

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: P521473

Luminaire Tested: SQ4-F-075U-100D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521473
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-38)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-075U-100D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 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: 7507.6 lumens
Efficiency: N/A
Efficacy: 113.6 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

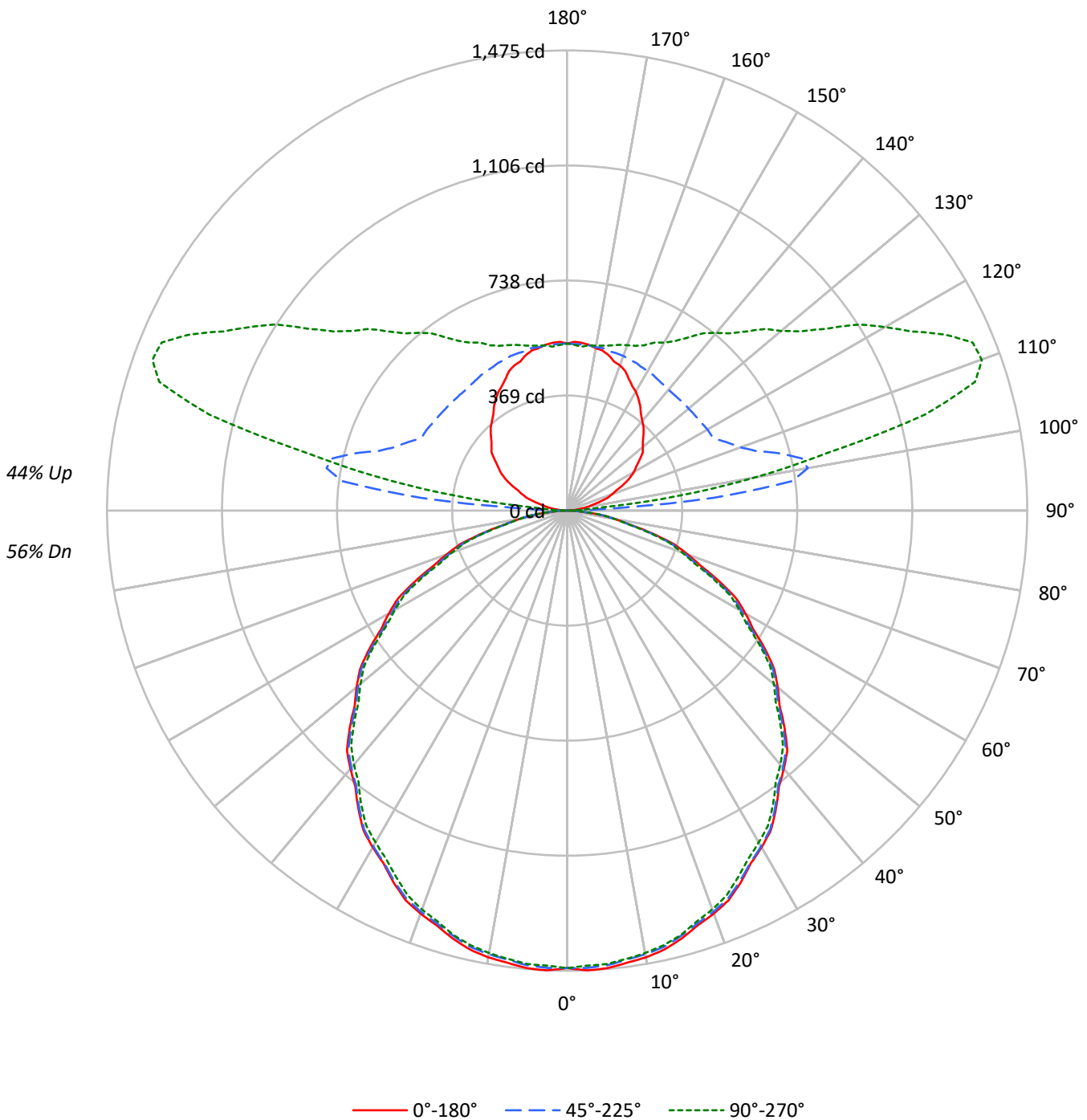
Input Watts (W): 66.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56				
1	99	94	90	87	92	88	84	81	76	73	71	64	63	61	54	53	52	47				
2	90	82	76	71	83	77	71	66	66	62	58	56	53	51	47	45	43	39				
3	82	72	65	59	76	67	61	55	58	53	49	50	46	43	42	39	36	33				
4	75	64	56	49	69	60	52	47	52	46	41	44	40	36	37	34	31	28				
5	69	57	48	42	63	53	46	40	46	40	36	39	35	31	33	30	27	24				
6	63	51	43	37	58	48	40	35	41	35	31	36	31	27	30	27	24	21				
7	58	46	38	32	54	43	36	30	37	32	27	32	28	24	28	24	21	18				
8	54	42	34	28	50	39	32	27	34	28	24	30	25	21	25	22	19	16				
9	50	38	30	25	47	36	29	24	31	26	22	27	23	19	23	20	17	15				
10	47	35	27	23	44	33	26	22	29	23	19	25	21	17	22	18	15	13				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13528	13528	13528
5°	13637	13552	13514
10°	13623	13527	13490
15°	13559	13481	13452
20°	13497	13437	13357
25°	13393	13341	13196
30°	13279	13245	13084
35°	13144	13098	12960
40°	13012	12963	12804
45°	12861	12756	12609
50°	12642	12555	12409
55°	12465	12284	12138
60°	12177	11931	11763
65°	11782	11448	11271
70°	11098	10742	10547
75°	10017	9764	9618
80°	8278	8278	8172
85°	5822	6680	6902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12861 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.8	1.8
10°-20°	397.7	5.3
20°-30°	601.4	8.0
30°-40°	724.2	9.6
40°-50°	752.1	10.0
50°-60°	681.7	9.1
60°-70°	519.2	6.9
70°-80°	290.1	3.9
80°-90°	75.3	1.0
90°-100°	244.1	3.3
100°-110°	694.5	9.3
110°-120°	665.4	8.9
120°-130°	526.6	7.0
130°-140°	422.7	5.6
140°-150°	330.9	4.4
150°-160°	242.1	3.2
160°-170°	150.0	2.0
170°-180°	50.9	0.7
0°-30°	1137.9	15.2
0°-40°	1862.0	24.8
0°-60°	3295.8	43.9
0°-90°	4180.4	55.7
90°-120°	1603.9	21.4
90°-150°	2884.1	38.4
90°-180°	3327.0	44.3
0°-180°	7507.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1466	1466	1466	1466	1466	
5°	1472	1458	1463	1459	1459	140
15°	1420	1407	1411	1408	1408	400
25°	1316	1305	1310	1300	1296	606
35°	1167	1160	1163	1152	1151	730
45°	986	980	978	967	966	759
55°	775	772	764	755	755	691
65°	540	534	524	517	516	532
75°	281	277	274	270	270	297
85°	55	59	63	64	65	69
90°	0	0	0	0	0	3
95°	26	105	472	164	101	30
105°	108	164	708	1250	1188	114
115°	201	242	537	1137	1335	198
125°	283	314	512	850	1016	253
135°	346	375	506	718	812	267
145°	408	429	510	621	677	255
155°	466	477	522	562	584	216
165°	515	517	528	540	548	145
175°	540	537	535	532	528	51
180°	536	536	536	536	536	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1466.3	1466.3	1466.3	1466.3	1466.3
2.5°	1475.3	1463.4	1467.2	1464.6	1459.8
5°	1472.5	1458.5	1463.3	1459.2	1459.2
7.5°	1462.3	1448.9	1452.1	1449.6	1449.6
10°	1454.1	1439.2	1443.9	1439.9	1439.9
12.5°	1441.1	1427.7	1432.5	1428.4	1427.6
15°	1419.5	1406.6	1411.4	1408.3	1408.3
17.5°	1393.4	1381.1	1387.3	1382.4	1380.8
20°	1374.7	1360.8	1368.6	1360.4	1360.4
22.5°	1351.9	1339.5	1346.6	1336.8	1335.2
25°	1315.6	1304.7	1310.5	1300.3	1296.3
27.5°	1274.9	1263.2	1271.8	1260.4	1258.2
30°	1246.4	1235.4	1243.3	1231.0	1228.1
32.5°	1215.4	1206.1	1211.6	1200.1	1197.9
35°	1167.0	1160.0	1162.9	1151.7	1150.7
37.5°	1115.4	1108.7	1111.4	1098.9	1098.1
40°	1080.4	1074.4	1076.3	1063.1	1063.1
42.5°	1044.6	1037.8	1038.0	1025.6	1024.8
45°	985.7	979.7	977.6	967.4	966.4
47.5°	923.2	920.4	917.1	906.9	906.9
50°	880.8	878.8	874.7	864.5	864.5
52.5°	837.6	836.5	830.7	822.1	820.5
55°	774.9	771.9	763.7	754.6	754.6
57.5°	706.3	703.9	694.7	687.3	685.5
60°	659.9	655.9	646.6	638.4	637.5
62.5°	611.8	608.6	598.6	591.2	589.4
65°	539.7	533.7	524.4	517.3	516.3
67.5°	463.5	456.8	448.7	442.7	440.7
70°	411.4	405.4	398.2	393.0	391.0
72.5°	360.1	354.1	347.6	344.2	343.8
75°	281.0	277.1	273.9	269.8	269.8
77.5°	203.9	201.5	199.8	197.8	197.8
80°	155.8	155.8	155.8	153.8	153.8
82.5°	111.8	114.2	115.9	114.7	114.7
85°	55.0	59.0	63.1	64.2	65.2
87.5°	15.5	20.3	25.3	26.1	26.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.1	43.2	100.2	29.2	22.0
95°	26.5	105.1	472.5	163.5	100.8
97.5°	48.7	123.2	727.7	520.7	356.8
100°	64.2	133.8	783.1	793.2	611.0
102.5°	81.3	145.4	770.8	1015.3	856.2
105°	107.9	163.7	707.7	1250.1	1188.4
107.5°	135.0	185.0	634.0	1316.3	1371.2
110°	153.8	200.6	591.6	1290.9	1414.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	171.7	216.1	563.1	1231.0	1407.1
115°	200.6	242.4	536.6	1136.8	1335.0
117.5°	226.1	265.3	521.0	1033.9	1243.7
120°	246.4	279.3	519.3	975.0	1176.1
122.5°	262.7	295.6	515.3	923.4	1110.1
125°	283.1	314.0	512.2	850.0	1016.3
127.5°	305.3	334.2	510.6	806.1	943.1
130°	316.7	345.6	508.1	775.6	895.1
132.5°	328.9	357.0	508.1	751.8	861.7
135°	346.2	375.1	506.1	718.0	811.6
137.5°	362.5	390.6	505.9	689.4	770.2
140°	374.7	403.6	505.1	665.7	743.4
142.5°	388.6	412.7	507.5	646.8	716.5
145°	408.3	429.2	510.2	621.4	677.2
147.5°	425.2	445.6	514.6	595.8	644.0
150°	439.9	453.8	516.3	587.3	621.2
152.5°	451.3	466.0	517.9	575.8	607.3
155°	466.4	477.3	522.4	561.6	584.5
157.5°	485.1	491.7	523.4	555.1	571.5
160°	494.9	499.9	527.5	550.2	564.1
162.5°	500.6	506.4	528.3	546.1	556.8
165°	515.3	517.2	528.5	539.9	547.8
167.5°	525.2	523.4	533.2	538.3	541.5
170°	528.5	527.5	531.5	532.7	536.6
172.5°	535.8	532.4	534.0	531.0	534.2
175°	539.7	536.7	534.6	531.5	527.5
177.5°	541.3	536.5	534.0	530.8	531.5
180°	535.6	535.6	535.6	535.6	535.6

(END OF REPORT)