

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: P845674

Luminaire Tested: SQ2R-WBN-050D-935-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845674
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-050D-935-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - WHITE BAFFLE, NARROW 35-DEGREE OPTIC
500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

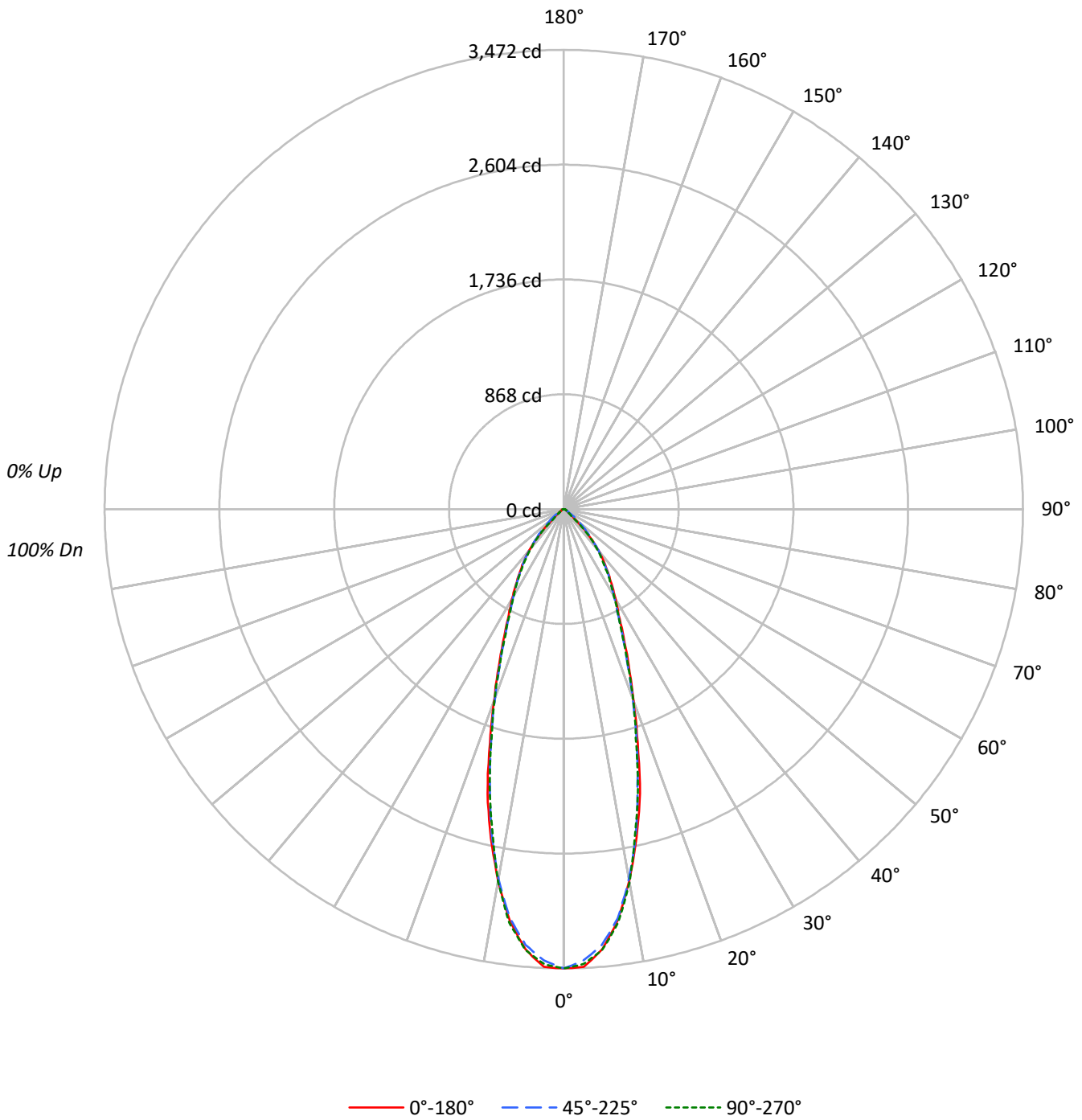
Lumens per Lamp: N/A
Luminaire Lumens: 2014.8 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 0.6 / 0.59 / 0.63
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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				
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°	56060	56060	56060
5°	54127	53589	54187
10°	46786	46563	46896
15°	37230	36055	36201
20°	26447	26098	26289
25°	19026	18654	18522
30°	14538	14147	14113
35°	11412	11217	10925
40°	8646	8530	8115
45°	4838	5781	4318
50°	1703	3559	1500
55°	1042	1942	988
60°	794	1014	736
65°	730	753	684
70°	699	699	642
75°	655	655	618
80°	576	576	576
85°	574	463	463

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5781 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	303.3	15.1
10°-20°	600.0	29.8
20°-30°	493.6	24.5
30°-40°	356.6	17.7
40°-50°	181.3	9.0
50°-60°	46.5	2.3
60°-70°	19.5	1.0
70°-80°	10.9	0.5
80°-90°	3.2	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°	1396.8	69.3
0°-40°	1753.4	87.0
0°-60°	1981.2	98.3
0°-90°	2014.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2014.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3472	3472	3472	3472	3472	
5°	3340	3335	3306	3354	3343	303
15°	2227	2201	2157	2172	2166	606
25°	1068	1066	1047	1038	1040	500
35°	579	583	569	560	554	363
45°	212	244	253	236	189	168
55°	37	43	69	40	35	36
65°	19	20	20	18	18	19
75°	10	10	10	10	10	11
85°	3	3	2	3	2	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3472.1	3472.1	3472.1	3472.1	3472.1
2.5°	3465.3	3457.9	3416.6	3451.1	3442.5
5°	3339.6	3334.7	3306.4	3354.4	3343.3
7.5°	3133.3	3135.8	3121.0	3158.6	3154.2
10°	2853.7	2864.8	2840.1	2902.3	2860.4
12.5°	2545.1	2533.4	2518.6	2515.5	2497.0
15°	2227.3	2201.4	2157.0	2172.4	2165.7
17.5°	1857.7	1869.4	1826.3	1821.3	1812.1
20°	1539.2	1542.3	1518.9	1531.2	1530.0
22.5°	1283.0	1283.0	1251.6	1271.3	1257.8
25°	1068.0	1066.2	1047.1	1037.9	1039.7
27.5°	899.9	891.9	877.7	884.5	880.2
30°	779.8	773.6	758.8	762.5	757.0
32.5°	672.0	673.8	658.4	655.4	651.7
35°	579.0	582.7	569.1	559.9	554.3
37.5°	493.4	497.1	484.7	471.8	466.9
40°	410.2	412.7	404.7	388.7	385.0
42.5°	319.7	332.0	324.0	309.2	300.0
45°	211.9	244.5	253.2	236.5	189.1
47.5°	117.0	165.7	190.3	147.8	94.9
50°	67.8	99.2	141.7	80.7	59.7
52.5°	48.0	60.4	105.9	54.2	45.0
55°	37.0	43.1	69.0	40.0	35.1
57.5°	29.6	33.3	43.7	31.4	28.3
60°	24.6	27.1	31.4	25.9	22.8
62.5°	21.6	22.8	24.0	20.9	20.3
65°	19.1	19.7	19.7	18.5	17.9
67.5°	16.6	17.2	17.2	16.6	16.0
70°	14.8	15.4	14.8	14.2	13.6
72.5°	12.3	12.9	12.3	12.3	11.7
75°	10.5	10.5	10.5	9.9	9.9
77.5°	8.6	8.6	8.0	8.0	7.4
80°	6.2	6.8	6.2	6.2	6.2
82.5°	4.9	4.9	4.3	4.3	4.3
85°	3.1	3.1	2.5	3.1	2.5
87.5°	1.2	1.2	1.2	1.2	1.2
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	5.20	6.26	5.56	6.57	6.89	4.81	5.87	5.18	6.19	6.50
	3H	6.26	7.19	6.64	7.52	7.89	5.83	6.76	6.21	7.09	7.46
	4H	6.69	7.56	7.10	7.91	8.30	6.26	7.12	6.67	7.48	7.87
	6H	7.02	7.80	7.43	8.18	8.58	6.61	7.39	7.02	7.77	8.16
	8H	7.12	7.86	7.56	8.26	8.67	6.71	7.46	7.15	7.85	8.26
	12H	7.19	7.90	7.63	8.29	8.72	6.77	7.48	7.20	7.86	8.29
4H	2H	5.44	6.30	5.85	6.65	7.04	5.11	5.97	5.52	6.33	6.71
	3H	6.74	7.44	7.16	7.85	8.26	6.37	7.07	6.78	7.48	7.88
	4H	7.31	7.93	7.74	8.35	8.80	6.93	7.55	7.36	7.97	8.42
	6H	7.77	8.30	8.24	8.75	9.23	7.40	7.93	7.86	8.38	8.85
	8H	7.92	8.42	8.40	8.87	9.34	7.55	8.05	8.02	8.50	8.97
	12H	8.04	8.47	8.53	8.96	9.44	7.64	8.08	8.14	8.56	9.04
8H	4H	7.45	7.95	7.93	8.40	8.87	7.11	7.61	7.58	8.06	8.53
	6H	8.04	8.44	8.55	8.94	9.42	7.70	8.09	8.21	8.60	9.08
	8H	8.27	8.63	8.80	9.15	9.65	7.93	8.28	8.46	8.80	9.30
	12H	8.48	8.79	9.00	9.28	9.86	8.11	8.42	8.63	8.92	9.50
12H	4H	7.44	7.87	7.93	8.36	8.83	7.10	7.53	7.59	8.02	8.50
	6H	8.05	8.40	8.58	8.93	9.42	7.72	8.07	8.25	8.60	9.09
	8H	8.34	8.65	8.86	9.14	9.72	8.00	8.31	8.53	8.81	9.39