

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: P845658

Luminaire Tested: SQ2R-PW1-125D-930-UNV-STD-W-4

Issue Date: 6/14/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P845658  
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-930-UNV-STD-W-4  
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS  
1250 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

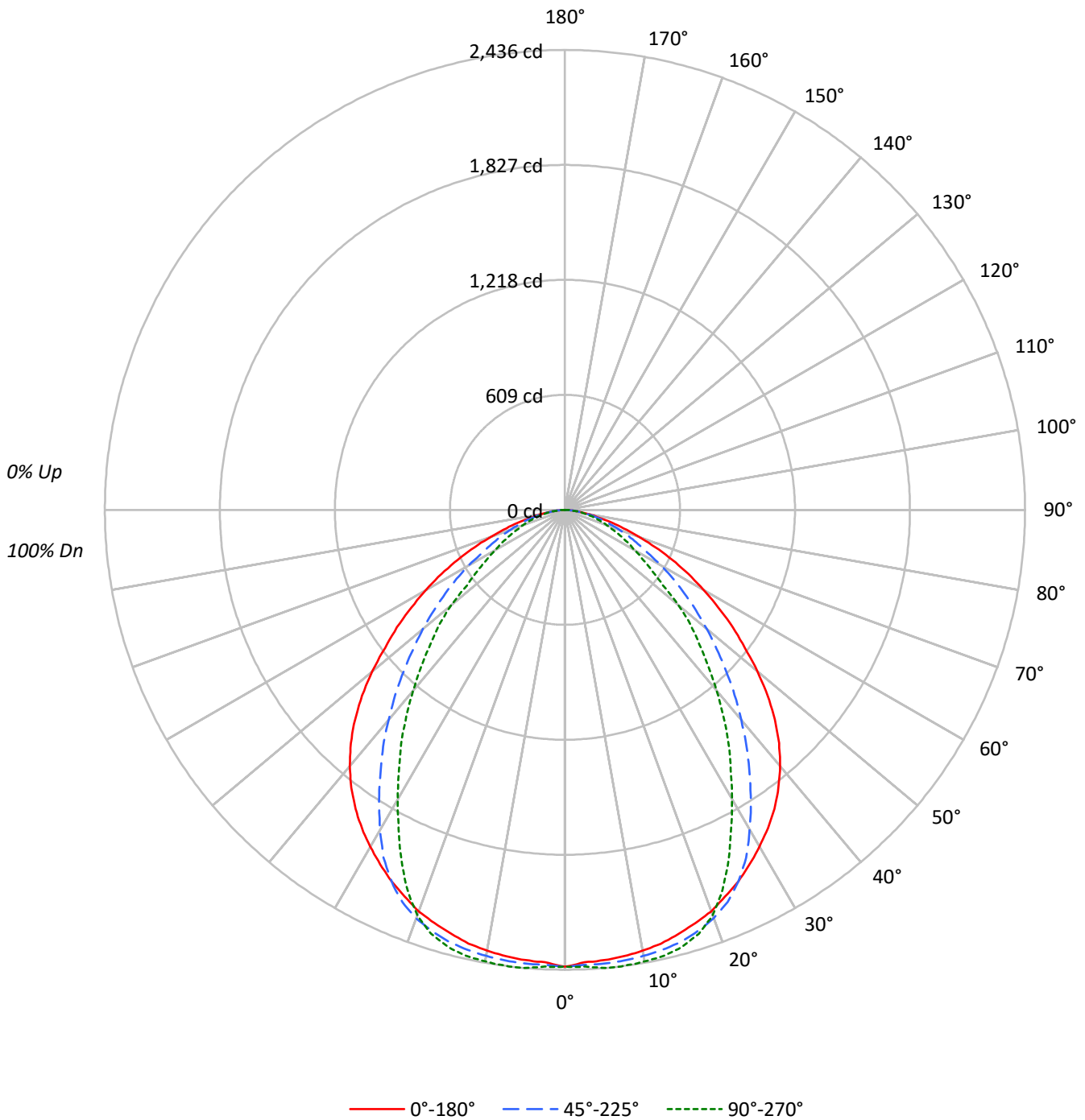
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5367.6 lumens  
Efficiency: N/A  
Efficacy: 109.1 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): 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

TEST NUMBER: P845658

CATALOG NUMBER: SQ2R-PW1-125D-930-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P845658

CATALOG NUMBER: SQ2R-PW1-125D-930-UNV-STD-W-4

**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°	39068	39068	39068
5°	38806	39105	39478
10°	38877	39331	39822
15°	38867	39599	40062
20°	38883	39557	39278
25°	38673	38714	36498
30°	38410	36476	32995
35°	38110	33567	29796
40°	37350	30599	26325
45°	35888	27519	22996
50°	33400	24601	19680
55°	30553	21731	15958
60°	27383	18900	13766
65°	23946	16286	12237
70°	19582	14469	11098
75°	15240	12508	10206
80°	11353	10711	9000
85°	7688	8114	5132

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 35888 cd/sqm

TEST NUMBER: P845658

CATALOG NUMBER: SQ2R-PW1-125D-930-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	230.5	4.3
10°-20°	668.2	12.4
20°-30°	984.0	18.3
30°-40°	1075.0	20.0
40°-50°	963.5	18.0
50°-60°	717.5	13.4
60°-70°	453.3	8.4
70°-80°	224.4	4.2
80°-90°	51.2	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°	1882.7	35.1
0°-40°	2957.7	55.1
0°-60°	4638.8	86.4
0°-90°	5367.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5367.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2420	2420	2420	2420	2420	
5°	2394	2434	2413	2415	2436	228
15°	2325	2371	2369	2385	2397	657
25°	2171	2219	2173	2083	2049	1000
35°	1934	1913	1703	1556	1512	1207
45°	1572	1443	1205	1055	1007	1207
55°	1085	979	772	606	567	969
65°	627	574	426	343	320	621
75°	244	263	200	168	164	267
85°	42	53	44	30	28	52
90°	0	0	0	0	0	



TEST NUMBER: P845658

CATALOG NUMBER: SQ2R-PW1-125D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2419.7	2419.7	2419.7	2419.7	2419.7
2.5°	2399.0	2438.1	2412.8	2415.1	2422.0
5°	2394.3	2433.5	2412.8	2415.1	2435.8
7.5°	2385.1	2424.3	2408.2	2415.1	2435.8
10°	2371.3	2412.8	2399.0	2410.5	2428.9
12.5°	2352.9	2396.7	2387.4	2401.3	2419.7
15°	2325.2	2371.3	2369.0	2385.1	2396.7
17.5°	2295.3	2341.3	2339.0	2348.3	2355.2
20°	2263.0	2309.1	2302.2	2286.0	2286.0
22.5°	2216.9	2267.6	2249.2	2198.5	2180.0
25°	2170.8	2219.2	2173.1	2083.2	2048.7
27.5°	2117.8	2159.3	2078.6	1954.2	1905.8
30°	2060.2	2090.2	1956.5	1815.9	1769.8
32.5°	2000.3	2007.2	1832.1	1684.6	1633.9
35°	1933.5	1912.7	1703.0	1555.5	1511.7
37.5°	1857.4	1802.1	1580.9	1426.5	1378.1
40°	1772.1	1684.6	1451.8	1297.4	1249.0
42.5°	1677.7	1562.4	1329.7	1175.3	1124.6
45°	1571.7	1442.6	1205.2	1055.4	1007.1
47.5°	1456.4	1327.4	1087.7	942.5	903.4
50°	1329.7	1205.2	979.4	834.2	783.5
52.5°	1200.6	1092.3	873.4	723.6	649.9
55°	1085.4	979.4	772.0	606.1	566.9
57.5°	963.3	868.8	679.8	523.1	490.9
60°	848.0	767.4	585.3	458.6	426.3
62.5°	737.4	668.3	493.2	398.7	373.3
65°	626.8	573.8	426.3	343.4	320.3
67.5°	518.5	483.9	366.4	290.4	274.2
70°	414.8	405.6	306.5	246.6	235.1
72.5°	324.9	331.8	248.9	205.1	198.2
75°	244.3	262.7	200.5	168.2	163.6
77.5°	177.4	205.1	156.7	131.4	126.7
80°	122.1	149.8	115.2	96.8	96.8
82.5°	76.0	96.8	73.7	66.8	66.8
85°	41.5	53.0	43.8	30.0	27.7
87.5°	13.8	20.7	9.2	6.9	6.9
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P845658

CATALOG NUMBER: SQ2R-PW1-125D-930-UNV-STD-W-4

**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	23.70	25.20	24.06	25.51	25.83	20.20	21.70	20.57	22.02	22.33
	3H	25.07	26.41	25.45	26.74	27.10	21.45	22.80	21.83	23.12	23.49
	4H	25.47	26.73	25.87	27.08	27.46	21.93	23.19	22.33	23.54	23.91
	6H	25.71	26.87	26.12	27.24	27.63	22.27	23.44	22.69	23.80	24.19
	8H	25.76	26.86	26.18	27.25	27.65	22.36	23.47	22.79	23.86	24.26
	12H	25.77	26.83	26.20	27.21	27.64	22.40	23.45	22.83	23.84	24.27
4H	2H	23.88	25.14	24.28	25.48	25.86	20.96	22.22	21.36	22.57	22.94
	3H	25.48	26.52	25.89	26.92	27.32	22.40	23.44	22.81	23.84	24.24
	4H	26.01	26.95	26.44	27.37	27.80	22.97	23.91	23.40	24.32	24.76
	6H	26.38	27.19	26.84	27.64	28.10	23.40	24.22	23.86	24.66	25.12
	8H	26.47	27.23	26.93	27.67	28.14	23.52	24.28	23.98	24.73	25.19
	12H	26.51	27.19	27.00	27.67	28.14	23.57	24.25	24.05	24.73	25.20
8H	4H	26.10	26.86	26.56	27.30	27.77	23.34	24.10	23.80	24.54	25.01
	6H	26.56	27.18	27.05	27.67	28.15	23.86	24.49	24.36	24.98	25.46
	8H	26.70	27.27	27.22	27.78	28.26	24.03	24.59	24.54	25.10	25.59
	12H	26.80	27.29	27.31	27.79	28.35	24.12	24.61	24.63	25.11	25.67
12H	4H	26.08	26.76	26.57	27.24	27.71	23.38	24.06	23.86	24.54	25.01
	6H	26.55	27.11	27.06	27.62	28.11	23.93	24.50	24.45	25.01	25.49
	8H	26.74	27.24	27.25	27.73	28.29	24.14	24.64	24.65	25.13	25.70