

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: P1055094

Luminaire Tested: SQ4R-FB-125D-840-1-UNV-STD-W-4

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055094
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-840-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH BATWING FROSTED CONTINUOUS ROLL LEN
1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

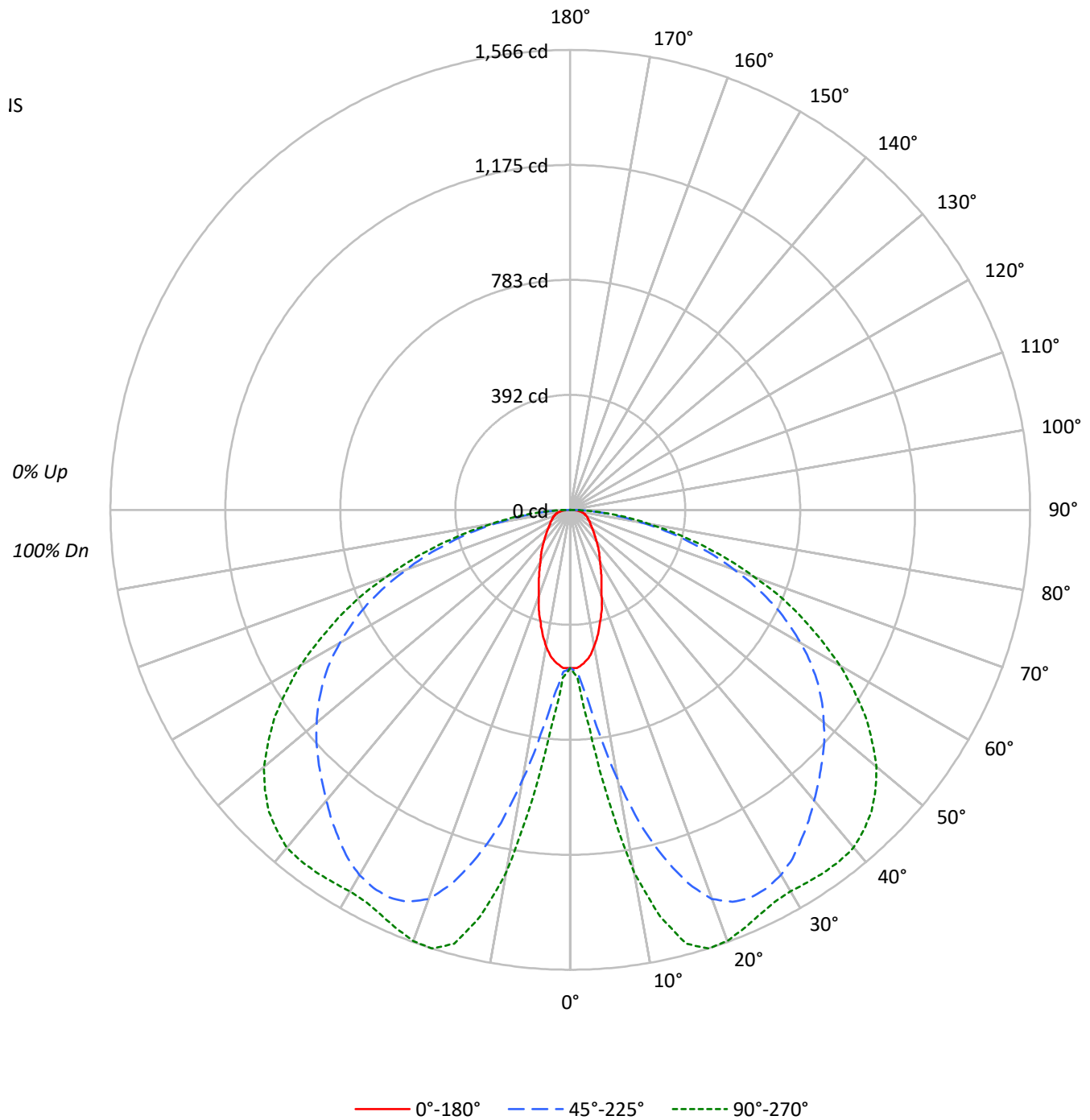
Lumens per Lamp: N/A
Luminaire Lumens: 4167.3 lumens
Efficiency: N/A
Efficacy: 84.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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					0
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°	5186	5186	5186
5°	5072	6127	7181
10°	4605	9127	12260
15°	3919	12189	15244
20°	3194	14446	16007
25°	2668	15474	16174
30°	2253	15962	16675
35°	1994	16124	17711
40°	1742	16240	18874
45°	1581	16508	19762
50°	1453	16889	20392
55°	1395	17270	20613
60°	1434	17443	20445
65°	1499	17402	19848
70°	1610	16675	18772
75°	1804	15593	17204
80°	2018	13539	14980
85°	1911	11477	12825

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 55°

Luminance: 20613 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.7	1.7
10°-20°	308.8	7.4
20°-30°	540.2	13.0
30°-40°	695.4	16.7
40°-50°	776.7	18.6
50°-60°	743.9	17.9
60°-70°	589.6	14.1
70°-80°	346.7	8.3
80°-90°	96.3	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°	918.7	22.0
0°-40°	1614.1	38.7
0°-60°	3134.8	75.2
0°-90°	4167.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4167.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	539	539	539	539	539	
5°	525	563	634	717	743	48
15°	393	726	1223	1483	1530	109
25°	251	823	1457	1521	1523	116
35°	170	786	1372	1450	1507	106
45°	116	627	1212	1389	1452	90
55°	83	398	1029	1195	1228	76
65°	66	211	764	859	871	65
75°	48	130	419	461	462	51
85°	17	40	104	114	116	20
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°	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7
2.5°	538.7	538.7	542.2	543.9	547.4	549.1	552.6	556.0	566.4	568.1	571.6
5°	524.8	531.8	554.3	562.9	587.2	620.1	634.0	656.5	703.2	717.1	725.8
7.5°	504.1	519.6	575.1	588.9	649.6	736.2	772.5	821.0	895.5	931.9	961.3
10°	471.1	504.1	602.8	635.7	734.4	866.1	933.6	1001.2	1113.8	1164.0	1183.1
12.5°	434.8	488.5	632.2	677.3	819.3	1011.6	1093.0	1167.5	1295.6	1363.2	1373.6
15°	393.2	465.9	659.9	725.8	909.4	1132.8	1222.9	1314.7	1434.2	1482.7	1494.8
17.5°	356.8	448.6	685.9	755.2	978.7	1241.9	1333.7	1410.0	1507.0	1539.9	1548.5
20°	311.8	420.9	703.2	793.3	1051.4	1321.6	1410.0	1468.9	1534.7	1555.5	1558.9
22.5°	278.9	391.5	713.6	807.2	1099.9	1370.1	1444.6	1491.4	1536.4	1543.3	1545.1
25°	251.2	358.6	711.9	822.8	1141.5	1399.6	1456.7	1491.4	1517.4	1520.8	1520.8
27.5°	225.2	322.2	705.0	826.2	1172.7	1406.5	1451.5	1475.8	1487.9	1494.8	1494.8
30°	202.7	287.5	687.7	819.3	1186.5	1399.6	1435.9	1448.1	1460.2	1470.6	1475.8
32.5°	185.3	254.6	661.7	805.4	1188.2	1382.2	1408.2	1415.2	1432.5	1456.7	1465.4
35°	169.7	221.7	632.2	786.4	1177.9	1354.5	1371.9	1378.8	1413.4	1449.8	1461.9
37.5°	154.2	197.5	594.1	753.5	1162.3	1321.6	1333.7	1345.9	1399.6	1442.9	1456.7
40°	138.6	176.7	549.1	717.1	1138.0	1281.8	1292.2	1311.2	1382.2	1432.5	1446.3
42.5°	126.4	159.4	500.6	679.0	1106.8	1236.7	1252.3	1280.1	1361.5	1415.2	1430.7
45°	116.1	142.0	448.6	627.0	1067.0	1190.0	1212.5	1250.6	1337.2	1389.2	1403.0
47.5°	105.7	129.9	394.9	573.3	1023.7	1143.2	1172.7	1216.0	1304.3	1354.5	1366.7
50°	97.0	117.8	341.2	516.2	976.9	1093.0	1127.6	1172.7	1262.7	1309.5	1325.1
52.5°	90.1	107.4	291.0	459.0	923.2	1041.0	1080.9	1127.6	1212.5	1257.5	1267.9
55°	83.1	98.7	247.7	398.4	867.8	985.6	1028.9	1073.9	1157.1	1195.2	1202.1
57.5°	79.7	91.8	211.3	341.2	808.9	923.2	971.7	1013.3	1091.2	1120.7	1127.6
60°	74.5	86.6	183.6	292.7	744.8	864.3	905.9	947.5	1013.3	1037.6	1042.7
62.5°	69.3	83.1	162.8	246.0	679.0	795.1	836.6	874.7	930.2	947.5	954.4
65°	65.8	79.7	147.2	211.3	611.4	722.3	763.9	796.8	841.8	859.1	862.6
67.5°	62.4	76.2	135.1	181.9	543.9	649.6	680.7	711.9	746.6	763.9	765.6
70°	57.2	72.7	124.7	161.1	474.6	566.4	592.4	625.3	653.0	661.7	666.9
72.5°	53.7	67.6	117.8	145.5	403.6	486.7	511.0	530.0	554.3	562.9	562.9
75°	48.5	60.6	110.9	129.9	330.8	398.4	419.2	438.2	457.3	460.7	455.6
77.5°	43.3	53.7	95.3	109.1	258.1	315.2	332.6	343.0	358.6	362.0	363.7
80°	36.4	46.8	74.5	84.9	187.1	232.1	244.2	252.9	266.7	266.7	270.2
82.5°	27.7	36.4	53.7	60.6	126.4	159.4	169.7	174.9	183.6	183.6	183.6
85°	17.3	22.5	34.6	39.8	76.2	97.0	103.9	105.7	112.6	114.3	114.3
87.5°	8.7	12.1	22.5	24.2	39.8	50.2	50.2	53.7	53.7	52.0	50.2
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°	538.7	538.7
2.5°	575.1	571.6
5°	739.6	743.1
7.5°	996.0	994.2
10°	1238.5	1254.1
12.5°	1415.2	1418.6
15°	1522.6	1529.5
17.5°	1564.1	1565.9
20°	1565.9	1562.4
22.5°	1546.8	1543.3
25°	1524.3	1522.6
27.5°	1503.5	1505.2
30°	1494.8	1500.0
32.5°	1494.8	1503.5
35°	1498.3	1507.0
37.5°	1496.6	1507.0
40°	1489.6	1501.8
42.5°	1470.6	1479.2
45°	1441.1	1451.5
47.5°	1403.0	1410.0
50°	1354.5	1361.5
52.5°	1293.9	1295.6
55°	1221.2	1228.1
57.5°	1143.2	1144.9
60°	1056.6	1061.8
62.5°	964.8	964.8
65°	867.8	871.3
67.5°	767.3	776.0
70°	665.1	666.9
72.5°	564.7	564.7
75°	460.7	462.5
77.5°	362.0	362.0
80°	268.5	270.2
82.5°	185.3	188.8
85°	116.1	116.1
87.5°	53.7	48.5
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	11.92	13.64	12.29	13.95	14.27	24.25	25.96	24.61	26.28	26.59
	3H	12.86	14.41	13.23	14.74	15.10	26.16	27.72	26.53	28.04	28.40
	4H	13.33	14.80	13.73	15.15	15.52	26.85	28.32	27.25	28.67	29.04
	6H	13.82	15.19	14.23	15.55	15.94	27.34	28.70	27.75	29.07	29.46
	8H	14.02	15.33	14.44	15.72	16.12	27.49	28.80	27.91	29.19	29.58
	12H	14.16	15.41	14.59	15.80	16.22	27.59	28.85	28.02	29.23	29.66
4H	2H	19.26	20.73	19.65	21.07	21.45	24.76	26.23	25.15	26.58	26.95
	3H	21.19	22.43	21.60	22.83	23.23	26.94	28.18	27.35	28.58	28.98
	4H	21.38	22.51	21.81	22.92	23.36	27.78	28.91	28.21	29.32	29.75
	6H	21.50	22.49	21.96	22.93	23.38	28.41	29.39	28.86	29.83	30.28
	8H	21.53	22.46	21.99	22.90	23.36	28.61	29.53	29.06	29.97	30.44
	12H	21.56	22.39	22.03	22.86	23.33	28.76	29.59	29.24	30.07	30.53
8H	4H	23.04	23.96	23.50	24.40	24.87	28.02	28.94	28.48	29.38	29.85
	6H	23.49	24.26	23.98	24.74	25.22	28.77	29.54	29.26	30.03	30.50
	8H	23.57	24.26	24.08	24.77	25.25	29.05	29.74	29.55	30.24	30.73
	12H	23.61	24.23	24.12	24.72	25.27	29.27	29.89	29.78	30.38	30.93
12H	4H	23.25	24.08	23.73	24.56	25.03	28.03	28.86	28.51	29.33	29.80
	6H	23.83	24.52	24.33	25.03	25.51	28.80	29.49	29.30	30.00	30.48
	8H	24.04	24.65	24.54	25.14	25.70	29.13	29.75	29.64	30.23	30.79