

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: P521627

Luminaire Tested: SQ4-F-125U-100D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521627
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-125U-100D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9372.2 lumens
Efficiency: N/A
Efficacy: 111.7 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

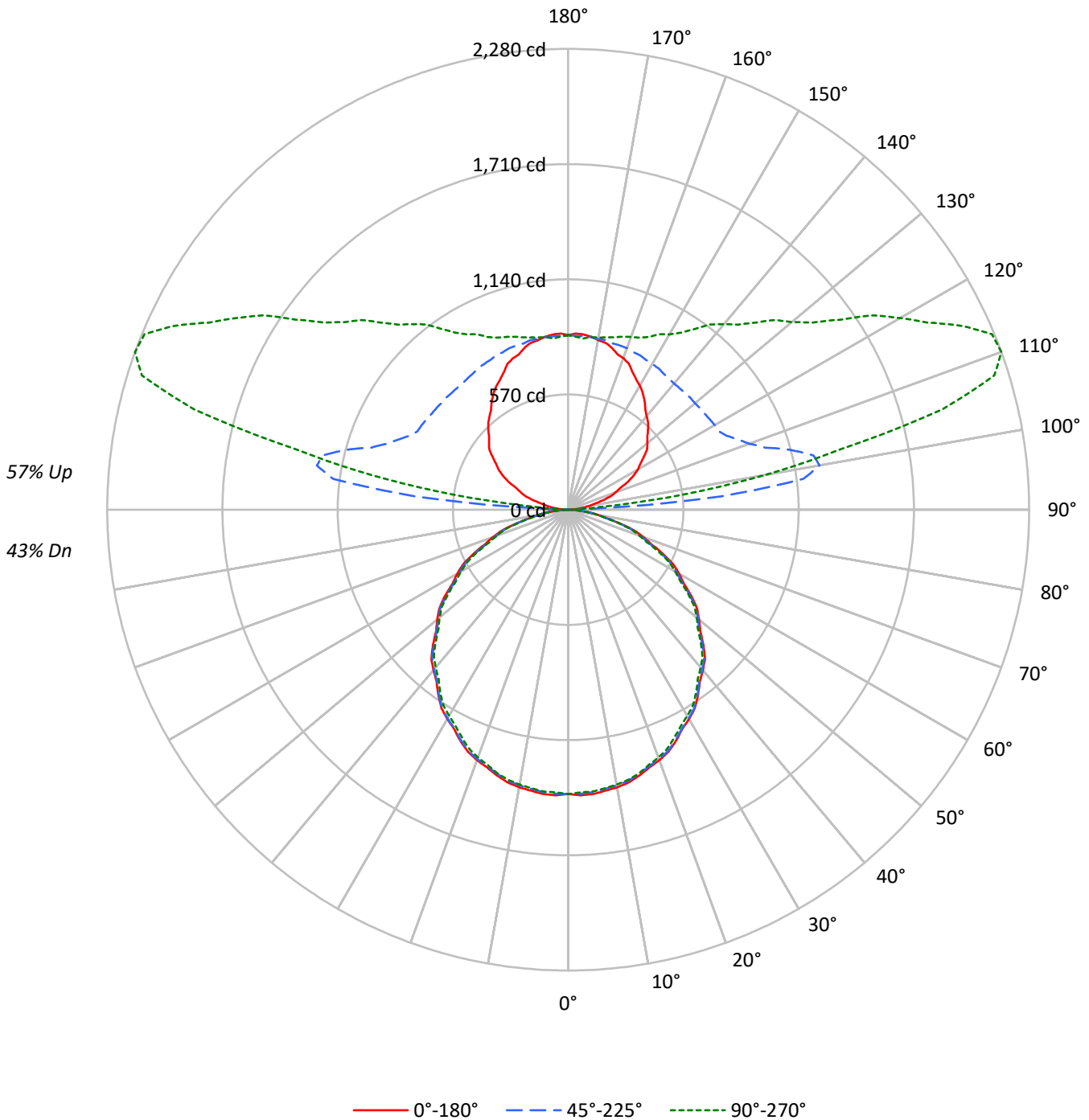
Input Watts (W): 83.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	43				
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	44	43	42	36				
2	87	80	74	69	79	73	68	63	61	57	53	49	46	44	38	36	35	30				
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	29	25				
4	73	62	54	48	66	57	50	45	47	42	38	38	35	31	30	27	25	21				
5	67	55	47	41	61	51	43	38	42	37	33	34	30	27	27	24	22	18				
6	61	49	41	35	56	45	38	33	38	32	28	31	27	24	24	21	19	16				
7	57	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	26	21	18	20	17	15	13				
9	49	37	29	24	44	34	27	23	28	23	20	23	19	17	19	16	14	11				
10	45	33	26	22	42	31	25	20	26	21	18	22	18	15	17	14	12	10				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12975	12975	12975
5°	13078	12997	12960
10°	13064	12974	12937
15°	13003	12928	12900
20°	12944	12887	12810
25°	12844	12794	12656
30°	12734	12703	12547
35°	12605	12561	12429
40°	12479	12432	12279
45°	12334	12232	12093
50°	12124	12041	11900
55°	11955	11781	11639
60°	11677	11442	11280
65°	11300	10979	10809
70°	10642	10299	10116
75°	9607	9365	9226
80°	7938	7938	7837
85°	5579	6404	6616

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12334 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	1.4
10°-20°	381.4	4.1
20°-30°	576.7	6.2
30°-40°	694.5	7.4
40°-50°	721.2	7.7
50°-60°	653.8	7.0
60°-70°	497.9	5.3
70°-80°	278.2	3.0
80°-90°	72.2	0.8
90°-100°	393.4	4.2
100°-110°	1119.5	11.9
110°-120°	1072.5	11.4
120°-130°	848.9	9.1
130°-140°	681.4	7.3
140°-150°	533.4	5.7
150°-160°	390.3	4.2
160°-170°	241.8	2.6
170°-180°	82.0	0.9
0°-30°	1091.2	11.6
0°-40°	1785.7	19.1
0°-60°	3160.8	33.7
0°-90°	4009.1	42.8
90°-120°	2585.4	27.6
90°-150°	4649.1	49.6
90°-180°	5363.0	57.2
0°-180°	9372.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1406	1406	1406	1406	1406	
5°	1412	1399	1403	1399	1399	134
15°	1361	1349	1354	1351	1351	384
25°	1262	1251	1257	1247	1243	581
35°	1119	1112	1115	1104	1104	700
45°	945	940	938	928	927	728
55°	743	740	732	724	724	663
65°	518	512	503	496	495	510
75°	270	266	263	259	259	285
85°	53	57	60	62	62	66
90°	0	0	0	0	0	4
95°	43	170	762	264	162	49
105°	174	264	1141	2015	1916	184
115°	323	391	865	1832	2152	318
125°	456	506	826	1370	1638	408
135°	558	605	816	1157	1308	431
145°	658	692	822	1002	1092	411
155°	752	769	842	905	942	348
165°	831	834	852	870	883	234
175°	870	865	862	857	850	82
180°	863	863	863	863	863	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1406.3	1406.3	1406.3	1406.3	1406.3
2.5°	1414.8	1403.4	1407.0	1404.6	1400.0
5°	1412.1	1398.7	1403.3	1399.4	1399.4
7.5°	1402.3	1389.6	1392.6	1390.2	1390.2
10°	1394.5	1380.2	1384.8	1380.9	1380.9
12.5°	1382.0	1369.2	1373.8	1369.9	1369.1
15°	1361.3	1348.9	1353.5	1350.6	1350.6
17.5°	1336.3	1324.5	1330.5	1325.8	1324.2
20°	1318.4	1305.0	1312.5	1304.7	1304.7
22.5°	1296.5	1284.6	1291.4	1282.0	1280.5
25°	1261.7	1251.2	1256.8	1247.0	1243.2
27.5°	1222.7	1211.4	1219.7	1208.7	1206.6
30°	1195.3	1184.8	1192.4	1180.6	1177.7
32.5°	1165.6	1156.7	1161.9	1150.9	1148.8
35°	1119.1	1112.5	1115.2	1104.5	1103.5
37.5°	1069.7	1063.2	1065.8	1053.9	1053.1
40°	1036.1	1030.4	1032.2	1019.5	1019.5
42.5°	1001.8	995.3	995.5	983.6	982.8
45°	945.3	939.6	937.5	927.7	926.8
47.5°	885.4	882.7	879.5	869.7	869.7
50°	844.7	842.8	838.9	829.1	829.1
52.5°	803.3	802.2	796.7	788.4	786.9
55°	743.2	740.3	732.4	723.6	723.6
57.5°	677.3	675.1	666.2	659.1	657.4
60°	632.8	629.0	620.1	612.3	611.3
62.5°	586.7	583.7	574.0	567.0	565.2
65°	517.6	511.9	502.9	496.1	495.1
67.5°	444.5	438.0	430.3	424.6	422.7
70°	394.5	388.8	381.8	376.9	375.0
72.5°	345.3	339.6	333.4	330.1	329.7
75°	269.5	265.7	262.7	258.8	258.8
77.5°	195.5	193.2	191.6	189.6	189.6
80°	149.4	149.4	149.4	147.5	147.5
82.5°	107.2	109.5	111.1	110.0	110.0
85°	52.7	56.6	60.5	61.5	62.5
87.5°	14.8	19.4	24.2	25.0	25.8
90°	0.0	0.0	0.0	0.0	0.0
92.5°	13.1	69.6	161.5	47.0	35.5
95°	42.7	169.5	761.6	263.6	162.5
97.5°	78.5	198.5	1173.0	839.3	575.2
100°	103.4	215.8	1262.3	1278.6	984.9
102.5°	131.0	234.3	1242.6	1636.6	1380.1
105°	174.0	263.9	1140.8	2015.1	1915.6
107.5°	217.7	298.2	1022.0	2121.8	2210.4
110°	247.9	323.3	953.7	2080.9	2279.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	276.7	348.3	907.7	1984.4	2268.1
115°	323.4	390.8	865.0	1832.5	2151.9
117.5°	364.4	427.6	839.8	1666.5	2004.8
120°	397.2	450.2	837.1	1571.7	1895.9
122.5°	423.5	476.5	830.6	1488.4	1789.5
125°	456.3	506.1	825.6	1370.1	1638.1
127.5°	492.1	538.6	823.0	1299.5	1520.3
130°	510.5	557.0	819.1	1250.2	1442.8
132.5°	530.2	575.4	819.1	1211.8	1389.0
135°	558.1	604.6	815.8	1157.4	1308.2
137.5°	584.3	629.6	815.5	1111.3	1241.6
140°	604.0	650.6	814.2	1073.1	1198.2
142.5°	626.4	665.2	818.1	1042.6	1154.9
145°	658.2	691.9	822.4	1001.7	1091.6
147.5°	685.5	718.2	829.6	960.4	1038.0
150°	709.1	731.6	832.2	946.7	1001.3
152.5°	727.5	751.2	834.8	928.2	978.9
155°	751.8	769.4	842.1	905.3	942.2
157.5°	782.0	792.6	843.7	894.9	921.2
160°	797.7	805.8	850.3	886.9	909.4
162.5°	806.9	816.2	851.6	880.2	897.5
165°	830.6	833.8	851.9	870.3	883.1
167.5°	846.7	843.8	859.5	867.8	872.9
170°	851.9	850.3	856.8	858.6	865.0
172.5°	863.7	858.3	860.8	856.0	861.1
175°	870.0	865.1	861.8	856.7	850.3
177.5°	872.6	864.9	860.8	855.5	856.8
180°	863.4	863.4	863.4	863.4	863.4

(END OF REPORT)