

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: P521657

Luminaire Tested: SQ4-F-150U-050D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521657
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-36)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-150U-050D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

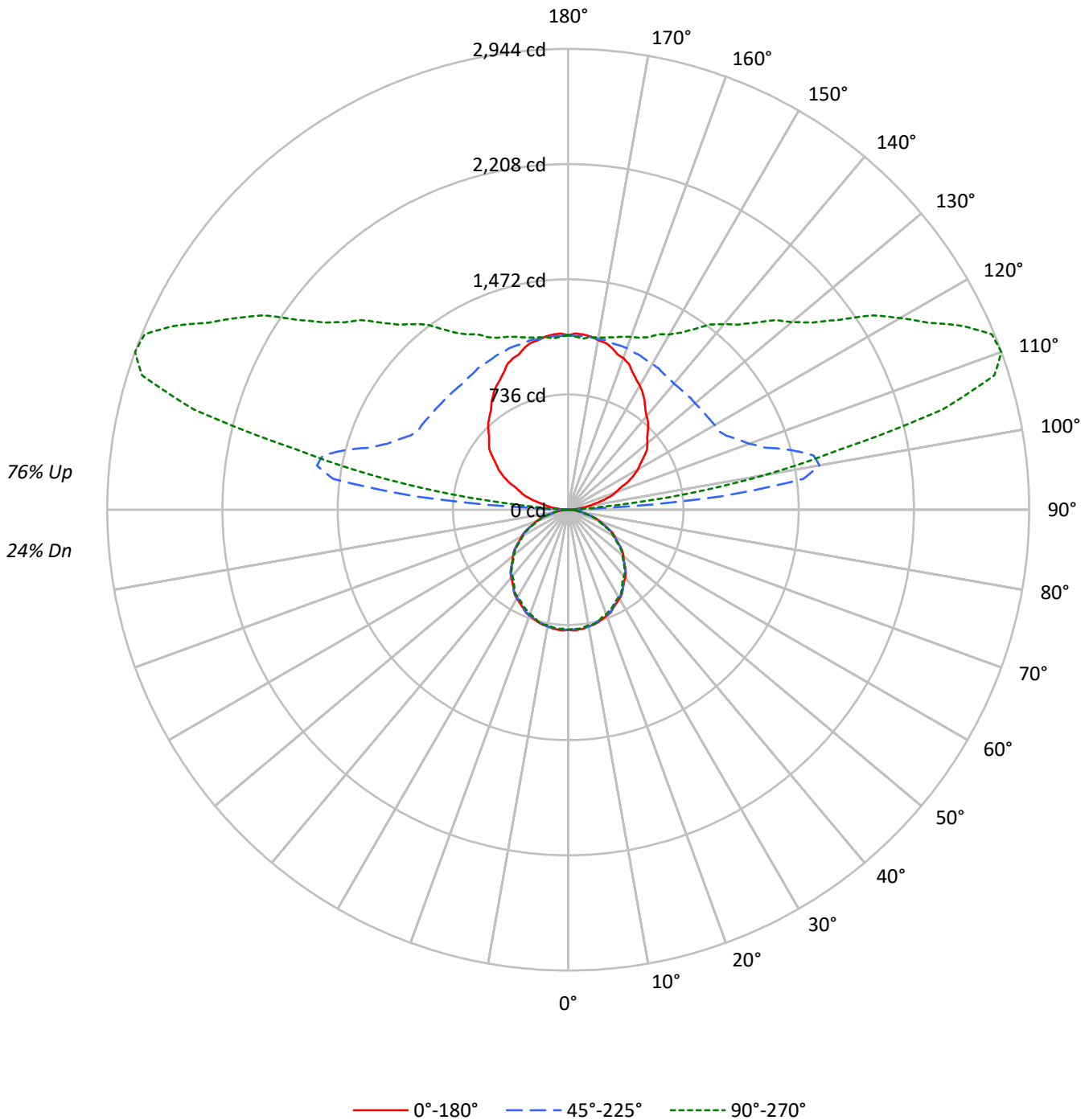
Lumens per Lamp: N/A
Luminaire Lumens: 9105.6 lumens
Efficiency: N/A
Efficacy: 126.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 71.8
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			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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	56	44	42	41	28	28	27	20
2	84	76	71	66	74	68	63	59	53	49	46	38	36	34	25	24	23	17
3	76	67	60	54	67	60	54	49	46	42	39	34	31	29	22	20	19	14
4	69	59	52	46	61	53	46	41	41	36	33	30	27	24	19	18	16	12
5	64	52	45	39	56	47	40	35	36	32	28	27	23	21	17	16	14	10
6	58	47	39	33	52	42	35	30	33	28	24	24	21	18	16	14	12	9
7	54	42	34	29	48	38	31	26	29	25	21	22	18	16	14	12	11	8
8	50	38	31	25	44	34	28	23	27	22	19	20	16	14	13	11	10	7
9	46	35	27	22	41	31	25	20	24	20	17	18	15	13	12	10	9	6
10	43	31	25	20	38	28	22	18	22	18	15	17	13	11	11	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7075	7075	7075
5°	7121	7073	7082
10°	7086	7106	7018
15°	7105	7035	7064
20°	7077	7047	6974
25°	6997	6954	6912
30°	6977	6932	6865
35°	6869	6869	6763
40°	6817	6753	6665
45°	6688	6688	6593
50°	6607	6562	6472
55°	6495	6428	6328
60°	6351	6235	6139
65°	6097	5960	5846
70°	5813	5616	5476
75°	5183	5033	4959
80°	4282	4224	4171
85°	3102	3430	3430

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6688 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.6	0.8
10°-20°	208.0	2.3
20°-30°	314.3	3.5
30°-40°	378.5	4.2
40°-50°	392.4	4.3
50°-60°	355.8	3.9
60°-70°	270.5	3.0
70°-80°	150.6	1.7
80°-90°	38.8	0.4
90°-100°	507.9	5.6
100°-110°	1445.2	15.9
110°-120°	1384.7	15.2
120°-130°	1095.9	12.0
130°-140°	879.7	9.7
140°-150°	688.7	7.6
150°-160°	503.9	5.5
160°-170°	312.1	3.4
170°-180°	105.9	1.2
0°-30°	594.9	6.5
0°-40°	973.4	10.7
0°-60°	1721.6	18.9
0°-90°	2181.5	24.0
90°-120°	3337.9	36.7
90°-150°	6002.1	65.9
90°-180°	6924.0	76.0
0°-180°	9105.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	767	767	767	767	767	
5°	769	760	764	765	765	73
15°	744	737	736	737	740	210
25°	687	682	683	679	679	318
35°	610	604	610	602	600	383
45°	513	510	513	503	505	397
55°	404	403	400	395	393	360
65°	279	278	273	270	268	277
75°	145	143	141	139	139	155
85°	29	31	32	34	32	36
90°	0	0	0	0	0	3
95°	55	219	983	340	210	63
105°	225	341	1473	2602	2473	238
115°	418	504	1117	2366	2778	411
125°	589	653	1066	1769	2115	527
135°	720	781	1053	1494	1689	556
145°	850	893	1062	1293	1409	531
155°	971	993	1087	1169	1216	449
165°	1072	1076	1100	1124	1140	302
175°	1123	1117	1113	1106	1098	106
180°	1115	1115	1115	1115	1115	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	766.8	766.8	766.8	766.8	766.8
2.5°	772.7	764.5	766.0	766.7	761.0
5°	768.9	759.7	763.7	764.7	764.7
7.5°	765.6	758.4	761.0	757.8	757.4
10°	756.4	753.3	758.5	751.1	749.1
12.5°	752.2	747.5	748.4	747.0	749.1
15°	743.8	736.7	736.5	736.6	739.6
17.5°	730.9	721.6	727.7	721.2	720.4
20°	720.8	711.6	717.7	710.3	710.3
22.5°	710.8	699.9	706.0	696.1	693.6
25°	687.3	682.2	683.1	679.0	679.0
27.5°	670.8	659.5	663.3	657.4	657.8
30°	654.9	643.6	650.7	642.4	644.4
32.5°	639.0	631.8	635.7	626.5	630.2
35°	609.9	603.8	609.9	602.5	600.5
37.5°	584.4	578.0	580.0	575.3	570.2
40°	566.0	558.8	560.7	554.4	553.4
42.5°	545.9	541.2	541.5	536.1	536.7
45°	512.6	509.6	512.6	503.3	505.3
47.5°	482.9	479.2	478.9	472.7	475.2
50°	460.3	458.3	457.2	450.9	450.9
52.5°	436.9	434.8	433.7	429.1	428.3
55°	403.8	402.8	399.6	395.4	393.4
57.5°	367.6	365.6	363.9	359.4	357.8
60°	344.2	342.1	337.9	332.7	332.7
62.5°	318.2	316.2	311.1	309.2	305.9
65°	279.3	278.3	273.0	269.9	267.8
67.5°	240.6	237.3	235.0	230.9	228.9
70°	215.5	211.4	208.2	205.0	203.0
72.5°	187.9	184.6	181.4	179.9	177.0
75°	145.4	143.4	141.2	139.1	139.1
77.5°	105.7	105.0	102.9	102.9	101.9
80°	80.6	81.6	79.5	79.5	78.5
82.5°	58.0	59.0	58.6	59.4	58.4
85°	29.3	31.3	32.4	33.5	32.4
87.5°	8.4	10.8	12.6	13.4	13.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	17.0	89.9	208.5	60.7	45.8
95°	55.1	218.8	983.3	340.3	209.8
97.5°	101.3	256.3	1514.4	1083.6	742.6
100°	133.5	278.6	1629.6	1650.7	1271.5
102.5°	169.1	302.6	1604.2	2112.9	1781.8
105°	224.6	340.7	1472.8	2601.5	2473.1
107.5°	281.0	385.0	1319.4	2739.3	2853.7
110°	320.0	417.4	1231.2	2686.6	2943.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	357.3	449.7	1171.9	2561.9	2928.3
115°	417.5	504.5	1116.8	2365.9	2778.2
117.5°	470.5	552.1	1084.2	2151.6	2588.3
120°	512.8	581.2	1080.8	2029.1	2447.6
122.5°	546.7	615.1	1072.3	1921.6	2310.3
125°	589.1	653.4	1065.9	1768.9	2114.9
127.5°	635.3	695.4	1062.5	1677.6	1962.8
130°	659.1	719.1	1057.5	1614.1	1862.7
132.5°	684.5	742.9	1057.5	1564.5	1793.2
135°	720.5	780.6	1053.2	1494.2	1689.0
137.5°	754.4	812.9	1052.8	1434.7	1602.9
140°	779.9	839.9	1051.1	1385.4	1547.0
142.5°	808.7	858.8	1056.2	1346.0	1491.0
145°	849.8	893.3	1061.7	1293.2	1409.2
147.5°	885.0	927.2	1071.0	1239.9	1340.2
150°	915.5	944.5	1074.4	1222.2	1292.7
152.5°	939.2	969.9	1077.8	1198.4	1263.9
155°	970.6	993.4	1087.1	1168.7	1216.4
157.5°	1009.6	1023.2	1089.2	1155.3	1189.3
160°	1029.9	1040.3	1097.7	1145.0	1174.0
162.5°	1041.8	1053.8	1099.4	1136.4	1158.8
165°	1072.3	1076.4	1099.8	1123.5	1140.1
167.5°	1093.1	1089.3	1109.6	1120.3	1127.0
170°	1099.8	1097.8	1106.2	1108.5	1116.8
172.5°	1115.1	1108.1	1111.3	1105.1	1111.7
175°	1123.2	1116.9	1112.6	1106.0	1097.7
177.5°	1126.5	1116.6	1111.3	1104.5	1106.2
180°	1114.7	1114.7	1114.7	1114.7	1114.7

(END OF REPORT)