

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: P521462

Luminaire Tested: SQ4-F-075U-075D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521462
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-075U-075D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 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: 6685.3 lumens
Efficiency: N/A
Efficacy: 120.7 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

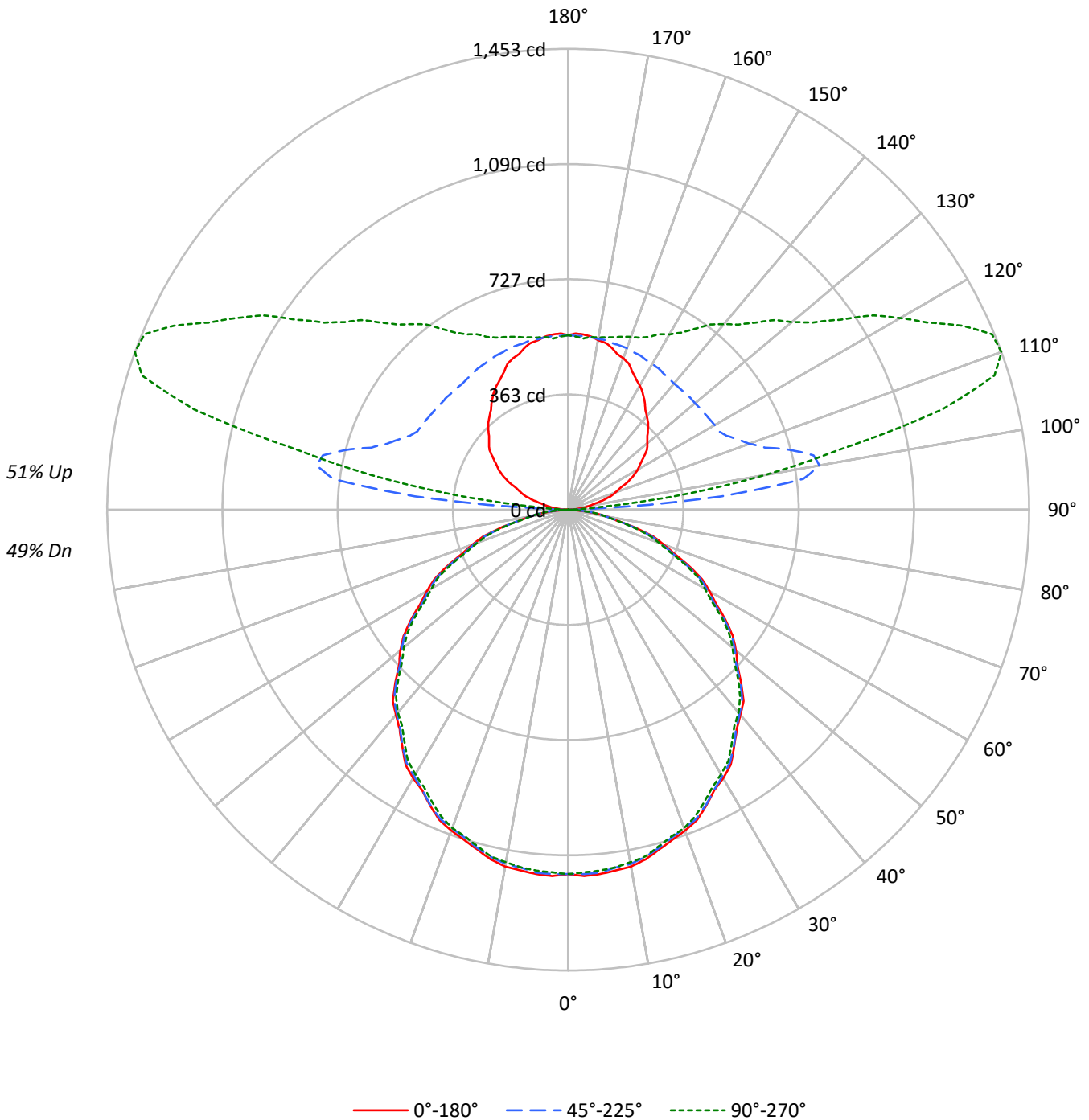
Input Watts (W): 55.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49				
1	97	93	89	86	90	86	82	79	72	70	68	60	58	57	48	47	46	41				
2	89	81	75	70	81	75	69	65	63	59	56	52	50	47	42	40	39	34				
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33	29				
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24				
5	68	56	48	42	62	52	44	39	44	38	34	37	32	29	30	27	24	21				
6	62	50	42	36	57	46	39	34	40	34	30	33	29	25	27	24	21	18				
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	25	21	19	16				
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	23	19	17	14				
9	50	37	30	25	46	35	28	23	30	24	21	25	21	18	21	18	15	13				
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	19	16	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10598	10598	10598
5°	10678	10639	10580
10°	10703	10624	10575
15°	10592	10553	10502
20°	10569	10498	10487
25°	10479	10458	10341
30°	10410	10342	10265
35°	10263	10252	10122
40°	10169	10118	10054
45°	10047	9992	9882
50°	9911	9835	9700
55°	9727	9609	9474
60°	9497	9342	9169
65°	9182	8975	8815
70°	8608	8411	8211
75°	7757	7532	7422
80°	6339	6392	6280
85°	4541	5208	5208

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10047 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.8	1.6
10°-20°	311.3	4.7
20°-30°	471.0	7.0
30°-40°	566.5	8.5
40°-50°	588.1	8.8
50°-60°	532.8	8.0
60°-70°	405.3	6.1
70°-80°	225.3	3.4
80°-90°	58.0	0.9
90°-100°	250.8	3.8
100°-110°	713.5	10.7
110°-120°	683.6	10.2
120°-130°	541.0	8.1
130°-140°	434.3	6.5
140°-150°	340.0	5.1
150°-160°	248.8	3.7
160°-170°	154.1	2.3
170°-180°	52.3	0.8
0°-30°	891.1	13.3
0°-40°	1457.6	21.8
0°-60°	2578.5	38.6
0°-90°	3267.2	48.9
90°-120°	1647.8	24.6
90°-150°	2963.1	44.3
90°-180°	3418.0	51.1
0°-180°	6685.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1149	1149	1149	1149	1149	
5°	1153	1143	1149	1143	1142	110
15°	1109	1100	1105	1104	1100	314
25°	1029	1020	1027	1017	1016	474
35°	911	907	910	900	899	571
45°	770	765	766	757	757	594
55°	605	604	597	592	589	540
65°	421	414	411	405	404	414
75°	218	214	211	209	208	230
85°	43	46	49	49	49	53
90°	0	0	0	0	0	3
95°	27	108	485	168	104	31
105°	111	168	727	1284	1221	117
115°	206	249	551	1168	1372	203
125°	291	322	526	873	1044	260
135°	356	385	520	738	834	274
145°	420	441	524	638	696	262
155°	479	490	537	577	600	221
165°	529	531	543	555	563	149
175°	554	551	549	546	542	53
180°	550	550	550	550	550	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1148.7	1148.7	1148.7	1148.7	1148.7
2.5°	1156.2	1146.4	1149.5	1147.0	1144.5
5°	1152.9	1142.7	1148.7	1143.4	1142.4
7.5°	1147.4	1135.4	1138.2	1137.2	1137.2
10°	1142.4	1127.1	1134.0	1128.8	1128.8
12.5°	1129.0	1116.1	1121.5	1118.8	1120.4
15°	1108.9	1099.7	1104.8	1103.6	1099.5
17.5°	1091.6	1080.5	1084.3	1082.3	1080.7
20°	1076.5	1066.3	1069.2	1064.0	1068.1
22.5°	1059.8	1049.5	1055.0	1046.4	1046.4
25°	1029.4	1020.2	1027.3	1016.9	1015.8
27.5°	997.2	991.3	996.0	988.1	985.3
30°	977.1	967.9	970.8	965.6	963.5
32.5°	953.7	944.5	947.4	938.0	939.3
35°	911.2	907.1	910.2	899.7	898.7
37.5°	872.7	864.5	869.4	860.8	860.0
40°	844.3	836.1	840.1	834.8	834.8
42.5°	818.3	809.3	811.6	804.7	802.2
45°	770.0	764.9	765.8	757.4	757.4
47.5°	722.3	718.6	717.0	708.5	710.1
50°	690.5	684.3	685.2	675.8	675.8
52.5°	653.6	654.1	650.1	643.9	639.0
55°	604.7	603.7	597.4	592.1	589.0
57.5°	552.4	547.7	543.2	536.0	535.4
60°	514.7	511.6	506.3	500.0	496.9
62.5°	476.2	473.1	467.8	462.4	461.8
65°	420.6	414.4	411.1	404.8	403.8
67.5°	360.1	355.2	351.1	346.1	345.4
70°	319.1	315.0	311.8	307.5	304.4
72.5°	281.4	274.9	271.6	268.2	265.9
75°	217.6	214.5	211.3	209.2	208.2
77.5°	156.1	156.3	156.3	153.6	152.5
80°	119.3	120.3	120.3	119.2	118.2
82.5°	86.6	88.5	89.3	88.3	88.1
85°	42.9	46.0	49.2	49.2	49.2
87.5°	11.7	15.8	19.2	20.1	19.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.4	44.4	102.9	30.0	22.6
95°	27.2	108.0	485.4	168.0	103.6
97.5°	50.0	126.5	747.6	535.0	366.6
100°	65.9	137.5	804.5	814.9	627.7
102.5°	83.5	149.4	792.0	1043.1	879.6
105°	110.9	168.2	727.1	1284.3	1220.9
107.5°	138.7	190.1	651.3	1352.3	1408.8
110°	158.0	206.0	607.8	1326.3	1453.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	176.4	222.0	578.5	1264.7	1445.6
115°	206.1	249.1	551.3	1168.0	1371.5
117.5°	232.2	272.6	535.2	1062.2	1277.8
120°	253.2	286.9	533.5	1001.7	1208.3
122.5°	269.9	303.7	529.4	948.6	1140.5
125°	290.8	322.5	526.2	873.2	1044.1
127.5°	313.6	343.3	524.5	828.2	969.0
130°	325.4	355.0	522.0	796.8	919.6
132.5°	337.9	366.8	522.0	772.3	885.3
135°	355.7	385.4	519.9	737.6	833.8
137.5°	372.4	401.3	519.7	708.3	791.3
140°	385.0	414.7	518.9	683.9	763.7
142.5°	399.2	424.0	521.4	664.5	736.1
145°	419.5	441.0	524.1	638.4	695.7
147.5°	436.9	457.7	528.7	612.1	661.6
150°	451.9	466.3	530.4	603.4	638.2
152.5°	463.7	478.8	532.1	591.6	623.9
155°	479.1	490.4	536.7	577.0	600.5
157.5°	498.4	505.1	537.7	570.3	587.1
160°	508.4	513.6	541.9	565.3	579.6
162.5°	514.3	520.2	542.8	561.0	572.0
165°	529.4	531.4	543.0	554.7	562.8
167.5°	539.6	537.8	547.8	553.1	556.4
170°	543.0	541.9	546.1	547.2	551.3
172.5°	550.5	547.0	548.6	545.5	548.8
175°	554.5	551.4	549.2	546.0	541.9
177.5°	556.1	551.2	548.6	545.3	546.1
180°	550.3	550.3	550.3	550.3	550.3

(END OF REPORT)