

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: P845538

Luminaire Tested: SQ2R-FB-125D-930-UNV-STD-W-4

Issue Date: 6/14/2024

**Test Information**

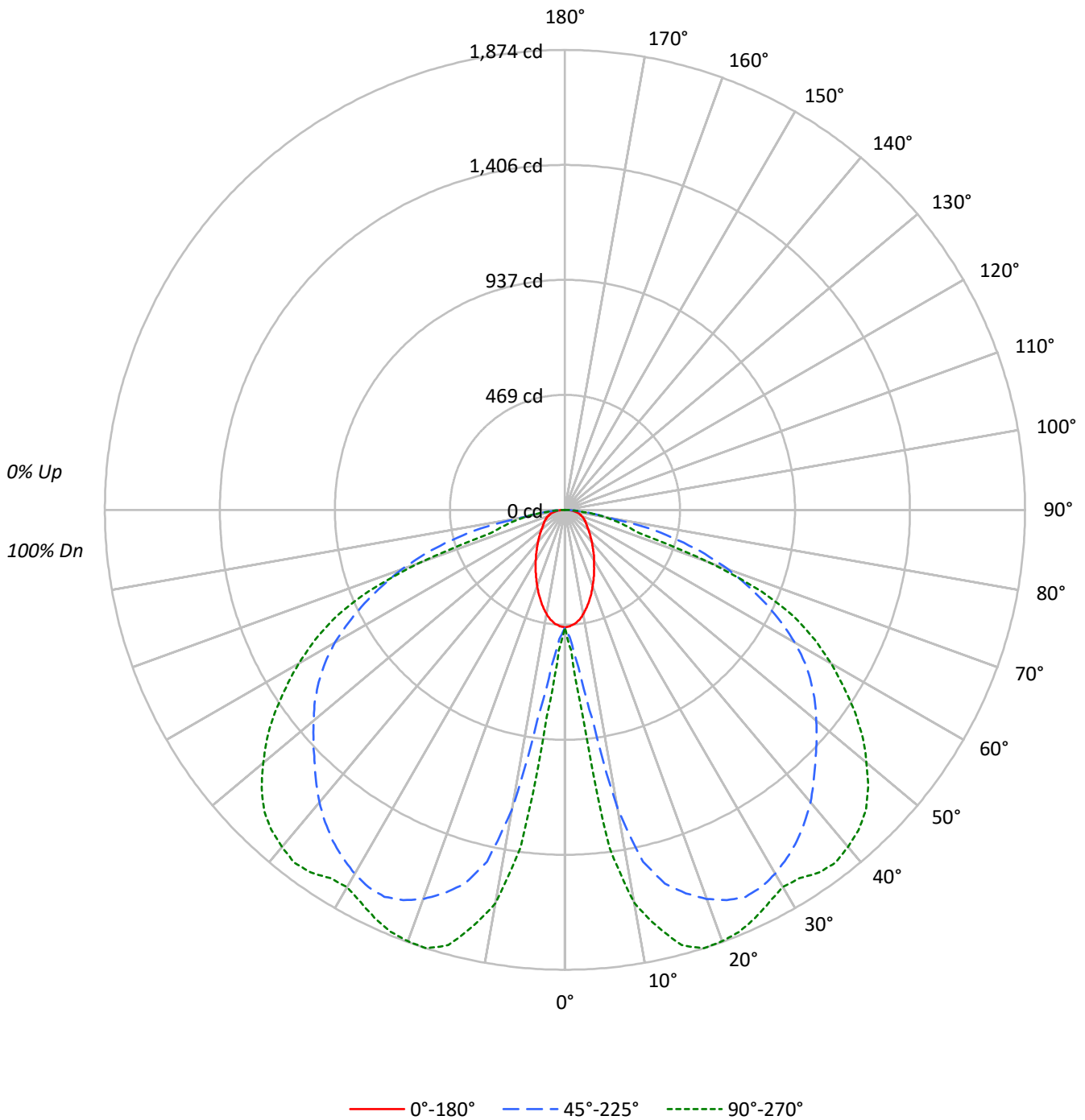
Test Method: LM-79-2019  
Report Number: P845538  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/14/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2R-FB-125D-930-UNV-STD-W-4  
Description: CONTINUA SQ2 RECESSED, BATWING LENS  
1250 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4746.6 lumens  
Efficiency: N/A  
Efficacy: 96.5 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): 49.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.9979  
Total Harmonic Distortion (THDi): 0.0523  
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				100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84				84
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69				69
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	57				57
4	81	69	60	53	79	67	59	52	65	58	52	63	56	51	60	55	50	48				48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41				41
6	68	54	45	39	66	53	45	38	52	44	38	50	43	38	48	42	37	35				35
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33	31				31
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27				27
9	54	40	32	26	53	40	32	26	39	31	26	38	31	26	37	30	26	24				24
10	51	37	29	23	49	37	29	23	36	28	23	35	28	23	34	28	23	21				21

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7739	7739	7739
5°	7545	10459	13707
10°	7065	20251	26675
15°	6394	26348	30701
20°	5661	28984	32151
25°	5008	30996	32680
30°	4426	31922	33081
35°	3952	32477	35566
40°	3594	32785	37789
45°	3315	32940	39571
50°	3125	33573	40288
55°	3049	34446	40608
60°	3126	34901	40407
65°	3259	34422	39266
70°	3371	33291	29698
75°	3737	29900	16388
80°	3859	15425	15212
85°	3835	10671	6410

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 55°  
 Luminance: 40608 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.9	1.7
10°-20°	367.9	7.8
20°-30°	647.7	13.6
30°-40°	837.6	17.6
40°-50°	923.9	19.5
50°-60°	861.8	18.2
60°-70°	666.9	14.1
70°-80°	304.8	6.4
80°-90°	57.0	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°	1094.5	23.1
0°-40°	1932.2	40.7
0°-60°	3717.9	78.3
0°-90°	4746.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4746.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	479	479	479	479	479	
5°	466	535	645	786	846	43
15°	382	763	1576	1763	1837	107
25°	281	1030	1740	1816	1834	129
35°	200	996	1648	1703	1804	126
45°	145	763	1443	1655	1733	112
55°	108	454	1224	1406	1443	97
65°	85	256	901	1009	1028	84
75°	60	157	479	258	263	62
85°	21	46	58	39	35	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	479.3	479.3	479.3	479.3	479.3
2.5°	474.7	500.1	527.7	560.0	573.8
5°	465.5	534.6	645.3	785.8	845.7
7.5°	451.7	578.4	864.2	1253.6	1387.3
10°	430.9	626.8	1235.2	1562.4	1627.0
12.5°	407.9	691.3	1467.9	1673.0	1739.9
15°	382.5	762.8	1576.3	1762.9	1836.7
17.5°	357.2	841.1	1638.5	1829.7	1873.5
20°	329.5	924.1	1686.9	1845.9	1871.2
22.5°	304.2	986.3	1721.4	1832.0	1859.7
25°	281.1	1030.1	1739.9	1815.9	1834.4
27.5°	258.1	1046.2	1733.0	1786.0	1802.1
30°	237.4	1041.6	1712.2	1749.1	1774.4
32.5°	218.9	1027.8	1682.3	1716.8	1779.0
35°	200.5	995.5	1647.7	1703.0	1804.4
37.5°	184.4	949.4	1603.9	1709.9	1811.3
40°	170.5	896.4	1555.5	1709.9	1792.9
42.5°	156.7	834.2	1500.2	1686.9	1769.8
45°	145.2	762.8	1442.6	1654.6	1733.0
47.5°	133.7	684.4	1389.6	1615.4	1675.3
50°	124.4	603.8	1336.6	1557.8	1603.9
52.5°	115.2	525.4	1283.6	1488.7	1530.2
55°	108.3	454.0	1223.7	1405.7	1442.6
57.5°	101.4	389.5	1159.1	1318.2	1348.1
60°	96.8	338.8	1080.8	1221.4	1251.3
62.5°	89.9	292.7	993.2	1120.0	1147.6
65°	85.3	255.8	901.0	1009.4	1027.8
67.5°	78.4	225.8	804.3	882.6	864.2
70°	71.4	205.1	705.2	728.2	629.1
72.5°	66.8	182.1	596.9	527.7	318.0
75°	59.9	156.7	479.3	258.1	262.7
77.5°	50.7	126.7	352.6	207.4	212.0
80°	41.5	99.1	165.9	161.3	163.6
82.5°	32.3	71.4	101.4	108.3	103.7
85°	20.7	46.1	57.6	39.2	34.6
87.5°	9.2	20.7	11.5	11.5	11.5
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	18.01	19.69	18.37	20.00	20.32	26.66	28.34	27.02	28.66	28.97
	3H	18.79	20.32	19.17	20.64	21.00	28.34	29.87	28.72	30.19	30.55
	4H	19.13	20.56	19.53	20.91	21.29	28.56	30.00	28.96	30.34	30.72
	6H	19.38	20.71	19.79	21.08	21.47	28.69	30.02	29.10	30.38	30.77
	8H	19.46	20.74	19.89	21.12	21.52	28.72	29.99	29.14	30.38	30.77
	12H	19.52	20.74	19.95	21.12	21.55	28.72	29.93	29.14	30.31	30.74
4H	2H	22.44	23.88	22.84	24.22	24.60	27.20	28.63	27.60	28.98	29.35
	3H	23.46	24.66	23.86	25.05	25.45	29.10	30.30	29.51	30.70	31.10
	4H	23.78	24.86	24.21	25.27	25.71	29.38	30.46	29.81	30.87	31.31
	6H	23.96	24.90	24.41	25.34	25.80	29.57	30.52	30.02	30.96	31.41
	8H	24.00	24.89	24.46	25.33	25.79	29.62	30.50	30.08	30.94	31.41
	12H	24.03	24.83	24.51	25.30	25.77	29.63	30.42	30.11	30.90	31.37
8H	4H	25.01	25.90	25.47	26.34	26.80	29.57	30.45	30.02	30.89	31.35
	6H	25.29	26.02	25.78	26.51	26.99	29.81	30.54	30.30	31.03	31.50
	8H	25.38	26.03	25.88	26.54	27.02	29.88	30.54	30.39	31.04	31.53
	12H	25.44	26.02	25.95	26.51	27.07	29.91	30.49	30.42	30.98	31.54
12H	4H	25.07	25.86	25.55	26.34	26.81	29.56	30.35	30.04	30.83	31.29
	6H	25.39	26.05	25.90	26.56	27.04	29.80	30.46	30.31	30.96	31.45
	8H	25.54	26.12	26.05	26.61	27.17	29.91	30.49	30.41	30.98	31.54