

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: P845532

Luminaire Tested: SQ2R-FB-100D-930-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845532
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-12)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-FB-100D-930-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, BATWING LENS
1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

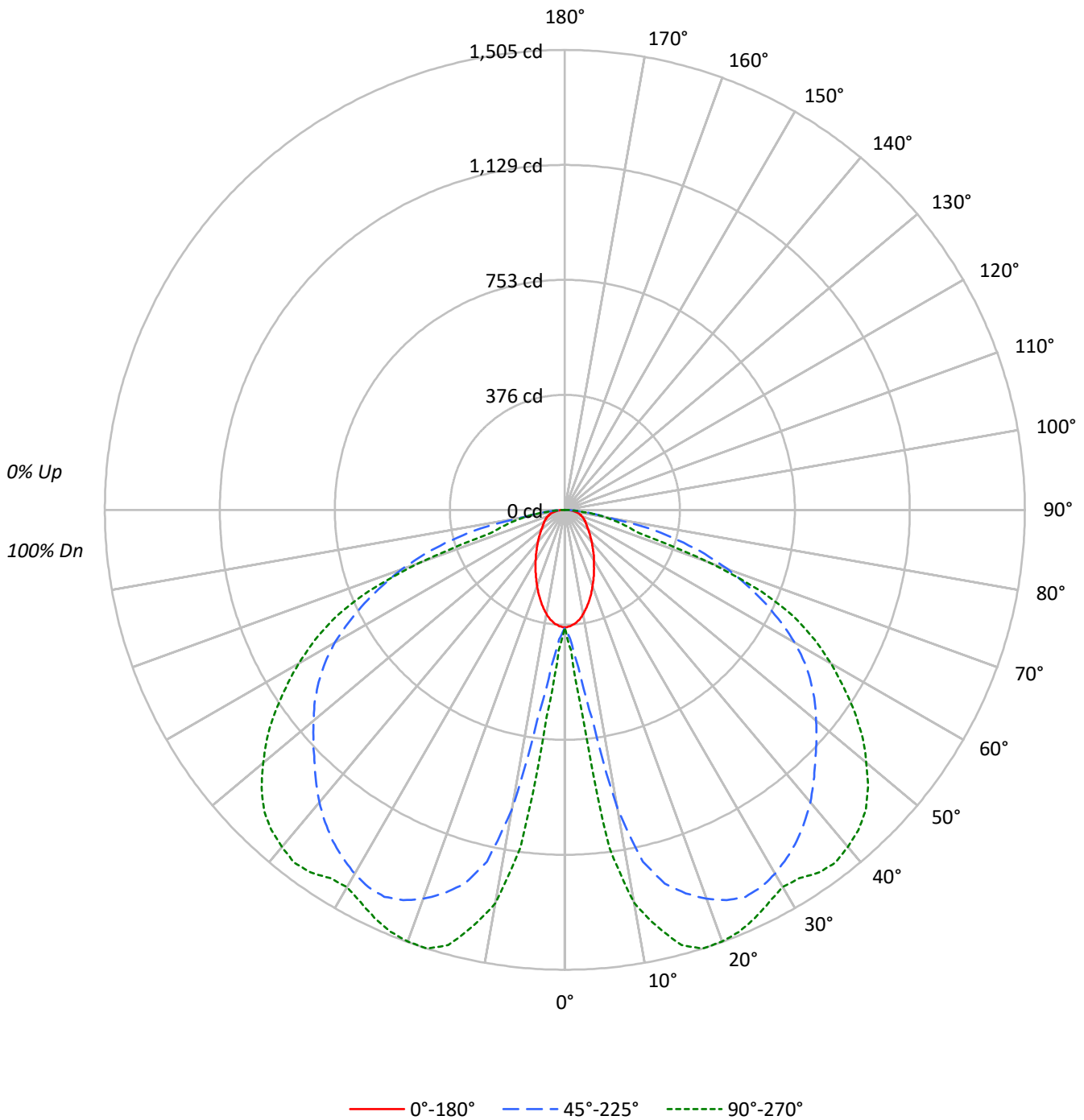
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3812.1 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 2.99 / 2.56
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 37.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9969
Total Harmonic Distortion (THDi): 0.066
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 3 HR
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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84				
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69				
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	57				
4	81	69	60	53	79	67	59	52	65	58	52	63	56	51	60	55	50	48				
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41				
6	68	54	45	39	66	53	45	38	52	44	38	50	43	38	48	42	37	35				
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33	31				
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27				
9	54	40	32	26	53	40	32	26	39	31	26	38	31	26	37	30	26	24				
10	51	37	29	23	49	37	29	23	36	28	23	35	28	23	34	28	23	21				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6216	6216	6216
5°	6060	8399	11008
10°	5674	16264	21422
15°	5135	21160	24655
20°	4548	23277	25821
25°	4023	24893	26245
30°	3553	25637	26569
35°	3173	26083	28562
40°	2888	26331	30349
45°	2662	26455	31780
50°	2509	26962	32355
55°	2449	27662	32614
60°	2509	28029	32453
65°	2617	27645	31534
70°	2710	26733	23854
75°	3001	24017	13163
80°	3096	12394	12218
85°	3094	8577	5150

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 55°
 Luminance: 32614 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.4	1.7
10°-20°	295.5	7.8
20°-30°	520.1	13.6
30°-40°	672.7	17.6
40°-50°	742.0	19.5
50°-60°	692.1	18.2
60°-70°	535.6	14.1
70°-80°	244.8	6.4
80°-90°	45.8	1.2
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°	879.0	23.1
0°-40°	1551.8	40.7
0°-60°	2985.9	78.3
0°-90°	3812.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3812.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	385	385	385	385	385	
5°	374	429	518	631	679	35
15°	307	613	1266	1416	1475	86
25°	226	827	1397	1458	1473	104
35°	161	800	1323	1368	1449	101
45°	117	613	1159	1329	1392	90
55°	87	365	983	1129	1159	78
65°	68	205	724	811	825	67
75°	48	126	385	207	211	50
85°	17	37	46	32	28	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	385.0	385.0	385.0	385.0	385.0
2.5°	381.3	401.6	423.8	449.7	460.8
5°	373.9	429.4	518.2	631.1	679.2
7.5°	362.7	464.5	694.0	1006.8	1114.2
10°	346.1	503.4	992.0	1254.8	1306.6
12.5°	327.6	555.2	1178.9	1343.6	1397.3
15°	307.2	612.6	1265.9	1415.8	1475.0
17.5°	286.9	675.5	1315.9	1469.5	1504.7
20°	264.7	742.1	1354.7	1482.4	1502.8
22.5°	244.3	792.1	1382.5	1471.3	1493.6
25°	225.8	827.3	1397.3	1458.4	1473.2
27.5°	207.3	840.2	1391.8	1434.3	1447.3
30°	190.6	836.5	1375.1	1404.7	1425.1
32.5°	175.8	825.4	1351.0	1378.8	1428.8
35°	161.0	799.5	1323.3	1367.7	1449.1
37.5°	148.1	762.5	1288.1	1373.3	1454.7
40°	137.0	719.9	1249.3	1373.3	1439.9
42.5°	125.9	670.0	1204.8	1354.7	1421.4
45°	116.6	612.6	1158.6	1328.8	1391.8
47.5°	107.3	549.7	1116.0	1297.4	1345.5
50°	99.9	484.9	1073.4	1251.1	1288.1
52.5°	92.5	422.0	1030.9	1195.6	1228.9
55°	87.0	364.6	982.7	1129.0	1158.6
57.5°	81.4	312.8	930.9	1058.6	1082.7
60°	77.7	272.1	868.0	980.9	1005.0
62.5°	72.2	235.0	797.7	899.5	921.7
65°	68.5	205.4	723.6	810.6	825.4
67.5°	62.9	181.4	645.9	708.8	694.0
70°	57.4	164.7	566.3	584.8	505.3
72.5°	53.7	146.2	479.3	423.8	255.4
75°	48.1	125.9	385.0	207.3	211.0
77.5°	40.7	101.8	283.2	166.6	170.3
80°	33.3	79.6	133.3	129.6	131.4
82.5°	25.9	57.4	81.4	87.0	83.3
85°	16.7	37.0	46.3	31.5	27.8
87.5°	7.4	16.7	9.3	9.3	9.3
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	17.24	18.93	17.61	19.24	19.56	25.90	27.58	26.26	27.90	28.21
	3H	18.03	19.56	18.41	19.88	20.24	27.58	29.11	27.96	29.43	29.79
	4H	18.37	19.80	18.76	20.15	20.52	27.80	29.24	28.20	29.58	29.96
	6H	18.62	19.95	19.03	20.32	20.71	27.93	29.26	28.34	29.62	30.01
	8H	18.70	19.97	19.13	20.36	20.76	27.96	29.23	28.38	29.61	30.01
	12H	18.76	19.97	19.19	20.36	20.78	27.95	29.17	28.38	29.55	29.98
4H	2H	21.68	23.11	22.08	23.46	23.84	26.44	27.87	26.83	28.22	28.59
	3H	22.69	23.89	23.10	24.29	24.69	28.34	29.54	28.75	29.94	30.34
	4H	23.02	24.10	23.45	24.51	24.95	28.62	29.70	29.05	30.11	30.55
	6H	23.20	24.14	23.65	24.58	25.04	28.81	29.76	29.26	30.20	30.65
	8H	23.24	24.12	23.70	24.57	25.03	28.86	29.74	29.32	30.18	30.65
	12H	23.27	24.07	23.75	24.54	25.01	28.87	29.66	29.35	30.14	30.61
8H	4H	24.25	25.14	24.71	25.58	26.04	28.80	29.69	29.26	30.13	30.59
	6H	24.53	25.26	25.02	25.75	26.22	29.05	29.78	29.54	30.27	30.74
	8H	24.61	25.27	25.12	25.77	26.26	29.12	29.77	29.63	30.28	30.76
	12H	24.68	25.26	25.19	25.75	26.31	29.15	29.73	29.66	30.22	30.78
12H	4H	24.31	25.10	24.79	25.58	26.05	28.80	29.59	29.28	30.06	30.53
	6H	24.63	25.29	25.14	25.80	26.28	29.04	29.70	29.55	30.20	30.69
	8H	24.78	25.36	25.29	25.85	26.41	29.15	29.72	29.65	30.21	30.77