

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: P1055086

Luminaire Tested: SQ4R-FB-100D-835-1-UNV-STD-W-4

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055086
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-835-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH BATWING FROSTED CONTINUOUS ROLL LEN
1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

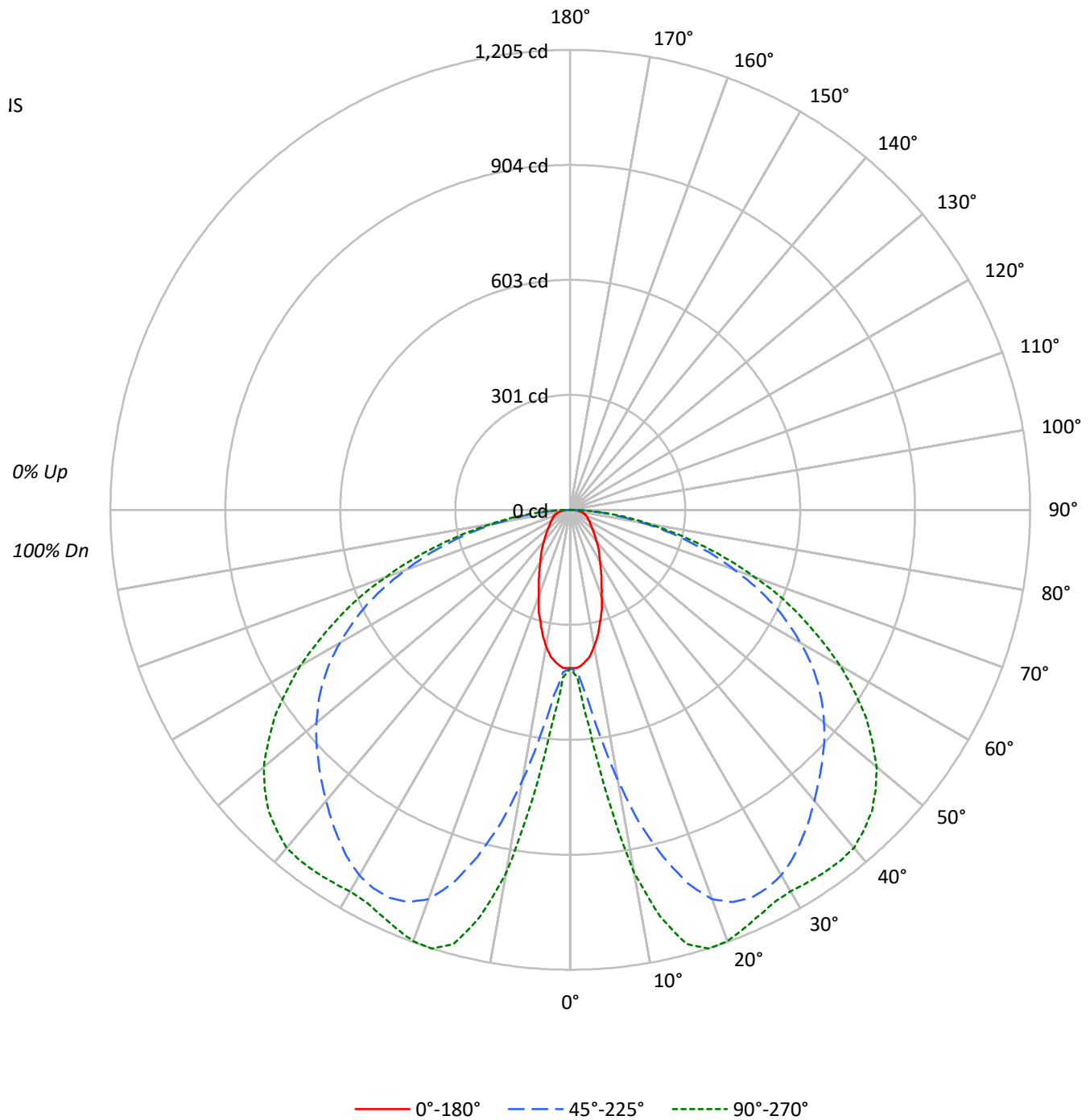
Lumens per Lamp: N/A
Luminaire Lumens: 3208.1 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	108	103	98	94	105	100	96	92	96	93	90	92	89	87	89	86	84	82		
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67		
3	88	77	68	61	86	75	67	61	72	65	60	69	63	58	67	62	57	55		
4	80	67	58	51	78	66	57	51	63	56	50	61	54	49	59	53	48	46		
5	73	60	50	43	71	59	50	43	56	48	42	54	47	42	52	46	41	39		
6	67	53	44	37	65	52	43	37	50	42	37	49	42	36	47	41	36	34		
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29		
8	58	43	35	28	56	43	34	28	41	34	28	40	33	28	39	32	28	26		
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25	23		
10	50	36	28	23	49	36	28	23	35	27	22	34	27	22	33	27	22	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3992	3992	3992
5°	3904	4716	5528
10°	3546	7026	9438
15°	3017	9383	11735
20°	2459	11120	12322
25°	2053	11912	12451
30°	1734	12288	12836
35°	1536	12412	13634
40°	1341	12501	14529
45°	1216	12708	15214
50°	1119	13002	15698
55°	1074	13294	15868
60°	1103	13428	15739
65°	1155	13395	15279
70°	1239	12836	14451
75°	1387	12004	13242
80°	1552	10423	11532
85°	1469	8837	9864

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 55°

Luminance: 15868 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.6	1.7
10°-20°	237.7	7.4
20°-30°	415.8	13.0
30°-40°	535.3	16.7
40°-50°	597.9	18.6
50°-60°	572.7	17.9
60°-70°	453.8	14.1
70°-80°	266.9	8.3
80°-90°	74.1	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°	707.2	22.0
0°-40°	1242.6	38.7
0°-60°	2413.2	75.2
0°-90°	3208.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3208.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	415	415	415	415	415	
5°	404	433	488	552	572	37
15°	303	559	941	1141	1177	84
25°	193	633	1121	1171	1172	89
35°	131	605	1056	1116	1160	82
45°	89	483	933	1069	1117	69
55°	64	307	792	920	945	58
65°	51	163	588	661	671	50
75°	37	100	323	355	356	39
85°	13	31	80	88	89	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°	414.7	414.7	414.7	414.7	414.7	414.7	414.7	414.7	414.7	414.7	414.7
2.5°	414.7	414.7	417.4	418.7	421.4	422.7	425.4	428.0	436.0	437.4	440.0
5°	404.0	409.4	426.7	433.4	452.0	477.4	488.0	505.4	541.4	552.0	558.7
7.5°	388.0	400.0	442.7	453.4	500.0	566.7	594.7	632.0	689.4	717.4	740.0
10°	362.7	388.0	464.0	489.4	565.4	666.7	718.7	770.7	857.4	896.1	910.7
12.5°	334.7	376.0	486.7	521.4	630.7	778.7	841.4	898.7	997.4	1049.4	1057.4
15°	302.7	358.7	508.0	558.7	700.0	872.1	941.4	1012.1	1104.1	1141.4	1150.7
17.5°	274.7	345.4	528.0	581.4	753.4	956.1	1026.7	1085.4	1160.1	1185.4	1192.1
20°	240.0	324.0	541.4	610.7	809.4	1017.4	1085.4	1130.7	1181.4	1197.4	1200.1
22.5°	214.7	301.4	549.4	621.4	846.7	1054.7	1112.1	1148.1	1182.7	1188.1	1189.4
25°	193.3	276.0	548.0	633.4	878.7	1077.4	1121.4	1148.1	1168.1	1170.7	1170.7
27.5°	173.3	248.0	542.7	636.0	902.7	1082.7	1117.4	1136.1	1145.4	1150.7	1150.7
30°	156.0	221.3	529.4	630.7	913.4	1077.4	1105.4	1114.7	1124.1	1132.1	1136.1
32.5°	142.7	196.0	509.4	620.0	914.7	1064.1	1084.1	1089.4	1102.7	1121.4	1128.1
35°	130.7	170.7	486.7	605.4	906.7	1042.7	1056.1	1061.4	1088.1	1116.1	1125.4
37.5°	118.7	152.0	457.4	580.0	894.7	1017.4	1026.7	1036.1	1077.4	1110.7	1121.4
40°	106.7	136.0	422.7	552.0	876.1	986.7	994.7	1009.4	1064.1	1102.7	1113.4
42.5°	97.3	122.7	385.4	522.7	852.1	952.1	964.1	985.4	1048.1	1089.4	1101.4
45°	89.3	109.3	345.4	482.7	821.4	916.1	933.4	962.7	1029.4	1069.4	1080.1
47.5°	81.3	100.0	304.0	441.4	788.0	880.1	902.7	936.1	1004.1	1042.7	1052.1
50°	74.7	90.7	262.7	397.4	752.0	841.4	868.1	902.7	972.1	1008.1	1020.1
52.5°	69.3	82.7	224.0	353.4	710.7	801.4	832.1	868.1	933.4	968.1	976.1
55°	64.0	76.0	190.7	306.7	668.0	758.7	792.0	826.7	890.7	920.1	925.4
57.5°	61.3	70.7	162.7	262.7	622.7	710.7	748.0	780.0	840.1	862.7	868.1
60°	57.3	66.7	141.3	225.3	573.4	665.4	697.4	729.4	780.0	798.7	802.7
62.5°	53.3	64.0	125.3	189.3	522.7	612.0	644.0	673.4	716.0	729.4	734.7
65°	50.7	61.3	113.3	162.7	470.7	556.0	588.0	613.4	648.0	661.4	664.0
67.5°	48.0	58.7	104.0	140.0	418.7	500.0	524.0	548.0	574.7	588.0	589.4
70°	44.0	56.0	96.0	124.0	365.4	436.0	456.0	481.4	502.7	509.4	513.4
72.5°	41.3	52.0	90.7	112.0	310.7	374.7	393.4	408.0	426.7	433.4	433.4
75°	37.3	46.7	85.3	100.0	254.7	306.7	322.7	337.4	352.0	354.7	350.7
77.5°	33.3	41.3	73.3	84.0	198.7	242.7	256.0	264.0	276.0	278.7	280.0
80°	28.0	36.0	57.3	65.3	144.0	178.7	188.0	194.7	205.3	205.3	208.0
82.5°	21.3	28.0	41.3	46.7	97.3	122.7	130.7	134.7	141.3	141.3	141.3
85°	13.3	17.3	26.7	30.7	58.7	74.7	80.0	81.3	86.7	88.0	88.0
87.5°	6.7	9.3	17.3	18.7	30.7	38.7	38.7	41.3	41.3	40.0	38.7
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°	414.7	414.7
2.5°	442.7	440.0
5°	569.4	572.0
7.5°	766.7	765.4
10°	953.4	965.4
12.5°	1089.4	1092.1
15°	1172.1	1177.4
17.5°	1204.1	1205.4
20°	1205.4	1202.7
22.5°	1190.7	1188.1
25°	1173.4	1172.1
27.5°	1157.4	1158.7
30°	1150.7	1154.7
32.5°	1150.7	1157.4
35°	1153.4	1160.1
37.5°	1152.1	1160.1
40°	1146.7	1156.1
42.5°	1132.1	1138.7
45°	1109.4	1117.4
47.5°	1080.1	1085.4
50°	1042.7	1048.1
52.5°	996.1	997.4
55°	940.1	945.4
57.5°	880.1	881.4
60°	813.4	817.4
62.5°	742.7	742.7
65°	668.0	670.7
67.5°	590.7	597.4
70°	512.0	513.4
72.5°	434.7	434.7
75°	354.7	356.0
77.5°	278.7	278.7
80°	206.7	208.0
82.5°	142.7	145.3
85°	89.3	89.3
87.5°	41.3	37.3
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	11.01	12.73	11.38	13.04	13.36	23.34	25.05	23.70	25.37	25.68
	3H	11.95	13.51	12.32	13.83	14.19	25.25	26.81	25.63	27.13	27.49
	4H	12.42	13.90	12.82	14.24	14.62	25.94	27.41	26.34	27.76	28.13
	6H	12.91	14.28	13.32	14.64	15.03	26.43	27.80	26.84	28.16	28.55
	8H	13.11	14.42	13.54	14.81	15.21	26.58	27.89	27.00	28.28	28.67
	12H	13.25	14.51	13.68	14.89	15.32	26.68	27.94	27.11	28.32	28.75
4H	2H	18.35	19.82	18.74	20.16	20.54	23.85	25.32	24.25	25.67	26.04
	3H	20.28	21.53	20.69	21.92	22.32	26.03	27.27	26.44	27.67	28.07
	4H	20.48	21.60	20.91	22.01	22.45	26.87	28.00	27.30	28.41	28.84
	6H	20.60	21.58	21.05	22.02	22.47	27.50	28.48	27.95	28.92	29.37
	8H	20.62	21.55	21.08	21.99	22.45	27.70	28.62	28.15	29.06	29.53
	12H	20.65	21.48	21.12	21.95	22.42	27.85	28.68	28.33	29.16	29.62
8H	4H	22.13	23.06	22.59	23.50	23.96	27.11	28.04	27.57	28.48	28.94
	6H	22.58	23.35	23.07	23.84	24.31	27.86	28.64	28.35	29.12	29.59
	8H	22.66	23.36	23.17	23.86	24.34	28.14	28.83	28.64	29.34	29.82
	12H	22.70	23.32	23.21	23.81	24.36	28.37	28.98	28.87	29.47	30.03
12H	4H	22.34	23.18	22.82	23.65	24.12	27.12	27.95	27.60	28.43	28.89
	6H	22.92	23.61	23.42	24.12	24.60	27.89	28.58	28.39	29.09	29.57
	8H	23.13	23.74	23.63	24.23	24.79	28.22	28.84	28.73	29.33	29.88

END OF REPORT