

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: P686078

Luminaire Tested: SQ4R-F-100D-940-1-UNV-STD-W-4

Issue Date: 11/18/2022

Test Information

Test Method: LM-79-2019
Report Number: P686078
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-940-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS.
1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

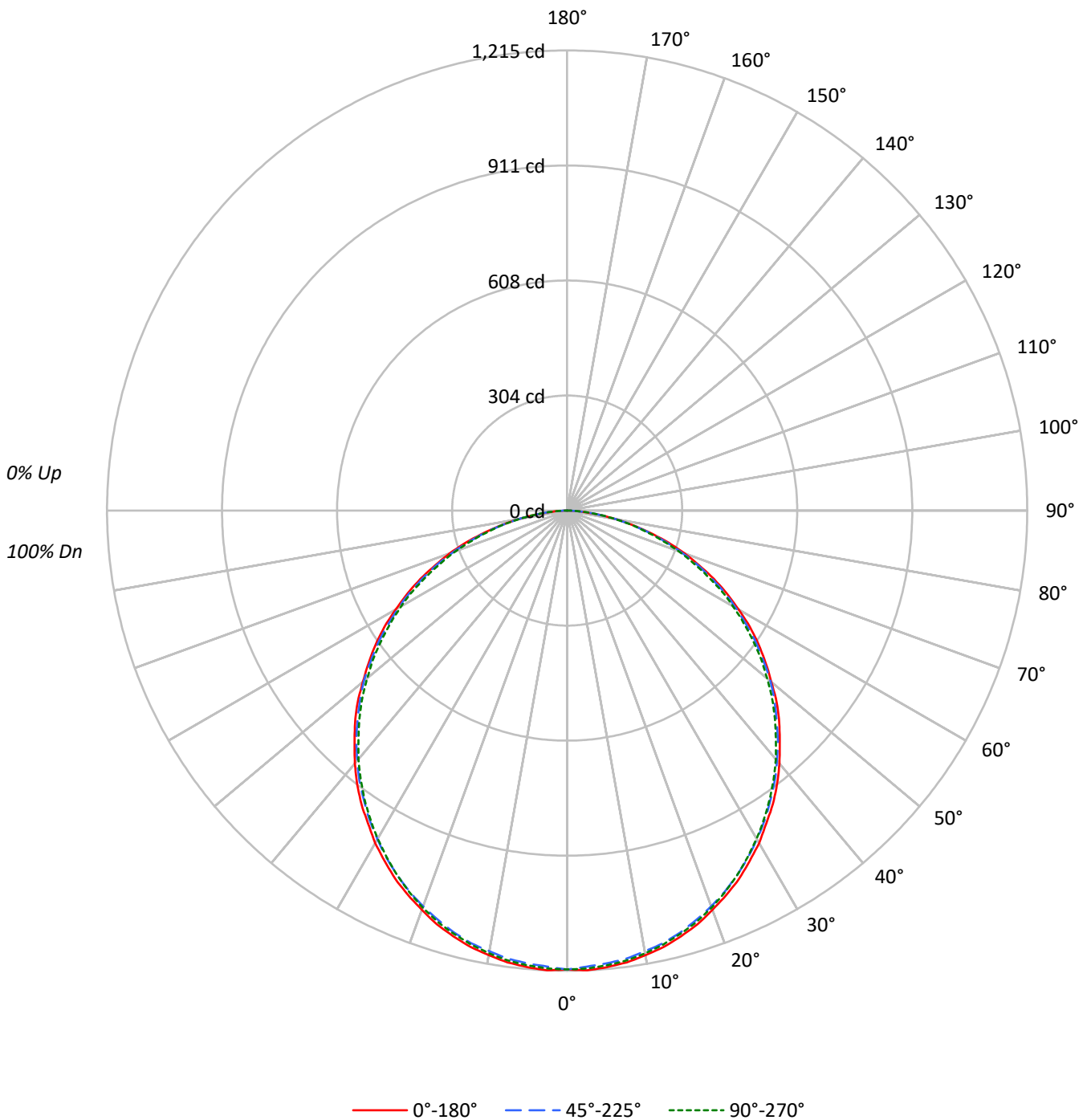
Lumens per Lamp: N/A
Luminaire Lumens: 3377.3 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P686078
CATALOG NUMBER: SQ4R-F-100D-940-1-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER: P686078

CATALOG NUMBER: SQ4R-F-100D-940-1-UNV-STD-W-4

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°	11664	11664	11664
5°	11694	11597	11645
10°	11650	11552	11601
15°	11596	11496	11529
20°	11493	11391	11424
25°	11403	11279	11279
30°	11268	11138	11120
35°	11130	10992	10954
40°	10960	10835	10772
45°	10786	10650	10560
50°	10544	10495	10319
55°	10365	10224	10057
60°	10062	9903	9743
65°	9743	9515	9290
70°	9275	8993	8808
75°	8418	8235	8049
80°	7196	7196	7108
85°	5147	5512	5512

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10786 cd/sqm

TEST NUMBER: P686078

CATALOG NUMBER: SQ4R-F-100D-940-1-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.6	3.4
10°-20°	326.8	9.7
20°-30°	491.2	14.5
30°-40°	587.0	17.4
40°-50°	604.9	17.9
50°-60°	544.3	16.1
60°-70°	413.8	12.3
70°-80°	235.2	7.0
80°-90°	59.4	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°	932.6	27.6
0°-40°	1519.6	45.0
0°-60°	2668.8	79.0
0°-90°	3377.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3377.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1212	1212	1212	1212	1212	
5°	1210	1208	1200	1210	1205	115
15°	1163	1162	1153	1160	1157	328
25°	1074	1070	1062	1065	1062	494
35°	947	944	935	935	932	592
45°	792	792	782	777	776	610
55°	618	616	609	604	599	551
65°	428	426	418	413	408	422
75°	226	225	221	220	216	241
85°	47	48	50	50	50	57
90°	0	0	0	0	0	

TEST NUMBER: P686078

CATALOG NUMBER: SQ4R-F-100D-940-1-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1211.6	1211.6	1211.6	1211.6	1211.6
2.5°	1215.0	1211.6	1205.0	1213.3	1210.0
5°	1210.0	1208.3	1200.0	1210.0	1205.0
7.5°	1203.3	1201.6	1193.3	1201.6	1198.3
10°	1191.7	1190.0	1181.7	1190.0	1186.7
12.5°	1180.0	1178.3	1170.0	1176.7	1173.3
15°	1163.4	1161.7	1153.4	1160.0	1156.7
17.5°	1145.1	1143.4	1133.4	1140.1	1138.4
20°	1121.8	1120.1	1111.8	1116.8	1115.1
22.5°	1098.5	1096.8	1088.5	1093.5	1090.1
25°	1073.5	1070.2	1061.8	1065.2	1061.8
27.5°	1043.5	1041.9	1033.5	1035.2	1031.9
30°	1013.6	1011.9	1001.9	1003.6	1000.3
32.5°	978.6	978.6	970.3	970.3	967.0
35°	947.0	943.7	935.3	935.3	932.0
37.5°	910.4	907.1	900.4	898.7	895.4
40°	872.1	870.4	862.1	860.5	857.1
42.5°	830.5	832.2	823.8	818.8	815.5
45°	792.2	792.2	782.2	777.2	775.6
47.5°	750.6	750.6	742.3	737.3	734.0
50°	704.0	707.3	700.7	692.4	689.0
52.5°	660.7	662.4	654.1	649.1	645.8
55°	617.5	615.8	609.1	604.1	599.2
57.5°	572.5	570.9	560.9	555.9	552.6
60°	522.6	522.6	514.3	509.3	506.0
62.5°	476.0	474.3	467.7	461.0	459.4
65°	427.7	426.1	417.7	412.8	407.8
67.5°	376.1	374.5	369.5	362.8	359.5
70°	329.5	324.5	319.5	314.6	312.9
72.5°	279.6	274.6	269.6	266.3	263.0
75°	226.3	224.7	221.4	219.7	216.4
77.5°	178.1	178.1	174.8	173.1	173.1
80°	129.8	129.8	129.8	128.2	128.2
82.5°	84.9	86.5	86.5	84.9	86.5
85°	46.6	48.3	49.9	49.9	49.9
87.5°	15.0	20.0	18.3	20.0	20.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)