

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: P845655

Luminaire Tested: SQ2R-PW1-125D-830-UNV-STD-W-4

Issue Date: 6/14/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P845655  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/14/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2R-PW1-125D-830-UNV-STD-W-4  
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS  
1250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

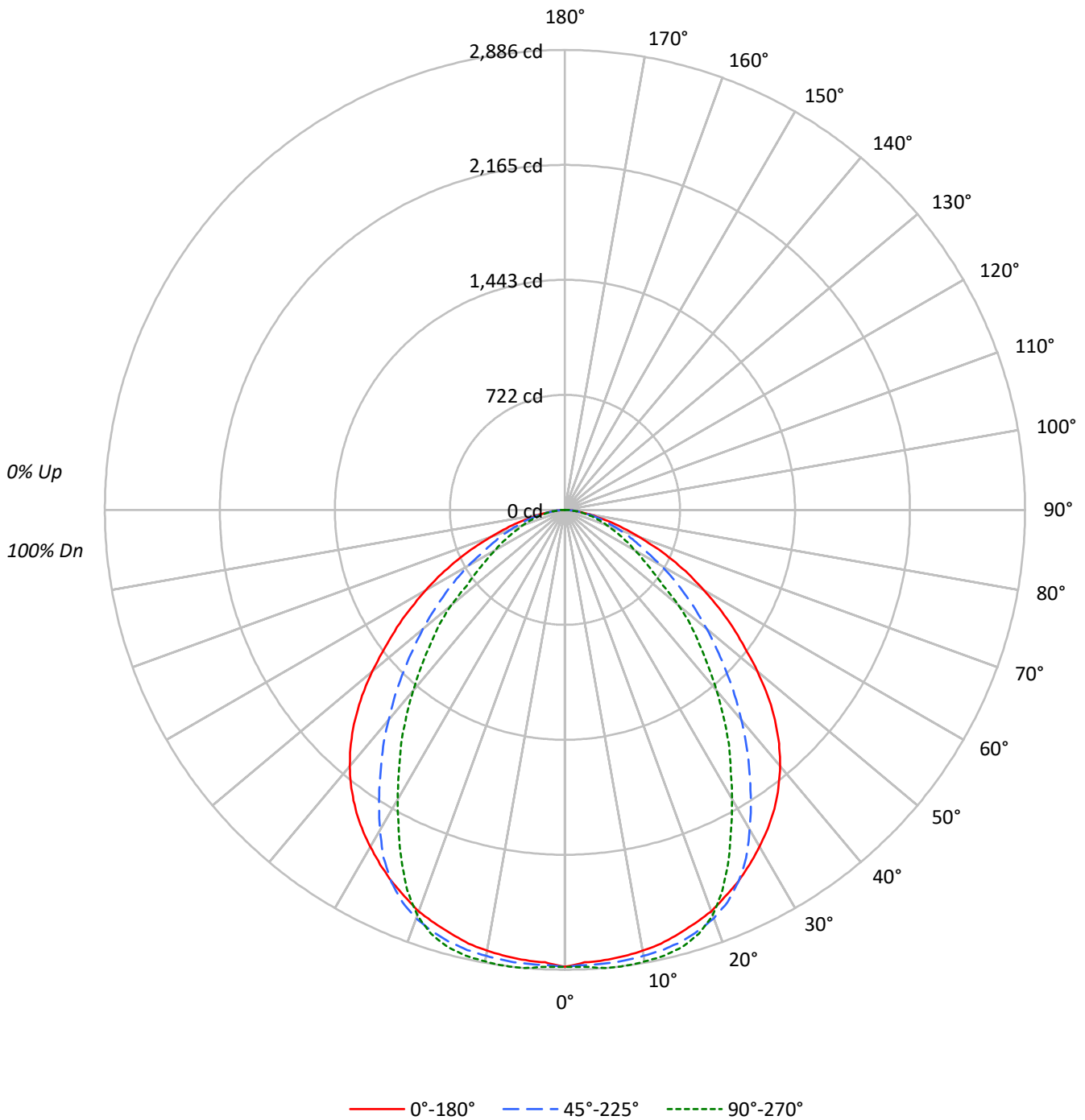
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6360.1 lumens  
Efficiency: N/A  
Efficacy: 129.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.12 / 1.22  
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	
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	83	79	76	74	74	74	
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64	64	64	
4	86	75	67	61	84	74	66	61	71	65	60	69	64	59	67	62	58	56	56	56	
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49	49	49	
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44	44	44	
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39	39	39	
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	35	35	35	
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34	32	32	32	
10	57	44	37	32	55	44	36	31	43	36	31	42	36	31	41	35	31	29	29	29	

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

	0°	45°	90°
0°	46292	46292	46292
5°	45982	46336	46778
10°	46066	46603	47185
15°	46053	46920	47468
20°	46072	46869	46541
25°	45824	45872	43246
30°	45511	43221	39098
35°	45157	39774	35307
40°	44257	36259	31194
45°	42523	32609	27247
50°	39574	29150	23320
55°	36203	25748	18908
60°	32450	22398	16314
65°	28374	19301	14499
70°	23202	17146	13147
75°	18054	14822	12096
80°	13454	12692	10665
85°	9114	9615	6076

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 42523 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	273.1	4.3
10°-20°	791.8	12.4
20°-30°	1165.9	18.3
30°-40°	1273.8	20.0
40°-50°	1141.7	18.0
50°-60°	850.2	13.4
60°-70°	537.1	8.4
70°-80°	265.9	4.2
80°-90°	60.7	1.0
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°	2230.8	35.1
0°-40°	3504.6	55.1
0°-60°	5496.5	86.4
0°-90°	6360.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6360.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2867	2867	2867	2867	2867	
5°	2837	2884	2859	2862	2886	270
15°	2755	2810	2807	2826	2840	778
25°	2572	2630	2575	2468	2428	1185
35°	2291	2266	2018	1843	1791	1430
45°	1862	1709	1428	1251	1193	1430
55°	1286	1160	915	718	672	1148
65°	743	680	505	407	380	736
75°	289	311	238	199	194	317
85°	49	63	52	36	33	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2867.1	2867.1	2867.1	2867.1	2867.1
2.5°	2842.5	2888.9	2858.9	2861.6	2869.8
5°	2837.1	2883.5	2858.9	2861.6	2886.2
7.5°	2826.1	2872.6	2853.5	2861.6	2886.2
10°	2809.8	2858.9	2842.5	2856.2	2878.0
12.5°	2787.9	2839.8	2828.9	2845.3	2867.1
15°	2755.1	2809.8	2807.0	2826.1	2839.8
17.5°	2719.7	2774.3	2771.5	2782.5	2790.6
20°	2681.4	2736.0	2727.8	2708.7	2708.7
22.5°	2626.8	2686.9	2665.0	2605.0	2583.1
25°	2572.2	2629.5	2574.9	2468.4	2427.5
27.5°	2509.4	2558.5	2463.0	2315.5	2258.2
30°	2441.1	2476.6	2318.3	2151.7	2097.1
32.5°	2370.1	2378.3	2170.8	1996.1	1936.0
35°	2291.0	2266.4	2017.9	1843.1	1791.3
37.5°	2200.8	2135.3	1873.2	1690.2	1632.9
40°	2099.8	1996.1	1720.3	1537.3	1480.0
42.5°	1987.9	1851.3	1575.5	1392.6	1332.5
45°	1862.3	1709.3	1428.1	1250.6	1193.3
47.5°	1725.7	1572.8	1288.8	1116.8	1070.4
50°	1575.5	1428.1	1160.5	988.5	928.4
52.5°	1422.6	1294.3	1034.9	857.4	770.0
55°	1286.1	1160.5	914.7	718.1	671.7
57.5°	1141.4	1029.4	805.5	619.8	581.6
60°	1004.9	909.3	693.6	543.4	505.2
62.5°	873.8	791.9	584.3	472.4	442.4
65°	742.7	679.9	505.2	406.9	379.5
67.5°	614.4	573.4	434.2	344.1	324.9
70°	491.5	480.6	363.2	292.2	278.5
72.5°	385.0	393.2	294.9	243.0	234.8
75°	289.4	311.3	237.6	199.3	193.9
77.5°	210.3	243.0	185.7	155.6	150.2
80°	144.7	177.5	136.5	114.7	114.7
82.5°	90.1	114.7	87.4	79.2	79.2
85°	49.2	62.8	51.9	35.5	32.8
87.5°	16.4	24.6	10.9	8.2	8.2
90°	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	24.29	25.79	24.65	26.10	26.42	20.79	22.29	21.15	22.61	22.92
	3H	25.66	27.00	26.03	27.33	27.69	22.04	23.39	22.42	23.71	24.08
	4H	26.06	27.32	26.46	27.67	28.05	22.52	23.78	22.92	24.12	24.50
	6H	26.29	27.46	26.71	27.82	28.22	22.86	24.03	23.27	24.39	24.78
	8H	26.35	27.45	26.77	27.84	28.24	22.95	24.06	23.38	24.45	24.85
	12H	26.36	27.42	26.79	27.80	28.23	22.98	24.04	23.42	24.43	24.86
4H	2H	24.46	25.73	24.86	26.07	26.45	21.55	22.81	21.95	23.16	23.53
	3H	26.07	27.11	26.48	27.51	27.91	22.99	24.03	23.40	24.43	24.83
	4H	26.60	27.54	27.03	27.95	28.39	23.56	24.49	23.99	24.91	25.35
	6H	26.97	27.78	27.43	28.22	28.69	23.99	24.81	24.45	25.25	25.71
	8H	27.06	27.82	27.52	28.26	28.73	24.11	24.87	24.57	25.32	25.78
	12H	27.10	27.78	27.58	28.26	28.73	24.16	24.84	24.64	25.32	25.79
8H	4H	26.68	27.45	27.15	27.89	28.36	23.93	24.69	24.39	25.13	25.60
	6H	27.14	27.77	27.64	28.26	28.74	24.45	25.08	24.95	25.57	26.05
	8H	27.29	27.86	27.81	28.37	28.85	24.62	25.18	25.13	25.69	26.18
	12H	27.39	27.88	27.90	28.38	28.94	24.71	25.20	25.22	25.70	26.26
12H	4H	26.67	27.35	27.15	27.83	28.30	23.97	24.65	24.45	25.13	25.60
	6H	27.14	27.70	27.65	28.21	28.70	24.52	25.08	25.04	25.60	26.08
	8H	27.33	27.83	27.84	28.32	28.88	24.73	25.23	25.24	25.72	26.29