

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1055087

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

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055087
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-892-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/23/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-FB-100D-840-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH BATWING FROSTED CONTINUOUS ROLL LEN
1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

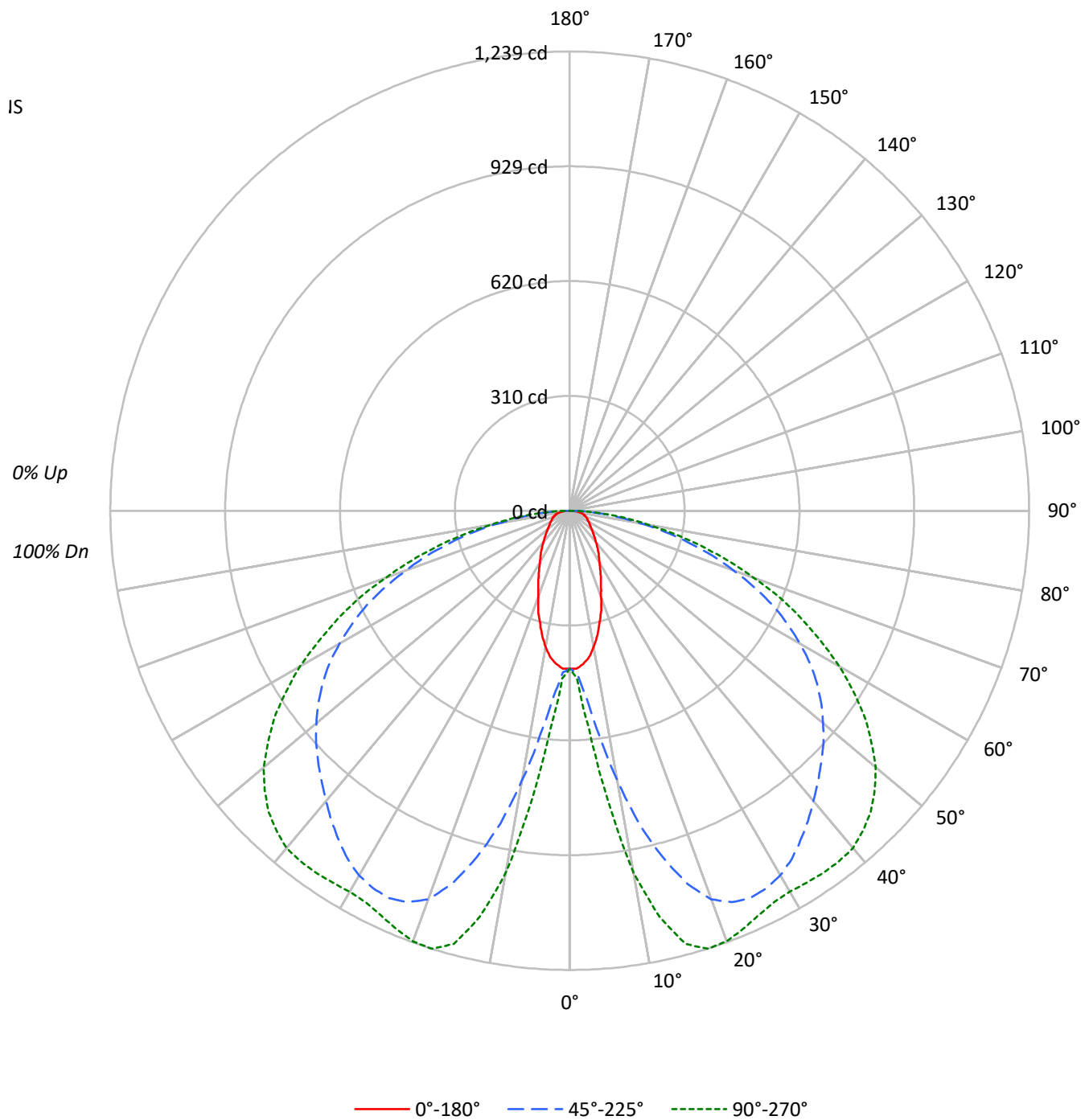
Lumens per Lamp: N/A
Luminaire Lumens: 3297.4 lumens
Efficiency: N/A
Efficacy: 89.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	100	96	92	96	93	90	92	89	87	89	86	84
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69
3	88	77	68	61	86	75	67	61	72	65	60	69	63	58	67	62	57
4	80	67	58	51	78	66	57	51	63	56	50	61	54	49	59	53	48
5	73	60	50	43	71	59	50	43	56	48	42	54	47	42	52	46	41
6	67	53	44	37	65	52	43	37	50	42	37	49	42	36	47	41	36
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31
8	58	43	35	28	56	43	34	28	41	34	28	40	33	28	39	32	28
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25
10	50	36	28	23	49	36	28	23	35	27	22	34	27	22	33	27	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4103	4103	4103
5°	4014	4848	5683
10°	3644	7221	9701
15°	3101	9644	12062
20°	2527	11430	12665
25°	2111	12244	12797
30°	1783	12631	13194
35°	1578	12758	14014
40°	1377	12849	14934
45°	1250	13062	15637
50°	1150	13363	16135
55°	1104	13664	16310
60°	1134	13802	16178
65°	1187	13768	15705
70°	1272	13193	14854
75°	1428	12338	13610
80°	1597	10711	11853
85°	1513	9080	10140

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 55°

Luminance: 16310 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.1	1.7
10°-20°	244.4	7.4
20°-30°	427.4	13.0
30°-40°	550.2	16.7
40°-50°	614.6	18.6
50°-60°	588.6	17.9
60°-70°	466.5	14.1
70°-80°	274.3	8.3
80°-90°	76.2	2.3
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°	726.9	22.0
0°-40°	1277.2	38.7
0°-60°	2480.4	75.2
0°-90°	3297.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3297.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	426	426	426	426	426	
5°	415	445	502	567	588	38
15°	311	574	968	1173	1210	87
25°	199	651	1153	1203	1205	92
35°	134	622	1086	1147	1192	84
45°	92	496	959	1099	1148	71
55°	66	315	814	946	972	60
65°	52	167	604	680	689	52
75°	38	103	332	365	366	40
85°	14	32	82	90	92	15
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	426.2	426.2	426.2	426.2	426.2	426.2	426.2	426.2	426.2	426.2	426.2
2.5°	426.2	426.2	429.0	430.4	433.1	434.5	437.2	439.9	448.2	449.5	452.3
5°	415.3	420.8	438.6	445.4	464.6	490.7	501.6	519.4	556.4	567.4	574.3
7.5°	398.8	411.2	455.0	466.0	514.0	582.5	611.3	649.6	708.6	737.4	760.7
10°	372.8	398.8	477.0	503.0	581.1	685.3	738.7	792.2	881.3	921.0	936.1
12.5°	344.0	386.5	500.3	535.9	648.3	800.4	864.8	923.8	1025.2	1078.6	1086.9
15°	311.1	368.7	522.2	574.3	719.5	896.3	967.6	1040.3	1134.8	1173.2	1182.8
17.5°	282.3	355.0	542.7	597.6	774.4	982.7	1055.3	1115.6	1192.4	1218.4	1225.3
20°	246.7	333.0	556.4	627.7	831.9	1045.7	1115.6	1162.2	1214.3	1230.8	1233.5
22.5°	220.7	309.7	564.7	638.7	870.3	1084.1	1143.0	1180.0	1215.7	1221.2	1222.5
25°	198.7	283.7	563.3	651.0	903.2	1107.4	1152.6	1180.0	1200.6	1203.3	1203.3
27.5°	178.2	254.9	557.8	653.8	927.9	1112.9	1148.5	1167.7	1177.3	1182.8	1182.8
30°	160.4	227.5	544.1	648.3	938.8	1107.4	1136.2	1145.8	1155.4	1163.6	1167.7
32.5°	146.6	201.5	523.6	637.3	940.2	1093.7	1114.3	1119.7	1133.4	1152.6	1159.5
35°	134.3	175.4	500.3	622.2	932.0	1071.8	1085.5	1091.0	1118.4	1147.2	1156.7
37.5°	122.0	156.2	470.1	596.2	919.6	1045.7	1055.3	1064.9	1107.4	1141.7	1152.6
40°	109.6	139.8	434.5	567.4	900.5	1014.2	1022.4	1037.5	1093.7	1133.4	1144.4
42.5°	100.1	126.1	396.1	537.3	875.8	978.6	990.9	1012.8	1077.3	1119.7	1132.1
45°	91.8	112.4	355.0	496.1	844.3	941.6	959.4	989.5	1058.1	1099.2	1110.2
47.5°	83.6	102.8	312.5	453.7	810.0	904.6	927.9	962.1	1032.0	1071.8	1081.4
50°	76.8	93.2	270.0	408.4	773.0	864.8	892.2	927.9	999.1	1036.1	1048.5
52.5°	71.3	85.0	230.3	363.2	730.5	823.7	855.2	892.2	959.4	995.0	1003.2
55°	65.8	78.1	196.0	315.2	686.6	779.8	814.1	849.7	915.5	945.7	951.2
57.5°	63.0	72.6	167.2	270.0	640.0	730.5	768.9	801.8	863.5	886.7	892.2
60°	58.9	68.5	145.3	231.6	589.3	683.9	716.8	749.7	801.8	821.0	825.1
62.5°	54.8	65.8	128.8	194.6	537.3	629.1	662.0	692.1	736.0	749.7	755.2
65°	52.1	63.0	116.5	167.2	483.8	571.5	604.4	630.5	666.1	679.8	682.5
67.5°	49.3	60.3	106.9	143.9	430.4	514.0	538.6	563.3	590.7	604.4	605.8
70°	45.2	57.6	98.7	127.5	375.5	448.2	468.7	494.8	516.7	523.6	527.7
72.5°	42.5	53.5	93.2	115.1	319.3	385.1	404.3	419.4	438.6	445.4	445.4
75°	38.4	48.0	87.7	102.8	261.8	315.2	331.7	346.8	361.8	364.6	360.5
77.5°	34.3	42.5	75.4	86.3	204.2	249.4	263.1	271.4	283.7	286.4	287.8
80°	28.8	37.0	58.9	67.2	148.0	183.7	193.2	200.1	211.1	211.1	213.8
82.5°	21.9	28.8	42.5	48.0	100.1	126.1	134.3	138.4	145.3	145.3	145.3
85°	13.7	17.8	27.4	31.5	60.3	76.8	82.2	83.6	89.1	90.5	90.5
87.5°	6.9	9.6	17.8	19.2	31.5	39.7	39.7	42.5	42.5	41.1	39.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	426.2	426.2
2.5°	455.0	452.3
5°	585.2	588.0
7.5°	788.1	786.7
10°	979.9	992.3
12.5°	1119.7	1122.5
15°	1204.7	1210.2
17.5°	1237.6	1239.0
20°	1239.0	1236.2
22.5°	1223.9	1221.2
25°	1206.1	1204.7
27.5°	1189.6	1191.0
30°	1182.8	1186.9
32.5°	1182.8	1189.6
35°	1185.5	1192.4
37.5°	1184.2	1192.4
40°	1178.7	1188.3
42.5°	1163.6	1170.5
45°	1140.3	1148.5
47.5°	1110.2	1115.6
50°	1071.8	1077.3
52.5°	1023.8	1025.2
55°	966.2	971.7
57.5°	904.6	905.9
60°	836.0	840.2
62.5°	763.4	763.4
65°	686.6	689.4
67.5°	607.2	614.0
70°	526.3	527.7
72.5°	446.8	446.8
75°	364.6	365.9
77.5°	286.4	286.4
80°	212.4	213.8
82.5°	146.6	149.4
85°	91.8	91.8
87.5°	42.5	38.4
90°	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	11.11	12.82	11.47	13.14	13.45	23.43	25.15	23.80	25.46	25.78
	3H	12.04	13.60	12.42	13.93	14.29	25.34	26.90	25.72	27.23	27.59
	4H	12.52	13.99	12.92	14.34	14.71	26.04	27.51	26.43	27.86	28.23
	6H	13.01	14.38	13.42	14.74	15.13	26.52	27.89	26.93	28.25	28.64
	8H	13.21	14.52	13.63	14.91	15.30	26.67	27.98	27.10	28.37	28.77
	12H	13.35	14.60	13.78	14.98	15.41	26.78	28.03	27.21	28.42	28.84
4H	2H	18.44	19.91	18.84	20.26	20.63	23.94	25.42	24.34	25.76	26.14
	3H	20.38	21.62	20.79	22.02	22.41	26.13	27.37	26.54	27.76	28.16
	4H	20.57	21.70	21.00	22.11	22.54	26.97	28.09	27.40	28.50	28.94
	6H	20.69	21.68	21.14	22.12	22.57	27.59	28.58	28.04	29.02	29.47
	8H	20.72	21.64	21.18	22.09	22.55	27.79	28.72	28.25	29.16	29.62
	12H	20.74	21.58	21.22	22.05	22.52	27.94	28.78	28.42	29.25	29.72
8H	4H	22.23	23.15	22.68	23.59	24.05	27.21	28.13	27.66	28.57	29.03
	6H	22.67	23.45	23.16	23.93	24.40	27.96	28.73	28.45	29.22	29.69
	8H	22.76	23.45	23.26	23.95	24.44	28.23	28.93	28.74	29.43	29.91
	12H	22.80	23.41	23.30	23.90	24.46	28.46	29.07	28.96	29.56	30.12
12H	4H	22.44	23.27	22.91	23.74	24.21	27.21	28.05	27.69	28.52	28.99
	6H	23.01	23.71	23.52	24.21	24.70	27.98	28.68	28.49	29.18	29.67
	8H	23.22	23.84	23.73	24.33	24.88	28.32	28.93	28.82	29.42	29.98

END OF REPORT