

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: P1055088

Luminaire Tested: SQ4R-FB-100D-927-1-UNV-STD-W-4

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055088
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-927-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH BATWING FROSTED CONTINUOUS ROLL LEN
1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

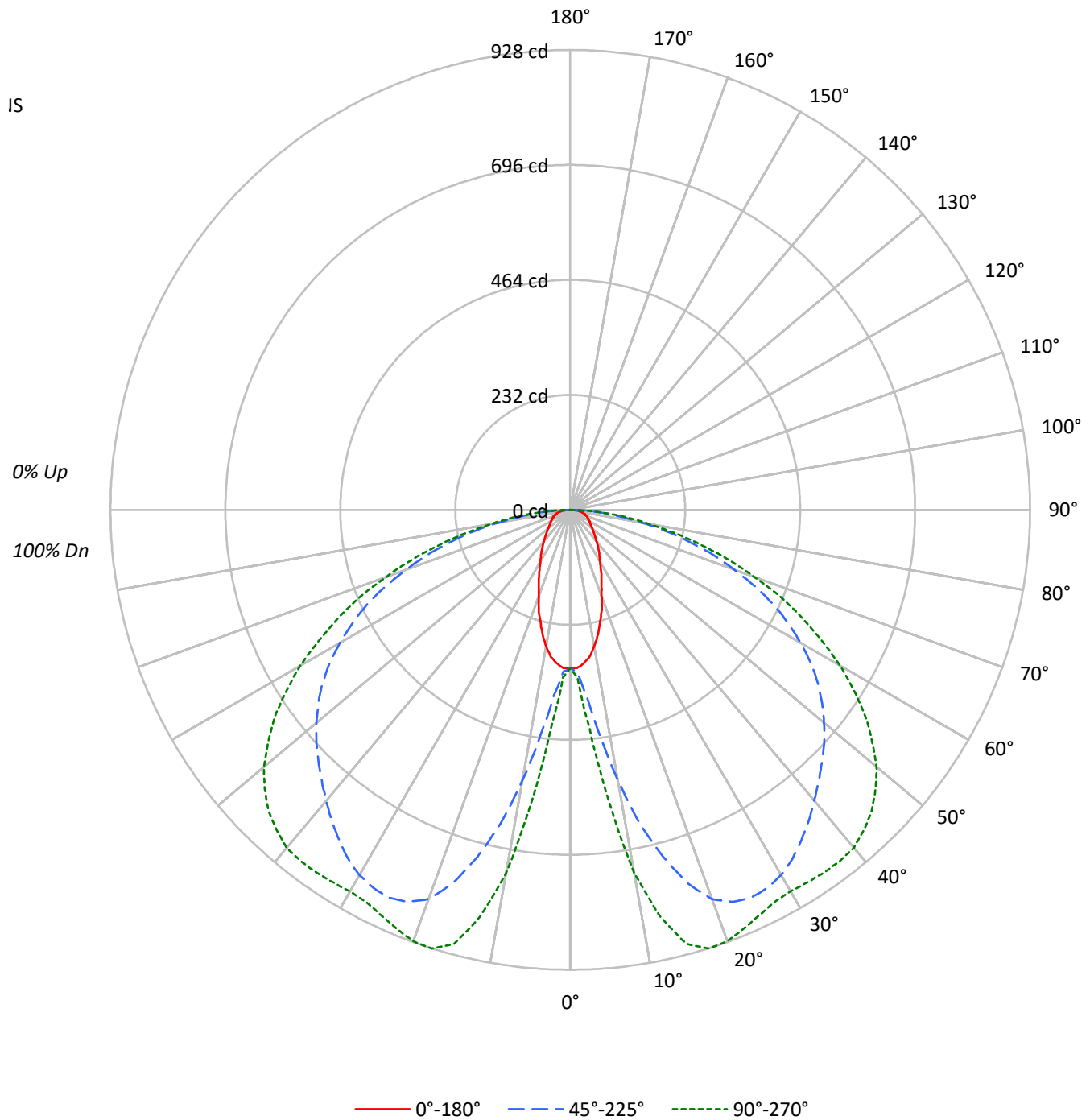
Lumens per Lamp: N/A
Luminaire Lumens: 2470.2 lumens
Efficiency: N/A
Efficacy: 66.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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		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°	3074	3074	3074
5°	3007	3632	4257
10°	2730	5410	7267
15°	2323	7225	9036
20°	1893	8563	9488
25°	1582	9173	9587
30°	1335	9463	9884
35°	1182	9557	10499
40°	1032	9626	11188
45°	937	9785	11714
50°	861	10011	12087
55°	827	10237	12219
60°	849	10340	12119
65°	888	10315	11764
70°	954	9883	11127
75°	1068	9244	10196
80°	1198	8028	8882
85°	1138	6804	7600

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 55°

Luminance: 12219 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.3	1.7
10°-20°	183.1	7.4
20°-30°	320.2	13.0
30°-40°	412.2	16.7
40°-50°	460.4	18.6
50°-60°	441.0	17.9
60°-70°	349.5	14.1
70°-80°	205.5	8.3
80°-90°	57.1	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°	544.6	22.0
0°-40°	956.8	38.7
0°-60°	1858.2	75.2
0°-90°	2470.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2470.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	319	319	319	319	319	
5°	311	334	376	425	440	29
15°	233	430	725	879	907	65
25°	149	488	864	902	902	69
35°	101	466	813	859	893	63
45°	69	372	719	823	860	53
55°	49	236	610	708	728	45
65°	39	125	453	509	516	39
75°	29	77	248	273	274	30
85°	10	24	62	68	69	12
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°	319.3	319.3	319.3	319.3	319.3	319.3	319.3	319.3	319.3	319.3	319.3
2.5°	319.3	319.3	321.4	322.4	324.4	325.5	327.5	329.6	335.7	336.8	338.8
5°	311.1	315.2	328.6	333.7	348.1	367.6	375.8	389.1	416.9	425.1	430.2
7.5°	298.8	308.0	340.9	349.1	385.0	436.4	457.9	486.7	530.8	552.4	569.8
10°	279.3	298.8	357.3	376.8	435.3	513.4	553.4	593.4	660.2	690.0	701.3
12.5°	257.7	289.5	374.8	401.5	485.6	599.6	647.9	692.0	768.0	808.0	814.2
15°	233.1	276.2	391.2	430.2	539.0	671.5	724.9	779.3	850.1	878.9	886.1
17.5°	211.5	265.9	406.6	447.7	580.1	736.2	790.6	835.8	893.3	912.8	917.9
20°	184.8	249.5	416.9	470.2	623.2	783.4	835.8	870.7	909.7	922.0	924.1
22.5°	165.3	232.0	423.0	478.5	652.0	812.1	856.3	884.0	910.7	914.8	915.8
25°	148.9	212.5	422.0	487.7	676.6	829.6	863.5	884.0	899.4	901.5	901.5
27.5°	133.5	191.0	417.9	489.7	695.1	833.7	860.4	874.8	882.0	886.1	886.1
30°	120.1	170.4	407.6	485.6	703.3	829.6	851.2	858.3	865.5	871.7	874.8
32.5°	109.9	150.9	392.2	477.4	704.3	819.3	834.7	838.8	849.1	863.5	868.6
35°	100.6	131.4	374.8	466.1	698.2	802.9	813.2	817.3	837.8	859.4	866.6
37.5°	91.4	117.0	352.2	446.6	688.9	783.4	790.6	797.8	829.6	855.3	863.5
40°	82.1	104.7	325.5	425.1	674.6	759.8	765.9	777.2	819.3	849.1	857.3
42.5°	75.0	94.5	296.7	402.5	656.1	733.1	742.3	758.8	807.0	838.8	848.1
45°	68.8	84.2	265.9	371.7	632.5	705.4	718.7	741.3	792.6	823.4	831.7
47.5°	62.6	77.0	234.1	339.8	606.8	677.6	695.1	720.8	773.1	802.9	810.1
50°	57.5	69.8	202.3	306.0	579.1	647.9	668.4	695.1	748.5	776.2	785.4
52.5°	53.4	63.7	172.5	272.1	547.2	617.1	640.7	668.4	718.7	745.4	751.6
55°	49.3	58.5	146.8	236.1	514.4	584.2	609.9	636.6	685.9	708.4	712.5
57.5°	47.2	54.4	125.3	202.3	479.5	547.2	576.0	600.6	646.8	664.3	668.4
60°	44.1	51.3	108.8	173.5	441.5	512.3	537.0	561.6	600.6	615.0	618.1
62.5°	41.1	49.3	96.5	145.8	402.5	471.3	495.9	518.5	551.4	561.6	565.7
65°	39.0	47.2	87.3	125.3	362.4	428.1	452.8	472.3	499.0	509.3	511.3
67.5°	37.0	45.2	80.1	107.8	322.4	385.0	403.5	422.0	442.5	452.8	453.8
70°	33.9	43.1	73.9	95.5	281.3	335.7	351.1	370.6	387.1	392.2	395.3
72.5°	31.8	40.0	69.8	86.2	239.2	288.5	302.9	314.2	328.6	333.7	333.7
75°	28.7	35.9	65.7	77.0	196.1	236.1	248.5	259.8	271.1	273.1	270.0
77.5°	25.7	31.8	56.5	64.7	153.0	186.9	197.1	203.3	212.5	214.6	215.6
80°	21.6	27.7	44.1	50.3	110.9	137.6	144.8	149.9	158.1	158.1	160.2
82.5°	16.4	21.6	31.8	35.9	75.0	94.5	100.6	103.7	108.8	108.8	108.8
85°	10.3	13.3	20.5	23.6	45.2	57.5	61.6	62.6	66.7	67.8	67.8
87.5°	5.1	7.2	13.3	14.4	23.6	29.8	29.8	31.8	31.8	30.8	29.8
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°	319.3	319.3
2.5°	340.9	338.8
5°	438.4	440.5
7.5°	590.4	589.3
10°	734.1	743.4
12.5°	838.8	840.9
15°	902.5	906.6
17.5°	927.1	928.2
20°	928.2	926.1
22.5°	916.9	914.8
25°	903.5	902.5
27.5°	891.2	892.2
30°	886.1	889.1
32.5°	886.1	891.2
35°	888.1	893.3
37.5°	887.1	893.3
40°	883.0	890.2
42.5°	871.7	876.8
45°	854.2	860.4
47.5°	831.7	835.8
50°	802.9	807.0
52.5°	767.0	768.0
55°	723.8	728.0
57.5°	677.6	678.7
60°	626.3	629.4
62.5°	571.9	571.9
65°	514.4	516.4
67.5°	454.8	460.0
70°	394.3	395.3
72.5°	334.7	334.7
75°	273.1	274.1
77.5°	214.6	214.6
80°	159.1	160.2
82.5°	109.9	111.9
85°	68.8	68.8
87.5°	31.8	28.7
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	10.11	11.82	10.47	12.14	12.45	22.43	24.14	22.79	24.46	24.77
	3H	11.04	12.60	11.42	12.93	13.28	24.34	25.90	24.72	26.22	26.58
	4H	11.51	12.99	11.91	13.33	13.71	25.03	26.51	25.43	26.85	27.23
	6H	12.00	13.37	12.41	13.74	14.12	25.52	26.89	25.93	27.25	27.64
	8H	12.20	13.51	12.63	13.90	14.30	25.67	26.98	26.09	27.37	27.77
	12H	12.34	13.60	12.77	13.98	14.41	25.78	27.03	26.20	27.41	27.84
4H	2H	17.44	18.91	17.84	19.26	19.63	22.94	24.41	23.34	24.76	25.13
	3H	19.38	20.62	19.78	21.01	21.41	25.12	26.36	25.53	26.76	27.16
	4H	19.57	20.69	20.00	21.11	21.54	25.96	27.09	26.39	27.50	27.93
	6H	19.69	20.67	20.14	21.11	21.57	26.59	27.58	27.04	28.01	28.47
	8H	19.72	20.64	20.17	21.08	21.54	26.79	27.71	27.25	28.16	28.62
	12H	19.74	20.57	20.22	21.05	21.51	26.94	27.78	27.42	28.25	28.72
8H	4H	21.22	22.15	21.68	22.59	23.05	26.20	27.13	26.66	27.57	28.03
	6H	21.67	22.44	22.16	22.93	23.40	26.95	27.73	27.45	28.21	28.69
	8H	21.75	22.45	22.26	22.95	23.43	27.23	27.92	27.74	28.43	28.91
	12H	21.80	22.41	22.30	22.90	23.46	27.46	28.07	27.96	28.56	29.12
12H	4H	21.43	22.27	21.91	22.74	23.21	26.21	27.05	26.69	27.52	27.99
	6H	22.01	22.71	22.52	23.21	23.69	26.98	27.68	27.49	28.18	28.66
	8H	22.22	22.84	22.72	23.32	23.88	27.31	27.93	27.82	28.42	28.97