

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: P686079

Luminaire Tested: SQ4R-F-125D-830-1-UNV-STD-W-4

Issue Date: 11/18/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P686079  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/18/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4R-F-125D-830-1-UNV-STD-W-4  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS.  
1250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4881.0 lumens  
Efficiency: N/A  
Efficacy: 98.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

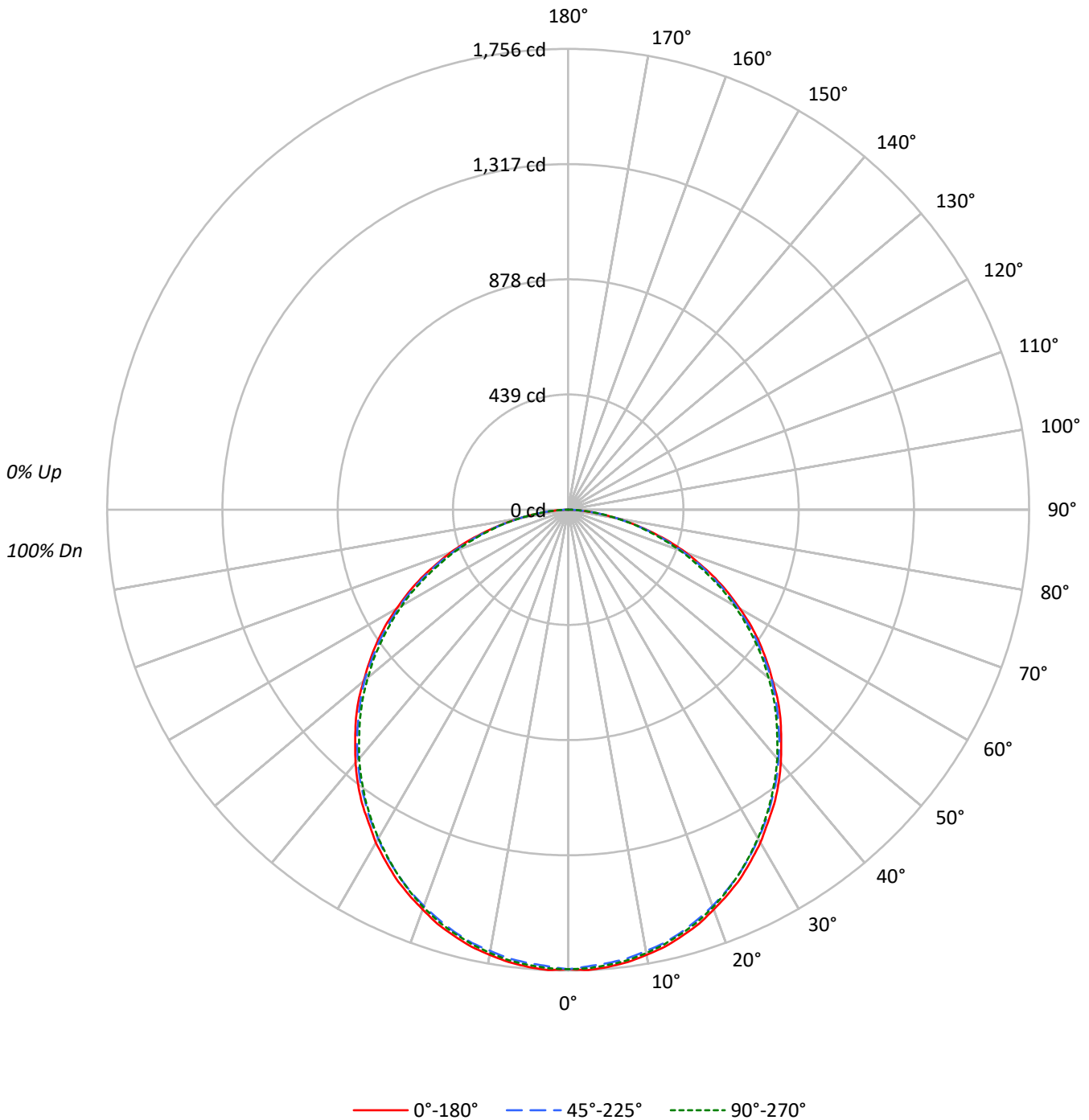
Input Watts (W): 49.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	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	94	91	88	90	88	86	84					84			
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70					70			
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59					59			
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50					50			
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43					43			
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38					38			
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24					24			

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

	0°	45°	90°
0°	16858	16858	16858
5°	16900	16760	16830
10°	16836	16695	16766
15°	16757	16614	16662
20°	16610	16462	16511
25°	16480	16301	16301
30°	16284	16097	16070
35°	16085	15887	15831
40°	15840	15659	15567
45°	15588	15392	15261
50°	15240	15166	14915
55°	14979	14776	14534
60°	14543	14310	14079
65°	14083	13752	13424
70°	13407	12999	12729
75°	12167	11899	11632
80°	10401	10401	10268
85°	7434	7975	7975

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15588 cd/sqm

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CATALOG NUMBER: SQ4R-F-125D-830-1-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.6	3.4
10°-20°	472.3	9.7
20°-30°	709.9	14.5
30°-40°	848.4	17.4
40°-50°	874.2	17.9
50°-60°	786.6	16.1
60°-70°	598.0	12.3
70°-80°	340.0	7.0
80°-90°	85.9	1.8
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°	1347.8	27.6
0°-40°	2196.2	45.0
0°-60°	3857.1	79.0
0°-90°	4881.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4881.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1751	1751	1751	1751	1751	
5°	1749	1746	1734	1749	1742	166
15°	1681	1679	1667	1676	1672	474
25°	1551	1547	1535	1539	1535	714
35°	1369	1364	1352	1352	1347	855
45°	1145	1145	1130	1123	1121	882
55°	892	890	880	873	866	796
65°	618	616	604	596	589	610
75°	327	325	320	318	313	348
85°	67	70	72	72	72	83
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1751.1	1751.1	1751.1	1751.1	1751.1
2.5°	1755.9	1751.1	1741.5	1753.5	1748.7
5°	1748.7	1746.3	1734.2	1748.7	1741.5
7.5°	1739.0	1736.6	1724.6	1736.6	1731.8
10°	1722.2	1719.8	1707.8	1719.8	1715.0
12.5°	1705.4	1703.0	1690.9	1700.6	1695.8
15°	1681.3	1678.9	1666.9	1676.5	1671.7
17.5°	1654.9	1652.5	1638.0	1647.6	1645.2
20°	1621.2	1618.8	1606.8	1614.0	1611.6
22.5°	1587.5	1585.1	1573.1	1580.3	1575.5
25°	1551.4	1546.6	1534.6	1539.4	1534.6
27.5°	1508.1	1505.7	1493.7	1496.1	1491.3
30°	1464.8	1462.4	1448.0	1450.4	1445.6
32.5°	1414.3	1414.3	1402.3	1402.3	1397.5
35°	1368.6	1363.8	1351.8	1351.8	1347.0
37.5°	1315.7	1310.9	1301.3	1298.9	1294.1
40°	1260.4	1258.0	1246.0	1243.6	1238.7
42.5°	1200.3	1202.7	1190.6	1183.4	1178.6
45°	1144.9	1144.9	1130.5	1123.3	1120.9
47.5°	1084.8	1084.8	1072.8	1065.6	1060.7
50°	1017.5	1022.3	1012.6	1000.6	995.8
52.5°	954.9	957.3	945.3	938.1	933.3
55°	892.4	890.0	880.3	873.1	865.9
57.5°	827.4	825.0	810.6	803.4	798.6
60°	755.3	755.3	743.2	736.0	731.2
62.5°	687.9	685.5	675.9	666.3	663.9
65°	618.2	615.8	603.7	596.5	589.3
67.5°	543.6	541.2	534.0	524.4	519.5
70°	476.3	469.0	461.8	454.6	452.2
72.5°	404.1	396.9	389.7	384.9	380.0
75°	327.1	324.7	319.9	317.5	312.7
77.5°	257.4	257.4	252.6	250.2	250.2
80°	187.6	187.6	187.6	185.2	185.2
82.5°	122.7	125.1	125.1	122.7	125.1
85°	67.3	69.8	72.2	72.2	72.2
87.5°	21.6	28.9	26.5	28.9	28.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)