

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: P688989

Luminaire Tested: SQ4R-PW1-100D-92765-1-UNV-STD-W-4\_6500K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688989  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-35)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/22/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4R-PW1-100D-92765-1-UNV-STD-W-4\_6500K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
1000 LUMENS PER FOOT  
Light Source: 6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4156.9 lumens  
Efficiency: N/A  
Efficacy: 90.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.2 / 1.29  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

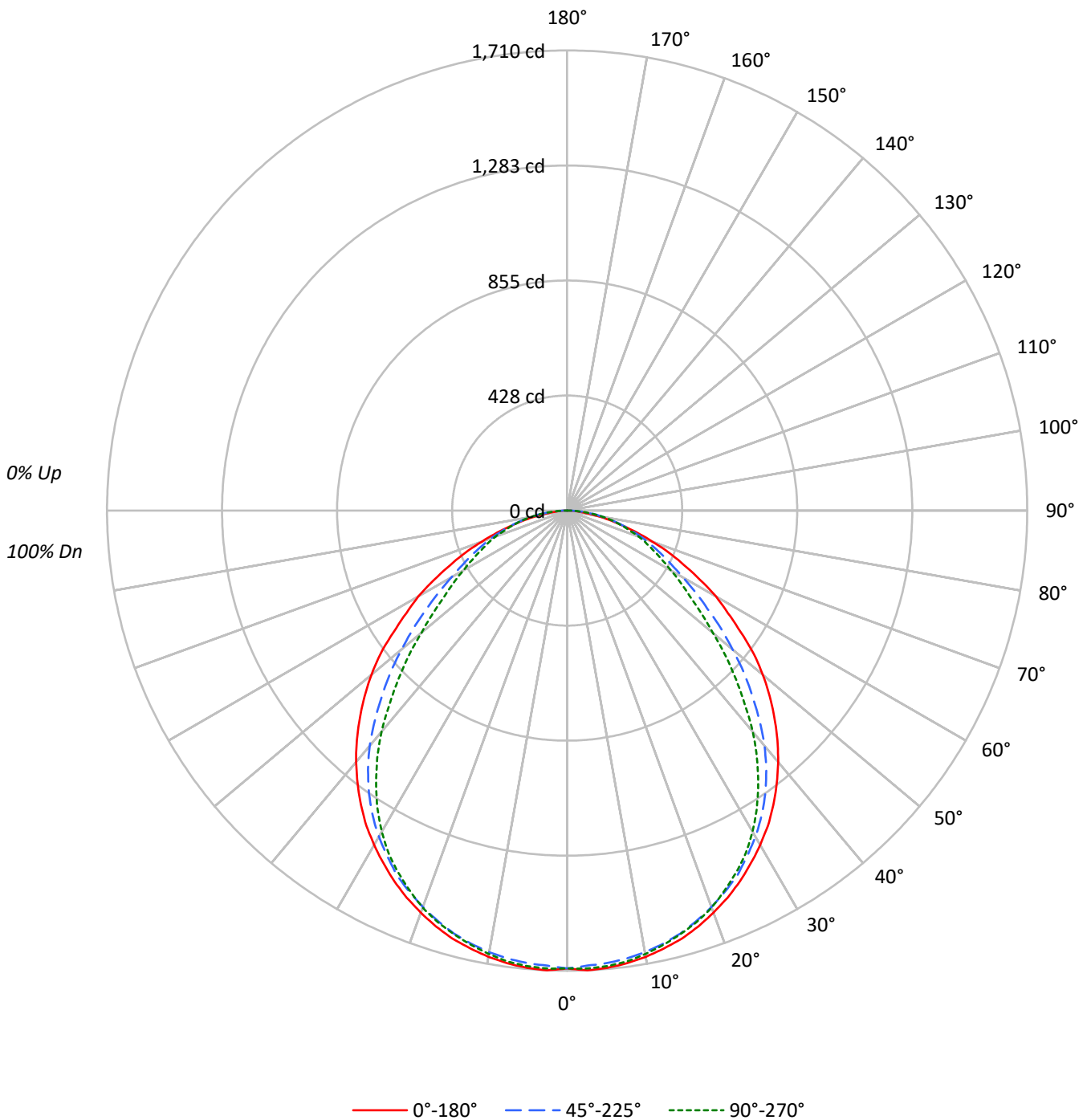
Input Watts (W): 46.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	105	101	97	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78		84	80	76		81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66		75	69	65		72	68	64	62
4	85	73	65	58	82	72	64	58	69	63	57		67	61	56		65	60	56	54
5	78	66	57	51	76	65	57	50	63	55	50		61	54	49		59	53	49	47
6	72	59	51	45	70	59	50	44	57	49	44		55	49	44		54	48	43	41
7	67	54	46	40	65	53	45	40	52	45	39		50	44	39		49	43	39	37
8	63	50	41	36	61	49	41	36	48	40	35		46	40	35		45	39	35	33
9	59	46	38	32	57	45	37	32	44	37	32		43	36	32		42	36	32	30
10	55	42	34	29	54	42	34	29	41	34	29		40	33	29		39	33	29	27

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

	0°	45°	90°
0°	16379	16379	16379
5°	16484	16315	16420
10°	16461	16290	16354
15°	16412	16216	16238
20°	16288	16063	16086
25°	16144	15889	15772
30°	15947	15558	15315
35°	15703	15086	14546
40°	15335	14346	13494
45°	14827	13249	12088
50°	14215	12019	10579
55°	13213	10682	9359
60°	12294	9558	8590
65°	10909	8866	8119
70°	9480	8433	8003
75°	7808	7971	7648
80°	6182	7518	7518
85°	4584	6760	7003

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14827 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.4	3.9
10°-20°	461.0	11.1
20°-30°	690.6	16.6
30°-40°	802.4	19.3
40°-50°	757.0	18.2
50°-60°	590.6	14.2
60°-70°	401.0	9.6
70°-80°	225.8	5.4
80°-90°	67.0	1.6
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°	1313.0	31.6
0°-40°	2115.4	50.9
0°-60°	3463.1	83.3
0°-90°	4156.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4156.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1701	1701	1701	1701	1701	
5°	1706	1701	1688	1701	1699	162
15°	1647	1640	1627	1636	1629	464
25°	1520	1513	1496	1491	1485	700
35°	1336	1323	1284	1255	1238	835
45°	1089	1056	973	912	888	840
55°	787	741	636	575	558	707
65°	479	435	389	365	356	478
75°	210	219	214	206	206	228
85°	42	59	61	61	63	50
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1701.3	1701.3	1701.3	1701.3	1701.3
2.5°	1710.1	1705.7	1692.6	1705.7	1703.5
5°	1705.7	1701.3	1688.2	1701.3	1699.1
7.5°	1696.9	1694.8	1679.4	1692.6	1690.4
10°	1683.8	1681.6	1666.3	1677.3	1672.9
12.5°	1666.3	1664.1	1648.8	1657.6	1653.2
15°	1646.6	1640.1	1627.0	1635.7	1629.2
17.5°	1620.4	1613.8	1598.5	1605.1	1602.9
20°	1589.8	1583.2	1567.9	1574.5	1570.1
22.5°	1557.0	1550.4	1532.9	1535.1	1528.6
25°	1519.8	1513.3	1495.8	1491.4	1484.8
27.5°	1478.3	1473.9	1447.6	1443.3	1436.7
30°	1434.5	1428.0	1399.5	1390.8	1377.7
32.5°	1388.6	1375.5	1344.9	1327.4	1312.1
35°	1336.1	1323.0	1283.6	1255.2	1237.7
37.5°	1279.3	1259.6	1215.9	1176.5	1159.0
40°	1220.2	1198.4	1141.5	1089.0	1073.7
42.5°	1156.8	1130.6	1058.4	1003.7	977.5
45°	1089.0	1056.2	973.1	911.9	887.8
47.5°	1021.2	979.7	890.0	824.4	798.2
50°	949.1	898.8	802.5	732.6	706.3
52.5°	874.7	820.0	721.6	649.5	629.8
55°	787.2	741.3	636.4	575.1	557.6
57.5°	708.5	658.2	566.4	513.9	500.8
60°	638.5	577.3	496.4	457.0	446.1
62.5°	557.6	503.0	439.5	408.9	398.0
65°	478.9	435.2	389.2	365.2	356.4
67.5°	411.1	373.9	343.3	323.6	319.3
70°	336.8	317.1	299.6	284.3	284.3
72.5°	273.3	266.8	255.9	247.1	240.5
75°	209.9	218.7	214.3	205.6	205.6
77.5°	159.6	172.8	174.9	170.6	172.8
80°	111.5	131.2	135.6	133.4	135.6
82.5°	70.0	94.0	98.4	98.4	100.6
85°	41.5	59.0	61.2	61.2	63.4
87.5°	17.5	28.4	30.6	30.6	30.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)