

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: P845684

Luminaire Tested: SQ2R-WBN-125D-940-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845684
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-940-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - WHITE BAFFLE, NARROW 35-DEGREE OPTIC
1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

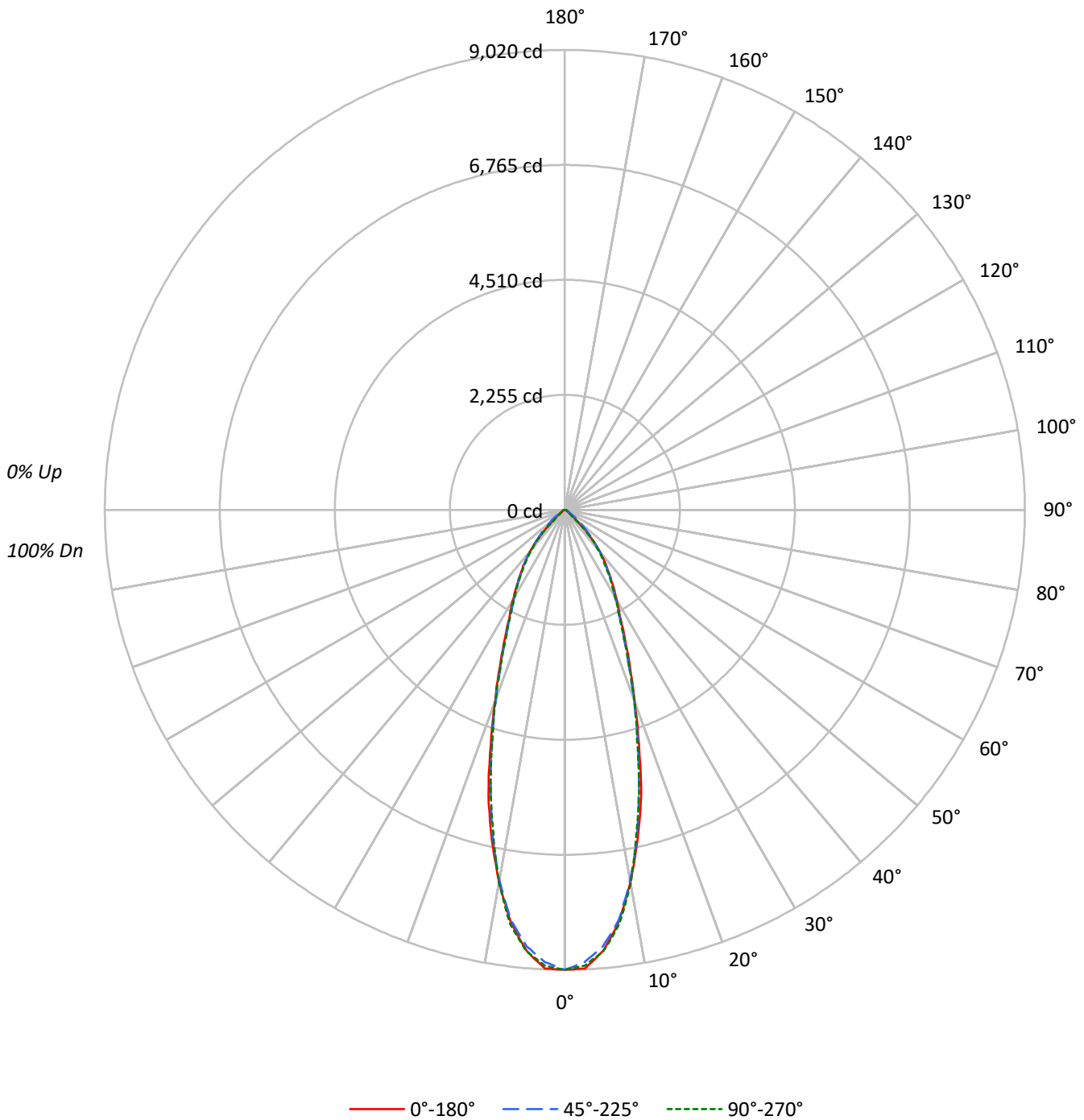
Lumens per Lamp: N/A
Luminaire Lumens: 5234.4 lumens
Efficiency: N/A
Efficacy: 95.9 lumens/watt
Spacing Criteria (0/90/45): 0.6 / 0.59 / 0.63
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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	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°	145644	145644	145644
5°	140623	139223	140778
10°	121549	120972	121837
15°	96722	93673	94048
20°	68711	67804	68299
25°	49433	48464	48122
30°	37770	36756	36666
35°	29648	29144	28387
40°	22462	22158	21079
45°	12570	15018	11218
50°	4421	9246	3898
55°	2702	5044	2567
60°	2067	2635	1912
65°	1895	1956	1773
70°	1813	1813	1662
75°	1697	1697	1597
80°	1488	1488	1488
85°	1482	1186	1186

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15018 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	787.9	15.1
10°-20°	1558.8	29.8
20°-30°	1282.3	24.5
30°-40°	926.4	17.7
40°-50°	470.9	9.0
50°-60°	120.7	2.3
60°-70°	50.7	1.0
70°-80°	28.3	0.5
80°-90°	8.3	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°	3629.0	69.3
0°-40°	4555.4	87.0
0°-60°	5147.1	98.3
0°-90°	5234.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5234.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9020	9020	9020	9020	9020	
5°	8676	8664	8590	8715	8686	788
15°	5786	5719	5604	5644	5626	1575
25°	2775	2770	2720	2696	2701	1299
35°	1504	1514	1479	1455	1440	943
45°	550	635	658	614	491	436
55°	96	112	179	104	91	93
65°	50	51	51	48	46	49
75°	27	27	27	26	26	29
85°	8	8	6	8	6	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9020.5	9020.5	9020.5	9020.5	9020.5
2.5°	9002.9	8983.7	8876.4	8966.1	8943.7
5°	8676.4	8663.6	8590.0	8714.8	8686.0
7.5°	8140.3	8146.7	8108.3	8206.0	8194.8
10°	7413.8	7442.6	7378.6	7540.3	7431.4
12.5°	6612.1	6581.7	6543.3	6535.3	6487.3
15°	5786.4	5719.2	5604.0	5644.0	5626.4
17.5°	4826.3	4856.7	4744.7	4731.9	4707.9
20°	3999.0	4007.0	3946.2	3978.2	3975.0
22.5°	3333.3	3333.3	3251.7	3302.9	3267.7
25°	2774.8	2770.0	2720.4	2696.4	2701.2
27.5°	2337.9	2317.1	2280.3	2297.9	2286.7
30°	2025.9	2009.9	1971.5	1981.1	1966.7
32.5°	1745.8	1750.6	1710.6	1702.6	1693.0
35°	1504.2	1513.8	1478.6	1454.6	1440.2
37.5°	1281.8	1291.4	1259.4	1225.8	1213.0
40°	1065.7	1072.2	1051.3	1009.7	1000.1
42.5°	830.5	862.5	841.7	803.3	779.3
45°	550.5	635.3	657.7	614.5	491.3
47.5°	304.0	430.5	494.5	384.1	246.4
50°	176.0	257.6	368.1	209.6	155.2
52.5°	124.8	156.8	275.2	140.8	116.8
55°	96.0	112.0	179.2	104.0	91.2
57.5°	76.8	86.4	113.6	81.6	73.6
60°	64.0	70.4	81.6	67.2	59.2
62.5°	56.0	59.2	62.4	54.4	52.8
65°	49.6	51.2	51.2	48.0	46.4
67.5°	43.2	44.8	44.8	43.2	41.6
70°	38.4	40.0	38.4	36.8	35.2
72.5°	32.0	33.6	32.0	32.0	30.4
75°	27.2	27.2	27.2	25.6	25.6
77.5°	22.4	22.4	20.8	20.8	19.2
80°	16.0	17.6	16.0	16.0	16.0
82.5°	12.8	12.8	11.2	11.2	11.2
85°	8.0	8.0	6.4	8.0	6.4
87.5°	3.2	3.2	3.2	3.2	3.2
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	8.52	9.58	8.88	9.89	10.20	8.13	9.19	8.50	9.50	9.82
	3H	9.57	10.50	9.95	10.84	11.20	9.14	10.07	9.52	10.40	10.77
	4H	10.01	10.87	10.41	11.22	11.61	9.57	10.43	9.98	10.79	11.17
	6H	10.33	11.12	10.74	11.49	11.89	9.91	10.70	10.33	11.07	11.47
	8H	10.43	11.17	10.87	11.57	11.97	10.02	10.76	10.45	11.15	11.56
	12H	10.50	11.21	10.94	11.59	12.02	10.07	10.78	10.50	11.16	11.59
4H	2H	8.76	9.62	9.16	9.97	10.36	8.43	9.29	8.83	9.64	10.03
	3H	10.06	10.76	10.48	11.17	11.57	9.68	10.38	10.09	10.79	11.19
	4H	10.62	11.24	11.06	11.67	12.11	10.23	10.86	10.67	11.28	11.73
	6H	11.08	11.61	11.55	12.06	12.53	10.70	11.23	11.17	11.68	12.15
	8H	11.23	11.73	11.70	12.18	12.65	10.85	11.35	11.32	11.80	12.27
	12H	11.34	11.78	11.83	12.26	12.74	10.94	11.37	11.43	11.86	12.34
8H	4H	10.76	11.26	11.24	11.71	12.19	10.41	10.91	10.89	11.36	11.84
	6H	11.35	11.74	11.85	12.25	12.73	11.00	11.39	11.51	11.90	12.38
	8H	11.58	11.93	12.11	12.45	12.95	11.23	11.58	11.76	12.10	12.60
	12H	11.78	12.09	12.30	12.59	13.16	11.41	11.71	11.93	12.21	12.79
12H	4H	10.75	11.18	11.24	11.67	12.14	10.41	10.84	10.90	11.33	11.80
	6H	11.35	11.71	11.89	12.23	12.73	11.02	11.37	11.55	11.89	12.39
	8H	11.64	11.95	12.16	12.45	13.03	11.30	11.61	11.82	12.11	12.69