

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: P845520

Luminaire Tested: SQ2R-FB-050D-930-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845520
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-050D-930-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, BATWING LENS
500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

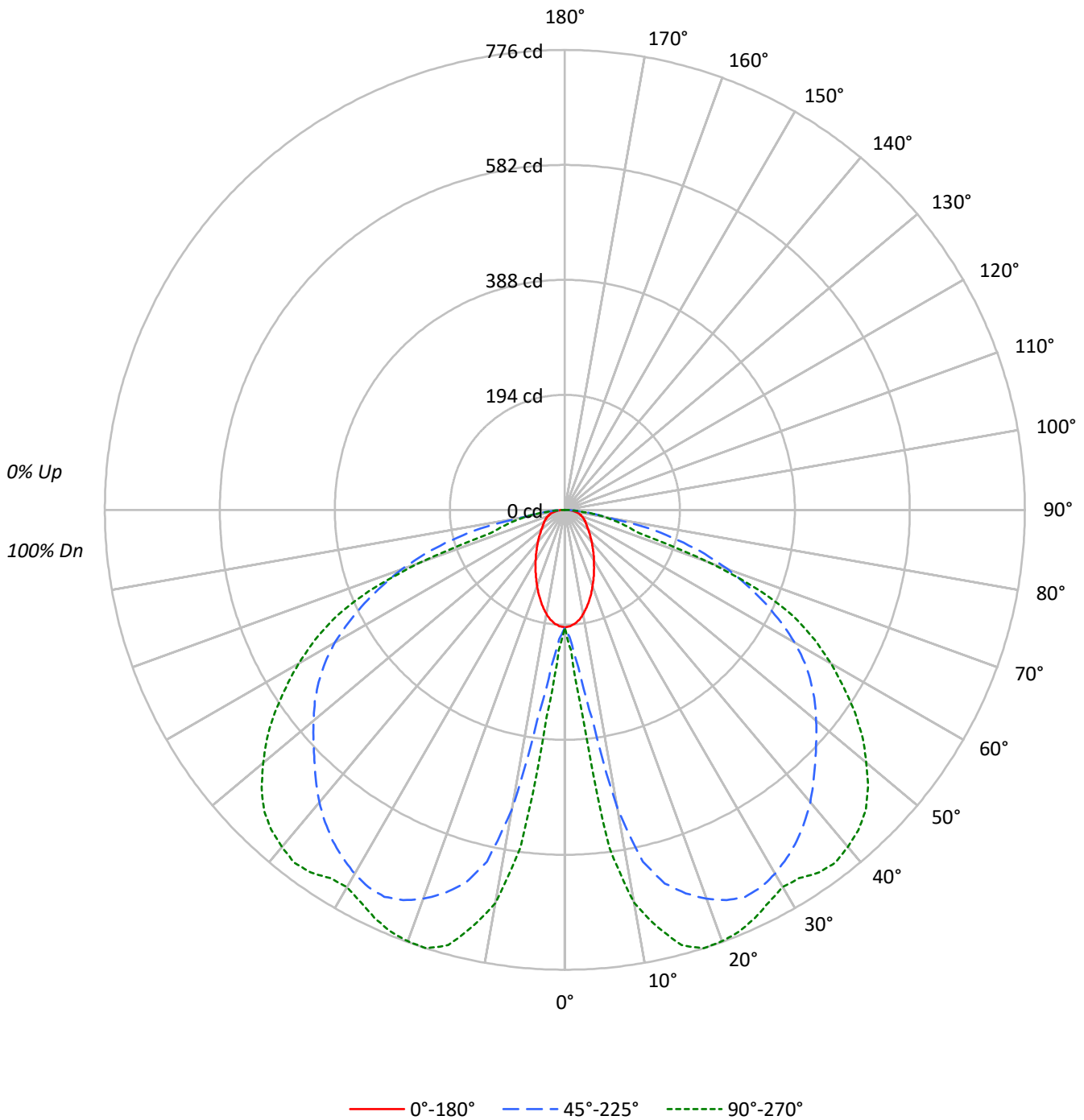
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1965.4 lumens
Efficiency: N/A
Efficacy: 110.4 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): 17.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9973
Total Harmonic Distortion (THDi): 0.0531
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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84	84	84
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69	69	69
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	57	57	57
4	81	69	60	53	79	67	59	52	65	58	52	63	56	51	60	55	50	48	48	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41	41	41
6	68	54	45	39	66	53	45	38	52	44	38	50	43	38	48	42	37	35	35	35
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33	31	31	31
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27	27	27
9	54	40	32	26	53	40	32	26	39	31	26	38	31	26	37	30	26	24	24	24
10	51	37	29	23	49	37	29	23	36	28	23	35	28	23	34	28	23	21	21	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3205	3205	3205
5°	3123	4331	5676
10°	2925	8386	11045
15°	2648	10910	12712
20°	2345	12002	13313
25°	2074	12834	13530
30°	1833	13218	13697
35°	1636	13448	14726
40°	1488	13576	15647
45°	1372	13639	16385
50°	1294	13901	16681
55°	1261	14263	16814
60°	1295	14451	16730
65°	1349	14254	16260
70°	1397	13785	12297
75°	1547	12383	6787
80°	1599	6388	6295
85°	1593	4428	2649

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 55°
 Luminance: 16814 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.7	1.7
10°-20°	152.3	7.8
20°-30°	268.2	13.6
30°-40°	346.8	17.6
40°-50°	382.6	19.5
50°-60°	356.8	18.2
60°-70°	276.1	14.0
70°-80°	126.2	6.4
80°-90°	23.6	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°	453.2	23.1
0°-40°	800.1	40.7
0°-60°	1539.5	78.3
0°-90°	1965.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1965.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	198	198	198	198	198	
5°	193	221	267	325	350	18
15°	158	316	653	730	760	44
25°	116	426	720	752	760	53
35°	83	412	682	705	747	52
45°	60	316	597	685	718	47
55°	45	188	507	582	597	40
65°	35	106	373	418	426	35
75°	25	65	198	107	109	26
85°	9	19	24	16	14	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	198.5	198.5	198.5	198.5	198.5
2.5°	196.6	207.1	218.5	231.9	237.6
5°	192.7	221.4	267.2	325.4	350.2
7.5°	187.0	239.5	357.8	519.1	574.4
10°	178.4	259.5	511.5	647.0	673.7
12.5°	168.9	286.3	607.8	692.8	720.4
15°	158.4	315.8	652.7	730.0	760.5
17.5°	147.9	348.3	678.4	757.6	775.8
20°	136.5	382.6	698.5	764.3	774.8
22.5°	126.0	408.4	712.8	758.6	770.0
25°	116.4	426.5	720.4	751.9	759.5
27.5°	106.9	433.2	717.6	739.5	746.2
30°	98.3	431.3	709.0	724.2	734.7
32.5°	90.6	425.6	696.6	710.9	736.6
35°	83.0	412.2	682.3	705.2	747.1
37.5°	76.3	393.1	664.1	708.0	750.0
40°	70.6	371.2	644.1	708.0	742.4
42.5°	64.9	345.4	621.2	698.5	732.8
45°	60.1	315.8	597.3	685.1	717.6
47.5°	55.3	283.4	575.4	668.9	693.7
50°	51.5	250.0	553.4	645.0	664.1
52.5°	47.7	217.6	531.5	616.4	633.6
55°	44.8	188.0	506.7	582.1	597.3
57.5°	42.0	161.3	480.0	545.8	558.2
60°	40.1	140.3	447.5	505.7	518.1
62.5°	37.2	121.2	411.3	463.7	475.2
65°	35.3	105.9	373.1	417.9	425.6
67.5°	32.4	93.5	333.0	365.5	357.8
70°	29.6	84.9	292.0	301.5	260.5
72.5°	27.7	75.4	247.1	218.5	131.7
75°	24.8	64.9	198.5	106.9	108.8
77.5°	21.0	52.5	146.0	85.9	87.8
80°	17.2	41.0	68.7	66.8	67.7
82.5°	13.4	29.6	42.0	44.8	42.9
85°	8.6	19.1	23.9	16.2	14.3
87.5°	3.8	8.6	4.8	4.8	4.8
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	14.94	16.63	15.31	16.94	17.26	23.60	25.28	23.96	25.59	25.91
	3H	15.73	17.25	16.11	17.58	17.94	25.28	26.80	25.66	27.13	27.49
	4H	16.07	17.50	16.46	17.85	18.22	25.50	26.93	25.90	27.28	27.65
	6H	16.32	17.65	16.73	18.01	18.40	25.63	26.96	26.04	27.32	27.71
	8H	16.40	17.67	16.83	18.06	18.46	25.65	26.92	26.08	27.31	27.71
	12H	16.46	17.67	16.89	18.05	18.48	25.65	26.87	26.08	27.25	27.68
4H	2H	19.38	20.81	19.78	21.16	21.53	24.14	25.57	24.53	25.92	26.29
	3H	20.39	21.59	20.80	21.99	22.39	26.04	27.24	26.45	27.64	28.04
	4H	20.71	21.80	21.14	22.21	22.65	26.31	27.40	26.74	27.81	28.25
	6H	20.90	21.84	21.35	22.28	22.74	26.51	27.45	26.96	27.89	28.35
	8H	20.94	21.82	21.40	22.26	22.73	26.55	27.44	27.01	27.88	28.34
	12H	20.97	21.76	21.45	22.24	22.71	26.57	27.36	27.05	27.84	28.30
8H	4H	21.95	22.83	22.41	23.28	23.74	26.50	27.39	26.96	27.83	28.29
	6H	22.23	22.96	22.72	23.45	23.92	26.75	27.48	27.24	27.96	28.44
	8H	22.31	22.97	22.82	23.47	23.96	26.82	27.47	27.33	27.98	28.46
	12H	22.38	22.96	22.88	23.45	24.01	26.85	27.43	27.36	27.92	28.48
12H	4H	22.01	22.80	22.49	23.28	23.75	26.49	27.29	26.97	27.76	28.23
	6H	22.33	22.99	22.84	23.49	23.98	26.74	27.39	27.25	27.90	28.38
	8H	22.48	23.06	22.98	23.55	24.11	26.85	27.42	27.35	27.91	28.47