

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: P521185

Luminaire Tested: SQ4-BB-100U-050D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521185
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_3000K
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5533.9 lumens
Efficiency: N/A
Efficacy: 104.2 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

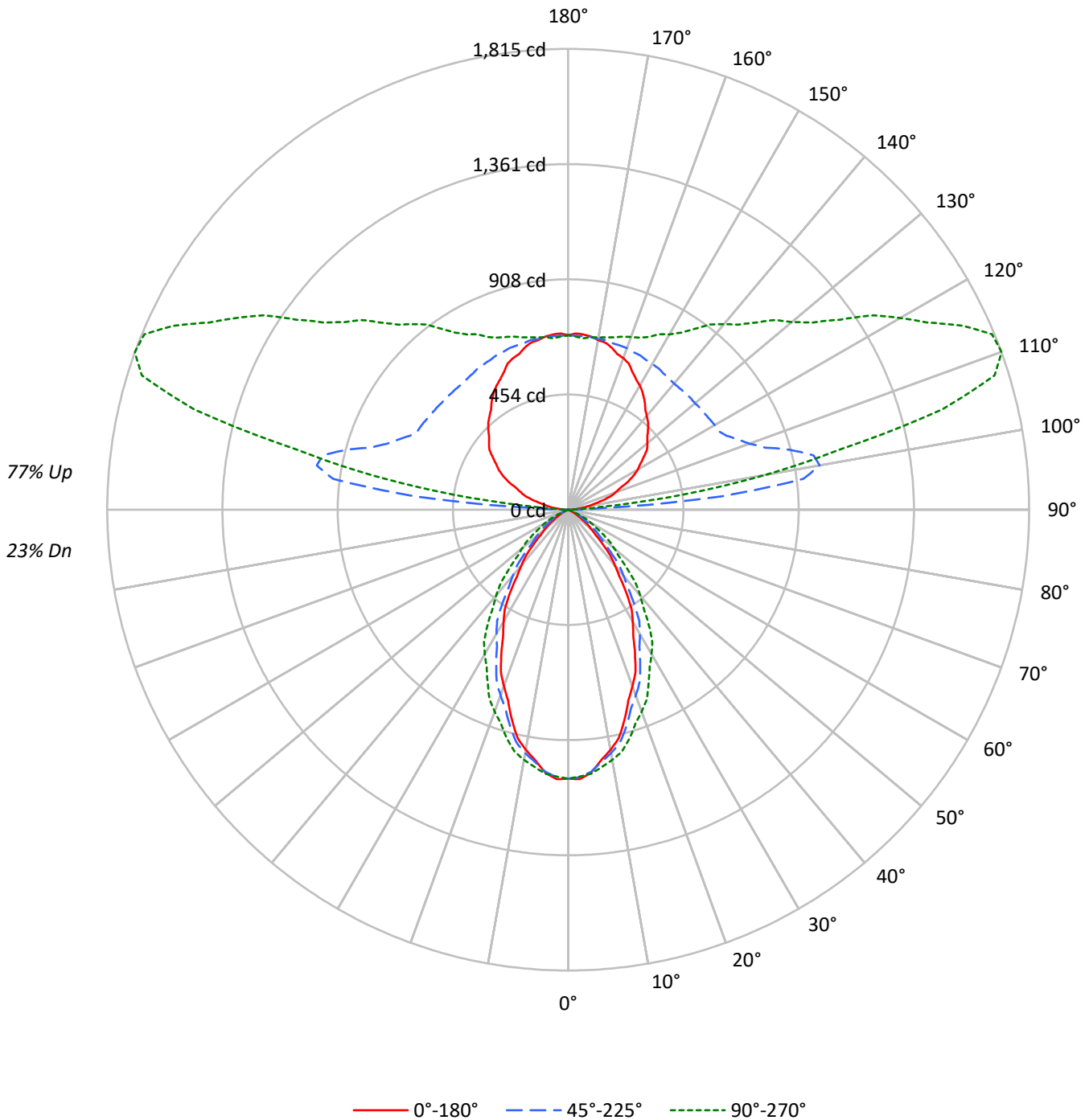
Input Watts (W): 53.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	9775	9775	9775
5°	9618	9594	9665
10°	8999	9119	9373
15°	8181	8441	8911
20°	7262	7640	8309
25°	6324	6825	7634
30°	5417	6012	6995
35°	4492	5103	6224
40°	3451	4080	5303
45°	2495	3090	4267
50°	1699	2302	3385
55°	1105	1665	2630
60°	633	1174	1901
65°	168	716	963
70°	84	221	278
75°	36	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4267 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.7	1.7
10°-20°	247.3	4.5
20°-30°	309.6	5.6
30°-40°	285.9	5.2
40°-50°	192.1	3.5
50°-60°	99.2	1.8
60°-70°	31.1	0.6
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	313.2	5.7
100°-110°	891.3	16.1
110°-120°	853.9	15.4
120°-130°	675.9	12.2
130°-140°	542.5	9.8
140°-150°	424.7	7.7
150°-160°	310.7	5.6
160°-170°	192.5	3.5
170°-180°	65.3	1.2
0°-30°	653.5	11.8
0°-40°	939.4	17.0
0°-60°	1230.8	22.2
0°-90°	1263.9	22.8
90°-120°	2058.5	37.2
90°-150°	3701.5	66.9
90°-180°	4270.0	77.2
0°-180°	5533.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1038	1028	1036	1040	1044	96
15°	856	854	884	913	933	239
25°	621	626	670	716	750	285
35°	399	409	453	506	553	247
45°	191	203	237	283	327	150
55°	69	80	104	133	164	64
65°	8	15	33	40	44	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	34	135	606	210	129	39
105°	138	210	908	1604	1525	147
115°	258	311	689	1459	1713	253
125°	363	403	657	1091	1304	325
135°	444	481	650	922	1042	343
145°	524	551	655	798	869	327
155°	599	613	670	721	750	277
165°	661	664	678	693	703	186
175°	693	689	686	682	677	66
180°	687	687	687	687	687	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1059.5	1059.5	1059.5	1059.5	1059.5
2.5°	1062.0	1051.9	1054.6	1054.5	1051.7
5°	1038.5	1028.0	1035.9	1039.6	1043.6
7.5°	994.6	986.4	1001.7	1013.1	1021.5
10°	960.6	953.5	973.4	989.0	1000.5
12.5°	921.2	915.8	939.8	961.2	975.9
15°	856.5	853.5	883.7	913.3	932.9
17.5°	787.2	787.1	821.6	858.4	881.9
20°	739.6	741.1	778.1	818.7	846.3
22.5°	692.1	695.6	735.0	777.4	808.9
25°	621.2	626.3	670.4	716.3	749.9
27.5°	553.2	560.5	607.0	654.7	695.6
30°	508.5	517.0	564.3	614.5	656.6
32.5°	464.6	474.7	520.9	573.9	616.8
35°	398.8	408.8	453.1	506.4	552.6
37.5°	330.8	340.6	383.9	436.4	486.2
40°	286.5	297.6	338.8	389.7	440.3
42.5°	246.3	257.4	296.2	346.2	394.0
45°	191.2	202.7	236.8	282.9	327.0
47.5°	145.5	158.0	187.9	229.6	269.8
50°	118.4	130.9	160.4	197.2	235.8
52.5°	96.7	108.8	135.4	170.1	205.4
55°	68.7	80.2	103.5	132.9	163.5
57.5°	47.5	57.4	78.3	102.9	126.8
60°	34.3	43.9	63.6	83.5	103.0
62.5°	22.9	31.6	50.8	66.1	79.2
65°	7.7	14.7	32.8	39.6	44.1
67.5°	3.9	4.7	17.2	18.2	19.7
70°	3.1	3.1	8.2	8.7	10.3
72.5°	2.3	2.3	3.3	4.2	4.5
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	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°	10.5	55.4	128.6	37.4	28.2
95°	34.0	134.9	606.4	209.9	129.4
97.5°	62.5	158.1	933.9	668.3	457.9
100°	82.3	171.8	1005.0	1018.0	784.1
102.5°	104.3	186.6	989.3	1303.0	1098.8
105°	138.5	210.1	908.3	1604.4	1525.1
107.5°	173.3	237.4	813.7	1689.3	1759.9
110°	197.3	257.4	759.3	1656.8	1815.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.3	277.3	722.7	1579.9	1805.9
115°	257.5	311.1	688.7	1459.0	1713.3
117.5°	290.1	340.5	668.6	1326.9	1596.2
120°	316.3	358.4	666.5	1251.3	1509.5
122.5°	337.2	379.3	661.3	1185.0	1424.8
125°	363.3	402.9	657.4	1090.9	1304.3
127.5°	391.8	428.9	655.3	1034.6	1210.4
130°	406.4	443.5	652.1	995.4	1148.8
132.5°	422.1	458.2	652.1	964.8	1105.9
135°	444.3	481.4	649.5	921.5	1041.6
137.5°	465.3	501.3	649.3	884.8	988.5
140°	480.9	518.0	648.2	854.4	954.0
142.5°	498.7	529.6	651.4	830.1	919.5
145°	524.1	550.9	654.8	797.5	869.1
147.5°	545.8	571.8	660.5	764.6	826.5
150°	564.6	582.5	662.6	753.8	797.2
152.5°	579.2	598.1	664.7	739.0	779.4
155°	598.6	612.6	670.4	720.8	750.2
157.5°	622.6	631.0	671.7	712.5	733.4
160°	635.1	641.5	677.0	706.1	724.0
162.5°	642.5	649.9	678.0	700.8	714.6
165°	661.3	663.8	678.3	692.9	703.1
167.5°	674.1	671.8	684.3	690.9	695.0
170°	678.3	677.0	682.2	683.6	688.7
172.5°	687.7	683.3	685.3	681.5	685.6
175°	692.7	688.8	686.1	682.1	677.0
177.5°	694.7	688.6	685.3	681.2	682.2
180°	687.4	687.4	687.4	687.4	687.4

(END OF REPORT)