

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: P686073

Luminaire Tested: SQ4R-F-100D-830-1-UNV-STD-W-4

Issue Date: 11/18/2022

Test Information

Test Method: LM-79-2019
Report Number: P686073
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-830-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS.
1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

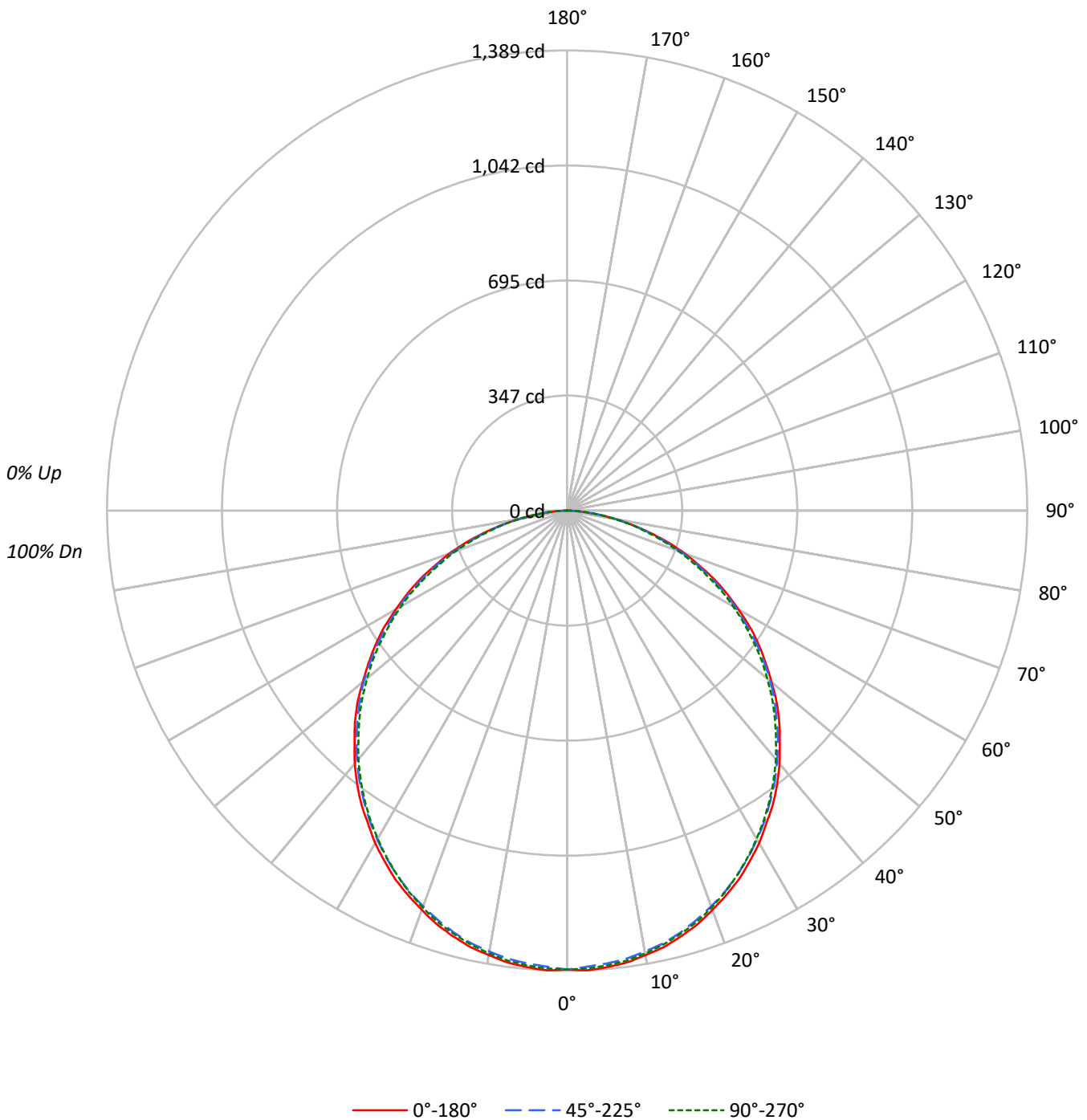
Lumens per Lamp: N/A
Luminaire Lumens: 3862.0 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 37
Input Voltage (V): 120
Input Current (A_{in}): 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	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°	13339	13339	13339
5°	13371	13261	13316
10°	13322	13210	13266
15°	13259	13145	13183
20°	13143	13025	13064
25°	13040	12898	12898
30°	12885	12736	12715
35°	12727	12571	12526
40°	12534	12390	12319
45°	12334	12179	12075
50°	12058	12001	11801
55°	11852	11692	11501
60°	11507	11324	11141
65°	11142	10882	10622
70°	10606	10285	10072
75°	9627	9415	9203
80°	8233	8233	8122
85°	5888	6307	6307

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°	131.0	3.4
10°-20°	373.7	9.7
20°-30°	561.7	14.5
30°-40°	671.3	17.4
40°-50°	691.7	17.9
50°-60°	622.4	16.1
60°-70°	473.2	12.3
70°-80°	269.0	7.0
80°-90°	68.0	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°	1066.5	27.6
0°-40°	1737.8	45.0
0°-60°	3051.9	79.0
0°-90°	3862.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3862.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1386	1386	1386	1386	1386	
5°	1384	1382	1372	1384	1378	131
15°	1330	1328	1319	1326	1323	375
25°	1228	1224	1214	1218	1214	565
35°	1083	1079	1070	1070	1066	677
45°	906	906	894	889	887	698
55°	706	704	697	691	685	630
65°	489	487	478	472	466	483
75°	259	257	253	251	247	275
85°	53	55	57	57	57	66
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1385.5	1385.5	1385.5	1385.5	1385.5
2.5°	1389.3	1385.5	1377.9	1387.4	1383.6
5°	1383.6	1381.7	1372.2	1383.6	1377.9
7.5°	1376.0	1374.1	1364.6	1374.1	1370.3
10°	1362.7	1360.8	1351.3	1360.8	1357.0
12.5°	1349.4	1347.5	1338.0	1345.6	1341.8
15°	1330.3	1328.4	1318.9	1326.5	1322.7
17.5°	1309.4	1307.5	1296.1	1303.7	1301.8
20°	1282.8	1280.9	1271.3	1277.1	1275.1
22.5°	1256.1	1254.2	1244.7	1250.4	1246.6
25°	1227.6	1223.8	1214.2	1218.1	1214.2
27.5°	1193.3	1191.4	1181.9	1183.8	1180.0
30°	1159.1	1157.2	1145.7	1147.6	1143.8
32.5°	1119.1	1119.1	1109.6	1109.6	1105.8
35°	1082.9	1079.1	1069.6	1069.6	1065.8
37.5°	1041.1	1037.2	1029.6	1027.7	1023.9
40°	997.3	995.4	985.9	984.0	980.2
42.5°	949.7	951.6	942.1	936.4	932.6
45°	905.9	905.9	894.5	888.8	886.9
47.5°	858.3	858.3	848.8	843.1	839.3
50°	805.1	808.9	801.3	791.7	787.9
52.5°	755.6	757.5	748.0	742.3	738.4
55°	706.1	704.2	696.6	690.9	685.2
57.5°	654.7	652.8	641.4	635.7	631.9
60°	597.6	597.6	588.1	582.4	578.6
62.5°	544.3	542.4	534.8	527.2	525.3
65°	489.1	487.2	477.7	472.0	466.3
67.5°	430.1	428.2	422.5	414.9	411.1
70°	376.8	371.1	365.4	359.7	357.8
72.5°	319.7	314.0	308.3	304.5	300.7
75°	258.8	256.9	253.1	251.2	247.4
77.5°	203.6	203.6	199.8	197.9	197.9
80°	148.5	148.5	148.5	146.5	146.5
82.5°	97.1	99.0	99.0	97.1	99.0
85°	53.3	55.2	57.1	57.1	57.1
87.5°	17.1	22.8	20.9	22.8	22.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)