

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: P845646

Luminaire Tested: SQ2R-PW1-075D-930-UNV-STD-W-4

Issue Date: 6/14/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P845646  
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-930-UNV-STD-W-4  
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS  
750 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

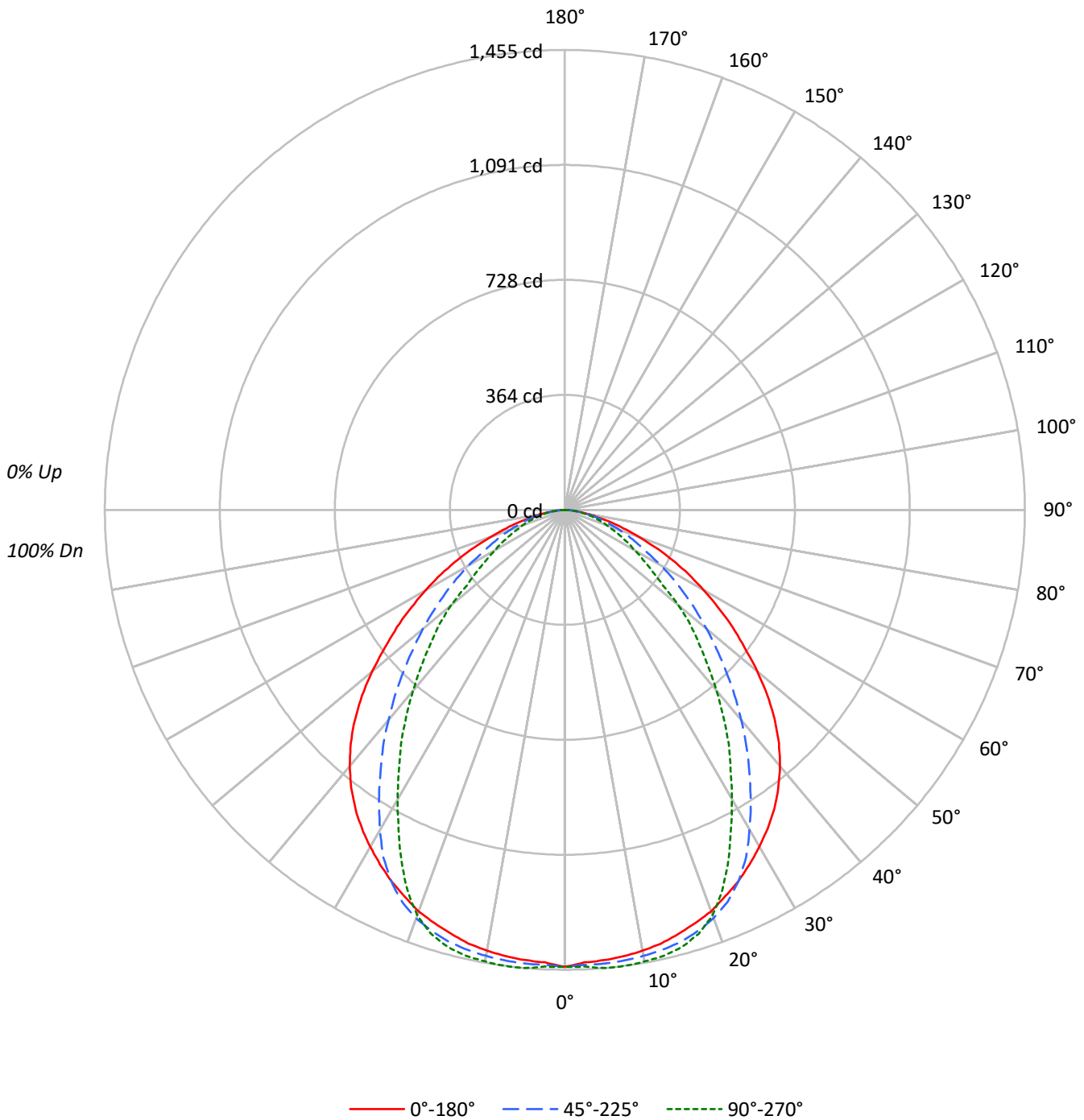
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3206.2 lumens  
Efficiency: N/A  
Efficacy: 120.1 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	83	79	76	74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	66	61	71	65	60	69	64	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	35
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	31	43	36	31	42	36	31	41	35	31	29

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

	0°	45°	90°
0°	23337	23337	23337
5°	23180	23358	23582
10°	23222	23494	23787
15°	23216	23654	23930
20°	23225	23627	23462
25°	23101	23126	21800
30°	22943	21789	19710
35°	22764	20051	17799
40°	22310	18278	15725
45°	21436	16438	13734
50°	19952	14694	11755
55°	18249	12980	9531
60°	16359	11289	8225
65°	14304	9731	7308
70°	11698	8644	6628
75°	9102	7473	6095
80°	6788	6397	5374
85°	4594	4854	3057

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 21436 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.7	4.3
10°-20°	399.2	12.4
20°-30°	587.8	18.3
30°-40°	642.1	20.0
40°-50°	575.5	18.0
50°-60°	428.6	13.4
60°-70°	270.8	8.4
70°-80°	134.0	4.2
80°-90°	30.6	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°	1124.6	35.1
0°-40°	1766.7	55.1
0°-60°	2770.9	86.4
0°-90°	3206.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3206.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1445	1445	1445	1445	1445	
5°	1430	1454	1441	1443	1455	136
15°	1389	1416	1415	1425	1432	392
25°	1297	1326	1298	1244	1224	597
35°	1155	1142	1017	929	903	721
45°	939	862	720	630	602	721
55°	648	585	461	362	339	579
65°	374	343	255	205	191	371
75°	146	157	120	100	98	160
85°	25	32	26	18	16	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1445.4	1445.4	1445.4	1445.4	1445.4
2.5°	1433.0	1456.4	1441.2	1442.6	1446.7
5°	1430.2	1453.6	1441.2	1442.6	1455.0
7.5°	1424.7	1448.1	1438.5	1442.6	1455.0
10°	1416.4	1441.2	1433.0	1439.8	1450.9
12.5°	1405.4	1431.6	1426.1	1434.3	1445.4
15°	1388.9	1416.4	1415.1	1424.7	1431.6
17.5°	1371.0	1398.6	1397.2	1402.7	1406.8
20°	1351.7	1379.3	1375.1	1365.5	1365.5
22.5°	1324.2	1354.5	1343.5	1313.2	1302.2
25°	1296.7	1325.6	1298.1	1244.4	1223.7
27.5°	1265.0	1289.8	1241.6	1167.3	1138.4
30°	1230.6	1248.5	1168.7	1084.7	1057.2
32.5°	1194.8	1199.0	1094.3	1006.2	976.0
35°	1154.9	1142.5	1017.3	929.2	903.0
37.5°	1109.5	1076.4	944.3	852.1	823.2
40°	1058.5	1006.2	867.2	775.0	746.1
42.5°	1002.1	933.3	794.3	702.0	671.7
45°	938.8	861.7	719.9	630.4	601.5
47.5°	870.0	792.9	649.7	563.0	539.6
50°	794.3	719.9	585.0	498.3	468.0
52.5°	717.2	652.5	521.7	432.2	388.2
55°	648.3	585.0	461.1	362.0	338.6
57.5°	575.4	519.0	406.1	312.5	293.2
60°	506.6	458.4	349.6	273.9	254.7
62.5°	440.5	399.2	294.6	238.1	223.0
65°	374.4	342.8	254.7	205.1	191.3
67.5°	309.7	289.1	218.9	173.4	163.8
70°	247.8	242.3	183.1	147.3	140.4
72.5°	194.1	198.2	148.7	122.5	118.4
75°	145.9	156.9	119.8	100.5	97.7
77.5°	106.0	122.5	93.6	78.5	75.7
80°	73.0	89.5	68.8	57.8	57.8
82.5°	45.4	57.8	44.0	39.9	39.9
85°	24.8	31.7	26.2	17.9	16.5
87.5°	8.3	12.4	5.5	4.1	4.1
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	21.91	23.41	22.27	23.72	24.04	18.41	19.91	18.77	20.23	20.54
	3H	23.28	24.62	23.65	24.95	25.31	19.66	21.01	20.04	21.33	21.70
	4H	23.68	24.94	24.08	25.29	25.67	20.13	21.40	20.54	21.74	22.12
	6H	23.92	25.08	24.33	25.45	25.84	20.48	21.64	20.89	22.01	22.40
	8H	23.97	25.07	24.39	25.46	25.86	20.57	21.68	21.00	22.07	22.47
	12H	23.98	25.04	24.41	25.42	25.85	20.60	21.66	21.03	22.05	22.47
4H	2H	22.09	23.35	22.49	23.69	24.07	19.17	20.43	19.57	20.78	21.15
	3H	23.69	24.73	24.10	25.13	25.53	20.61	21.65	21.02	22.05	22.45
	4H	24.22	25.16	24.65	25.58	26.01	21.18	22.11	21.61	22.53	22.97
	6H	24.59	25.40	25.05	25.85	26.31	21.61	22.43	22.07	22.87	23.33
	8H	24.68	25.44	25.14	25.88	26.35	21.73	22.49	22.19	22.94	23.40
	12H	24.72	25.40	25.21	25.88	26.35	21.78	22.46	22.26	22.94	23.41
8H	4H	24.30	25.07	24.77	25.51	25.98	21.55	22.31	22.01	22.75	23.22
	6H	24.77	25.39	25.26	25.88	26.36	22.07	22.70	22.57	23.19	23.67
	8H	24.91	25.48	25.43	25.99	26.47	22.24	22.80	22.75	23.31	23.80
	12H	25.01	25.50	25.52	26.00	26.56	22.33	22.82	22.84	23.32	23.88
12H	4H	24.29	24.97	24.77	25.45	25.92	21.59	22.27	22.07	22.75	23.22
	6H	24.76	25.32	25.27	25.83	26.32	22.14	22.70	22.66	23.22	23.70
	8H	24.95	25.45	25.46	25.94	26.50	22.35	22.85	22.86	23.34	23.91