

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: P521229

Luminaire Tested: SQ4-BB-100U-125D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521229
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_5700K
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 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8062.5 lumens
Efficiency: N/A
Efficacy: 91.7 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

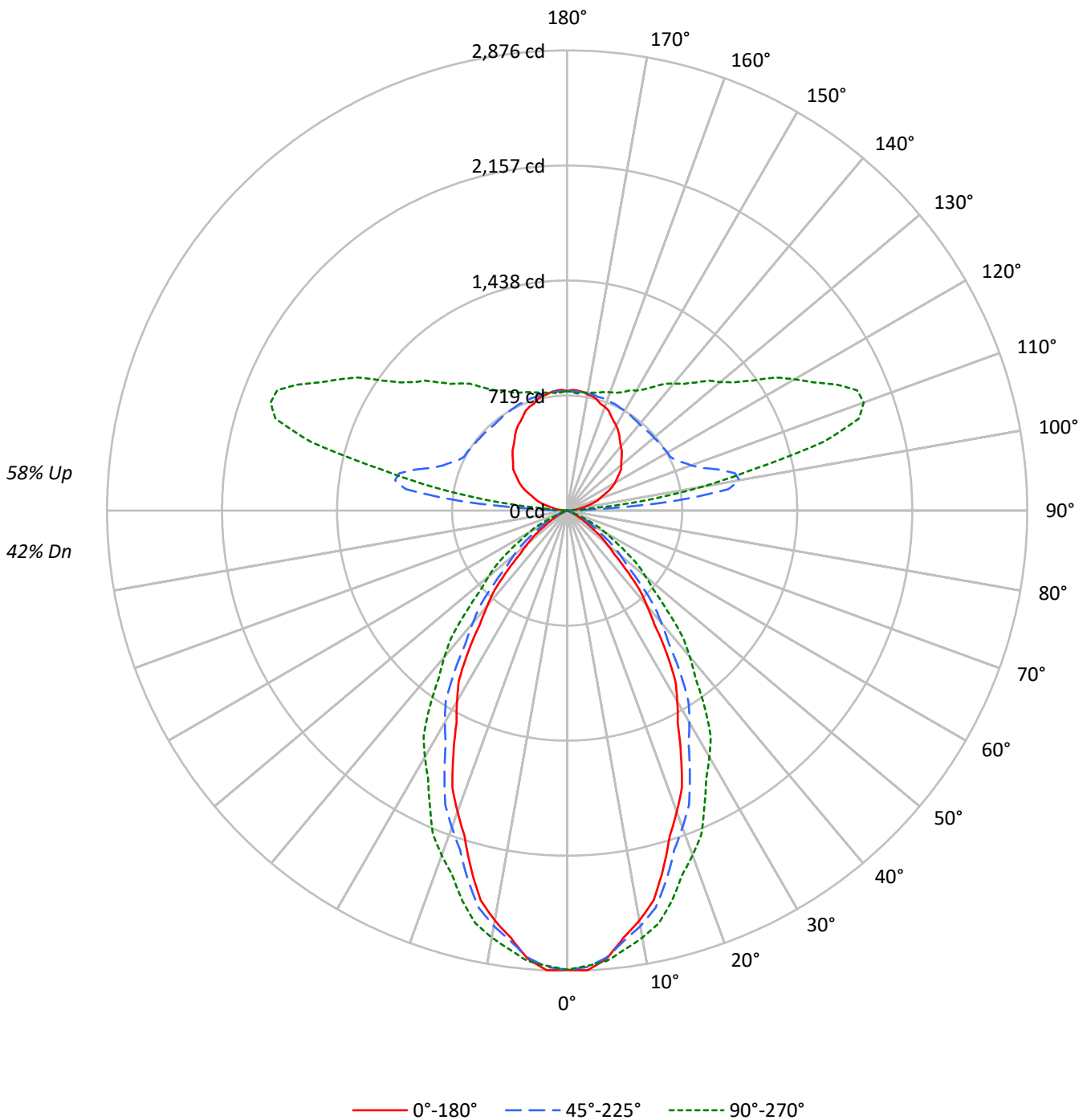
Input Watts (W): 87.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									70									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	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	42	42	42	42	42	42													
1	98	94	91	88	89	86	83	81	72	70	68	58	57	56	46	45	44	39	39	39	39	39	39	39													
2	90	84	79	74	82	77	73	69	65	61	59	53	51	49	42	41	40	35	35	35	35	35	35	35													
3	83	75	69	64	76	69	64	60	58	55	51	48	46	43	39	37	36	32	32	32	32	32	32	32													
4	77	68	61	55	71	62	57	52	53	49	45	44	41	39	36	34	32	29	29	29	29	29	29	29													
5	71	61	54	49	65	57	50	46	48	44	40	40	37	35	33	31	29	26	26	26	26	26	26	26													
6	66	55	48	43	61	51	45	41	44	39	36	37	34	31	31	28	27	24	24	24	24	24	24	24													
7	62	51	43	38	57	47	41	36	40	36	32	34	31	28	29	26	24	22	22	22	22	22	22	22													
8	57	46	39	34	53	43	37	33	37	33	29	32	28	26	27	24	22	20	20	20	20	20	20	20													
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	22	21	19	19	19	19	19	19	19													
10	50	39	33	28	47	37	31	27	32	28	24	28	24	22	23	21	19	17	17	17	17	17	17	17													

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26474	26474	26474
5°	26048	25983	26176
10°	24372	24697	25386
15°	22157	22859	24132
20°	19668	20690	22503
25°	17128	18484	20675
30°	14671	16283	18945
35°	12164	13822	16855
40°	9346	11052	14362
45°	6756	8368	11556
50°	4603	6237	9166
55°	2992	4510	7123
60°	1716	3176	5148
65°	454	1939	2607
70°	224	599	750
75°	100	50	0
80°	74	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11556 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.9	3.2
10°-20°	669.7	8.3
20°-30°	838.4	10.4
30°-40°	774.4	9.6
40°-50°	520.3	6.5
50°-60°	268.8	3.3
60°-70°	84.2	1.0
70°-80°	5.3	0.1
80°-90°	0.1	0.0
90°-100°	340.3	4.2
100°-110°	968.4	12.0
110°-120°	927.8	11.5
120°-130°	734.4	9.1
130°-140°	589.4	7.3
140°-150°	461.5	5.7
150°-160°	337.6	4.2
160°-170°	209.1	2.6
170°-180°	71.0	0.9
0°-30°	1769.9	22.0
0°-40°	2544.3	31.6
0°-60°	3333.3	41.3
0°-90°	3422.9	42.5
90°-120°	2236.6	27.7
90°-150°	4021.8	49.9
90°-180°	4640.0	57.6
0°-180°	8062.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2869	2869	2869	2869	2869	
5°	2812	2784	2806	2816	2826	261
15°	2320	2312	2393	2474	2526	646
25°	1682	1696	1816	1940	2031	771
35°	1080	1107	1227	1372	1496	669
45°	518	549	641	766	886	407
55°	186	217	280	360	443	174
65°	21	40	89	107	119	35
75°	3	3	1	0	0	4
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°	2869.4	2869.4	2869.4	2869.4	2869.4
2.5°	2876.0	2848.9	2856.1	2855.9	2848.3
5°	2812.5	2784.0	2805.5	2815.5	2826.3
7.5°	2693.6	2671.4	2712.8	2743.8	2766.4
10°	2601.5	2582.5	2636.2	2678.5	2709.7
12.5°	2494.8	2480.2	2545.1	2603.2	2643.1
15°	2319.7	2311.5	2393.2	2473.6	2526.5
17.5°	2132.0	2131.7	2225.0	2324.7	2388.5
20°	2003.2	2007.2	2107.3	2217.2	2291.9
22.5°	1874.3	1883.8	1990.7	2105.3	2190.8
25°	1682.5	1696.1	1815.7	1940.0	2030.9
27.5°	1498.1	1517.9	1643.9	1773.0	1883.8
30°	1377.1	1400.2	1528.4	1664.2	1778.3
32.5°	1258.3	1285.7	1410.7	1554.4	1670.5
35°	1080.0	1107.2	1227.2	1371.6	1496.5
37.5°	895.9	922.5	1039.8	1181.9	1316.8
40°	776.0	805.9	917.6	1055.4	1192.5
42.5°	667.2	697.0	802.1	937.5	1067.0
45°	517.8	549.0	641.3	766.2	885.7
47.5°	394.0	427.9	508.9	621.9	730.7
50°	320.7	354.6	434.5	534.0	638.6
52.5°	261.8	294.7	366.8	460.6	556.4
55°	186.0	217.2	280.4	360.0	442.8
57.5°	128.5	155.4	212.1	278.6	343.4
60°	93.0	118.8	172.1	226.1	279.0
62.5°	61.9	85.5	137.7	179.1	214.6
65°	20.8	39.8	88.8	107.2	119.4
67.5°	10.6	12.7	46.6	49.2	53.3
70°	8.3	8.3	22.2	23.7	27.8
72.5°	6.1	6.1	8.9	11.4	12.2
75°	2.8	2.8	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	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°	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)