

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: P1055092

Luminaire Tested: SQ4R-FB-125D-830-1-UNV-STD-W-4

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055092
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-125D-830-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH BATWING FROSTED CONTINUOUS ROLL LEN
1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

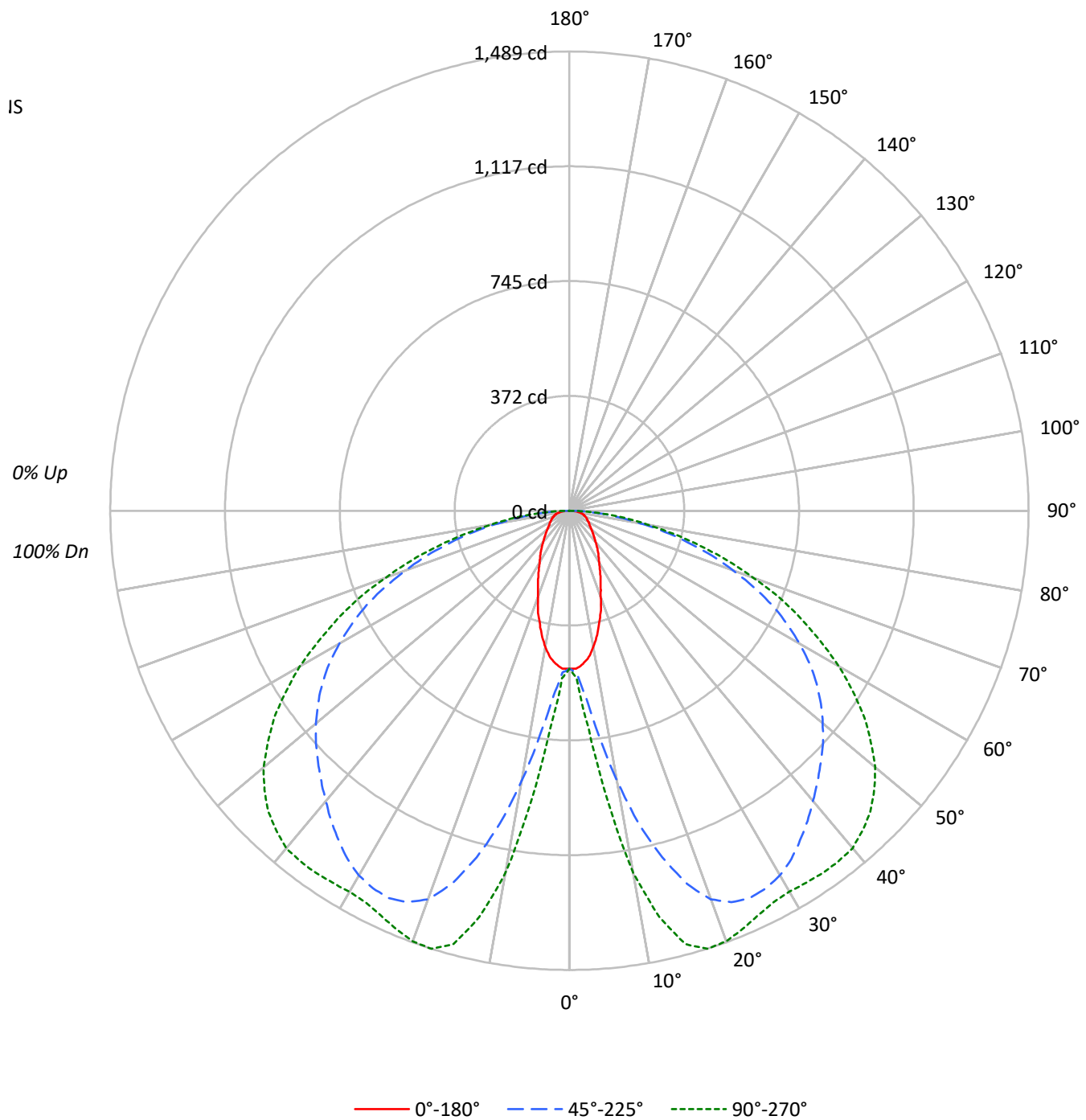
Lumens per Lamp: N/A
Luminaire Lumens: 3963.1 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 49.5
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		0
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°	4932	4932	4932
5°	4823	5826	6830
10°	4381	8680	11659
15°	3727	11592	14497
20°	3038	13738	15222
25°	2538	14715	15380
30°	2142	15181	15858
35°	1897	15333	16843
40°	1656	15443	17949
45°	1503	15700	18794
50°	1381	16062	19391
55°	1328	16424	19603
60°	1363	16588	19443
65°	1426	16548	18876
70°	1531	15859	17852
75°	1715	14827	16359
80°	1918	12879	14249
85°	1823	10914	12195

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 55°

Luminance: 19603 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.3	1.7
10°-20°	293.7	7.4
20°-30°	513.7	13.0
30°-40°	661.3	16.7
40°-50°	738.7	18.6
50°-60°	707.5	17.9
60°-70°	560.7	14.1
70°-80°	329.7	8.3
80°-90°	91.6	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°	873.7	22.0
0°-40°	1535.0	38.7
0°-60°	2981.1	75.2
0°-90°	3963.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3963.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	512	512	512	512	512	
5°	499	535	603	682	707	46
15°	374	690	1163	1410	1454	104
25°	239	782	1385	1446	1448	110
35°	161	748	1305	1379	1433	101
45°	110	596	1153	1321	1380	85
55°	79	379	978	1137	1168	72
65°	63	201	726	817	829	62
75°	46	124	399	438	440	48
85°	16	38	99	109	110	19
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°	512.3	512.3	512.3	512.3	512.3	512.3	512.3	512.3	512.3	512.3	512.3
2.5°	512.3	512.3	515.6	517.2	520.5	522.2	525.5	528.8	538.6	540.3	543.6
5°	499.1	505.7	527.1	535.4	558.4	589.7	602.9	624.3	668.8	682.0	690.2
7.5°	479.3	494.2	546.9	560.1	617.7	700.1	734.7	780.8	851.6	886.2	914.2
10°	448.1	479.3	573.2	604.5	698.4	823.6	887.9	952.1	1059.2	1106.9	1125.1
12.5°	413.5	464.5	601.2	644.1	779.1	962.0	1039.4	1110.2	1232.1	1296.4	1306.3
15°	373.9	443.1	627.6	690.2	864.8	1077.3	1163.0	1250.3	1363.9	1410.0	1421.6
17.5°	339.3	426.6	652.3	718.2	930.7	1181.1	1268.4	1340.9	1433.1	1464.4	1472.6
20°	296.5	400.3	668.8	754.4	999.9	1256.8	1340.9	1396.9	1459.5	1479.2	1482.5
22.5°	265.2	372.3	678.7	767.6	1046.0	1303.0	1373.8	1418.3	1461.1	1467.7	1469.3
25°	238.9	341.0	677.0	782.4	1085.5	1331.0	1385.3	1418.3	1443.0	1446.3	1446.3
27.5°	214.1	306.4	670.4	785.7	1115.2	1337.6	1380.4	1403.5	1415.0	1421.6	1421.6
30°	192.7	273.4	654.0	779.1	1128.4	1331.0	1365.6	1377.1	1388.6	1398.5	1403.5
32.5°	176.3	242.1	629.2	766.0	1130.0	1314.5	1339.2	1345.8	1362.3	1385.3	1393.6
35°	161.4	210.8	601.2	747.8	1120.1	1288.1	1304.6	1311.2	1344.2	1378.7	1390.3
37.5°	146.6	187.8	565.0	716.6	1105.3	1256.8	1268.4	1279.9	1331.0	1372.2	1385.3
40°	131.8	168.0	522.2	682.0	1082.2	1219.0	1228.8	1247.0	1314.5	1362.3	1375.4
42.5°	120.2	151.5	476.1	645.7	1052.6	1176.1	1191.0	1217.3	1294.7	1345.8	1360.6
45°	110.4	135.1	426.6	596.3	1014.7	1131.7	1153.1	1189.3	1271.7	1321.1	1334.3
47.5°	100.5	123.5	375.6	545.2	973.5	1087.2	1115.2	1156.4	1240.4	1288.1	1299.7
50°	92.2	112.0	324.5	490.9	929.0	1039.4	1072.4	1115.2	1200.8	1245.3	1260.1
52.5°	85.7	102.1	276.7	436.5	878.0	990.0	1027.9	1072.4	1153.1	1195.9	1205.8
55°	79.1	93.9	235.6	378.9	825.3	937.3	978.5	1021.3	1100.4	1136.6	1143.2
57.5°	75.8	87.3	201.0	324.5	769.3	878.0	924.1	963.6	1037.8	1065.8	1072.4
60°	70.8	82.4	174.6	278.4	708.3	822.0	861.5	901.0	963.6	986.7	991.6
62.5°	65.9	79.1	154.8	233.9	645.7	756.1	795.6	831.9	884.6	901.0	907.6
65°	62.6	75.8	140.0	201.0	581.5	686.9	726.4	757.7	800.6	817.0	820.3
67.5°	59.3	72.5	128.5	173.0	517.2	617.7	647.4	677.0	710.0	726.4	728.1
70°	54.4	69.2	118.6	153.2	451.3	538.6	563.4	594.7	621.0	629.2	634.2
72.5°	51.1	64.2	112.0	138.4	383.8	462.9	485.9	504.1	527.1	535.4	535.4
75°	46.1	57.7	105.4	123.5	314.6	378.9	398.6	416.8	434.9	438.2	433.2
77.5°	41.2	51.1	90.6	103.8	245.4	299.8	316.3	326.2	341.0	344.3	345.9
80°	34.6	44.5	70.8	80.7	177.9	220.7	232.3	240.5	253.7	253.7	257.0
82.5°	26.4	34.6	51.1	57.7	120.2	151.5	161.4	166.4	174.6	174.6	174.6
85°	16.5	21.4	32.9	37.9	72.5	92.2	98.8	100.5	107.1	108.7	108.7
87.5°	8.2	11.5	21.4	23.1	37.9	47.8	47.8	51.1	51.1	49.4	47.8
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°	512.3	512.3
2.5°	546.9	543.6
5°	703.4	706.7
7.5°	947.2	945.5
10°	1177.8	1192.6
12.5°	1345.8	1349.1
15°	1447.9	1454.5
17.5°	1487.5	1489.1
20°	1489.1	1485.8
22.5°	1471.0	1467.7
25°	1449.6	1447.9
27.5°	1429.8	1431.5
30°	1421.6	1426.5
32.5°	1421.6	1429.8
35°	1424.9	1433.1
37.5°	1423.2	1433.1
40°	1416.6	1428.2
42.5°	1398.5	1406.7
45°	1370.5	1380.4
47.5°	1334.3	1340.9
50°	1288.1	1294.7
52.5°	1230.5	1232.1
55°	1161.3	1167.9
57.5°	1087.2	1088.8
60°	1004.8	1009.8
62.5°	917.5	917.5
65°	825.3	828.6
67.5°	729.7	738.0
70°	632.5	634.2
72.5°	537.0	537.0
75°	438.2	439.8
77.5°	344.3	344.3
80°	255.3	257.0
82.5°	176.3	179.5
85°	110.4	110.4
87.5°	51.1	46.1
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	11.75	13.46	12.11	13.78	14.09	24.07	25.79	24.44	26.10	26.42
	3H	12.68	14.24	13.06	14.57	14.93	25.98	27.54	26.36	27.87	28.23
	4H	13.16	14.63	13.56	14.98	15.35	26.68	28.15	27.07	28.49	28.87
	6H	13.65	15.02	14.06	15.38	15.77	27.16	28.53	27.57	28.89	29.28
	8H	13.85	15.16	14.27	15.55	15.94	27.31	28.62	27.74	29.01	29.41
	12H	13.99	15.24	14.42	15.62	16.05	27.42	28.67	27.85	29.06	29.48
4H	2H	19.08	20.55	19.48	20.90	21.27	24.58	26.06	24.98	26.40	26.78
	3H	21.02	22.26	21.43	22.65	23.05	26.77	28.01	27.17	28.40	28.80
	4H	21.21	22.34	21.64	22.75	23.18	27.61	28.73	28.04	29.14	29.58
	6H	21.33	22.32	21.78	22.76	23.21	28.23	29.22	28.68	29.66	30.11
	8H	21.36	22.28	21.82	22.72	23.19	28.43	29.36	28.89	29.80	30.26
	12H	21.38	22.22	21.86	22.69	23.16	28.58	29.42	29.06	29.89	30.36
8H	4H	22.86	23.79	23.32	24.23	24.69	27.84	28.77	28.30	29.21	29.67
	6H	23.31	24.08	23.80	24.57	25.04	28.60	29.37	29.09	29.86	30.33
	8H	23.40	24.09	23.90	24.59	25.08	28.87	29.57	29.38	30.07	30.55
	12H	23.44	24.05	23.94	24.54	25.10	29.10	29.71	29.60	30.20	30.76
12H	4H	23.07	23.91	23.55	24.38	24.85	27.85	28.69	28.33	29.16	29.63
	6H	23.65	24.35	24.16	24.85	25.33	28.62	29.32	29.13	29.82	30.31
	8H	23.86	24.48	24.37	24.97	25.52	28.96	29.57	29.46	30.06	30.62