

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: P845457

Luminaire Tested: SQ2R-BBN-050D-930-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845457
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-930-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - BLACK BAFFLE, NARROW 35-DEGREE OPTIC
500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

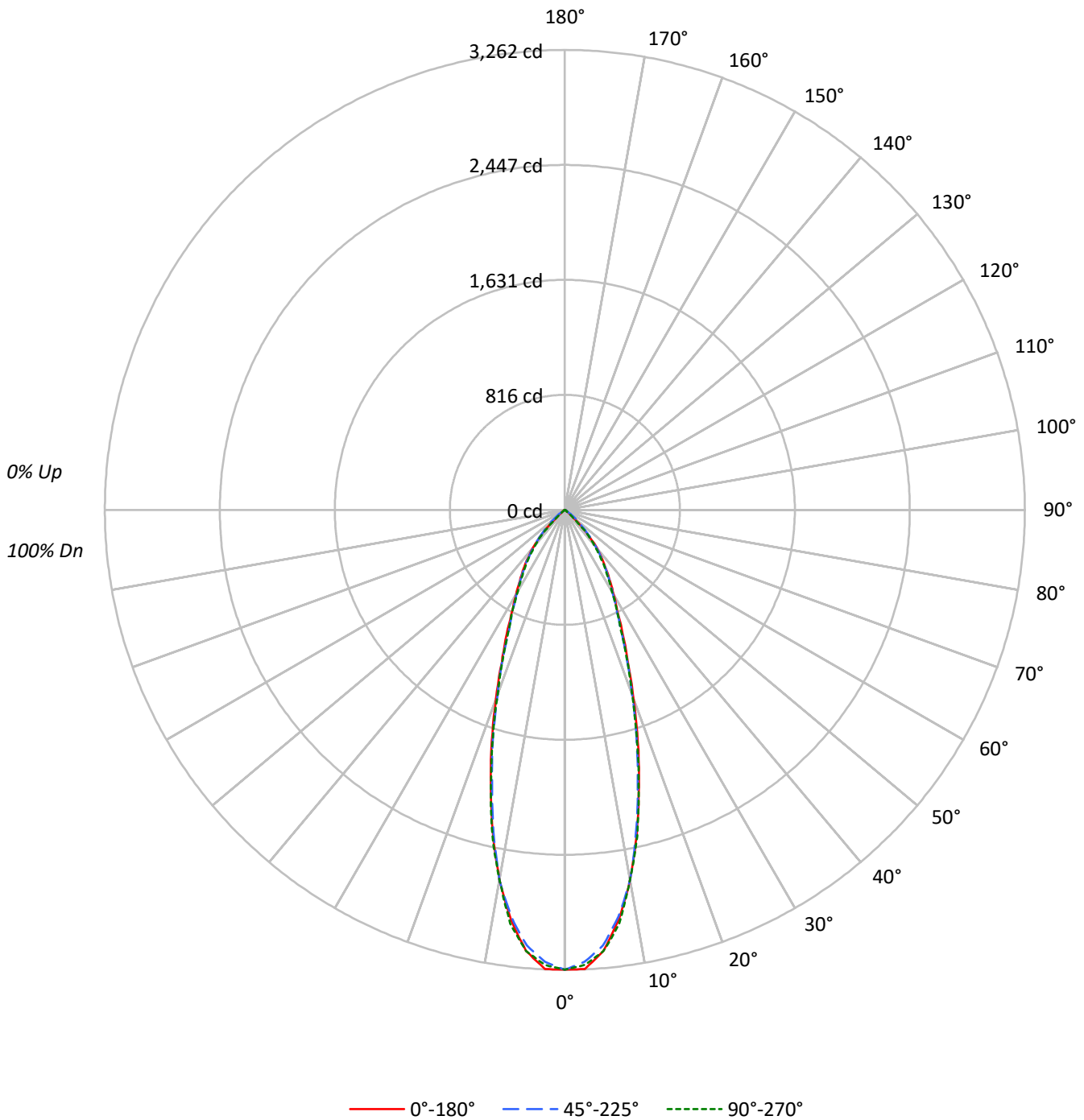
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1762.2 lumens
Efficiency: N/A
Efficacy: 106.2 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	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°	52661	52661	52661
5°	50900	50271	50927
10°	43683	43710	43683
15°	33906	33366	33827
20°	24471	23966	23945
25°	17350	16659	16691
30°	12909	12581	12460
35°	10044	9790	9581
40°	7434	7246	6789
45°	3797	4658	3060
50°	826	2570	605
55°	231	1042	183
60°	39	210	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: 4658 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.9	16.1
10°-20°	557.3	31.6
20°-30°	446.3	25.3
30°-40°	311.4	17.7
40°-50°	143.4	8.1
50°-60°	19.4	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°	1287.5	73.1
0°-40°	1598.9	90.7
0°-60°	1761.6	100.0
0°-90°	1762.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1762.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3262	3262	3262	3262	3262	
5°	3140	3123	3102	3140	3142	284
15°	2028	2055	1996	2024	2024	560
25°	974	952	935	949	937	453
35°	510	510	497	488	486	319
45°	166	199	204	186	134	133
55°	8	13	37	11	6	10
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°	3261.6	3261.6	3261.6	3261.6	3261.6
2.5°	3259.2	3243.9	3208.7	3241.0	3231.0
5°	3140.5	3123.4	3101.7	3139.9	3142.2
7.5°	2930.6	2936.5	2911.2	2960.6	2958.9
10°	2664.4	2668.5	2666.1	2680.3	2664.4
12.5°	2355.8	2375.2	2337.6	2360.5	2372.8
15°	2028.4	2054.9	1996.1	2024.3	2023.7
17.5°	1723.4	1721.0	1689.9	1697.5	1694.6
20°	1424.2	1420.1	1394.8	1390.7	1393.6
22.5°	1167.9	1160.3	1155.6	1143.8	1147.9
25°	973.9	951.6	935.1	949.3	936.9
27.5°	804.1	804.7	790.6	792.3	797.0
30°	692.4	688.3	674.8	675.4	668.3
32.5°	593.1	597.8	580.1	576.0	569.0
35°	509.6	509.6	496.7	487.9	486.1
37.5°	429.1	428.5	418.5	406.7	402.6
40°	352.7	349.7	343.8	328.6	322.1
42.5°	265.7	276.3	270.4	255.1	244.5
45°	166.3	199.3	204.0	186.3	134.0
47.5°	81.1	119.3	144.6	101.1	51.7
50°	32.9	61.1	102.3	44.1	24.1
52.5°	15.9	26.4	69.4	21.2	12.9
55°	8.2	12.9	37.0	10.6	6.5
57.5°	3.5	6.5	15.9	5.3	2.9
60°	1.2	2.4	6.5	1.8	0.6
62.5°	0.0	0.6	2.4	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