

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: P845506

Luminaire Tested: SQ2R-FA-100D-835-UNV-STD-W-4

Issue Date: 6/14/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P845506  
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-100D-835-UNV-STD-W-4  
Description: CONTINUA SQ2 RECESSED, ASYMMETRIC LENS  
1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

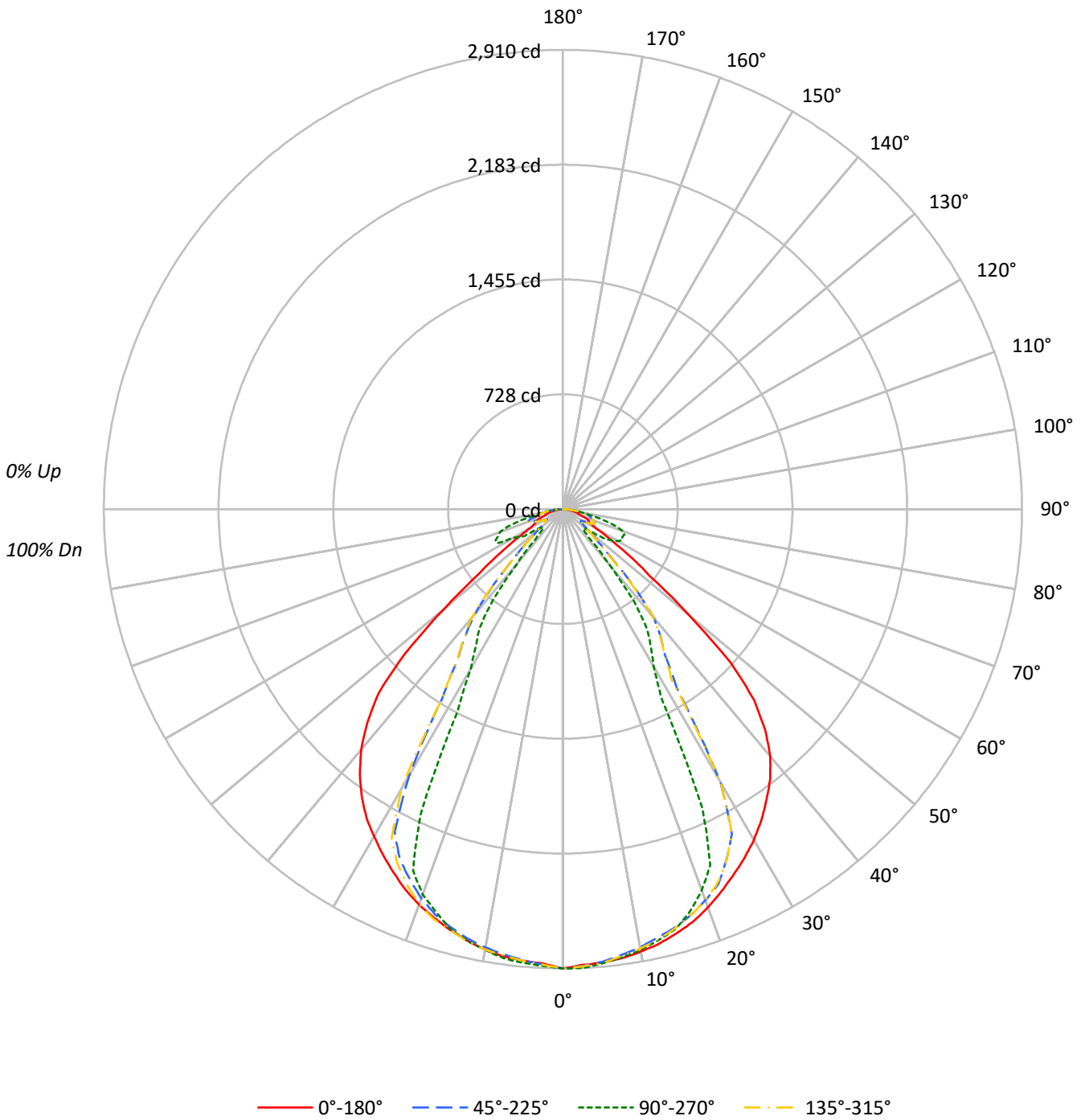
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4246.2 lumens  
Efficiency: N/A  
Efficacy: 112.9 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): 37.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.9969  
Total Harmonic Distortion (THDi): 0.066  
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°	46992	46992	46992	46992
5°	46744	46815	46567	46780
10°	46673	46494	46494	46494
15°	46522	46044	46155	46044
20°	46161	44201	45821	44615
25°	45555	37305	45241	38087
30°	45136	21403	44646	21688
35°	44345	18386	43783	18128
40°	43117	9668	41914	9577
45°	39192	4160	37790	4160
50°	25857	5016	24533	4687
55°	14458	9267	13717	8403
60°	7795	13043	7656	11696
65°	6877	15847	7213	18029
70°	6425	18963	6113	19997
75°	6026	16294	6163	16843
80°	5105	11632	5105	12245
85°	4465	6502	4057	7725

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 39192 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	274.1	6.5
10°-20°	777.8	18.3
20°-30°	1063.9	25.1
30°-40°	891.0	21.0
40°-50°	499.4	11.8
50°-60°	264.9	6.2
60°-70°	247.0	5.8
70°-80°	181.6	4.3
80°-90°	46.5	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°	2115.8	49.8
0°-40°	3006.9	70.8
0°-60°	3771.2	88.8
0°-90°	4246.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4246.2	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	2910	2910	2910	2910	2910	
5°	2884	2888	2873	2886	2884	274
15°	2783	2755	2761	2755	2783	785
25°	2557	2094	2540	2138	2557	1180
35°	2250	933	2221	920	2250	1406
45°	1716	182	1655	182	1716	1266
55°	514	329	487	298	514	485
65°	180	415	189	472	180	180
75°	97	261	99	270	97	99
85°	24	35	22	42	24	28
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°	2910.5	2910.5	2910.5	2910.5	2910.5	2910.5	2910.5	2910.5	2910.5	2910.5	2910.5
2.5°	2890.7	2945.6	2897.3	2890.7	2910.5	2906.1	2899.5	2925.8	2881.9	2925.8	2890.7
5°	2884.1	2934.6	2877.6	2862.2	2888.5	2871.0	2886.3	2917.1	2873.2	2912.7	2868.8
7.5°	2871.0	2917.1	2849.0	2838.0	2864.4	2849.0	2855.6	2897.3	2860.0	2886.3	2846.8
10°	2846.8	2886.3	2818.3	2811.7	2835.9	2820.5	2827.1	2871.0	2835.9	2860.0	2820.5
12.5°	2820.5	2849.0	2781.0	2778.8	2798.5	2789.8	2792.0	2827.1	2800.7	2824.9	2787.6
15°	2783.2	2811.7	2743.7	2732.7	2754.6	2745.9	2750.3	2783.2	2761.2	2776.6	2743.7
17.5°	2741.5	2763.4	2697.6	2673.4	2675.6	2686.6	2697.6	2737.1	2715.1	2734.9	2693.2
20°	2686.6	2712.9	2638.3	2576.9	2572.5	2583.4	2638.3	2677.8	2666.8	2688.8	2622.9
22.5°	2622.9	2638.3	2572.5	2458.3	2440.8	2451.7	2563.7	2612.0	2609.8	2622.9	2537.3
25°	2557.1	2574.7	2451.7	2306.9	2094.0	2293.7	2456.1	2539.5	2539.5	2552.7	2445.2
27.5°	2491.2	2495.6	2320.0	1554.0	1343.3	1490.4	2315.7	2451.7	2469.3	2467.1	2309.1
30°	2421.0	2405.6	1999.6	1196.2	1148.0	1178.7	2001.8	2359.6	2394.7	2370.5	1949.1
32.5°	2339.8	2289.3	1345.5	1075.5	1038.2	1064.5	1284.0	2249.8	2317.8	2258.6	1428.9
35°	2249.8	2135.7	1126.0	972.4	932.8	968.0	1117.2	2098.4	2221.3	2080.8	1163.3
37.5°	2157.6	1782.3	1016.3	827.5	748.5	814.3	1011.9	1775.7	2113.7	1701.1	1020.6
40°	2045.7	1319.2	891.1	568.5	458.7	535.6	884.6	1257.7	1988.6	1356.5	869.2
42.5°	1896.4	1115.0	671.6	309.5	237.1	278.8	636.5	1097.5	1835.0	1126.0	647.5
45°	1716.4	992.1	423.6	197.5	182.2	191.0	390.7	974.6	1655.0	952.6	432.4
47.5°	1442.1	796.8	287.5	166.8	180.0	166.8	278.8	772.6	1360.9	757.3	287.5
50°	1029.4	590.4	210.7	169.0	199.7	169.0	204.1	570.7	976.7	625.6	208.5
52.5°	695.8	471.9	162.4	188.8	250.2	193.2	158.0	460.9	660.7	476.3	151.5
55°	513.6	390.7	138.3	243.6	329.2	250.2	138.3	379.7	487.3	375.3	133.9
57.5°	346.8	307.3	136.1	309.5	368.7	316.1	138.3	296.3	331.4	298.5	120.7
60°	241.4	230.5	155.8	333.6	403.9	338.0	158.0	221.7	237.1	219.5	131.7
62.5°	188.8	169.0	195.3	368.7	423.6	355.6	199.7	160.2	199.7	151.5	149.3
65°	180.0	116.3	221.7	366.6	414.8	366.6	223.9	109.7	188.8	118.5	197.5
67.5°	169.0	87.8	217.3	362.2	421.4	366.6	210.7	83.4	162.4	81.2	193.2
70°	136.1	76.8	201.9	370.9	401.7	357.8	201.9	74.6	129.5	72.4	237.1
72.5°	107.6	72.4	184.4	335.8	344.6	322.7	186.6	72.4	109.7	63.7	219.5
75°	96.6	72.4	180.0	274.4	261.2	261.2	175.6	70.2	98.8	65.8	173.4
77.5°	76.8	65.8	155.8	191.0	180.0	180.0	153.6	63.7	72.4	59.3	147.1
80°	54.9	59.3	122.9	131.7	125.1	125.1	118.5	57.1	54.9	54.9	116.3
82.5°	39.5	48.3	87.8	87.8	83.4	81.2	85.6	48.3	39.5	43.9	83.4
85°	24.1	35.1	50.5	41.7	35.1	32.9	48.3	32.9	21.9	32.9	48.3
87.5°	11.0	19.8	8.8	8.8	8.8	8.8	8.8	19.8	11.0	17.6	11.0
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°	2910.5	2910.5	2910.5	2910.5	2910.5	2910.5
2.5°	2881.9	2897.3	2897.3	2888.5	2932.4	2890.7
5°	2857.8	2886.3	2873.2	2873.2	2917.1	2884.1
7.5°	2842.4	2871.0	2857.8	2853.4	2897.3	2871.0
10°	2816.1	2835.9	2827.1	2833.7	2873.2	2846.8
12.5°	2778.8	2802.9	2794.2	2805.1	2840.2	2820.5
15°	2734.9	2754.6	2759.0	2763.4	2805.1	2783.2
17.5°	2666.8	2675.6	2699.8	2723.9	2765.6	2741.5
20°	2583.4	2596.6	2609.8	2662.5	2712.9	2686.6
22.5°	2489.1	2480.3	2515.4	2579.0	2644.9	2622.9
25°	2306.9	2137.9	2324.4	2480.3	2563.7	2557.1
27.5°	1694.5	1448.7	1663.8	2350.8	2482.5	2491.2
30°	1264.3	1163.3	1262.1	2043.5	2390.3	2421.0
32.5°	1086.5	1025.0	1075.5	1433.3	2274.0	2339.8
35°	968.0	919.7	968.0	1163.3	2113.7	2249.8
37.5°	825.3	733.1	827.5	1031.6	1788.9	2157.6
40°	579.5	454.4	561.9	899.9	1352.1	2045.7
42.5°	338.0	252.4	316.1	660.7	1119.4	1896.4
45°	208.5	182.2	199.7	428.0	948.2	1716.4
47.5°	164.6	169.0	164.6	285.3	755.1	1442.1
50°	155.8	186.6	155.8	208.5	601.4	1029.4
52.5°	173.4	206.3	171.2	153.6	465.3	695.8
55°	191.0	298.5	193.2	133.9	362.2	513.6
57.5°	272.2	329.2	276.6	125.1	296.3	346.8
60°	281.0	362.2	278.8	133.9	217.3	241.4
62.5°	344.6	469.7	344.6	158.0	147.1	188.8
65°	428.0	471.9	432.4	195.3	114.1	180.0
67.5°	408.3	441.2	403.9	201.9	79.0	169.0
70°	399.5	423.6	395.1	239.2	72.4	136.1
72.5°	366.6	364.4	357.8	217.3	63.7	107.6
75°	289.7	270.0	278.8	191.0	65.8	96.6
77.5°	191.0	182.2	184.4	151.5	59.3	76.8
80°	136.1	131.7	129.5	122.9	54.9	54.9
82.5°	92.2	87.8	85.6	87.8	43.9	39.5
85°	46.1	41.7	39.5	54.9	32.9	24.1
87.5°	11.0	11.0	8.8	11.0	15.4	11.0
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	17.36	18.67	17.72	18.98	19.29	16.20	17.51	16.57	17.82	18.14
	3H	18.08	19.25	18.46	19.58	19.94	22.40	23.58	22.78	23.91	24.27
	4H	18.51	19.60	18.91	19.95	20.34	23.70	24.80	24.10	25.15	25.53
	6H	18.88	19.89	19.30	20.26	20.66	24.33	25.34	24.74	25.71	26.10
	8H	19.01	19.97	19.44	20.36	20.77	24.46	25.42	24.89	25.81	26.22
	12H	19.10	20.01	19.53	20.40	20.83	24.52	25.43	24.95	25.82	26.25
4H	2H	17.80	18.89	18.20	19.24	19.63	16.78	17.88	17.19	18.23	18.61
	3H	18.82	19.73	19.23	20.13	20.53	23.16	24.07	23.57	24.47	24.87
	4H	19.39	20.21	19.82	20.63	21.07	24.62	25.44	25.06	25.86	26.30
	6H	19.89	20.60	20.35	21.04	21.51	25.38	26.09	25.84	26.53	27.00
	8H	20.07	20.73	20.53	21.18	21.65	25.55	26.22	26.02	26.66	27.13
	12H	20.20	20.79	20.69	21.27	21.74	25.63	26.22	26.12	26.70	27.18
8H	4H	20.52	21.18	20.99	21.63	22.10	24.77	25.43	25.24	25.88	26.35
	6H	21.14	21.69	21.65	22.18	22.66	25.66	26.20	26.16	26.70	27.18
	8H	21.38	21.86	21.90	22.38	22.87	25.91	26.40	26.43	26.91	27.40
	12H	21.57	22.00	22.09	22.49	23.06	26.05	26.48	26.57	26.97	27.54
12H	4H	20.69	21.27	21.17	21.76	22.23	24.75	25.34	25.24	25.82	26.29
	6H	21.42	21.90	21.94	22.42	22.91	25.67	26.15	26.19	26.67	27.16
	8H	21.74	22.17	22.26	22.66	23.23	25.97	26.40	26.49	26.89	27.46