

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: P1055085

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

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055085
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-830-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH BATWING FROSTED CONTINUOUS ROLL LEN
1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

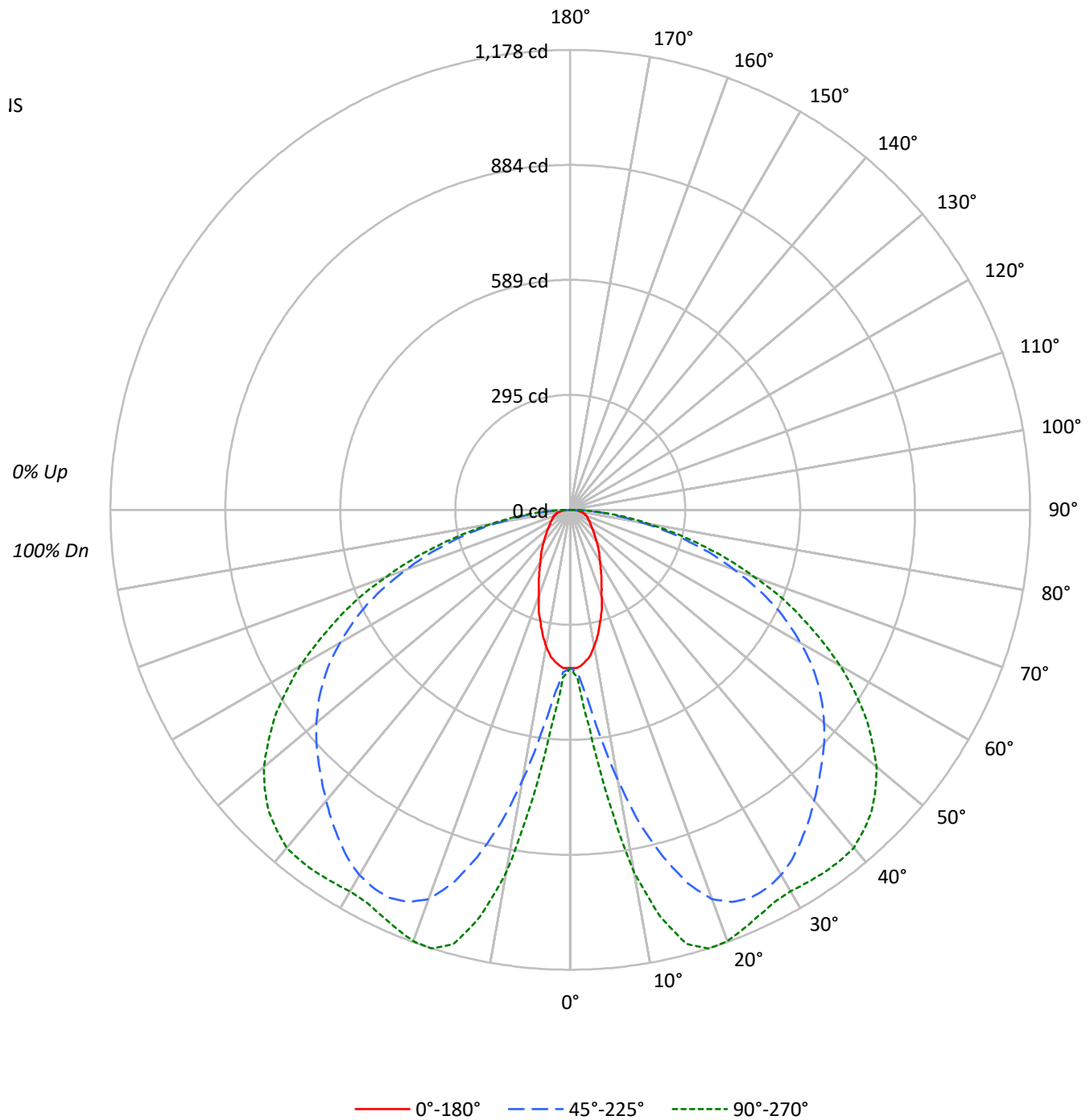
Lumens per Lamp: N/A
Luminaire Lumens: 3135.8 lumens
Efficiency: N/A
Efficacy: 84.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3903	3903	3903
5°	3816	4610	5404
10°	3466	6868	9225
15°	2949	9172	11471
20°	2404	10870	12044
25°	2008	11643	12170
30°	1695	12012	12547
35°	1501	12132	13327
40°	1311	12219	14201
45°	1189	12422	14870
50°	1093	12708	15344
55°	1051	12995	15511
60°	1078	13126	15384
65°	1128	13094	14935
70°	1210	12549	14125
75°	1358	11732	12945
80°	1519	10190	11271
85°	1436	8638	9643

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 55°

Luminance: 15511 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.4	1.7
10°-20°	232.4	7.4
20°-30°	406.5	13.0
30°-40°	523.3	16.7
40°-50°	584.5	18.6
50°-60°	559.8	17.9
60°-70°	443.6	14.1
70°-80°	260.9	8.3
80°-90°	72.5	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°	691.3	22.0
0°-40°	1214.6	38.7
0°-60°	2358.8	75.2
0°-90°	3135.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3135.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	405	405	405	405	405	
5°	395	424	477	540	559	36
15°	296	546	920	1116	1151	82
25°	189	619	1096	1144	1146	87
35°	128	592	1032	1091	1134	80
45°	87	472	912	1045	1092	68
55°	63	300	774	899	924	57
65°	50	159	575	646	656	49
75°	36	98	315	347	348	38
85°	13	30	78	86	87	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°	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4
2.5°	405.4	405.4	408.0	409.3	411.9	413.2	415.8	418.4	426.2	427.5	430.1
5°	394.9	400.1	417.1	423.6	441.8	466.6	477.0	494.0	529.2	539.6	546.1
7.5°	379.3	391.0	432.7	443.1	488.8	553.9	581.3	617.8	673.8	701.2	723.4
10°	354.5	379.3	453.6	478.3	552.6	651.7	702.5	753.4	838.1	875.9	890.2
12.5°	327.1	367.6	475.7	509.6	616.5	761.2	822.4	878.5	974.9	1025.8	1033.6
15°	295.9	350.6	496.6	546.1	684.3	852.4	920.2	989.3	1079.2	1115.7	1124.8
17.5°	268.5	337.6	516.1	568.3	736.4	934.5	1003.6	1061.0	1133.9	1158.7	1165.2
20°	234.6	316.7	529.2	596.9	791.2	994.5	1061.0	1105.3	1154.8	1170.4	1173.0
22.5°	209.8	294.6	537.0	607.4	827.6	1031.0	1087.0	1122.2	1156.1	1161.3	1162.6
25°	189.0	269.8	535.7	619.1	858.9	1053.1	1096.1	1122.2	1141.8	1144.4	1144.4
27.5°	169.4	242.4	530.5	621.7	882.4	1058.3	1092.2	1110.5	1119.6	1124.8	1124.8
30°	152.5	216.4	517.4	616.5	892.8	1053.1	1080.5	1089.6	1098.7	1106.6	1110.5
32.5°	139.5	191.6	497.9	606.1	894.1	1040.1	1059.6	1064.9	1077.9	1096.1	1102.7
35°	127.7	166.8	475.7	591.7	886.3	1019.2	1032.3	1037.5	1063.6	1090.9	1100.1
37.5°	116.0	148.6	447.1	567.0	874.6	994.5	1003.6	1012.7	1053.1	1085.7	1096.1
40°	104.3	132.9	413.2	539.6	856.3	964.5	972.3	986.7	1040.1	1077.9	1088.3
42.5°	95.1	119.9	376.7	510.9	832.9	930.6	942.3	963.2	1024.5	1064.9	1076.6
45°	87.3	106.9	337.6	471.8	802.9	895.4	912.4	941.0	1006.2	1045.3	1055.7
47.5°	79.5	97.8	297.2	431.4	770.3	860.2	882.4	915.0	981.4	1019.2	1028.4
50°	73.0	88.6	256.8	388.4	735.1	822.4	848.5	882.4	950.2	985.4	997.1
52.5°	67.8	80.8	219.0	345.4	694.7	783.3	813.3	848.5	912.4	946.3	954.1
55°	62.6	74.3	186.4	299.8	653.0	741.6	774.2	808.1	870.7	899.3	904.5
57.5°	60.0	69.1	159.0	256.8	608.7	694.7	731.2	762.5	821.1	843.3	848.5
60°	56.0	65.2	138.2	220.3	560.5	650.4	681.7	712.9	762.5	780.7	784.6
62.5°	52.1	62.6	122.5	185.1	510.9	598.3	629.5	658.2	699.9	712.9	718.2
65°	49.5	60.0	110.8	159.0	460.1	543.5	574.8	599.6	633.4	646.5	649.1
67.5°	46.9	57.3	101.7	136.9	409.3	488.8	512.2	535.7	561.8	574.8	576.1
70°	43.0	54.7	93.8	121.2	357.1	426.2	445.8	470.5	491.4	497.9	501.8
72.5°	40.4	50.8	88.6	109.5	303.7	366.2	384.5	398.8	417.1	423.6	423.6
75°	36.5	45.6	83.4	97.8	248.9	299.8	315.4	329.8	344.1	346.7	342.8
77.5°	32.6	40.4	71.7	82.1	194.2	237.2	250.2	258.1	269.8	272.4	273.7
80°	27.4	35.2	56.0	63.9	140.8	174.7	183.8	190.3	200.7	200.7	203.3
82.5°	20.9	27.4	40.4	45.6	95.1	119.9	127.7	131.6	138.2	138.2	138.2
85°	13.0	16.9	26.1	30.0	57.3	73.0	78.2	79.5	84.7	86.0	86.0
87.5°	6.5	9.1	16.9	18.2	30.0	37.8	37.8	40.4	40.4	39.1	37.8
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°	405.4	405.4
2.5°	432.7	430.1
5°	556.5	559.2
7.5°	749.4	748.1
10°	931.9	943.6
12.5°	1064.9	1067.5
15°	1145.7	1150.9
17.5°	1177.0	1178.3
20°	1178.3	1175.6
22.5°	1163.9	1161.3
25°	1147.0	1145.7
27.5°	1131.3	1132.6
30°	1124.8	1128.7
32.5°	1124.8	1131.3
35°	1127.4	1133.9
37.5°	1126.1	1133.9
40°	1120.9	1130.0
42.5°	1106.6	1113.1
45°	1084.4	1092.2
47.5°	1055.7	1061.0
50°	1019.2	1024.5
52.5°	973.6	974.9
55°	918.9	924.1
57.5°	860.2	861.5
60°	795.1	799.0
62.5°	726.0	726.0
65°	653.0	655.6
67.5°	577.4	583.9
70°	500.5	501.8
72.5°	424.9	424.9
75°	346.7	348.0
77.5°	272.4	272.4
80°	202.0	203.3
82.5°	139.5	142.1
85°	87.3	87.3
87.5°	40.4	36.5
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	10.93	12.65	11.30	12.96	13.28	23.26	24.97	23.62	25.29	25.60
	3H	11.87	13.43	12.24	13.75	14.11	25.17	26.73	25.55	27.05	27.41
	4H	12.34	13.81	12.74	14.16	14.53	25.86	27.33	26.26	27.68	28.05
	6H	12.83	14.20	13.24	14.56	14.95	26.35	27.72	26.76	28.08	28.47
	8H	13.03	14.34	13.46	14.73	15.13	26.50	27.81	26.92	28.20	28.59
	12H	13.17	14.43	13.60	14.81	15.24	26.61	27.86	27.03	28.24	28.67
4H	2H	18.27	19.74	18.66	20.09	20.46	23.77	25.24	24.17	25.59	25.96
	3H	20.20	21.45	20.61	21.84	22.24	25.95	27.19	26.36	27.59	27.99
	4H	20.40	21.52	20.83	21.93	22.37	26.79	27.92	27.22	28.33	28.76
	6H	20.52	21.50	20.97	21.94	22.39	27.42	28.40	27.87	28.84	29.30
	8H	20.54	21.47	21.00	21.91	22.37	27.62	28.54	28.08	28.98	29.45
	12H	20.57	21.40	21.05	21.88	22.34	27.77	28.60	28.25	29.08	29.55
8H	4H	22.05	22.98	22.51	23.42	23.88	27.03	27.96	27.49	28.40	28.86
	6H	22.50	23.27	22.99	23.76	24.23	27.78	28.56	28.27	29.04	29.51
	8H	22.58	23.28	23.09	23.78	24.26	28.06	28.75	28.56	29.26	29.74
	12H	22.63	23.24	23.13	23.73	24.29	28.29	28.90	28.79	29.39	29.95
12H	4H	22.26	23.10	22.74	23.57	24.04	27.04	27.87	27.52	28.35	28.81
	6H	22.84	23.53	23.34	24.04	24.52	27.81	28.51	28.31	29.01	29.49
	8H	23.05	23.66	23.55	24.15	24.71	28.14	28.76	28.65	29.25	29.80

END OF REPORT