

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: P521187

Luminaire Tested: SQ4-BB-100U-050D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521187
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_4000K
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 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5770.4 lumens
Efficiency: N/A
Efficacy: 108.7 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

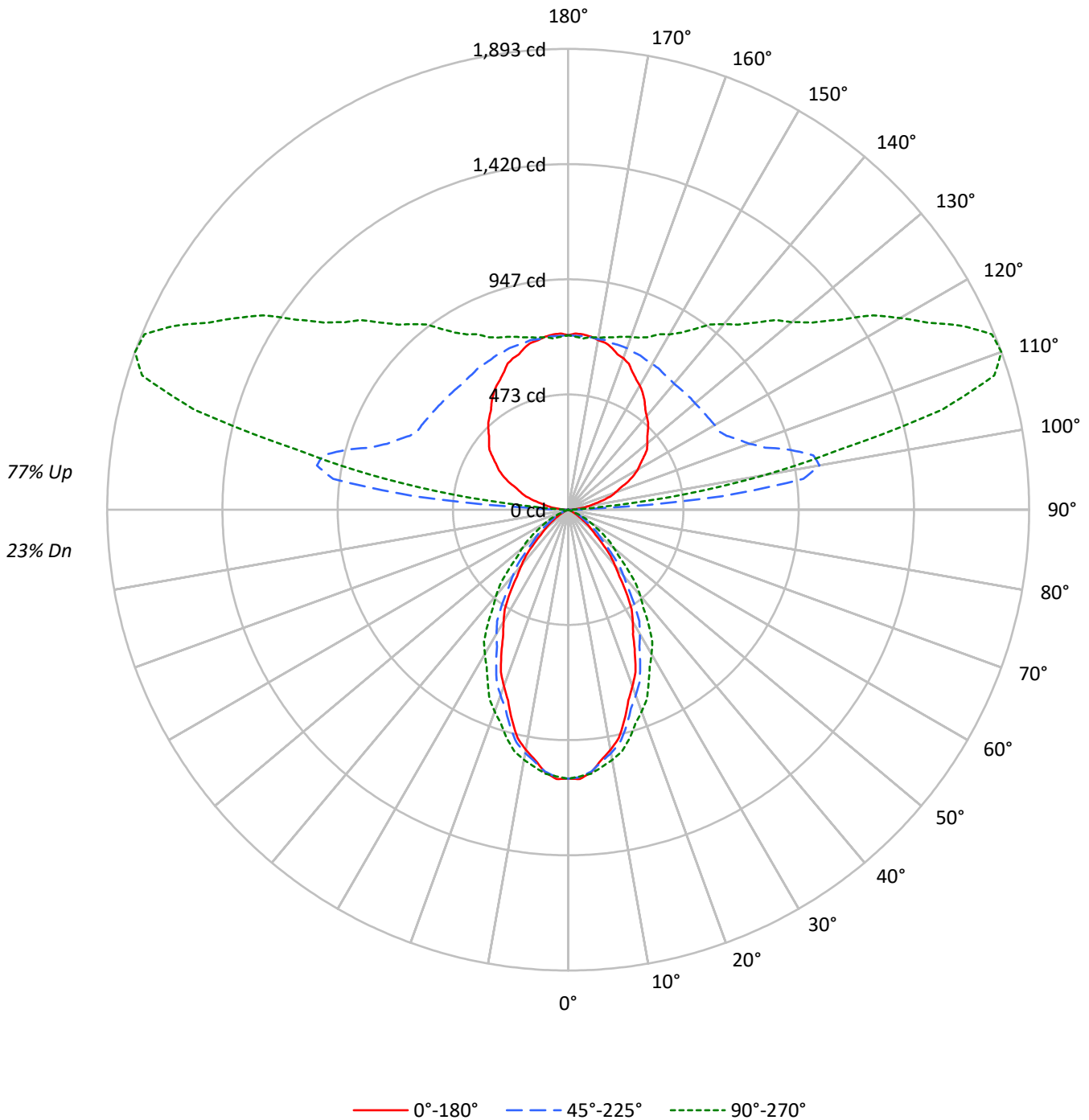
Input Watts (W): 53.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	10193	10193	10193
5°	10029	10004	10078
10°	9384	9509	9774
15°	8531	8801	9291
20°	7573	7966	8664
25°	6595	7117	7960
30°	5648	6270	7294
35°	4683	5322	6490
40°	3599	4255	5529
45°	2602	3222	4449
50°	1773	2401	3530
55°	1152	1737	2743
60°	661	1223	1982
65°	175	747	1004
70°	86	232	289
75°	39	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4449 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.8	1.7
10°-20°	257.8	4.5
20°-30°	322.8	5.6
30°-40°	298.2	5.2
40°-50°	200.3	3.5
50°-60°	103.5	1.8
60°-70°	32.4	0.6
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	326.6	5.7
100°-110°	929.4	16.1
110°-120°	890.4	15.4
120°-130°	704.7	12.2
130°-140°	565.7	9.8
140°-150°	442.8	7.7
150°-160°	324.0	5.6
160°-170°	200.7	3.5
170°-180°	68.1	1.2
0°-30°	681.4	11.8
0°-40°	979.6	17.0
0°-60°	1283.4	22.2
0°-90°	1317.9	22.8
90°-120°	2146.4	37.2
90°-150°	3859.7	66.9
90°-180°	4453.0	77.2
0°-180°	5770.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1083	1072	1080	1084	1088	100
15°	893	890	921	952	973	249
25°	648	653	699	747	782	297
35°	416	426	472	528	576	258
45°	199	211	247	295	341	157
55°	72	84	108	139	170	67
65°	8	15	34	41	46	14
75°	1	1	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	35	141	632	219	135	40
105°	144	219	947	1673	1590	153
115°	268	324	718	1521	1786	264
125°	379	420	686	1138	1360	339
135°	463	502	677	961	1086	358
145°	546	574	683	832	906	341
155°	624	639	699	752	782	289
165°	690	692	707	722	733	194
175°	722	718	715	711	706	68
180°	717	717	717	717	717	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1104.8	1104.8	1104.8	1104.8	1104.8
2.5°	1107.3	1096.9	1099.6	1099.6	1096.6
5°	1082.9	1071.9	1080.2	1084.0	1088.2
7.5°	1037.1	1028.5	1044.5	1056.4	1065.1
10°	1001.6	994.3	1015.0	1031.3	1043.3
12.5°	960.6	954.9	979.9	1002.3	1017.6
15°	893.1	890.0	921.4	952.4	972.7
17.5°	820.9	820.7	856.7	895.1	919.6
20°	771.3	772.8	811.3	853.7	882.4
22.5°	721.7	725.3	766.4	810.6	843.5
25°	647.8	653.0	699.1	746.9	781.9
27.5°	576.8	584.4	632.9	682.6	725.3
30°	530.2	539.1	588.5	640.8	684.7
32.5°	484.5	495.0	543.1	598.5	643.2
35°	415.8	426.3	472.5	528.1	576.2
37.5°	345.0	355.2	400.3	455.1	507.0
40°	298.8	310.3	353.3	406.3	459.1
42.5°	256.9	268.4	308.8	360.9	410.8
45°	199.4	211.4	246.9	295.0	341.0
47.5°	151.7	164.7	195.9	239.4	281.3
50°	123.5	136.5	167.3	205.6	245.9
52.5°	100.8	113.4	141.2	177.3	214.2
55°	71.6	83.6	108.0	138.6	170.5
57.5°	49.5	59.8	81.7	107.2	132.2
60°	35.8	45.7	66.3	87.0	107.4
62.5°	23.8	32.9	53.0	68.9	82.6
65°	8.0	15.3	34.2	41.3	46.0
67.5°	4.1	4.9	18.0	19.0	20.5
70°	3.2	3.2	8.6	9.1	10.7
72.5°	2.4	2.4	3.4	4.4	4.7
75°	1.1	1.1	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°	10.9	57.8	134.1	39.0	29.4
95°	35.4	140.7	632.3	218.9	134.9
97.5°	65.1	164.8	973.8	696.8	477.5
100°	85.9	179.1	1047.9	1061.5	817.6
102.5°	108.7	194.6	1031.6	1358.7	1145.8
105°	144.4	219.1	947.1	1672.9	1590.3
107.5°	180.7	247.6	848.4	1761.5	1835.1
110°	205.8	268.4	791.7	1727.6	1892.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	229.8	289.2	753.6	1647.4	1883.0
115°	268.5	324.4	718.2	1521.4	1786.5
117.5°	302.5	355.0	697.2	1383.6	1664.4
120°	329.8	373.8	695.0	1304.8	1574.0
122.5°	351.6	395.6	689.5	1235.7	1485.7
125°	378.8	420.1	685.5	1137.5	1360.0
127.5°	408.5	447.2	683.3	1078.8	1262.2
130°	423.8	462.5	680.0	1037.9	1197.8
132.5°	440.2	477.7	680.0	1006.0	1153.1
135°	463.3	502.0	677.3	960.8	1086.1
137.5°	485.1	522.7	677.0	922.6	1030.8
140°	501.5	540.1	675.9	890.9	994.8
142.5°	520.0	552.3	679.2	865.5	958.8
145°	546.5	574.4	682.7	831.6	906.2
147.5°	569.1	596.3	688.7	797.3	861.8
150°	588.7	607.4	690.9	786.0	831.3
152.5°	604.0	623.7	693.1	770.6	812.7
155°	624.1	638.8	699.1	751.6	782.2
157.5°	649.2	658.0	700.4	742.9	764.8
160°	662.3	668.9	705.9	736.3	755.0
162.5°	669.9	677.6	707.0	730.8	745.1
165°	689.5	692.2	707.3	722.5	733.1
167.5°	702.9	700.5	713.5	720.4	724.7
170°	707.3	705.9	711.3	712.8	718.2
172.5°	717.1	712.5	714.6	710.6	714.9
175°	722.2	718.3	715.4	711.2	705.9
177.5°	724.4	718.0	714.6	710.3	711.3
180°	716.8	716.8	716.8	716.8	716.8

(END OF REPORT)