

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: P845681

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

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845681
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-100D-940-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - WHITE BAFFLE, NARROW 35-DEGREE OPTIC
1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

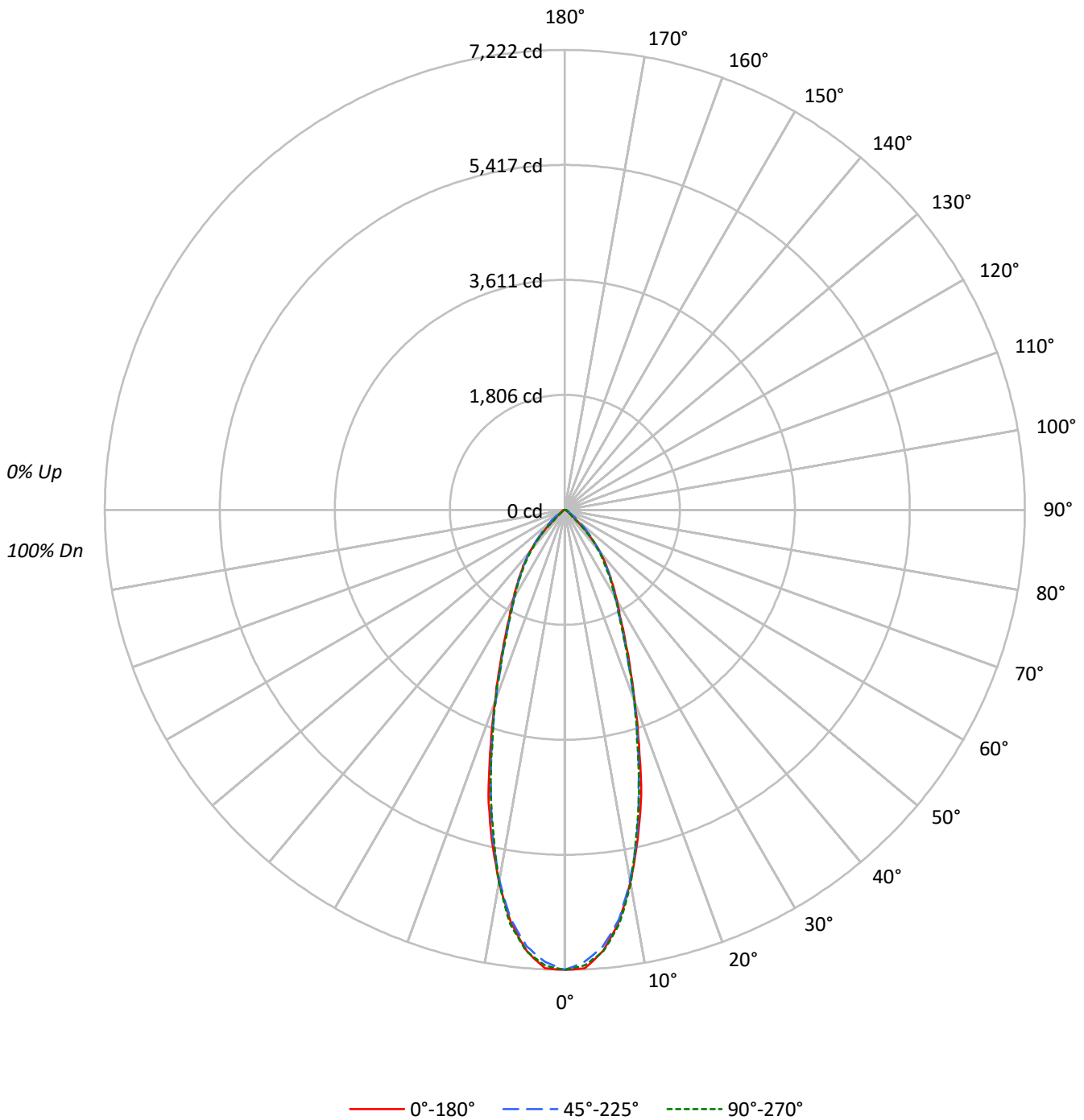
Lumens per Lamp: N/A
Luminaire Lumens: 4190.8 lumens
Efficiency: N/A
Efficacy: 120.1 lumens/watt
Spacing Criteria (0/90/45): 0.6 / 0.59 / 0.63
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	82	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°	116605	116605	116605
5°	112586	111464	112710
10°	97315	96853	97546
15°	77437	74997	75296
20°	55010	54285	54680
25°	39578	38801	38527
30°	30240	29427	29356
35°	23737	23333	22728
40°	17985	17740	16876
45°	10063	12024	8980
50°	3539	7402	3122
55°	2165	4039	2055
60°	1653	2109	1531
65°	1517	1566	1421
70°	1449	1449	1331
75°	1360	1360	1279
80°	1190	1190	1190
85°	1186	945	945

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 12024 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	630.8	15.1
10°-20°	1248.0	29.8
20°-30°	1026.7	24.5
30°-40°	741.7	17.7
40°-50°	377.0	9.0
50°-60°	96.7	2.3
60°-70°	40.6	1.0
70°-80°	22.6	0.5
80°-90°	6.7	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°	2905.5	69.3
0°-40°	3647.2	87.0
0°-60°	4120.9	98.3
0°-90°	4190.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4190.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7222	7222	7222	7222	7222	
5°	6946	6936	6877	6977	6954	631
15°	4633	4579	4487	4519	4505	1261
25°	2222	2218	2178	2159	2163	1040
35°	1204	1212	1184	1165	1153	755
45°	441	509	527	492	393	349
55°	77	90	144	83	73	74
65°	40	41	41	38	37	40
75°	22	22	22	20	20	23
85°	6	6	5	6	5	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7222.0	7222.0	7222.0	7222.0	7222.0
2.5°	7207.9	7192.5	7106.7	7178.4	7160.5
5°	6946.5	6936.3	6877.3	6977.3	6954.2
7.5°	6517.3	6522.4	6491.7	6569.8	6560.9
10°	5935.7	5958.7	5907.5	6036.9	5949.8
12.5°	5293.8	5269.5	5238.7	5232.3	5193.9
15°	4632.7	4578.9	4486.7	4518.7	4504.6
17.5°	3864.0	3888.4	3798.7	3788.4	3769.2
20°	3201.6	3208.1	3159.4	3185.0	3182.4
22.5°	2668.7	2668.7	2603.3	2644.3	2616.2
25°	2221.6	2217.7	2178.0	2158.8	2162.6
27.5°	1871.8	1855.1	1825.7	1839.8	1830.8
30°	1622.0	1609.2	1578.4	1586.1	1574.6
32.5°	1397.8	1401.6	1369.6	1363.2	1355.5
35°	1204.3	1212.0	1183.8	1164.6	1153.1
37.5°	1026.2	1033.9	1008.3	981.4	971.1
40°	853.3	858.4	841.7	808.4	800.7
42.5°	664.9	690.6	673.9	643.1	623.9
45°	440.7	508.6	526.6	492.0	393.3
47.5°	243.4	344.6	395.9	307.5	197.3
50°	140.9	206.3	294.7	167.8	124.3
52.5°	99.9	125.6	220.4	112.7	93.5
55°	76.9	89.7	143.5	83.3	73.0
57.5°	61.5	69.2	91.0	65.3	58.9
60°	51.2	56.4	65.3	53.8	47.4
62.5°	44.8	47.4	50.0	43.6	42.3
65°	39.7	41.0	41.0	38.4	37.2
67.5°	34.6	35.9	35.9	34.6	33.3
70°	30.7	32.0	30.7	29.5	28.2
72.5°	25.6	26.9	25.6	25.6	24.3
75°	21.8	21.8	21.8	20.5	20.5
77.5°	17.9	17.9	16.7	16.7	15.4
80°	12.8	14.1	12.8	12.8	12.8
82.5°	10.2	10.2	9.0	9.0	9.0
85°	6.4	6.4	5.1	6.4	5.1
87.5°	2.6	2.6	2.6	2.6	2.6
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	7.75	8.81	8.11	9.12	9.43	7.36	8.42	7.72	8.73	9.05
	3H	8.80	9.73	9.18	10.06	10.43	8.37	9.30	8.75	9.63	10.00
	4H	9.23	10.10	9.64	10.45	10.84	8.80	9.66	9.21	10.01	10.40
	6H	9.55	10.34	9.97	10.72	11.11	9.14	9.93	9.56	10.30	10.70
	8H	9.66	10.40	10.09	10.79	11.20	9.25	9.99	9.68	10.38	10.79
	12H	9.73	10.44	10.16	10.82	11.25	9.30	10.01	9.73	10.39	10.82
4H	2H	7.99	8.85	8.39	9.20	9.59	7.66	8.52	8.06	8.87	9.26
	3H	9.29	9.99	9.70	10.40	10.80	8.91	9.61	9.32	10.02	10.42
	4H	9.85	10.47	10.29	10.89	11.34	9.46	10.08	9.90	10.51	10.96
	6H	10.31	10.84	10.78	11.29	11.76	9.93	10.46	10.40	10.91	11.38
	8H	10.46	10.95	10.93	11.40	11.88	10.08	10.57	10.55	11.02	11.50
	12H	10.57	11.00	11.06	11.49	11.97	10.17	10.60	10.66	11.09	11.57
8H	4H	9.99	10.49	10.47	10.94	11.41	9.64	10.14	10.12	10.59	11.07
	6H	10.57	10.97	11.08	11.47	11.96	10.23	10.62	10.73	11.12	11.61
	8H	10.81	11.16	11.34	11.68	12.18	10.45	10.81	10.98	11.33	11.83
	12H	11.01	11.32	11.53	11.81	12.39	10.63	10.94	11.15	11.44	12.02
12H	4H	9.98	10.41	10.47	10.89	11.37	9.64	10.07	10.13	10.56	11.03
	6H	10.58	10.94	11.11	11.46	11.96	10.25	10.60	10.78	11.12	11.62
	8H	10.87	11.18	11.39	11.67	12.25	10.53	10.84	11.05	11.34	11.91