142.5
137.5°	510.3	549.8	712.1	970.4	1084.3
140°	527.5	568.2	711.0	937.1	1046.4
142.5°	547.0	580.9	714.4	910.5	1008.6
145°	574.8	604.2	718.2	874.7	953.2
147.5°	598.6	627.2	724.5	838.7	906.5
150°	619.2	638.9	726.8	826.7	874.4
152.5°	635.3	656.0	729.0	810.6	854.9
155°	656.5	671.9	735.4	790.6	822.8
157.5°	682.9	692.1	736.8	781.5	804.4
160°	696.7	703.7	742.5	774.5	794.1
162.5°	704.7	712.8	743.7	768.7	783.8
165°	725.3	728.1	744.0	760.0	771.2
167.5°	739.4	736.8	750.6	757.8	762.3
170°	744.0	742.6	748.3	749.8	755.4
172.5°	754.3	749.5	751.7	747.5	752.0
175°	759.7	755.5	752.6	748.1	742.5
177.5°	762.0	755.3	751.7	747.1	748.3
180°	754.0	754.0	754.0	754.0	754.0

(END OF REPORT)