

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: P686077

Luminaire Tested: SQ4R-F-100D-935-1-UNV-STD-W-4

Issue Date: 11/18/2022

Test Information

Test Method: LM-79-2019
Report Number: P686077
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-935-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS.
1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

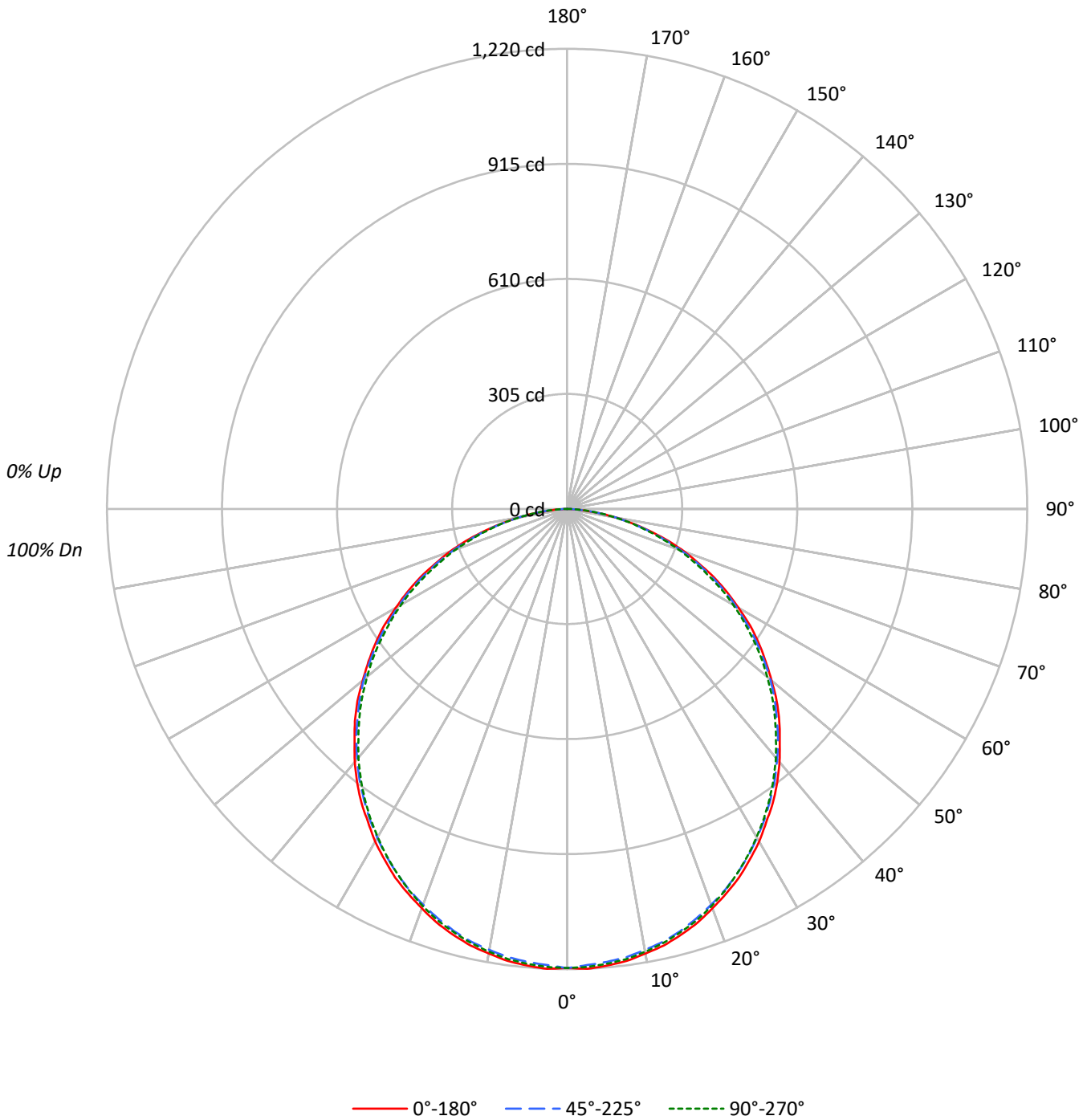
Lumens per Lamp: N/A
Luminaire Lumens: 3392.3 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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	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°	11716	11716	11716
5°	11745	11648	11696
10°	11701	11603	11652
15°	11646	11547	11580
20°	11543	11441	11475
25°	11454	11329	11329
30°	11318	11188	11169
35°	11179	11042	11003
40°	11009	10882	10819
45°	10834	10697	10606
50°	10591	10541	10366
55°	10410	10269	10101
60°	10107	9947	9785
65°	9786	9559	9331
70°	9317	9036	8847
75°	8459	8269	8083
80°	7230	7230	7135
85°	5170	5545	5545

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10834 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.1	3.4
10°-20°	328.3	9.7
20°-30°	493.4	14.5
30°-40°	589.7	17.4
40°-50°	607.6	17.9
50°-60°	546.7	16.1
60°-70°	415.6	12.3
70°-80°	236.3	7.0
80°-90°	59.7	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°	936.7	27.6
0°-40°	1526.4	45.0
0°-60°	2680.7	79.0
0°-90°	3392.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3392.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1215	1214	1205	1215	1210	115
15°	1168	1167	1158	1165	1162	330
25°	1078	1075	1066	1070	1066	496
35°	951	948	940	940	936	594
45°	796	796	786	781	779	613
55°	620	618	612	607	602	554
65°	430	428	420	415	410	424
75°	227	226	222	221	217	242
85°	47	48	50	50	50	58
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1217.0	1217.0	1217.0	1217.0	1217.0
2.5°	1220.3	1217.0	1210.3	1218.7	1215.3
5°	1215.3	1213.7	1205.3	1215.3	1210.3
7.5°	1208.6	1207.0	1198.6	1207.0	1203.6
10°	1196.9	1195.3	1186.9	1195.3	1191.9
12.5°	1185.2	1183.6	1175.2	1181.9	1178.6
15°	1168.5	1166.9	1158.5	1165.2	1161.8
17.5°	1150.1	1148.5	1138.4	1145.1	1143.4
20°	1126.7	1125.1	1116.7	1121.7	1120.0
22.5°	1103.3	1101.7	1093.3	1098.3	1095.0
25°	1078.3	1074.9	1066.5	1069.9	1066.5
27.5°	1048.2	1046.5	1038.1	1039.8	1036.5
30°	1018.1	1016.4	1006.4	1008.0	1004.7
32.5°	983.0	983.0	974.6	974.6	971.3
35°	951.2	947.9	939.5	939.5	936.2
37.5°	914.4	911.1	904.4	902.7	899.4
40°	876.0	874.3	865.9	864.3	860.9
42.5°	834.2	835.9	827.5	822.5	819.1
45°	795.7	795.7	785.7	780.7	779.0
47.5°	753.9	753.9	745.6	740.6	737.2
50°	707.1	710.5	703.8	695.4	692.1
52.5°	663.7	665.3	657.0	652.0	648.6
55°	620.2	618.5	611.8	606.8	601.8
57.5°	575.1	573.4	563.4	558.4	555.0
60°	524.9	524.9	516.6	511.5	508.2
62.5°	478.1	476.4	469.7	463.1	461.4
65°	429.6	428.0	419.6	414.6	409.6
67.5°	377.8	376.1	371.1	364.4	361.1
70°	331.0	326.0	321.0	316.0	314.3
72.5°	280.8	275.8	270.8	267.5	264.1
75°	227.4	225.7	222.3	220.7	217.3
77.5°	178.9	178.9	175.5	173.9	173.9
80°	130.4	130.4	130.4	128.7	128.7
82.5°	85.3	86.9	86.9	85.3	86.9
85°	46.8	48.5	50.2	50.2	50.2
87.5°	15.0	20.1	18.4	20.1	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)