

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: P688908

Luminaire Tested: SQ4R-PR1-100D-92765-1-UNV-STD-W-4_4500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688908
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PR1-100D-92765-1-UNV-STD-W-4_4500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 4500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3733.0 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

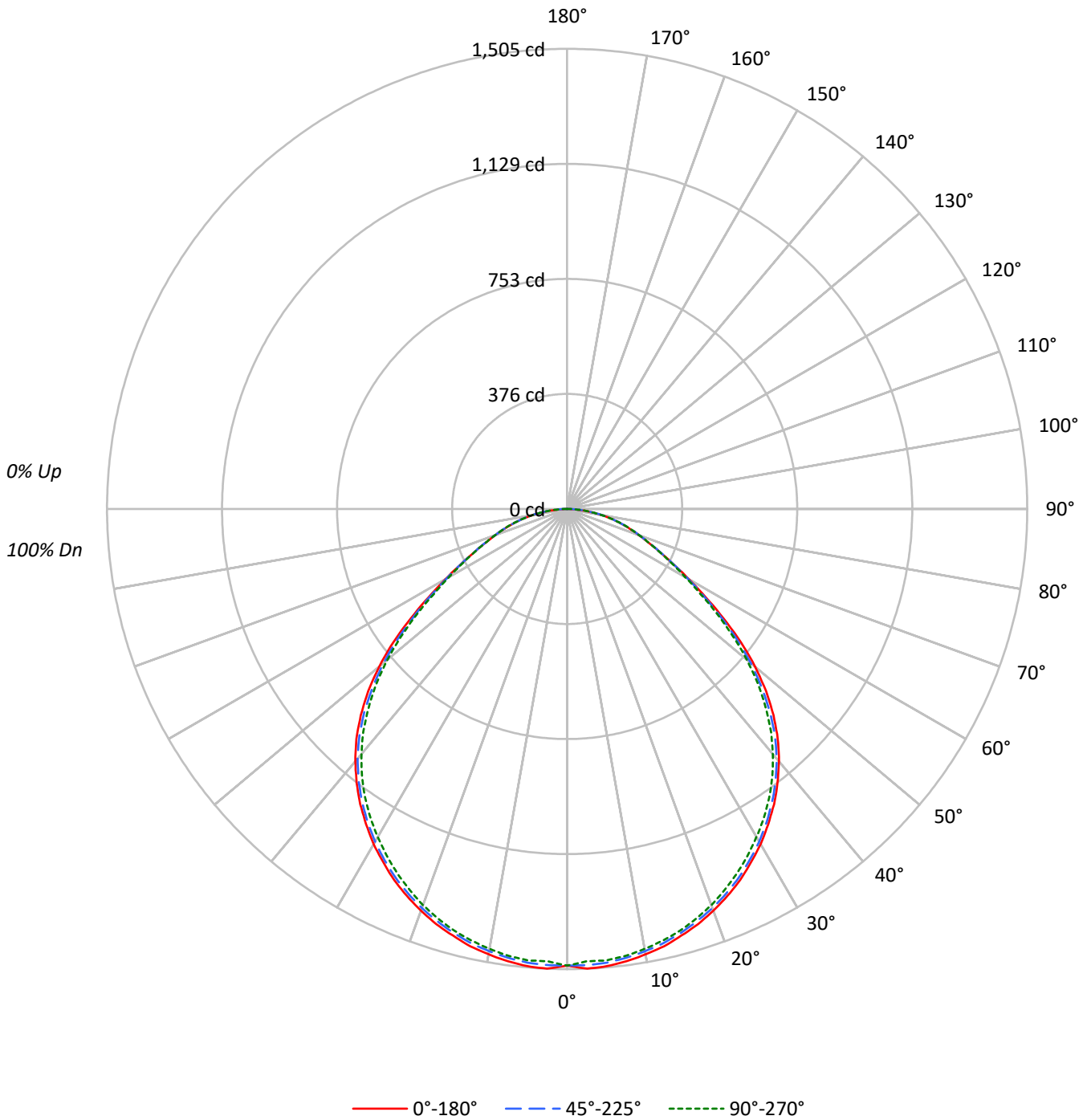
Input Watts (W): 46.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P688908

CATALOG NUMBER: SQ4R-PR1-100D-92765-1-UNV-STD-W-4_4500K

Luminous Intensity Polar Plot



TEST NUMBER: P688908

CATALOG NUMBER: SQ4R-PR1-100D-92765-1-UNV-STD-W-4_4500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									70									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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85														
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72														
3	92	82	74	68	90	80	73	68	78	71	66	75	70	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	58	50	44	57	49	44	55	49	44	53	48	43	41					41														
7	67	54	46	40	65	53	45	39	52	44	39	50	44	39	49	43	39	37					37														
8	63	49	41	36	61	49	41	35	47	40	35	46	40	35	45	39	35	33					33														
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31	30					30														
10	55	42	34	29	54	41	34	29	40	34	29	40	33	29	39	33	29	27					27														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14376	14376	14376
5°	14506	14394	14319
10°	14459	14359	14284
15°	14396	14307	14229
20°	14324	14232	14126
25°	14223	14127	13963
30°	14069	13969	13769
35°	13861	13740	13544
40°	13545	13400	13157
45°	12993	12766	12503
50°	12021	11732	11500
55°	10492	10254	10039
60°	8842	8767	8593
65°	7647	7677	7618
70°	7023	7060	7060
75°	6744	6744	6792
80°	6348	6420	6348
85°	5114	5678	5678

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12993 cd/sqm

TEST NUMBER: P688908

CATALOG NUMBER: SQ4R-PR1-100D-92765-1-UNV-STD-W-4_4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.3	3.8
10°-20°	404.2	10.8
20°-30°	609.7	16.3
30°-40°	726.6	19.5
40°-50°	716.8	19.2
50°-60°	546.8	14.6
60°-70°	337.5	9.0
70°-80°	192.3	5.2
80°-90°	58.0	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°	1155.2	30.9
0°-40°	1881.8	50.4
0°-60°	3145.3	84.3
0°-90°	3733.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3733.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1493	1493	1493	1493	1493	
5°	1501	1484	1489	1484	1482	143
15°	1444	1429	1435	1430	1428	408
25°	1339	1322	1330	1316	1314	617
35°	1179	1165	1169	1154	1152	737
45°	954	942	938	921	918	732
55°	625	615	611	601	598	560
65°	336	333	337	334	334	339
75°	181	181	181	183	183	191
85°	46	49	51	51	51	55
90°	0	0	0	0	0	

TEST NUMBER: P688908

CATALOG NUMBER: SQ4R-PR1-100D-92765-1-UNV-STD-W-4_4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1493.2	1493.2	1493.2	1493.2	1493.2
2.5°	1504.8	1488.1	1493.2	1489.4	1480.4
5°	1501.0	1484.2	1489.4	1484.2	1481.7
7.5°	1492.0	1475.2	1480.4	1475.2	1473.9
10°	1479.1	1463.7	1468.8	1463.7	1461.1
12.5°	1464.9	1448.2	1454.7	1448.2	1445.7
15°	1444.4	1428.9	1435.4	1430.2	1427.6
17.5°	1423.8	1407.1	1413.5	1408.4	1404.5
20°	1398.1	1382.6	1389.1	1380.1	1378.8
22.5°	1369.8	1354.3	1360.8	1347.9	1347.9
25°	1338.9	1322.2	1329.9	1315.7	1314.5
27.5°	1302.9	1287.5	1293.9	1279.7	1278.4
30°	1265.6	1250.2	1256.6	1241.2	1238.6
32.5°	1223.1	1209.0	1214.1	1198.7	1197.4
35°	1179.4	1165.3	1169.1	1153.7	1152.4
37.5°	1130.5	1117.7	1120.3	1103.5	1102.2
40°	1077.8	1064.9	1066.2	1048.2	1046.9
42.5°	1019.9	1007.1	1005.8	987.8	986.5
45°	954.3	941.5	937.6	920.9	918.3
47.5°	882.3	869.4	861.7	847.6	846.3
50°	802.6	789.7	783.3	771.7	767.8
52.5°	716.4	703.5	698.4	688.1	684.2
55°	625.1	614.8	610.9	600.6	598.1
57.5°	537.6	529.9	528.6	518.3	517.0
60°	459.2	455.3	455.3	446.3	446.3
62.5°	392.3	389.7	392.3	387.1	385.8
65°	335.7	333.1	337.0	334.4	334.4
67.5°	288.1	288.1	290.7	289.4	289.4
70°	249.5	249.5	250.8	250.8	250.8
72.5°	214.8	213.5	217.4	217.4	216.1
75°	181.3	181.3	181.3	182.6	182.6
77.5°	147.9	147.9	149.2	149.2	147.9
80°	114.5	115.8	115.8	114.5	114.5
82.5°	81.0	82.3	82.3	82.3	81.0
85°	46.3	48.9	51.4	51.4	51.4
87.5°	16.7	21.9	25.7	25.7	24.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)