

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: P845675

Luminaire Tested: SQ2R-WBN-050D-940-UNV-STD-W-4

Issue Date: 6/14/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P845675  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2308-130-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/14/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2R-WBN-050D-940-UNV-STD-W-4  
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - WHITE BAFFLE, NARROW 35-DEGREE OPTIC  
500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

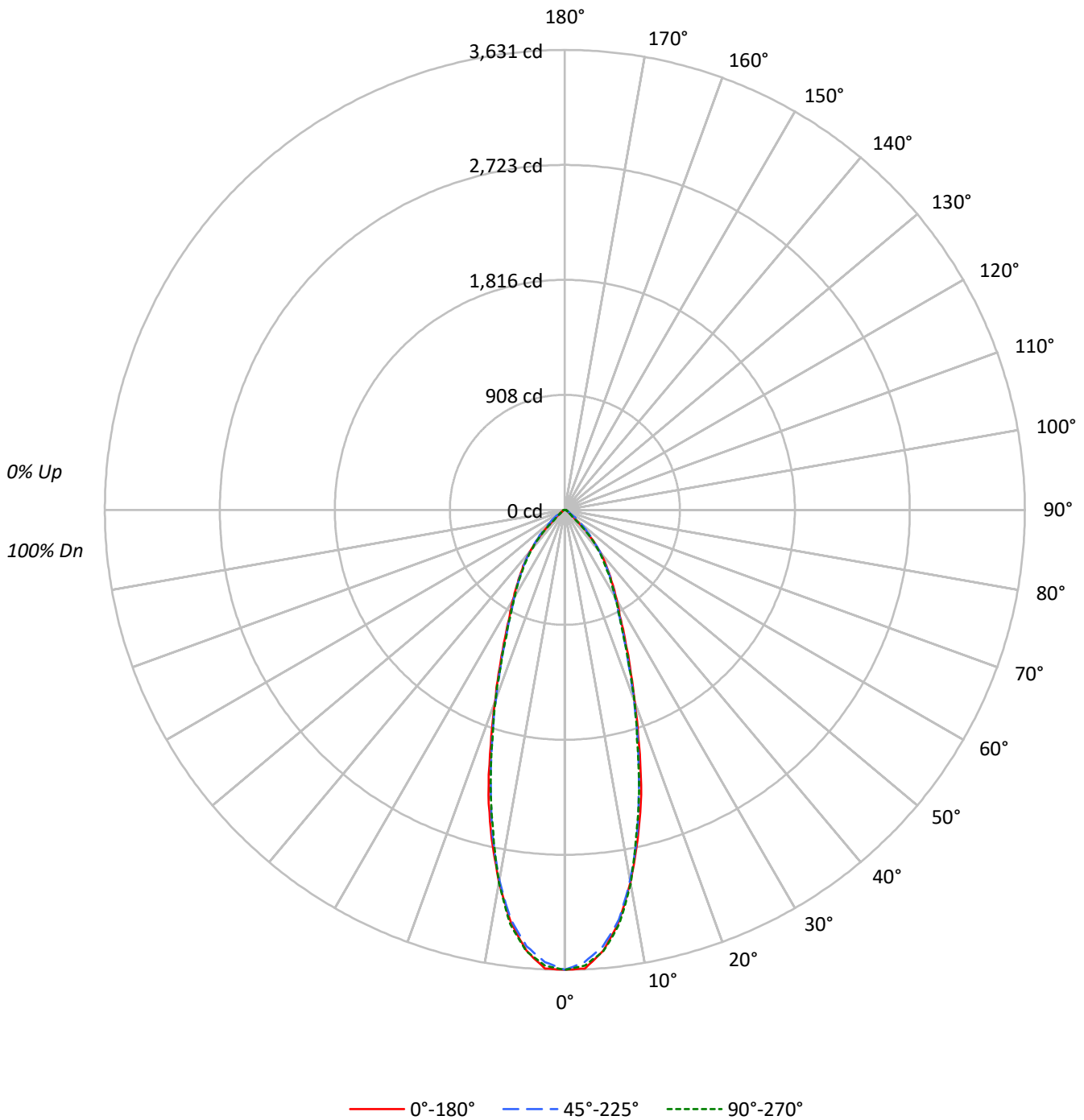
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2107.2 lumens  
Efficiency: N/A  
Efficacy: 126.9 lumens/watt  
Spacing Criteria (0/90/45): 0.6 / 0.59 / 0.63  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.6  
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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93
2	108	103	99	95	106	101	97	94	98	95	92	95	92	90	92	90	88	87
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	81
4	97	90	84	80	95	89	83	79	86	82	78	84	81	78	83	79	77	75
5	92	84	78	74	91	83	78	74	81	77	73	80	76	72	78	75	72	70
6	88	79	73	69	87	78	73	69	77	72	68	75	71	68	74	70	67	66
7	84	75	69	65	83	74	68	64	73	68	64	72	67	64	70	66	63	62
8	80	71	65	61	79	70	64	61	69	64	60	68	63	60	67	63	60	58
9	76	67	61	57	75	66	61	57	66	61	57	65	60	57	64	60	57	55
10	73	64	58	54	72	63	58	54	62	57	54	62	57	54	61	57	54	52

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

	0°	45°	90°
0°	58630	58630	58630
5°	56610	56046	56671
10°	48931	48698	49047
15°	38937	37708	37859
20°	27660	27295	27495
25°	19899	19509	19372
30°	15204	14796	14760
35°	11935	11732	11428
40°	9042	8920	8486
45°	5060	6046	4516
50°	1781	3723	1570
55°	1089	2030	1033
60°	833	1062	769
65°	764	787	714
70°	732	732	670
75°	686	686	643
80°	595	595	595
85°	593	482	482

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 6046 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	317.2	15.1
10°-20°	627.5	29.8
20°-30°	516.2	24.5
30°-40°	372.9	17.7
40°-50°	189.6	9.0
50°-60°	48.6	2.3
60°-70°	20.4	1.0
70°-80°	11.4	0.5
80°-90°	3.4	0.2
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°	1460.9	69.3
0°-40°	1833.8	87.0
0°-60°	2072.0	98.3
0°-90°	2107.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2107.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3631	3631	3631	3631	3631	
5°	3493	3488	3458	3508	3497	317
15°	2329	2302	2256	2272	2265	634
25°	1117	1115	1095	1085	1087	523
35°	606	609	595	586	580	380
45°	222	256	265	247	198	176
55°	39	45	72	42	37	37
65°	20	21	21	19	19	20
75°	11	11	11	10	10	12
85°	3	3	3	3	3	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3631.3	3631.3	3631.3	3631.3	3631.3
2.5°	3624.2	3616.4	3573.3	3609.4	3600.3
5°	3492.8	3487.6	3458.0	3508.2	3496.6
7.5°	3277.0	3279.5	3264.1	3303.4	3298.9
10°	2984.5	2996.1	2970.3	3035.4	2991.6
12.5°	2661.8	2649.5	2634.1	2630.8	2611.5
15°	2329.4	2302.3	2255.9	2272.0	2264.9
17.5°	1942.9	1955.1	1910.0	1904.9	1895.2
20°	1609.8	1613.0	1588.6	1601.4	1600.2
22.5°	1341.8	1341.8	1309.0	1329.6	1315.4
25°	1117.0	1115.1	1095.1	1085.4	1087.4
27.5°	941.2	932.8	918.0	925.0	920.5
30°	815.5	809.1	793.6	797.5	791.7
32.5°	702.8	704.7	688.6	685.4	681.5
35°	605.5	609.4	595.2	585.6	579.8
37.5°	516.0	519.9	507.0	493.4	488.3
40°	429.0	431.6	423.2	406.5	402.6
42.5°	334.3	347.2	338.8	323.4	313.7
45°	221.6	255.7	264.8	247.4	197.8
47.5°	122.4	173.3	199.1	154.6	99.2
50°	70.9	103.7	148.2	84.4	62.5
52.5°	50.2	63.1	110.8	56.7	47.0
55°	38.7	45.1	72.1	41.9	36.7
57.5°	30.9	34.8	45.7	32.9	29.6
60°	25.8	28.3	32.9	27.1	23.8
62.5°	22.5	23.8	25.1	21.9	21.3
65°	20.0	20.6	20.6	19.3	18.7
67.5°	17.4	18.0	18.0	17.4	16.7
70°	15.5	16.1	15.5	14.8	14.2
72.5°	12.9	13.5	12.9	12.9	12.2
75°	11.0	11.0	11.0	10.3	10.3
77.5°	9.0	9.0	8.4	8.4	7.7
80°	6.4	7.1	6.4	6.4	6.4
82.5°	5.2	5.2	4.5	4.5	4.5
85°	3.2	3.2	2.6	3.2	2.6
87.5°	1.3	1.3	1.3	1.3	1.3
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	5.36	6.42	5.72	6.73	7.04	4.97	6.03	5.34	6.34	6.66
	3H	6.41	7.34	6.79	7.68	8.04	5.98	6.91	6.36	7.24	7.61
	4H	6.85	7.71	7.26	8.07	8.46	6.41	7.27	6.82	7.63	8.02
	6H	7.17	7.96	7.59	8.33	8.73	6.75	7.54	7.17	7.91	8.31
	8H	7.27	8.01	7.71	8.41	8.82	6.85	7.59	7.29	7.99	8.40
	12H	7.34	8.05	7.78	8.43	8.86	6.91	7.61	7.34	8.00	8.43
4H	2H	5.59	6.46	6.00	6.81	7.20	5.27	6.13	5.68	6.48	6.87
	3H	6.90	7.60	7.32	8.01	8.42	6.52	7.22	6.94	7.63	8.03
	4H	7.47	8.09	7.90	8.51	8.96	7.07	7.70	7.51	8.12	8.57
	6H	7.92	8.46	8.39	8.91	9.38	7.53	8.07	8.00	8.52	8.99
	8H	8.07	8.57	8.55	9.02	9.49	7.68	8.18	8.16	8.63	9.10
	12H	8.18	8.62	8.68	9.10	9.58	7.78	8.21	8.27	8.70	9.17
8H	4H	7.61	8.11	8.08	8.56	9.03	7.26	7.75	7.73	8.20	8.68
	6H	8.19	8.59	8.70	9.09	9.58	7.83	8.23	8.34	8.73	9.22
	8H	8.42	8.78	8.95	9.30	9.79	8.06	8.41	8.59	8.93	9.43
	12H	8.62	8.93	9.14	9.43	10.00	8.24	8.55	8.76	9.05	9.62
12H	4H	7.59	8.02	8.08	8.51	8.99	7.25	7.68	7.74	8.17	8.65
	6H	8.20	8.55	8.73	9.08	9.57	7.85	8.21	8.38	8.73	9.23
	8H	8.48	8.79	9.00	9.29	9.87	8.13	8.44	8.65	8.94	9.52