

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: P688973

Luminaire Tested: SQ4R-PW1-075D-92765-1-UNV-STD-W-4_4500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688973
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-PW1-075D-92765-1-UNV-STD-W-4_4500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
750 LUMENS PER FOOT
Light Source: 4500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2946.8 lumens
Efficiency: N/A
Efficacy: 89.6 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

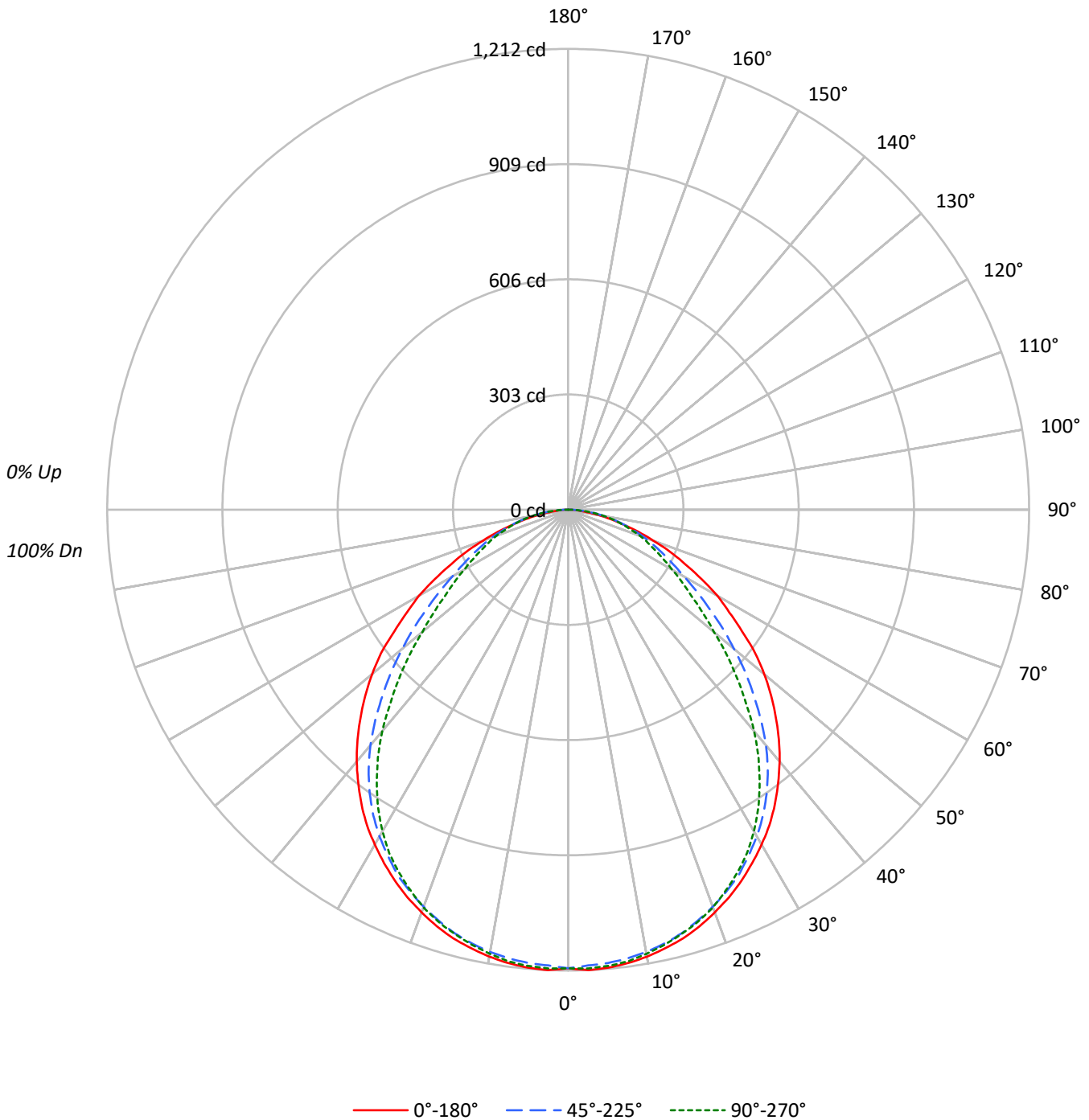
Input Watts (W): 32.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11611	11611	11611
5°	11685	11565	11640
10°	11668	11547	11593
15°	11634	11495	11511
20°	11546	11388	11403
25°	11445	11263	11181
30°	11305	11029	10857
35°	11132	10695	10312
40°	10871	10170	9565
45°	10511	9392	8569
50°	10077	8521	7499
55°	9368	7572	6635
60°	8717	6776	6088
65°	7734	6285	5757
70°	6719	5979	5672
75°	5535	5650	5420
80°	4385	5328	5328
85°	3259	4794	4971

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10511 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.4	3.9
10°-20°	326.8	11.1
20°-30°	489.5	16.6
30°-40°	568.8	19.3
40°-50°	536.6	18.2
50°-60°	418.7	14.2
60°-70°	284.2	9.6
70°-80°	160.1	5.4
80°-90°	47.5	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°	930.8	31.6
0°-40°	1499.6	50.9
0°-60°	2454.9	83.3
0°-90°	2946.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2946.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1206	1206	1206	1206	1206	
5°	1209	1206	1197	1206	1204	115
15°	1167	1163	1153	1160	1155	329
25°	1077	1073	1060	1057	1053	496
35°	947	938	910	890	877	592
45°	772	749	690	646	629	595
55°	558	526	451	408	395	501
65°	340	308	276	259	253	339
75°	149	155	152	146	146	162
85°	30	42	43	43	45	36
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1206.0	1206.0	1206.0	1206.0	1206.0
2.5°	1212.2	1209.1	1199.8	1209.1	1207.6
5°	1209.1	1206.0	1196.7	1206.0	1204.5
7.5°	1202.9	1201.4	1190.5	1199.8	1198.3
10°	1193.6	1192.1	1181.2	1189.0	1185.9
12.5°	1181.2	1179.7	1168.8	1175.0	1171.9
15°	1167.3	1162.6	1153.3	1159.5	1154.9
17.5°	1148.7	1144.0	1133.2	1137.8	1136.3
20°	1127.0	1122.3	1111.5	1116.1	1113.0
22.5°	1103.7	1099.1	1086.7	1088.2	1083.6
25°	1077.4	1072.7	1060.3	1057.2	1052.6
27.5°	1047.9	1044.8	1026.2	1023.1	1018.5
30°	1016.9	1012.3	992.1	985.9	976.6
32.5°	984.4	975.1	953.4	941.0	930.1
35°	947.2	937.9	910.0	889.8	877.4
37.5°	906.9	892.9	861.9	834.0	821.6
40°	865.0	849.5	809.2	772.0	761.1
42.5°	820.0	801.4	750.3	711.5	692.9
45°	772.0	748.7	689.8	646.4	629.4
47.5°	723.9	694.5	630.9	584.4	565.8
50°	672.8	637.1	568.9	519.3	500.7
52.5°	620.1	581.3	511.6	460.4	446.5
55°	558.1	525.5	451.1	407.7	395.3
57.5°	502.3	466.6	401.5	364.3	355.0
60°	452.7	409.2	351.9	324.0	316.2
62.5°	395.3	356.5	311.6	289.9	282.1
65°	339.5	308.5	275.9	258.9	252.7
67.5°	291.4	265.1	243.4	229.4	226.3
70°	238.7	224.8	212.4	201.5	201.5
72.5°	193.8	189.1	181.4	175.2	170.5
75°	148.8	155.0	151.9	145.7	145.7
77.5°	113.2	122.5	124.0	120.9	122.5
80°	79.1	93.0	96.1	94.6	96.1
82.5°	49.6	66.7	69.8	69.8	71.3
85°	29.5	41.9	43.4	43.4	45.0
87.5°	12.4	20.2	21.7	21.7	21.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)