

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: P845641

Luminaire Tested: SQ2R-PW1-050D-935-UNV-STD-W-4

Issue Date: 6/14/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P845641  
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-PW1-050D-935-UNV-STD-W-4  
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS  
500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

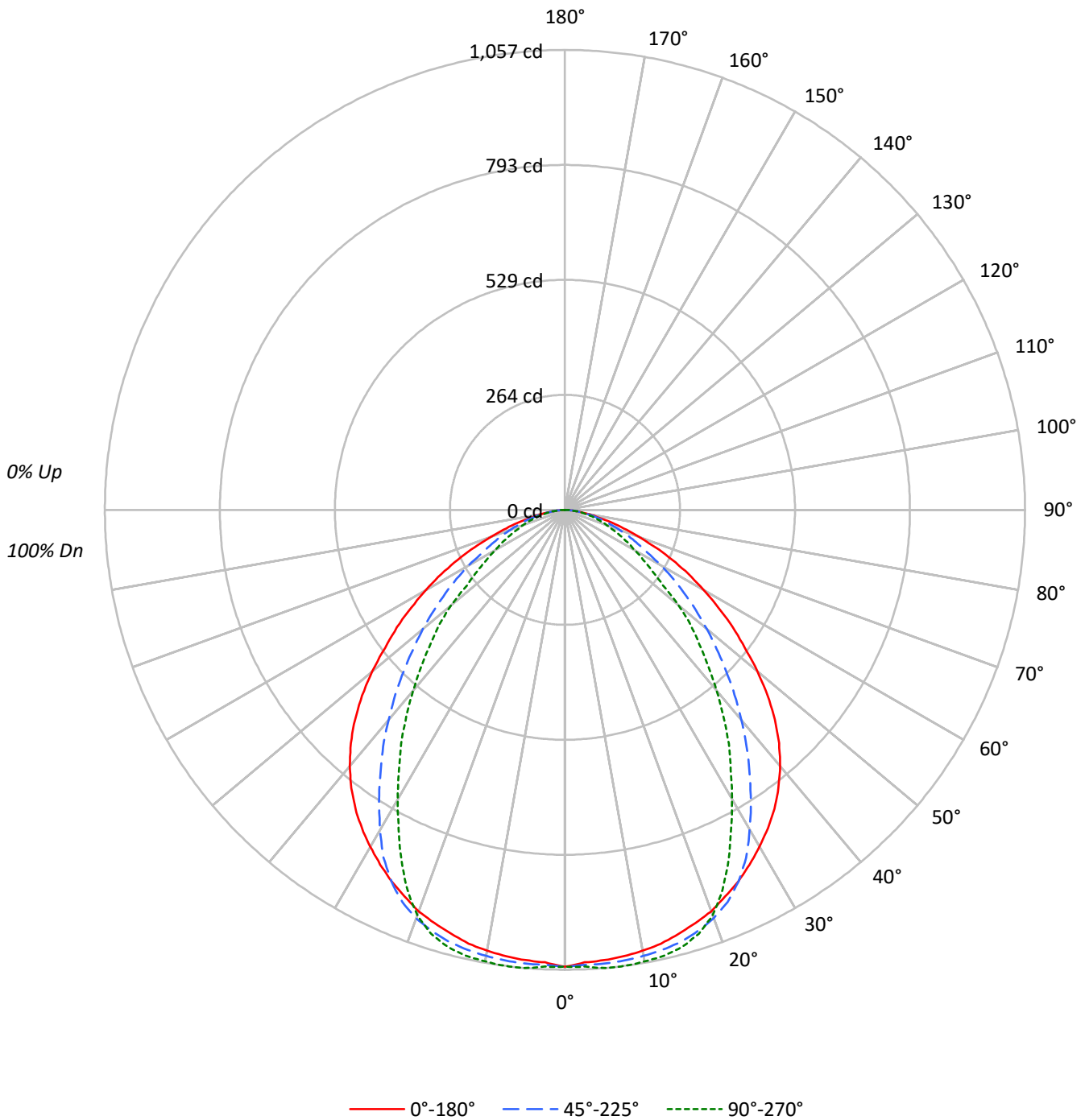
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2329.2 lumens  
Efficiency: N/A  
Efficacy: 130.9 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): 17.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.9973  
Total Harmonic Distortion (THDi): 0.0531  
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	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°	16953	16953	16953
5°	16840	16969	17131
10°	16870	17067	17280
15°	16866	17183	17384
20°	16873	17165	17045
25°	16782	16800	15838
30°	16667	15828	14318
35°	16537	14566	12930
40°	16208	13278	11424
45°	15573	11942	9978
50°	14493	10675	8540
55°	13258	9430	6925
60°	11883	8202	5974
65°	10392	7068	5310
70°	8497	6279	4815
75°	6613	5427	4429
80°	4928	4649	3905
85°	3335	3520	2223

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15573 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.0	4.3
10°-20°	290.0	12.4
20°-30°	427.0	18.3
30°-40°	466.5	20.0
40°-50°	418.1	18.0
50°-60°	311.4	13.4
60°-70°	196.7	8.4
70°-80°	97.4	4.2
80°-90°	22.2	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°	817.0	35.1
0°-40°	1283.5	55.1
0°-60°	2013.0	86.4
0°-90°	2329.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2329.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1039	1056	1047	1048	1057	99
15°	1009	1029	1028	1035	1040	285
25°	942	963	943	904	889	434
35°	839	830	739	675	656	524
45°	682	626	523	458	437	524
55°	471	425	335	263	246	420
65°	272	249	185	149	139	270
75°	106	114	87	73	71	116
85°	18	23	19	13	12	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1050	1050	1050	1050	1050
2.5°	1041	1058	1047	1048	1051
5°	1039	1056	1047	1048	1057
7.5°	1035	1052	1045	1048	1057
10°	1029	1047	1041	1046	1054
12.5°	1021	1040	1036	1042	1050
15°	1009	1029	1028	1035	1040
17.5°	996	1016	1015	1019	1022
20°	982	1002	999	992	992
22.5°	962	984	976	954	946
25°	942	963	943	904	889
27.5°	919	937	902	848	827
30°	894	907	849	788	768
32.5°	868	871	795	731	709
35°	839	830	739	675	656
37.5°	806	782	686	619	598
40°	769	731	630	563	542
42.5°	728	678	577	510	488
45°	682	626	523	458	437
47.5°	632	576	472	409	392
50°	577	523	425	362	340
52.5°	521	474	379	314	282
55°	471	425	335	263	246
57.5°	418	377	295	227	213
60°	368	333	254	199	185
62.5°	320	290	214	173	162
65°	272	249	185	149	139
67.5°	225	210	159	126	119
70°	180	176	133	107	102
72.5°	141	144	108	89	86
75°	106	114	87	73	71
77.5°	77	89	68	57	55
80°	53	65	50	42	42
82.5°	33	42	32	29	29
85°	18	23	19	13	12
87.5°	6	9	4	3	3
90°	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	20.80	22.30	21.16	22.61	22.93	17.30	18.80	17.66	19.12	19.43
	3H	22.17	23.51	22.54	23.84	24.20	18.55	19.90	18.93	20.22	20.59
	4H	22.57	23.83	22.97	24.18	24.56	19.03	20.29	19.43	20.63	21.01
	6H	22.80	23.97	23.22	24.33	24.73	19.37	20.54	19.78	20.90	21.29
	8H	22.86	23.96	23.28	24.35	24.75	19.46	20.57	19.89	20.96	21.36
	12H	22.87	23.93	23.30	24.31	24.74	19.49	20.55	19.93	20.94	21.37
4H	2H	20.97	22.24	21.37	22.58	22.96	18.06	19.32	18.46	19.66	20.04
	3H	22.58	23.62	22.99	24.02	24.42	19.50	20.54	19.91	20.94	21.34
	4H	23.11	24.05	23.54	24.46	24.90	20.07	21.00	20.50	21.42	21.86
	6H	23.48	24.29	23.94	24.73	25.20	20.50	21.32	20.96	21.76	22.22
	8H	23.57	24.33	24.03	24.77	25.24	20.62	21.38	21.08	21.83	22.29
	12H	23.61	24.29	24.09	24.77	25.24	20.67	21.35	21.15	21.83	22.30
8H	4H	23.19	23.96	23.66	24.40	24.87	20.44	21.20	20.90	21.64	22.11
	6H	23.65	24.28	24.15	24.77	25.25	20.96	21.59	21.46	22.08	22.56
	8H	23.80	24.37	24.32	24.88	25.36	21.13	21.69	21.64	22.20	22.69
	12H	23.90	24.39	24.41	24.89	25.45	21.22	21.71	21.73	22.21	22.77
12H	4H	23.18	23.86	23.66	24.34	24.81	20.48	21.16	20.96	21.64	22.11
	6H	23.65	24.21	24.16	24.72	25.21	21.03	21.59	21.55	22.10	22.59
	8H	23.84	24.33	24.35	24.83	25.39	21.24	21.74	21.75	22.23	22.80