

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: P845647

Luminaire Tested: SQ2R-PW1-075D-935-UNV-STD-W-4

Issue Date: 6/14/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P845647  
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-935-UNV-STD-W-4  
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS  
750 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

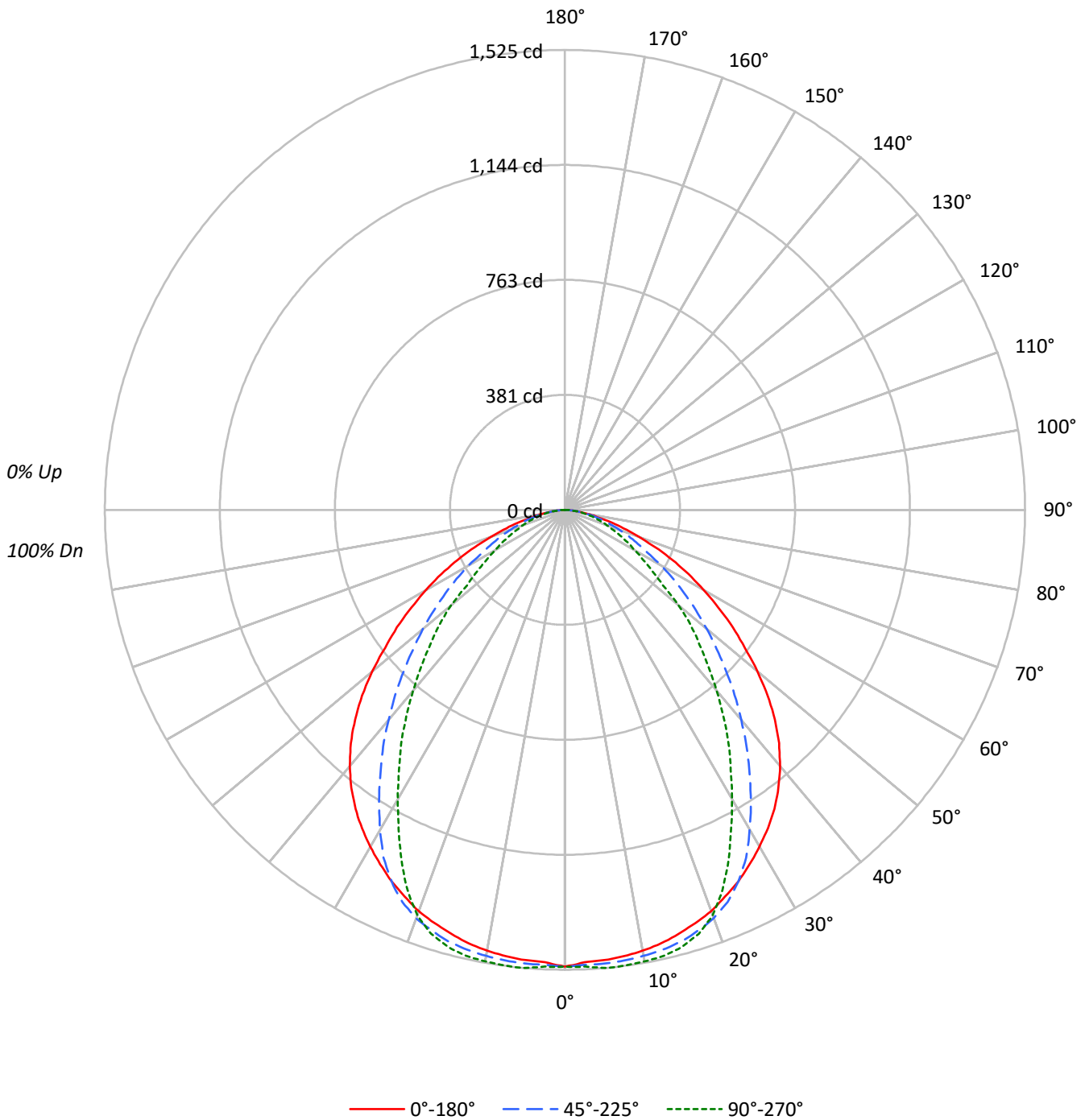
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3360.1 lumens  
Efficiency: N/A  
Efficacy: 125.8 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

TEST NUMBER: P845647

CATALOG NUMBER: SQ2R-PW1-075D-935-UNV-STD-W-4

### 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	35				35
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°	24456	24456	24456
5°	24292	24480	24713
10°	24337	24620	24928
15°	24331	24789	25078
20°	24340	24761	24588
25°	24209	24235	22848
30°	24045	22835	20655
35°	23856	21013	18652
40°	23381	19155	16480
45°	22464	17228	14394
50°	20909	15400	12321
55°	19128	13605	9990
60°	17144	11832	8619
65°	14991	10197	7660
70°	12260	9059	6944
75°	9538	7829	6388
80°	7113	6704	5635
85°	4817	5076	3205

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 22464 cd/sqm



TEST NUMBER: P845647

CATALOG NUMBER: SQ2R-PW1-075D-935-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.3	4.3
10°-20°	418.3	12.4
20°-30°	616.0	18.3
30°-40°	673.0	20.0
40°-50°	603.2	18.0
50°-60°	449.2	13.4
60°-70°	283.7	8.4
70°-80°	140.5	4.2
80°-90°	32.0	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°	1178.6	35.1
0°-40°	1851.5	55.1
0°-60°	2903.9	86.4
0°-90°	3360.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3360.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1515	1515	1515	1515	1515	
5°	1499	1523	1510	1512	1525	143
15°	1456	1484	1483	1493	1500	411
25°	1359	1389	1360	1304	1282	626
35°	1210	1197	1066	974	946	756
45°	984	903	754	661	630	755
55°	680	613	483	379	355	607
65°	392	359	267	215	200	389
75°	153	164	126	105	102	167
85°	26	33	27	19	17	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1514.7	1514.7	1514.7	1514.7	1514.7
2.5°	1501.7	1526.3	1510.4	1511.8	1516.2
5°	1498.8	1523.4	1510.4	1511.8	1524.8
7.5°	1493.1	1517.6	1507.5	1511.8	1524.8
10°	1484.4	1510.4	1501.7	1508.9	1520.5
12.5°	1472.9	1500.3	1494.5	1503.2	1514.7
15°	1455.6	1484.4	1483.0	1493.1	1500.3
17.5°	1436.8	1465.7	1464.2	1470.0	1474.3
20°	1416.6	1445.5	1441.1	1431.0	1431.0
22.5°	1387.8	1419.5	1408.0	1376.2	1364.7
25°	1358.9	1389.2	1360.4	1304.1	1282.5
27.5°	1325.7	1351.7	1301.2	1223.3	1193.0
30°	1289.7	1308.4	1224.8	1136.8	1107.9
32.5°	1252.2	1256.5	1146.9	1054.5	1022.8
35°	1210.3	1197.3	1066.1	973.7	946.3
37.5°	1162.7	1128.1	989.6	893.0	862.7
40°	1109.3	1054.5	908.8	812.2	781.9
42.5°	1050.2	978.1	832.4	735.7	704.0
45°	983.8	903.1	754.5	660.7	630.4
47.5°	911.7	830.9	680.9	590.0	565.5
50°	832.4	754.5	613.1	522.2	490.5
52.5°	751.6	683.8	546.7	453.0	406.8
55°	679.5	613.1	483.3	379.4	354.9
57.5°	603.0	543.9	425.6	327.5	307.3
60°	530.9	480.4	366.4	287.1	266.9
62.5°	461.6	418.3	308.7	249.6	233.7
65°	392.4	359.2	266.9	214.9	200.5
67.5°	324.6	302.9	229.4	181.8	171.7
70°	259.7	253.9	191.9	154.4	147.1
72.5°	203.4	207.7	155.8	128.4	124.1
75°	152.9	164.5	125.5	105.3	102.4
77.5°	111.1	128.4	98.1	82.2	79.3
80°	76.5	93.8	72.1	60.6	60.6
82.5°	47.6	60.6	46.2	41.8	41.8
85°	26.0	33.2	27.4	18.8	17.3
87.5°	8.7	13.0	5.8	4.3	4.3
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P845647

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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	22.07	23.57	22.43	23.88	24.20	18.57	20.08	18.94	20.39	20.70
	3H	23.44	24.79	23.82	25.11	25.48	19.82	21.17	20.20	21.50	21.86
	4H	23.84	25.10	24.24	25.45	25.83	20.30	21.56	20.70	21.91	22.29
	6H	24.08	25.24	24.49	25.61	26.00	20.64	21.81	21.06	22.18	22.57
	8H	24.13	25.24	24.56	25.63	26.03	20.74	21.84	21.16	22.23	22.64
	12H	24.15	25.20	24.58	25.59	26.02	20.77	21.83	21.20	22.21	22.64
4H	2H	22.25	23.51	22.65	23.86	24.24	19.33	20.59	19.73	20.94	21.32
	3H	23.85	24.89	24.26	25.29	25.70	20.77	21.81	21.18	22.21	22.62
	4H	24.38	25.32	24.82	25.74	26.18	21.34	22.28	21.77	22.69	23.13
	6H	24.75	25.57	25.21	26.01	26.47	21.78	22.59	22.23	23.03	23.49
	8H	24.84	25.60	25.31	26.05	26.51	21.89	22.65	22.36	23.10	23.57
	12H	24.89	25.56	25.37	26.04	26.51	21.94	22.62	22.43	23.10	23.57
8H	4H	24.47	25.23	24.93	25.67	26.14	21.71	22.47	22.17	22.92	23.38
	6H	24.93	25.56	25.43	26.05	26.53	22.24	22.86	22.73	23.36	23.83
	8H	25.08	25.64	25.59	26.15	26.64	22.40	22.97	22.92	23.48	23.96
	12H	25.17	25.67	25.68	26.16	26.73	22.49	22.99	23.00	23.48	24.05
12H	4H	24.46	25.13	24.94	25.61	26.08	21.75	22.43	22.24	22.91	23.38
	6H	24.92	25.48	25.44	25.99	26.48	22.30	22.87	22.82	23.38	23.87
	8H	25.11	25.61	25.62	26.10	26.67	22.52	23.01	23.03	23.51	24.07