

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: P845459

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

Issue Date: 6/14/2024

**Test Information**

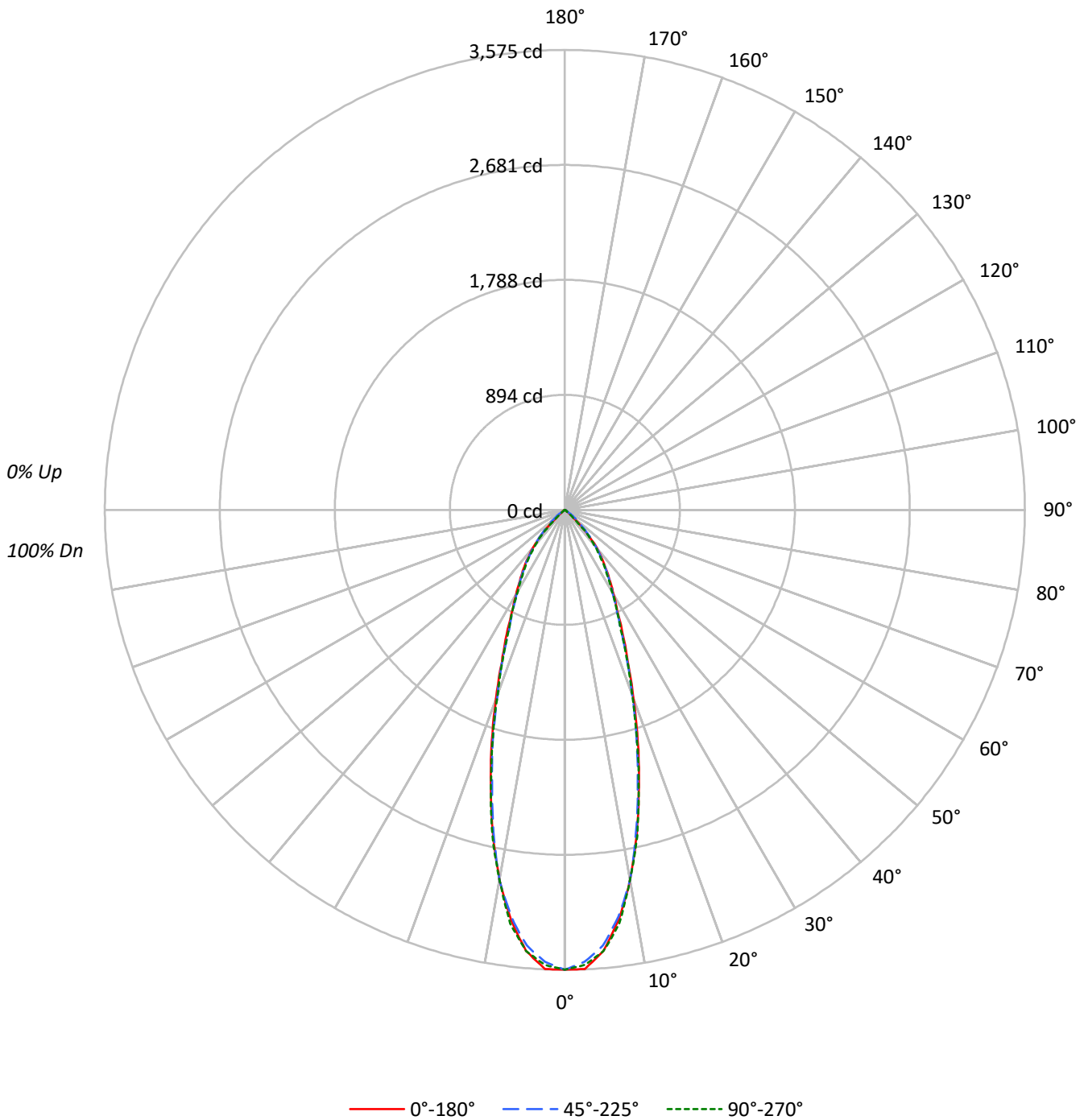
Test Method: LM-79-2019  
Report Number: P845459  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2308-130-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/14/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2R-BBN-050D-940-UNV-STD-W-4  
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - BLACK 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: 1931.4 lumens  
Efficiency: N/A  
Efficacy: 116.3 lumens/watt  
Spacing Criteria (0/90/45): 0.59 / 0.59 / 0.62  
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	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88
3	103	97	93	89	101	96	92	88	93	90	87	91	88	85	89	86	84	83
4	99	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73
6	90	81	75	71	88	80	75	71	79	74	71	78	73	70	76	73	70	68
7	86	77	71	67	84	76	71	67	75	70	67	74	69	66	73	69	66	65
8	82	73	67	63	81	72	67	63	71	66	63	70	66	63	69	65	62	61
9	78	69	64	60	77	69	63	60	68	63	59	67	62	59	66	62	59	58
10	75	66	60	57	74	65	60	57	65	60	56	64	59	56	63	59	56	55

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

	0°	45°	90°
0°	57718	57718	57718
5°	55788	55099	55819
10°	47878	47909	47878
15°	37162	36570	37076
20°	26821	26266	26246
25°	19017	18260	18294
30°	14149	13789	13656
35°	11008	10730	10502
40°	8146	7944	7440
45°	4163	5103	3354
50°	907	2816	663
55°	253	1143	200
60°	42	229	19
65°	0	23	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 5103 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	311.2	16.1
10°-20°	610.8	31.6
20°-30°	489.1	25.3
30°-40°	341.3	17.7
40°-50°	157.1	8.1
50°-60°	21.2	1.1
60°-70°	0.6	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	1411.1	73.1
0°-40°	1752.4	90.7
0°-60°	1930.7	100.0
0°-90°	1931.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1931.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3575	3575	3575	3575	3575	
5°	3442	3423	3400	3441	3444	311
15°	2223	2252	2188	2219	2218	613
25°	1068	1043	1025	1040	1027	497
35°	558	558	544	535	533	349
45°	182	218	224	204	147	146
55°	9	14	41	12	7	11
65°	0	0	1	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3574.8	3574.8	3574.8	3574.8	3574.8
2.5°	3572.2	3555.5	3516.8	3552.3	3541.3
5°	3442.1	3423.4	3399.6	3441.4	3444.0
7.5°	3212.1	3218.5	3190.8	3245.0	3243.0
10°	2920.3	2924.8	2922.2	2937.7	2920.3
12.5°	2582.0	2603.3	2562.1	2587.2	2600.7
15°	2223.2	2252.2	2187.8	2218.7	2218.1
17.5°	1888.9	1886.3	1852.1	1860.5	1857.3
20°	1561.0	1556.4	1528.7	1524.2	1527.5
22.5°	1280.1	1271.7	1266.5	1253.7	1258.2
25°	1067.5	1043.0	1025.0	1040.4	1026.9
27.5°	881.3	881.9	866.5	868.4	873.6
30°	758.9	754.4	739.6	740.2	732.5
32.5°	650.0	655.2	635.8	631.3	623.6
35°	558.5	558.5	544.4	534.7	532.8
37.5°	470.3	469.6	458.7	445.8	441.3
40°	386.5	383.3	376.9	360.1	353.0
42.5°	291.2	302.8	296.3	279.6	268.0
45°	182.3	218.4	223.5	204.2	146.9
47.5°	88.9	130.8	158.5	110.8	56.7
50°	36.1	67.0	112.1	48.3	26.4
52.5°	17.4	29.0	76.0	23.2	14.2
55°	9.0	14.2	40.6	11.6	7.1
57.5°	3.9	7.1	17.4	5.8	3.2
60°	1.3	2.6	7.1	1.9	0.6
62.5°	0.0	0.6	2.6	0.6	0.0
65°	0.0	0.0	0.6	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00