

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: P521226

Luminaire Tested: SQ4-BB-100U-125D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521226
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-125D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 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: 7737.4 lumens
Efficiency: N/A
Efficacy: 87.7 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: General Diffuse

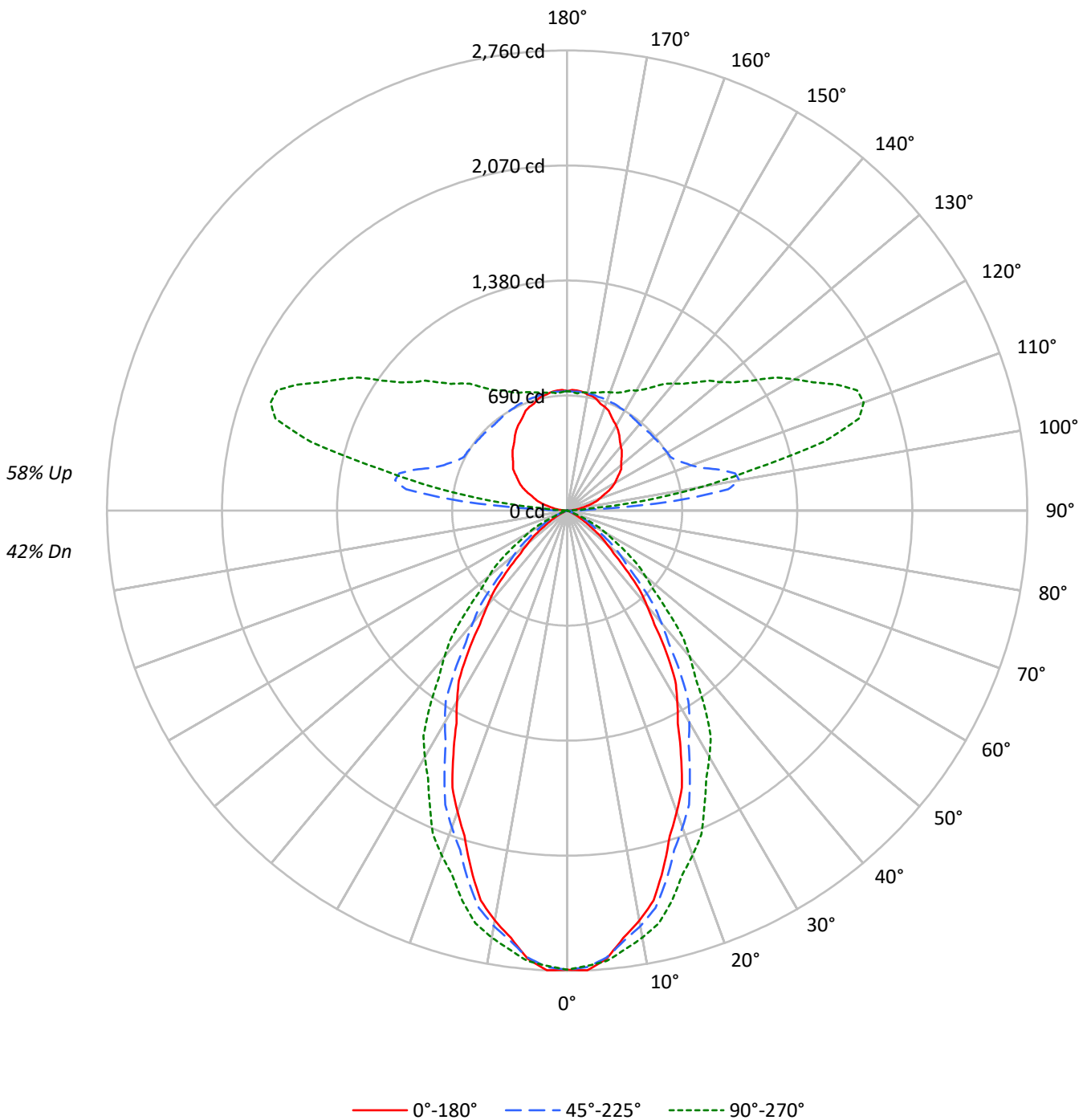
Input Watts (W): 88.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	98	94	91	88	89	86	83	81	72	70	68	58	57	56	46	45	44	39
2	90	84	79	74	82	77	73	69	65	61	59	53	51	49	42	41	40	35
3	83	75	69	64	76	69	64	60	58	55	51	48	46	43	39	37	36	32
4	77	68	61	55	71	62	57	52	53	49	45	44	41	39	36	34	32	29
5	71	61	54	49	65	57	50	46	48	44	40	40	37	35	33	31	29	26
6	66	55	48	43	61	51	45	41	44	39	36	37	34	31	31	28	27	24
7	62	51	43	38	57	47	41	36	40	36	32	34	31	28	29	26	24	22
8	57	46	39	34	53	43	37	33	37	33	29	32	28	26	27	24	22	20
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	22	21	19
10	50	39	33	28	47	37	31	27	32	28	24	28	24	22	23	21	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25406	25406	25406
5°	24998	24936	25121
10°	23389	23701	24363
15°	21263	21937	23159
20°	18875	19856	21595
25°	16438	17739	19841
30°	14080	15627	18181
35°	11674	13265	16175
40°	8969	10606	13783
45°	6483	8031	11091
50°	4417	5985	8796
55°	2871	4329	6836
60°	1648	3048	4942
65°	437	1862	2502
70°	216	575	718
75°	96	46	0
80°	69	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11091 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.3	3.2
10°-20°	642.7	8.3
20°-30°	804.6	10.4
30°-40°	743.1	9.6
40°-50°	499.4	6.5
50°-60°	257.9	3.3
60°-70°	80.8	1.0
70°-80°	5.1	0.1
80°-90°	0.1	0.0
90°-100°	326.6	4.2
100°-110°	929.4	12.0
110°-120°	890.4	11.5
120°-130°	704.7	9.1
130°-140°	565.7	7.3
140°-150°	442.8	5.7
150°-160°	324.0	4.2
160°-170°	200.7	2.6
170°-180°	68.1	0.9
0°-30°	1698.5	22.0
0°-40°	2441.7	31.6
0°-60°	3199.0	41.3
0°-90°	3284.9	42.5
90°-120°	2146.4	27.7
90°-150°	3859.7	49.9
90°-180°	4453.0	57.6
0°-180°	7737.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2754	2754	2754	2754	2754	
5°	2699	2672	2692	2702	2712	250
15°	2226	2218	2297	2374	2425	620
25°	1615	1628	1742	1862	1949	740
35°	1036	1062	1178	1316	1436	642
45°	497	527	616	735	850	390
55°	178	208	269	346	425	167
65°	20	38	85	103	115	34
75°	3	3	1	0	0	4
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°	2753.7	2753.7	2753.7	2753.7	2753.7
2.5°	2760.1	2734.0	2740.9	2740.7	2733.5
5°	2699.1	2671.7	2692.4	2702.0	2712.4
7.5°	2585.0	2563.7	2603.4	2633.2	2654.8
10°	2496.6	2478.3	2529.9	2570.5	2600.5
12.5°	2394.3	2380.2	2442.5	2498.3	2536.5
15°	2226.1	2218.3	2296.7	2373.8	2424.6
17.5°	2046.0	2045.8	2135.3	2231.0	2292.2
20°	1922.4	1926.3	2022.3	2127.9	2199.5
22.5°	1798.8	1807.9	1910.4	2020.4	2102.5
25°	1614.7	1627.7	1742.5	1861.8	1949.0
27.5°	1437.7	1456.8	1577.6	1701.5	1807.8
30°	1321.6	1343.7	1466.8	1597.2	1706.6
32.5°	1207.5	1233.8	1353.8	1491.7	1603.2
35°	1036.5	1062.5	1177.7	1316.3	1436.1
37.5°	859.8	885.3	997.8	1134.3	1263.7
40°	744.7	773.4	880.6	1012.8	1144.4
42.5°	640.3	668.9	769.8	899.7	1023.9
45°	496.9	526.9	615.5	735.3	850.0
47.5°	378.1	410.6	488.4	596.8	701.3
50°	307.7	340.3	417.0	512.5	612.8
52.5°	251.3	282.8	352.0	442.0	534.0
55°	178.5	208.5	269.1	345.5	425.0
57.5°	123.4	149.2	203.6	267.3	329.6
60°	89.3	114.0	165.2	217.0	267.8
62.5°	59.4	82.1	132.2	171.8	206.0
65°	20.0	38.2	85.3	102.8	114.6
67.5°	10.1	12.2	44.8	47.2	51.2
70°	8.0	8.0	21.3	22.7	26.6
72.5°	5.9	5.9	8.5	10.9	11.7
75°	2.7	2.7	1.3	0.0	0.0
77.5°	1.3	1.3	1.1	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	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)