

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: P845644

Luminaire Tested: SQ2R-PW1-075D-835-UNV-STD-W-4

Issue Date: 6/14/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P845644  
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-PW1-075D-835-UNV-STD-W-4  
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS  
750 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

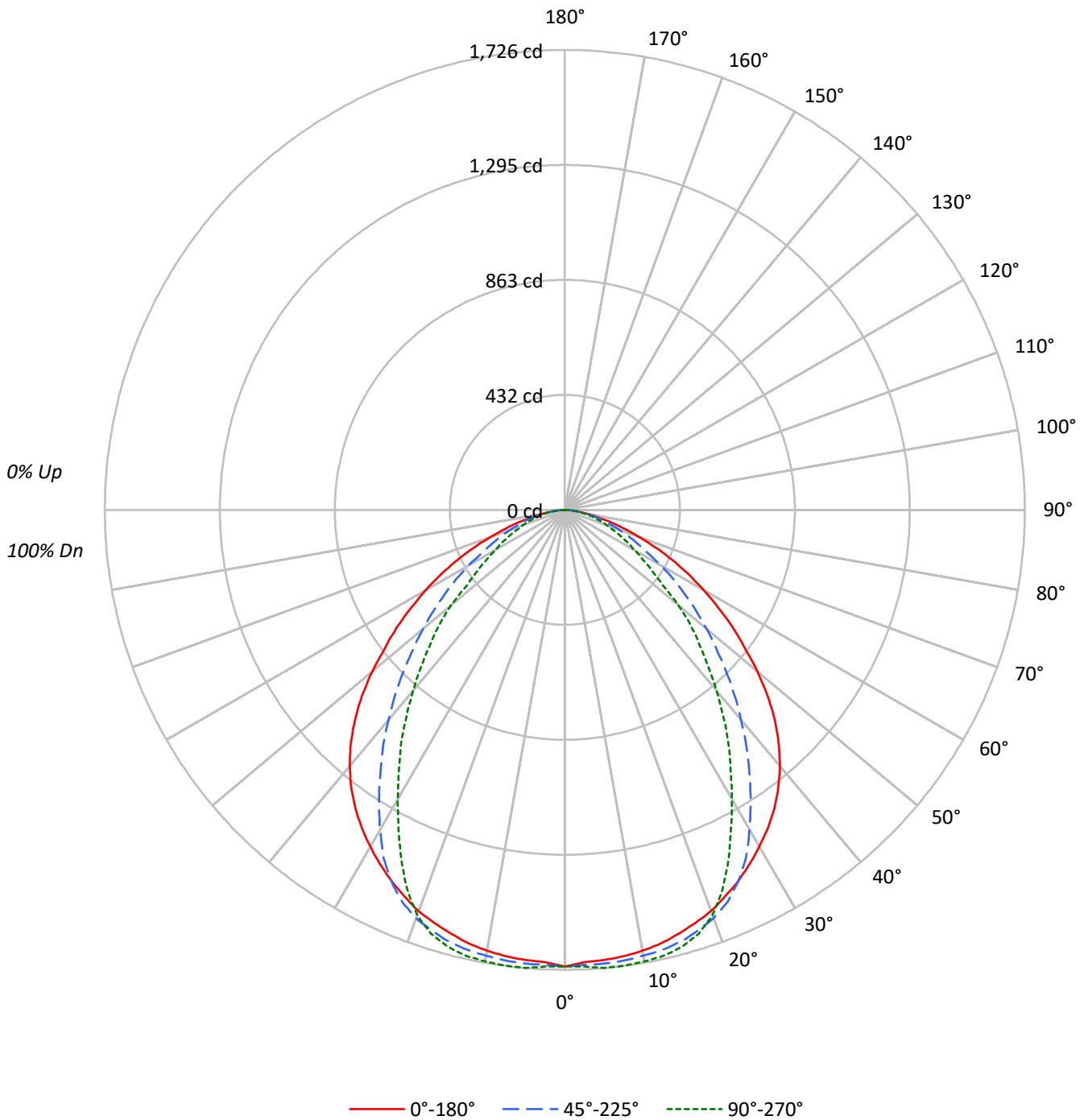
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3802.5 lumens  
Efficiency: N/A  
Efficacy: 142.4 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): 26.7  
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	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			100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87			87	
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	83	79	76	74			74	
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64			64	
4	86	75	67	61	84	74	66	61	71	65	60	69	64	59	67	62	58	56			56	
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49			49	
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44			44	
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39			39	
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36			36	
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34	32			32	
10	57	44	37	32	55	44	36	31	43	36	31	42	36	31	41	35	31	29			29	

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

	0°	45°	90°
0°	27676	27676	27676
5°	27491	27702	27968
10°	27542	27863	28211
15°	27534	28052	28379
20°	27545	28022	27826
25°	27396	27426	25855
30°	27210	25840	23375
35°	26997	23779	21108
40°	26460	21678	18649
45°	25423	19495	16290
50°	23662	17427	13943
55°	21644	15395	11305
60°	19401	13391	9752
65°	16963	11538	8669
70°	13874	10249	7860
75°	10792	8858	7230
80°	8043	7587	6378
85°	5446	5743	3631

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 25423 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.3	4.3
10°-20°	473.4	12.4
20°-30°	697.1	18.3
30°-40°	761.6	20.0
40°-50°	682.6	18.0
50°-60°	508.3	13.4
60°-70°	321.1	8.4
70°-80°	159.0	4.2
80°-90°	36.2	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°	1333.7	35.1
0°-40°	2095.3	55.1
0°-60°	3286.2	86.4
0°-90°	3802.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3802.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1714	1714	1714	1714	1714	
5°	1696	1724	1709	1711	1726	161
15°	1647	1680	1678	1690	1698	465
25°	1538	1572	1540	1476	1451	709
35°	1370	1355	1206	1102	1071	855
45°	1113	1022	854	748	713	855
55°	769	694	547	429	402	686
65°	444	406	302	243	227	440
75°	173	186	142	119	116	189
85°	29	38	31	21	20	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1714.1	1714.1	1714.1	1714.1	1714.1
2.5°	1699.5	1727.2	1709.2	1710.9	1715.8
5°	1696.2	1723.9	1709.2	1710.9	1725.6
7.5°	1689.7	1717.4	1706.0	1710.9	1725.6
10°	1679.9	1709.2	1699.5	1707.6	1720.7
12.5°	1666.8	1697.8	1691.3	1701.1	1714.1
15°	1647.2	1679.9	1678.2	1689.7	1697.8
17.5°	1626.0	1658.6	1657.0	1663.5	1668.4
20°	1603.1	1635.8	1630.9	1619.5	1619.5
22.5°	1570.5	1606.4	1593.3	1557.4	1544.4
25°	1537.8	1572.1	1539.5	1475.8	1451.3
27.5°	1500.3	1529.7	1472.5	1384.4	1350.1
30°	1459.5	1480.7	1386.0	1286.4	1253.8
32.5°	1417.0	1421.9	1297.9	1193.4	1157.5
35°	1369.7	1355.0	1206.4	1102.0	1070.9
37.5°	1315.8	1276.6	1119.9	1010.5	976.2
40°	1255.4	1193.4	1028.5	919.1	884.8
42.5°	1188.5	1106.8	942.0	832.6	796.7
45°	1113.4	1022.0	853.8	747.7	713.4
47.5°	1031.8	940.3	770.5	667.7	639.9
50°	942.0	853.8	693.8	591.0	555.1
52.5°	850.5	773.8	618.7	512.6	460.4
55°	768.9	693.8	546.9	429.4	401.6
57.5°	682.4	615.5	481.6	370.6	347.7
60°	600.8	543.6	414.7	324.9	302.0
62.5°	522.4	473.4	349.4	282.4	264.5
65°	444.0	406.5	302.0	243.2	226.9
67.5°	367.3	342.8	259.6	205.7	194.3
70°	293.9	287.3	217.1	174.7	166.5
72.5°	230.2	235.1	176.3	145.3	140.4
75°	173.0	186.1	142.0	119.2	115.9
77.5°	125.7	145.3	111.0	93.1	89.8
80°	86.5	106.1	81.6	68.6	68.6
82.5°	53.9	68.6	52.2	47.3	47.3
85°	29.4	37.5	31.0	21.2	19.6
87.5°	9.8	14.7	6.5	4.9	4.9
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	22.50	24.00	22.86	24.31	24.63	19.00	20.51	19.37	20.82	21.13
	3H	23.87	25.21	24.25	25.54	25.90	20.25	21.60	20.63	21.93	22.29
	4H	24.27	25.53	24.67	25.88	26.26	20.73	21.99	21.13	22.34	22.72
	6H	24.51	25.67	24.92	26.04	26.43	21.08	22.24	21.49	22.61	23.00
	8H	24.56	25.66	24.98	26.05	26.46	21.17	22.27	21.59	22.66	23.07
	12H	24.57	25.63	25.00	26.02	26.44	21.20	22.26	21.63	22.64	23.07
4H	2H	22.68	23.94	23.08	24.29	24.67	19.76	21.02	20.16	21.37	21.75
	3H	24.28	25.32	24.69	25.72	26.13	21.20	22.24	21.61	22.64	23.05
	4H	24.81	25.75	25.25	26.17	26.61	21.77	22.71	22.20	23.12	23.56
	6H	25.18	25.99	25.64	26.44	26.90	22.21	23.02	22.66	23.46	23.92
	8H	25.27	26.03	25.73	26.48	26.94	22.32	23.08	22.79	23.53	24.00
	12H	25.31	25.99	25.80	26.47	26.94	22.37	23.05	22.86	23.53	24.00
8H	4H	24.90	25.66	25.36	26.10	26.57	22.14	22.90	22.60	23.35	23.81
	6H	25.36	25.98	25.85	26.48	26.95	22.67	23.29	23.16	23.79	24.26
	8H	25.50	26.07	26.02	26.58	27.07	22.83	23.40	23.35	23.91	24.39
	12H	25.60	26.10	26.11	26.59	27.15	22.92	23.42	23.43	23.91	24.48
12H	4H	24.88	25.56	25.37	26.04	26.51	22.18	22.86	22.67	23.34	23.81
	6H	25.35	25.91	25.86	26.42	26.91	22.73	23.30	23.25	23.81	24.30
	8H	25.54	26.04	26.05	26.53	27.10	22.95	23.44	23.46	23.94	24.50