

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: P521567

Luminaire Tested: SQ4-F-100U-075D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521567
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-37)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-100U-075D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 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: 7953.3 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

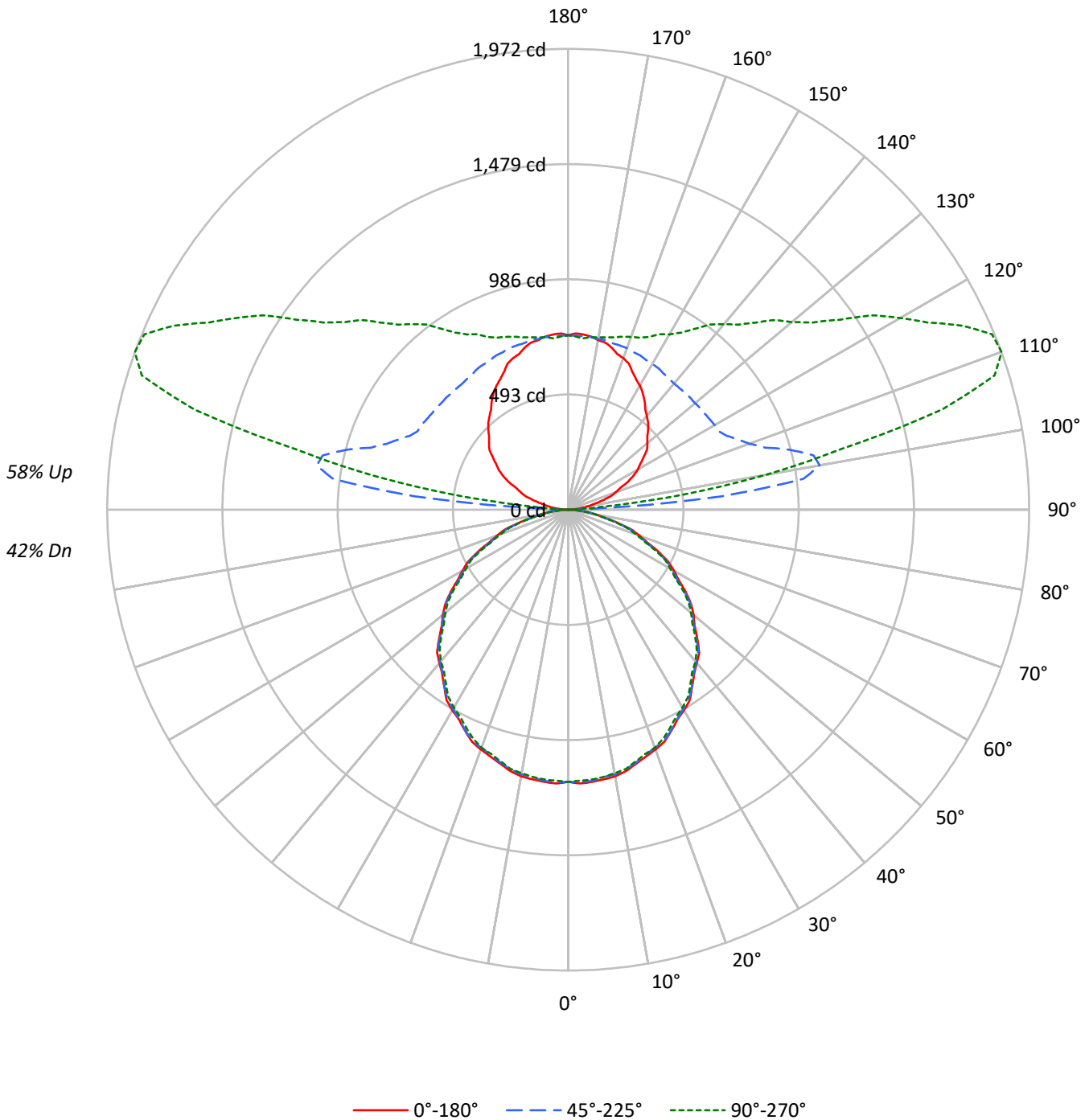
Input Watts (W): 64.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0
RCR																				
0	105	105	105	105	96	96	96	96	79	79	79		63	63	63		48	48	48	42
1	96	91	88	84	87	84	80	77	69	66	64		55	54	52		43	42	41	35
2	87	80	74	68	79	73	68	63	60	56	53		48	46	43		37	36	34	29
3	79	70	63	57	72	64	58	53	53	48	44		43	39	36		33	31	29	24
4	72	62	54	48	66	57	50	44	47	42	38		38	34	31		29	27	25	21
5	66	55	47	41	60	50	43	38	42	36	32		34	30	27		26	24	21	18
6	61	49	41	35	55	45	38	33	38	32	28		30	26	23		24	21	19	16
7	56	44	36	31	51	41	34	29	34	29	25		28	24	21		22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22		25	21	18		20	17	15	12
9	49	36	29	24	44	34	27	22	28	23	19		23	19	16		18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17		21	17	15		17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10749	10749	10749
5°	10829	10791	10731
10°	10855	10776	10726
15°	10743	10703	10652
20°	10720	10647	10637
25°	10629	10608	10488
30°	10558	10491	10411
35°	10409	10397	10266
40°	10313	10261	10198
45°	10189	10134	10023
50°	10052	9976	9839
55°	9865	9746	9609
60°	9632	9477	9300
65°	9313	9104	8942
70°	8729	8530	8330
75°	7867	7639	7529
80°	6429	6482	6370
85°	4605	5282	5282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10189 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.4	1.4
10°-20°	315.7	4.0
20°-30°	477.7	6.0
30°-40°	574.5	7.2
40°-50°	596.5	7.5
50°-60°	540.4	6.8
60°-70°	411.1	5.2
70°-80°	228.5	2.9
80°-90°	58.9	0.7
90°-100°	340.3	4.3
100°-110°	968.4	12.2
110°-120°	927.8	11.7
120°-130°	734.4	9.2
130°-140°	589.4	7.4
140°-150°	461.5	5.8
150°-160°	337.6	4.2
160°-170°	209.1	2.6
170°-180°	71.0	0.9
0°-30°	903.8	11.4
0°-40°	1478.3	18.6
0°-60°	2615.3	32.9
0°-90°	3313.7	41.7
90°-120°	2236.6	28.1
90°-150°	4021.8	50.6
90°-180°	4640.0	58.3
0°-180°	7953.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1165	1165	1165	1165	1165	
5°	1169	1159	1165	1160	1159	111
15°	1125	1115	1120	1119	1115	318
25°	1044	1035	1042	1031	1030	481
35°	924	920	923	912	912	579
45°	781	776	777	768	768	603
55°	613	612	606	600	597	547
65°	427	420	417	411	410	420
75°	221	218	214	212	211	234
85°	44	47	50	50	50	54
90°	0	0	0	0	0	3
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°	1165.1	1165.1	1165.1	1165.1	1165.1
2.5°	1172.7	1162.7	1165.9	1163.3	1160.8
5°	1169.3	1158.9	1165.1	1159.7	1158.7
7.5°	1163.8	1151.5	1154.4	1153.4	1153.4
10°	1158.7	1143.1	1150.2	1144.9	1144.9
12.5°	1145.1	1132.0	1137.5	1134.7	1136.4
15°	1124.7	1115.4	1120.5	1119.3	1115.2
17.5°	1107.1	1095.9	1099.7	1097.7	1096.1
20°	1091.8	1081.5	1084.4	1079.2	1083.4
22.5°	1074.9	1064.5	1070.0	1061.3	1061.3
25°	1044.1	1034.8	1042.0	1031.3	1030.3
27.5°	1011.4	1005.4	1010.1	1002.2	999.3
30°	991.0	981.7	984.7	979.3	977.2
32.5°	967.3	957.9	960.9	951.4	952.6
35°	924.2	920.0	923.1	912.5	911.5
37.5°	885.1	876.8	881.8	873.0	872.2
40°	856.3	848.0	852.0	846.7	846.7
42.5°	830.0	820.8	823.2	816.1	813.6
45°	780.9	775.8	776.7	768.2	768.2
47.5°	732.6	728.8	727.3	718.6	720.3
50°	700.3	694.1	695.0	685.5	685.5
52.5°	663.0	663.4	659.4	653.1	648.1
55°	613.3	612.3	605.9	600.5	597.4
57.5°	560.2	555.5	550.9	543.7	543.1
60°	522.0	518.9	513.6	507.1	504.0
62.5°	483.0	479.9	474.5	469.0	468.4
65°	426.6	420.3	417.0	410.6	409.6
67.5°	365.2	360.2	356.1	351.0	350.4
70°	323.6	319.5	316.2	311.9	308.8
72.5°	285.4	278.8	275.5	272.0	269.7
75°	220.7	217.6	214.3	212.2	211.2
77.5°	158.3	158.5	158.5	155.7	154.7
80°	121.0	122.0	122.0	120.9	119.9
82.5°	87.9	89.7	90.6	89.5	89.3
85°	43.5	46.6	49.9	49.9	49.9
87.5°	11.9	16.0	19.5	20.4	19.5
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)