

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: P845515

Luminaire Tested: SQ2R-FA-125D-935-UNV-STD-W-4

Issue Date: 6/14/2024

**Test Information**

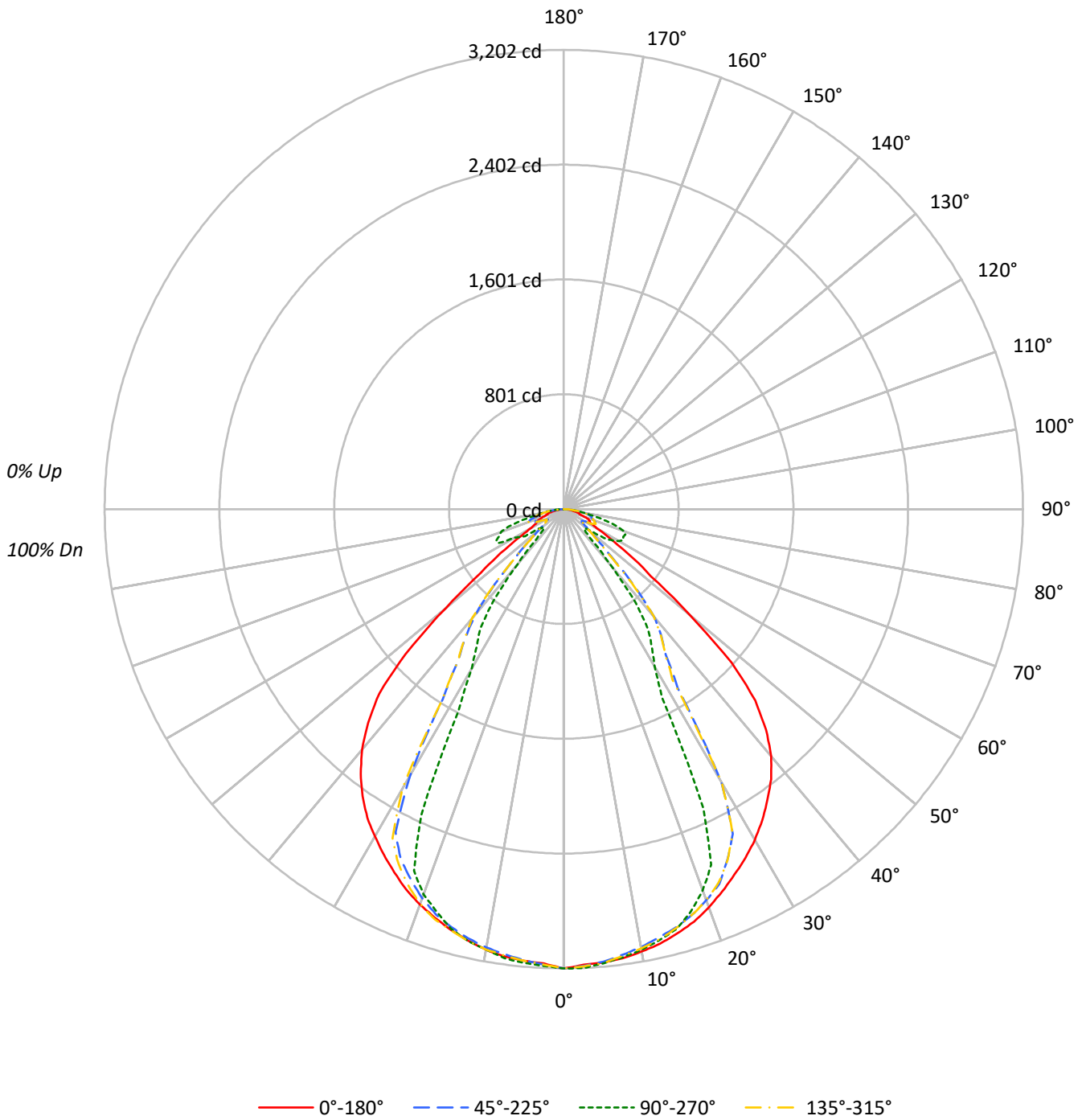
Test Method: LM-79-2019  
Report Number: P845515  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/14/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2R-FA-125D-935-UNV-STD-W-4  
Description: CONTINUA SQ2 RECESSED, ASYMMETRIC LENS  
1250 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4672.0 lumens  
Efficiency: N/A  
Efficacy: 95.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 0.95 / 0.93  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 49.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.9979  
Total Harmonic Distortion (THDi): 0.0523  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: 3 HR  
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	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	102	102	100				
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88				
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	86	83	80	78				
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70				
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63				
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57				
6	79	68	61	55	77	67	60	55	65	59	55	64	58	54	62	58	54	52				
7	74	63	56	50	73	62	55	50	61	55	50	60	54	50	58	53	49	48				
8	70	59	51	46	69	58	51	46	57	50	46	56	50	46	55	49	46	44				
9	66	55	48	43	65	54	47	43	53	47	43	52	46	42	51	46	42	41				
10	63	51	44	40	61	51	44	40	50	44	40	49	43	39	48	43	39	38				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	51705	51705	51705	51705
5°	51433	51511	51237	51472
10°	51354	51155	51155	51155
15°	51188	50663	50783	50663
20°	50790	48632	50417	49089
25°	50122	41046	49779	41906
30°	49663	23549	49122	23864
35°	48791	20231	48172	19945
40°	47440	10638	46116	10536
45°	43124	4576	41580	4576
50°	28452	5521	26995	5157
55°	15907	10199	15091	9244
60°	8580	14350	8422	12868
65°	7564	17436	7935	19836
70°	7067	20866	6727	22003
75°	6631	17929	6781	18534
80°	5616	12803	5616	13473
85°	4928	7151	4483	8503

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 43124 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	301.6	6.5
10°-20°	855.8	18.3
20°-30°	1170.6	25.1
30°-40°	980.4	21.0
40°-50°	549.5	11.8
50°-60°	291.4	6.2
60°-70°	271.7	5.8
70°-80°	199.8	4.3
80°-90°	51.1	1.1
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°	2328.0	49.8
0°-40°	3308.4	70.8
0°-60°	4149.3	88.8
0°-90°	4672.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4672.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	3202	3202	3202	3202	3202	
5°	3173	3178	3161	3176	3173	302
15°	3062	3031	3038	3031	3062	864
25°	2814	2304	2794	2352	2814	1298
35°	2475	1026	2444	1012	2475	1547
45°	1889	200	1821	200	1889	1393
55°	565	362	536	328	565	534
65°	198	456	208	519	198	198
75°	106	287	109	297	106	109
85°	27	39	24	46	27	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	3202.4	3202.4	3202.4	3202.4	3202.4	3202.4	3202.4	3202.4	3202.4	3202.4	3202.4
2.5°	3180.6	3241.0	3187.9	3180.6	3202.4	3197.5	3190.3	3219.3	3171.0	3219.3	3180.6
5°	3173.4	3228.9	3166.1	3149.2	3178.2	3158.9	3175.8	3209.6	3161.3	3204.8	3156.5
7.5°	3158.9	3209.6	3134.7	3122.7	3151.6	3134.7	3142.0	3187.9	3146.8	3175.8	3132.3
10°	3132.3	3175.8	3100.9	3093.7	3120.2	3103.3	3110.6	3158.9	3120.2	3146.8	3103.3
12.5°	3103.3	3134.7	3059.9	3057.5	3079.2	3069.5	3071.9	3110.6	3081.6	3108.2	3067.1
15°	3062.3	3093.7	3018.8	3006.7	3030.9	3021.2	3026.1	3062.3	3038.1	3055.0	3018.8
17.5°	3016.4	3040.6	2968.1	2941.5	2944.0	2956.0	2968.1	3011.6	2987.4	3009.2	2963.3
20°	2956.0	2985.0	2902.9	2835.3	2830.4	2842.5	2902.9	2946.4	2934.3	2958.4	2886.0
22.5°	2886.0	2902.9	2830.4	2704.9	2685.5	2697.6	2820.8	2873.9	2871.5	2886.0	2791.8
25°	2813.5	2832.9	2697.6	2538.2	2304.0	2523.7	2702.4	2794.2	2794.2	2808.7	2690.4
27.5°	2741.1	2745.9	2552.7	1709.9	1478.0	1639.8	2547.9	2697.6	2716.9	2714.5	2540.6
30°	2663.8	2646.9	2200.1	1316.2	1263.1	1296.9	2202.5	2596.2	2634.8	2608.3	2144.6
32.5°	2574.4	2518.9	1480.4	1183.4	1142.3	1171.3	1412.8	2475.4	2550.3	2485.1	1572.2
35°	2475.4	2349.8	1238.9	1069.9	1026.4	1065.0	1229.3	2308.8	2444.0	2289.5	1280.0
37.5°	2374.0	1961.0	1118.2	910.5	823.5	896.0	1113.3	1953.8	2325.7	1871.7	1123.0
40°	2250.8	1451.4	980.5	625.5	504.7	589.3	973.3	1383.8	2188.0	1492.5	956.4
42.5°	2086.6	1226.8	739.0	340.5	260.8	306.7	700.4	1207.5	2019.0	1238.9	712.4
45°	1888.6	1091.6	466.1	217.4	200.4	210.1	429.9	1072.3	1821.0	1048.1	475.8
47.5°	1586.7	876.7	316.4	183.5	198.0	183.5	306.7	850.1	1497.3	833.2	316.4
50°	1132.7	649.6	231.8	186.0	219.8	186.0	224.6	627.9	1074.7	688.3	229.4
52.5°	765.6	519.2	178.7	207.7	275.3	212.5	173.9	507.2	726.9	524.1	166.6
55°	565.1	429.9	152.1	268.1	362.3	275.3	152.1	417.8	536.1	413.0	147.3
57.5°	381.6	338.1	149.7	340.5	405.7	347.8	152.1	326.0	364.7	328.4	132.8
60°	265.7	253.6	171.5	367.1	444.4	371.9	173.9	243.9	260.8	241.5	144.9
62.5°	207.7	186.0	214.9	405.7	466.1	391.2	219.8	176.3	219.8	166.6	164.2
65°	198.0	128.0	243.9	403.3	456.4	403.3	246.3	120.8	207.7	130.4	217.4
67.5°	186.0	96.6	239.1	398.5	463.7	403.3	231.8	91.8	178.7	89.4	212.5
70°	149.7	84.5	222.2	408.1	442.0	393.7	222.2	82.1	142.5	79.7	260.8
72.5°	118.3	79.7	202.9	369.5	379.2	355.0	205.3	79.7	120.8	70.0	241.5
75°	106.3	79.7	198.0	301.9	287.4	287.4	193.2	77.3	108.7	72.5	190.8
77.5°	84.5	72.5	171.5	210.1	198.0	198.0	169.1	70.0	79.7	65.2	161.8
80°	60.4	65.2	135.2	144.9	137.7	137.7	130.4	62.8	60.4	60.4	128.0
82.5°	43.5	53.1	96.6	96.6	91.8	89.4	94.2	53.1	43.5	48.3	91.8
85°	26.6	38.6	55.5	45.9	38.6	36.2	53.1	36.2	24.2	36.2	53.1
87.5°	12.1	21.7	9.7	9.7	9.7	9.7	9.7	21.7	12.1	19.3	12.1
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):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	3202.4	3202.4	3202.4	3202.4	3202.4	3202.4
2.5°	3171.0	3187.9	3187.9	3178.2	3226.5	3180.6
5°	3144.4	3175.8	3161.3	3161.3	3209.6	3173.4
7.5°	3127.5	3158.9	3144.4	3139.6	3187.9	3158.9
10°	3098.5	3120.2	3110.6	3117.8	3161.3	3132.3
12.5°	3057.5	3084.0	3074.4	3086.4	3125.1	3103.3
15°	3009.2	3030.9	3035.7	3040.6	3086.4	3062.3
17.5°	2934.3	2944.0	2970.5	2997.1	3043.0	3016.4
20°	2842.5	2857.0	2871.5	2929.5	2985.0	2956.0
22.5°	2738.7	2729.0	2767.7	2837.7	2910.1	2886.0
25°	2538.2	2352.3	2557.5	2729.0	2820.8	2813.5
27.5°	1864.4	1593.9	1830.6	2586.5	2731.4	2741.1
30°	1391.1	1280.0	1388.7	2248.4	2630.0	2663.8
32.5°	1195.5	1127.8	1183.4	1577.0	2502.0	2574.4
35°	1065.0	1011.9	1065.0	1280.0	2325.7	2475.4
37.5°	908.1	806.6	910.5	1135.1	1968.3	2374.0
40°	637.6	499.9	618.3	990.2	1487.7	2250.8
42.5°	371.9	277.7	347.8	726.9	1231.7	2086.6
45°	229.4	200.4	219.8	470.9	1043.3	1888.6
47.5°	181.1	186.0	181.1	314.0	830.8	1586.7
50°	171.5	205.3	171.5	229.4	661.7	1132.7
52.5°	190.8	227.0	188.4	169.1	512.0	765.6
55°	210.1	328.4	212.5	147.3	398.5	565.1
57.5°	299.5	362.3	304.3	137.7	326.0	381.6
60°	309.1	398.5	306.7	147.3	239.1	265.7
62.5°	379.2	516.8	379.2	173.9	161.8	207.7
65°	470.9	519.2	475.8	214.9	125.6	198.0
67.5°	449.2	485.4	444.4	222.2	86.9	186.0
70°	439.5	466.1	434.7	263.2	79.7	149.7
72.5°	403.3	400.9	393.7	239.1	70.0	118.3
75°	318.8	297.1	306.7	210.1	72.5	106.3
77.5°	210.1	200.4	202.9	166.6	65.2	84.5
80°	149.7	144.9	142.5	135.2	60.4	60.4
82.5°	101.4	96.6	94.2	96.6	48.3	43.5
85°	50.7	45.9	43.5	60.4	36.2	26.6
87.5°	12.1	12.1	9.7	12.1	16.9	12.1
90°	0.0	0.0	0.0	0.0	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	17.69	19.00	18.06	19.31	19.63	16.53	17.84	16.90	18.15	18.47
	3H	18.41	19.58	18.79	19.91	20.28	22.74	23.91	23.12	24.24	24.60
	4H	18.84	19.93	19.24	20.29	20.67	24.03	25.13	24.44	25.48	25.86
	6H	19.22	20.22	19.63	20.59	20.99	24.66	25.67	25.07	26.04	26.43
	8H	19.34	20.30	19.77	20.69	21.10	24.80	25.75	25.23	26.14	26.55
	12H	19.43	20.35	19.86	20.73	21.16	24.85	25.76	25.28	26.15	26.58
4H	2H	18.13	19.23	18.53	19.58	19.96	17.12	18.21	17.52	18.56	18.94
	3H	19.15	20.06	19.56	20.46	20.87	23.49	24.40	23.90	24.80	25.20
	4H	19.72	20.54	20.16	20.96	21.40	24.95	25.77	25.39	26.19	26.63
	6H	20.22	20.93	20.68	21.38	21.84	25.71	26.42	26.17	26.87	27.33
	8H	20.40	21.06	20.87	21.51	21.98	25.88	26.55	26.35	26.99	27.46
	12H	20.53	21.12	21.02	21.60	22.08	25.96	26.55	26.45	27.03	27.51
8H	4H	20.85	21.52	21.32	21.96	22.43	25.10	25.76	25.57	26.21	26.68
	6H	21.48	22.02	21.98	22.51	22.99	25.99	26.54	26.49	27.03	27.51
	8H	21.71	22.20	22.23	22.71	23.20	26.24	26.73	26.76	27.24	27.73
	12H	21.91	22.33	22.42	22.83	23.40	26.38	26.81	26.90	27.30	27.87
12H	4H	21.02	21.61	21.50	22.09	22.56	25.08	25.67	25.57	26.15	26.63
	6H	21.75	22.24	22.27	22.75	23.24	26.00	26.49	26.52	27.00	27.49
	8H	22.07	22.50	22.59	22.99	23.56	26.30	26.73	26.82	27.22	27.79