

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: P686075

Luminaire Tested: SQ4R-F-100D-840-1-UNV-STD-W-4

Issue Date: 11/18/2022

Test Information

Test Method: LM-79-2019
Report Number: P686075
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-2)
Test Lab: INNOVATION CENTER
Issue Date: 11/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-100D-840-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS.
1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

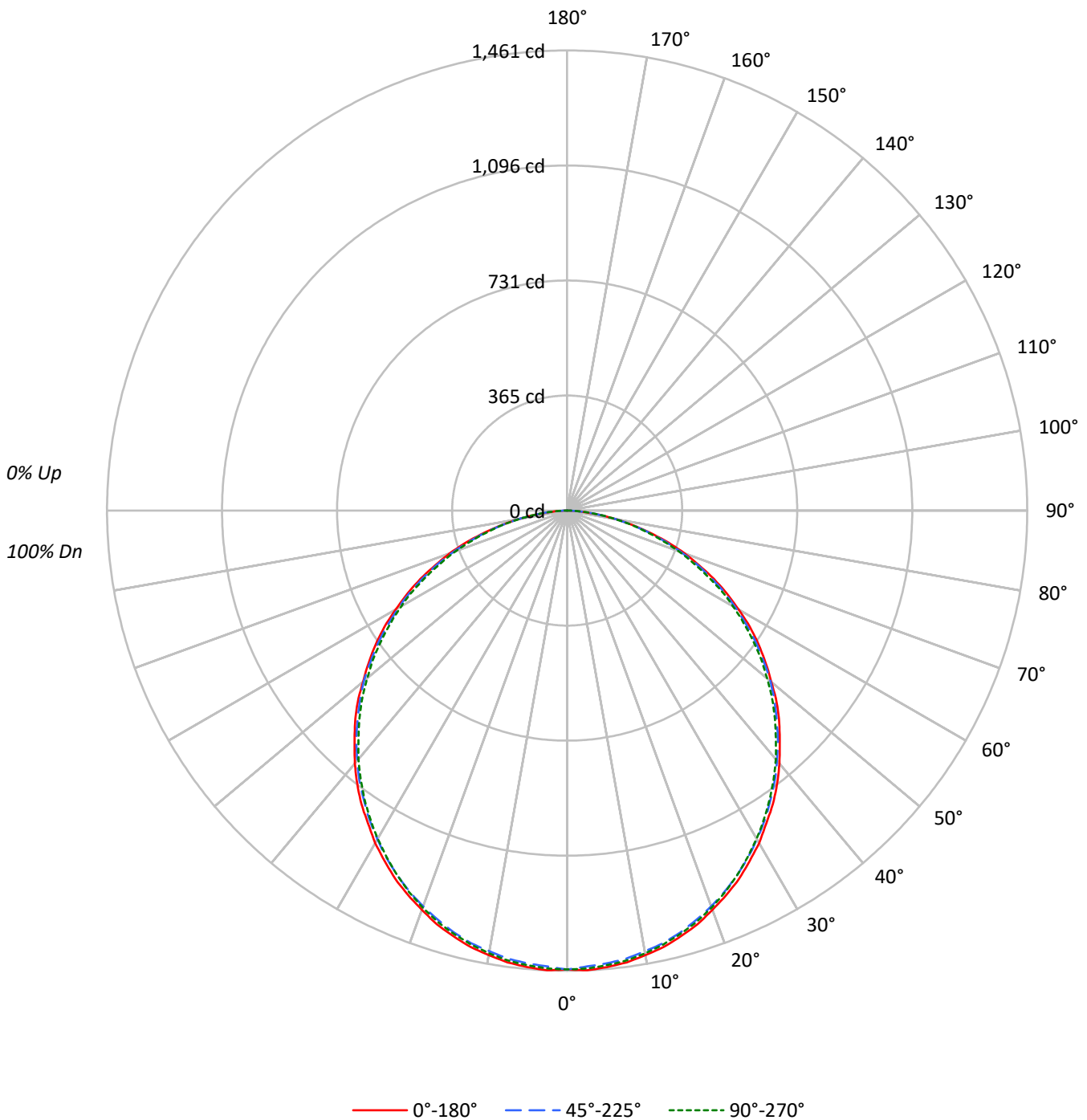
Lumens per Lamp: N/A
Luminaire Lumens: 4061.1 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 37
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	109	104	100	96	106	102	98	94	97	94	91	94	91	88	90	88	86	84				84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70				70
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59				59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50				50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43				43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38				38
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	33				33
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30				30
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27				27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24				24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14026	14026	14026
5°	14060	13944	14002
10°	14008	13891	13949
15°	13943	13823	13863
20°	13820	13697	13738
25°	13712	13563	13563
30°	13549	13393	13371
35°	13383	13218	13171
40°	13180	13029	12953
45°	12970	12806	12697
50°	12678	12619	12409
55°	12463	12295	12093
60°	12100	11907	11715
65°	11716	11443	11169
70°	11155	10815	10589
75°	10125	9902	9679
80°	8654	8654	8544
85°	6186	6628	6628

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12970 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.8	3.4
10°-20°	393.0	9.7
20°-30°	590.7	14.5
30°-40°	705.9	17.4
40°-50°	727.4	17.9
50°-60°	654.5	16.1
60°-70°	497.6	12.3
70°-80°	282.8	7.0
80°-90°	71.5	1.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1121.4	27.6
0°-40°	1827.3	45.0
0°-60°	3209.2	79.0
0°-90°	4061.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4061.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1457	1457	1457	1457	1457	
5°	1455	1453	1443	1455	1449	138
15°	1399	1397	1387	1395	1391	395
25°	1291	1287	1277	1281	1277	594
35°	1139	1135	1125	1125	1121	712
45°	953	953	941	935	933	734
55°	742	740	732	726	720	663
65°	514	512	502	496	490	508
75°	272	270	266	264	260	290
85°	56	58	60	60	60	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1456.9	1456.9	1456.9	1456.9	1456.9
2.5°	1460.9	1456.9	1448.9	1458.9	1454.9
5°	1454.9	1452.9	1442.9	1454.9	1448.9
7.5°	1446.9	1444.9	1434.9	1444.9	1440.9
10°	1432.9	1430.9	1420.9	1430.9	1426.9
12.5°	1418.9	1416.9	1406.9	1414.9	1410.9
15°	1398.9	1396.9	1386.9	1394.9	1390.9
17.5°	1376.9	1374.9	1362.9	1370.9	1368.9
20°	1348.9	1346.9	1336.9	1342.9	1340.9
22.5°	1320.9	1318.9	1308.8	1314.9	1310.9
25°	1290.8	1286.8	1276.8	1280.8	1276.8
27.5°	1254.8	1252.8	1242.8	1244.8	1240.8
30°	1218.8	1216.8	1204.8	1206.8	1202.8
32.5°	1176.8	1176.8	1166.8	1166.8	1162.8
35°	1138.7	1134.7	1124.7	1124.7	1120.7
37.5°	1094.7	1090.7	1082.7	1080.7	1076.7
40°	1048.7	1046.7	1036.7	1034.7	1030.7
42.5°	998.6	1000.6	990.6	984.6	980.6
45°	952.6	952.6	940.6	934.6	932.6
47.5°	902.6	902.6	892.6	886.6	882.6
50°	846.5	850.6	842.5	832.5	828.5
52.5°	794.5	796.5	786.5	780.5	776.5
55°	742.5	740.5	732.5	726.5	720.5
57.5°	688.4	686.4	674.4	668.4	664.4
60°	628.4	628.4	618.4	612.4	608.4
62.5°	572.4	570.4	562.4	554.4	552.4
65°	514.3	512.3	502.3	496.3	490.3
67.5°	452.3	450.3	444.3	436.3	432.3
70°	396.3	390.3	384.2	378.2	376.2
72.5°	336.2	330.2	324.2	320.2	316.2
75°	272.2	270.2	266.2	264.2	260.2
77.5°	214.1	214.1	210.1	208.1	208.1
80°	156.1	156.1	156.1	154.1	154.1
82.5°	102.1	104.1	104.1	102.1	104.1
85°	56.0	58.0	60.0	60.0	60.0
87.5°	18.0	24.0	22.0	24.0	24.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)