

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: P845683

Luminaire Tested: SQ2R-WBN-125D-935-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845683
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-125D-935-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - WHITE BAFFLE, NARROW 35-DEGREE OPTIC
1250 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

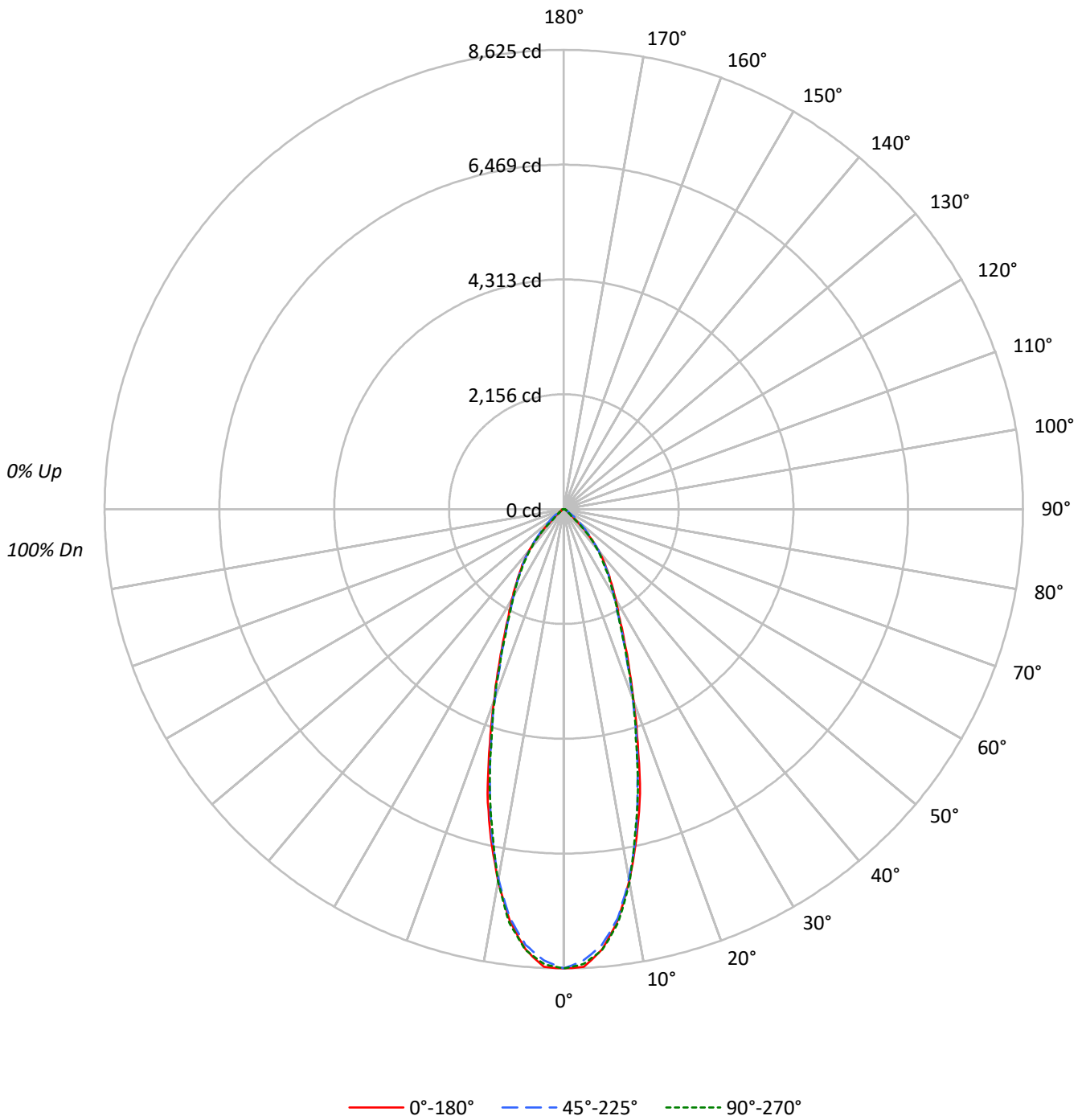
Lumens per Lamp: N/A
Luminaire Lumens: 5004.9 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 0.6 / 0.59 / 0.63
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 54.6
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°	139258	139258	139258
5°	134459	133119	134607
10°	116220	115669	116497
15°	92481	89566	89924
20°	65699	64831	65304
25°	47265	46339	46012
30°	36115	35143	35059
35°	28350	27867	27143
40°	21477	21189	20156
45°	12017	14360	10725
50°	4227	8839	3728
55°	2584	4825	2455
60°	1976	2519	1828
65°	1811	1872	1696
70°	1733	1733	1591
75°	1622	1622	1528
80°	1423	1423	1423
85°	1426	1130	1130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 14360 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	753.4	15.1
10°-20°	1490.4	29.8
20°-30°	1226.1	24.5
30°-40°	885.8	17.7
40°-50°	450.3	9.0
50°-60°	115.4	2.3
60°-70°	48.5	1.0
70°-80°	27.0	0.5
80°-90°	8.0	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°	3469.9	69.3
0°-40°	4355.7	87.0
0°-60°	4921.5	98.3
0°-90°	5004.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5004.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8625	8625	8625	8625	8625	
5°	8296	8284	8213	8333	8305	753
15°	5533	5468	5358	5397	5380	1506
25°	2653	2649	2601	2578	2583	1242
35°	1438	1447	1414	1391	1377	902
45°	526	607	629	588	470	417
55°	92	107	171	100	87	89
65°	47	49	49	46	44	47
75°	26	26	26	24	24	27
85°	8	8	6	8	6	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8625.0	8625.0	8625.0	8625.0	8625.0
2.5°	8608.2	8589.8	8487.3	8573.0	8551.6
5°	8296.1	8283.8	8213.4	8332.8	8305.2
7.5°	7783.5	7789.6	7752.9	7846.2	7835.5
10°	7088.8	7116.4	7055.2	7209.7	7105.7
12.5°	6322.3	6293.2	6256.5	6248.8	6202.9
15°	5532.7	5468.5	5358.3	5396.6	5379.7
17.5°	4614.7	4643.8	4536.7	4524.4	4501.5
20°	3823.7	3831.3	3773.2	3803.8	3800.7
22.5°	3187.1	3187.1	3109.1	3158.1	3124.4
25°	2653.1	2648.6	2601.1	2578.2	2582.8
27.5°	2235.4	2215.5	2180.4	2197.2	2186.5
30°	1937.1	1921.8	1885.0	1894.2	1880.5
32.5°	1669.3	1673.9	1635.6	1628.0	1618.8
35°	1438.3	1447.4	1413.8	1390.8	1377.1
37.5°	1225.6	1234.8	1204.2	1172.0	1159.8
40°	1019.0	1025.1	1005.3	965.5	956.3
42.5°	794.1	824.7	804.8	768.1	745.1
45°	526.3	607.4	628.9	587.5	469.7
47.5°	290.7	411.6	472.8	367.2	235.6
50°	168.3	246.3	351.9	200.4	148.4
52.5°	119.3	149.9	263.2	134.6	111.7
55°	91.8	107.1	171.4	99.5	87.2
57.5°	73.4	82.6	108.6	78.0	70.4
60°	61.2	67.3	78.0	64.3	56.6
62.5°	53.6	56.6	59.7	52.0	50.5
65°	47.4	49.0	49.0	45.9	44.4
67.5°	41.3	42.8	42.8	41.3	39.8
70°	36.7	38.3	36.7	35.2	33.7
72.5°	30.6	32.1	30.6	30.6	29.1
75°	26.0	26.0	26.0	24.5	24.5
77.5°	21.4	21.4	19.9	19.9	18.4
80°	15.3	16.8	15.3	15.3	15.3
82.5°	12.2	12.2	10.7	10.7	10.7
85°	7.7	7.7	6.1	7.7	6.1
87.5°	3.1	3.1	3.1	3.1	3.1
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	8.36	9.42	8.73	9.73	10.05	7.98	9.04	8.34	9.35	9.66
	3H	9.42	10.35	9.80	10.68	11.05	8.99	9.92	9.37	10.25	10.62
	4H	9.85	10.71	10.26	11.07	11.46	9.42	10.28	9.82	10.63	11.02
	6H	10.17	10.96	10.59	11.33	11.73	9.76	10.55	10.18	10.92	11.32
	8H	10.28	11.02	10.71	11.41	11.82	9.86	10.61	10.30	11.00	11.41
	12H	10.35	11.06	10.78	11.44	11.87	9.92	10.63	10.35	11.01	11.44
4H	2H	8.60	9.46	9.01	9.82	10.21	8.27	9.14	8.68	9.49	9.88
	3H	9.91	10.61	10.32	11.01	11.42	9.53	10.23	9.94	10.63	11.04
	4H	10.47	11.09	10.90	11.51	11.96	10.08	10.70	10.52	11.13	11.57
	6H	10.92	11.46	11.39	11.91	12.38	10.55	11.08	11.01	11.53	12.00
	8H	11.07	11.57	11.55	12.02	12.50	10.70	11.19	11.17	11.64	12.12
	12H	11.19	11.62	11.68	12.11	12.59	10.79	11.22	11.28	11.71	12.19
8H	4H	10.61	11.11	11.08	11.56	12.03	10.26	10.76	10.74	11.21	11.68
	6H	11.19	11.59	11.70	12.09	12.57	10.84	11.24	11.35	11.74	12.23
	8H	11.42	11.78	11.95	12.30	12.79	11.07	11.43	11.60	11.95	12.45
	12H	11.63	11.93	12.15	12.43	13.01	11.25	11.56	11.77	12.06	12.64
12H	4H	10.59	11.02	11.08	11.51	11.99	10.26	10.69	10.75	11.18	11.65
	6H	11.20	11.55	11.73	12.08	12.57	10.87	11.22	11.40	11.74	12.24
	8H	11.48	11.79	12.00	12.29	12.87	11.15	11.46	11.67	11.96	12.53