

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: P845465

Luminaire Tested: SQ2R-BBN-100D-940-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845465
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-100D-940-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - BLACK BAFFLE, NARROW 35-DEGREE OPTIC
1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

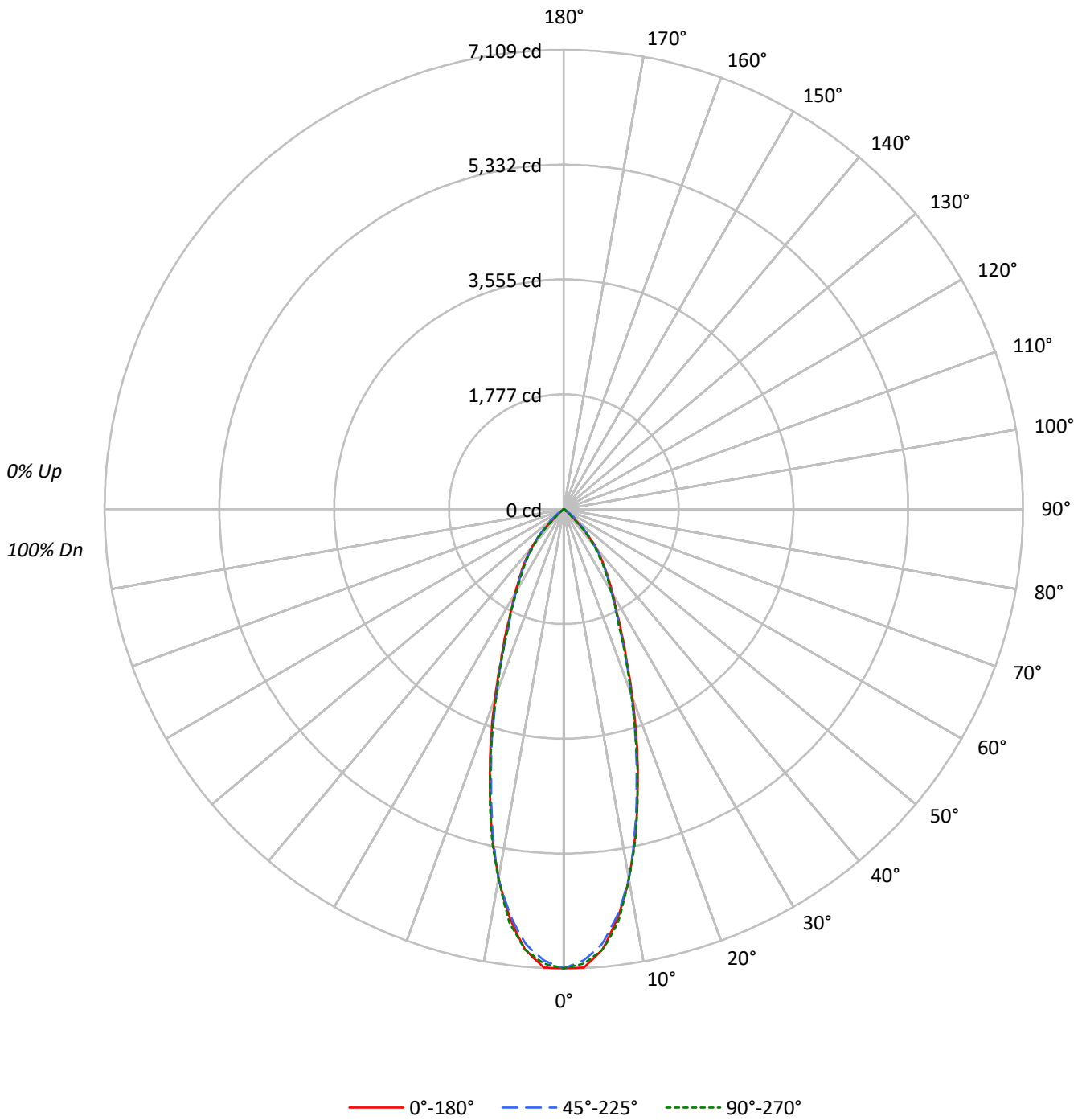
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3840.6 lumens
Efficiency: N/A
Efficacy: 110.0 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): 34.9
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	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	100	100	
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94	94	94	94	
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88	88	88	88	
3	103	97	93	89	101	96	92	88	93	90	87	91	88	85	89	86	84	83	83	83	83	
4	99	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77	77	77	77	
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73	73	73	73	
6	90	81	75	71	88	80	75	71	79	74	71	78	73	70	76	73	70	68	68	68	68	
7	86	77	71	67	84	76	71	67	75	70	67	74	69	66	73	69	66	65	65	65	65	
8	82	73	67	63	81	72	67	63	71	66	63	70	66	63	69	65	62	61	61	61	61	
9	78	69	64	60	77	69	63	60	68	63	59	67	62	59	66	62	59	58	58	58	58	
10	75	66	60	57	74	65	60	57	65	60	56	64	59	56	63	59	56	55	55	55	55	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	114774	114774	114774
5°	110936	109566	110999
10°	95207	95269	95207
15°	73899	72720	73727
20°	53333	52233	52189
25°	37816	36310	36378
30°	28135	27419	27156
35°	21892	21337	20881
40°	16200	15795	14796
45°	8277	10150	6670
50°	1801	5599	1319
55°	504	2272	397
60°	84	455	42
65°	0	50	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: 10150 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	618.7	16.1
10°-20°	1214.7	31.6
20°-30°	972.6	25.3
30°-40°	678.6	17.7
40°-50°	312.4	8.1
50°-60°	42.2	1.1
60°-70°	1.3	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°	2806.1	73.1
0°-40°	3484.7	90.7
0°-60°	3839.3	100.0
0°-90°	3840.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3840.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7109	7109	7109	7109	7109	
5°	6845	6808	6760	6844	6849	619
15°	4421	4479	4350	4412	4411	1220
25°	2123	2074	2038	2069	2042	988
35°	1111	1111	1082	1063	1059	694
45°	362	434	444	406	292	290
55°	18	28	81	23	14	21
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°	7108.6	7108.6	7108.6	7108.6	7108.6
2.5°	7103.5	7070.2	6993.3	7063.8	7042.0
5°	6844.7	6807.6	6760.2	6843.5	6848.6
7.5°	6387.4	6400.2	6345.1	6452.7	6448.9
10°	5807.1	5816.0	5810.9	5841.7	5807.1
12.5°	5134.5	5176.8	5094.8	5144.8	5171.7
15°	4421.0	4478.6	4350.5	4412.0	4410.7
17.5°	3756.1	3751.0	3683.1	3699.7	3693.3
20°	3104.0	3095.1	3040.0	3031.0	3037.4
22.5°	2545.5	2528.8	2518.6	2493.0	2501.9
25°	2122.7	2074.0	2038.2	2068.9	2042.0
27.5°	1752.5	1753.8	1723.0	1726.9	1737.1
30°	1509.1	1500.1	1470.7	1471.9	1456.6
32.5°	1292.6	1302.8	1264.4	1255.4	1240.1
35°	1110.7	1110.7	1082.5	1063.3	1059.4
37.5°	935.2	933.9	912.1	886.5	877.5
40°	768.6	762.2	749.4	716.1	702.0
42.5°	579.0	602.1	589.3	556.0	532.9
45°	362.5	434.3	444.5	406.1	292.1
47.5°	176.8	260.1	315.1	220.3	112.7
50°	71.7	133.2	222.9	96.1	52.5
52.5°	34.6	57.6	151.2	46.1	28.2
55°	17.9	28.2	80.7	23.1	14.1
57.5°	7.7	14.1	34.6	11.5	6.4
60°	2.6	5.1	14.1	3.8	1.3
62.5°	0.0	1.3	5.1	1.3	0.0
65°	0.0	0.0	1.3	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