

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: P688904

Luminaire Tested: SQ4R-PR1-100D-92765-1-UNV-STD-W-4_2700K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688904
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_2700K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3332.4 lumens
Efficiency: N/A
Efficacy: 72.6 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

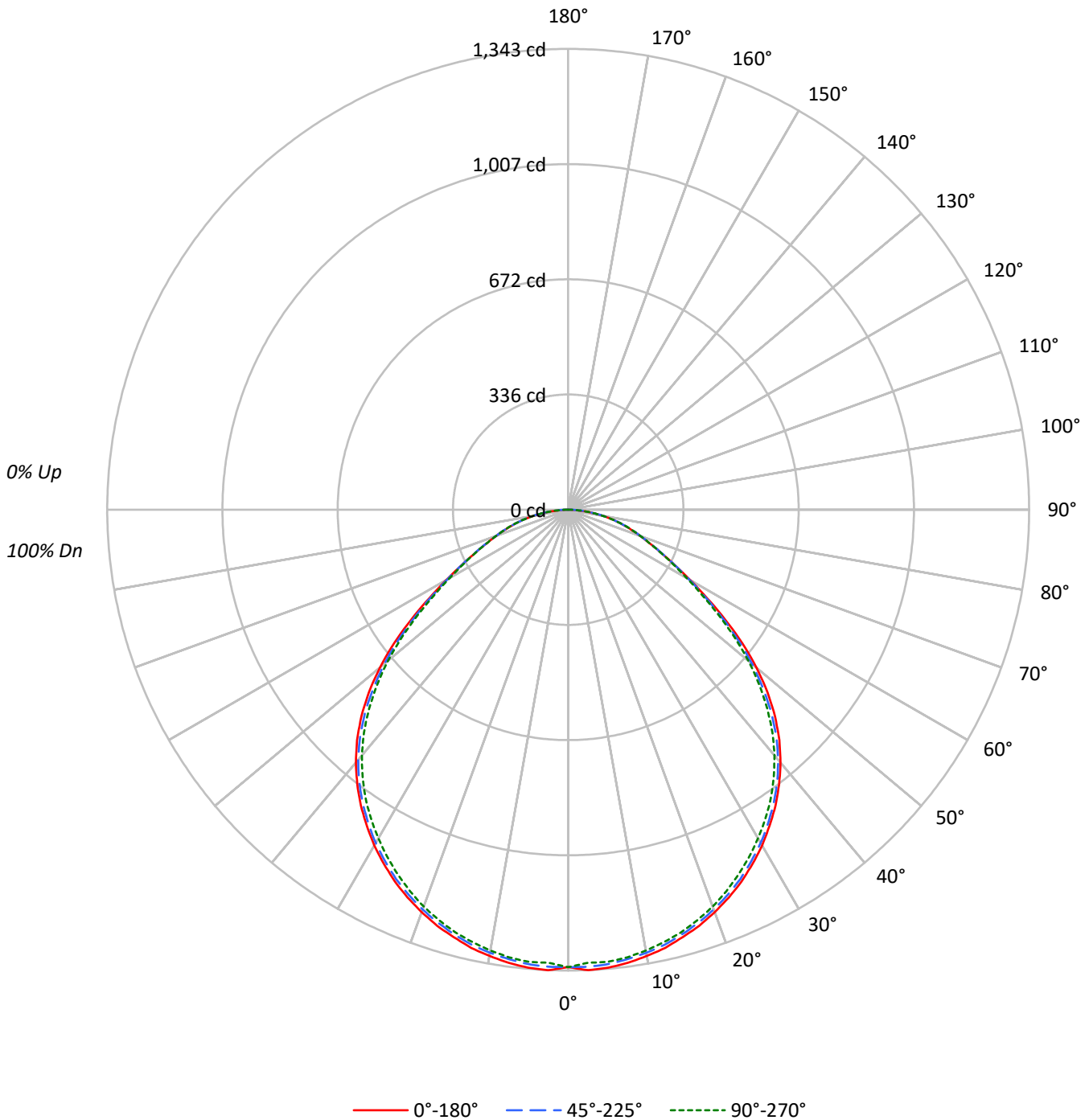
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	12833	12833	12833
5°	12949	12849	12783
10°	12908	12818	12751
15°	12851	12771	12702
20°	12786	12704	12610
25°	12696	12611	12465
30°	12560	12470	12292
35°	12373	12266	12090
40°	12091	11962	11746
45°	11599	11396	11162
50°	10730	10472	10266
55°	9366	9154	8961
60°	7892	7825	7671
65°	6827	6852	6800
70°	6269	6302	6302
75°	6022	6022	6063
80°	5666	5727	5666
85°	4562	5070	5070

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11599 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.1	3.8
10°-20°	360.9	10.8
20°-30°	544.3	16.3
30°-40°	648.6	19.5
40°-50°	639.8	19.2
50°-60°	488.1	14.6
60°-70°	301.2	9.0
70°-80°	171.6	5.2
80°-90°	51.8	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°	1031.2	30.9
0°-40°	1679.9	50.4
0°-60°	2807.8	84.3
0°-90°	3332.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3332.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1333	1333	1333	1333	1333	
5°	1340	1325	1330	1325	1323	127
15°	1289	1276	1281	1277	1274	364
25°	1195	1180	1187	1175	1173	550
35°	1053	1040	1044	1030	1029	658
45°	852	840	837	822	820	654
55°	558	549	545	536	534	500
65°	300	297	301	298	298	302
75°	162	162	162	163	163	171
85°	41	44	46	46	46	49
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1333.0	1333.0	1333.0	1333.0	1333.0
2.5°	1343.3	1328.4	1333.0	1329.6	1321.5
5°	1339.9	1325.0	1329.6	1325.0	1322.7
7.5°	1331.8	1316.9	1321.5	1316.9	1315.8
10°	1320.4	1306.6	1311.2	1306.6	1304.3
12.5°	1307.7	1292.8	1298.6	1292.8	1290.5
15°	1289.4	1275.6	1281.3	1276.7	1274.4
17.5°	1271.0	1256.1	1261.8	1257.2	1253.8
20°	1248.0	1234.3	1240.0	1232.0	1230.8
22.5°	1222.8	1209.0	1214.7	1203.3	1203.3
25°	1195.2	1180.3	1187.2	1174.6	1173.4
27.5°	1163.1	1149.3	1155.0	1142.4	1141.3
30°	1129.8	1116.0	1121.7	1108.0	1105.7
32.5°	1091.9	1079.3	1083.8	1070.1	1068.9
35°	1052.8	1040.2	1043.7	1029.9	1028.7
37.5°	1009.2	997.7	1000.0	985.1	984.0
40°	962.1	950.7	951.8	935.7	934.6
42.5°	910.5	899.0	897.8	881.8	880.6
45°	851.9	840.4	837.0	822.1	819.8
47.5°	787.6	776.1	769.3	756.6	755.5
50°	716.4	705.0	699.2	688.9	685.4
52.5°	639.5	628.0	623.4	614.3	610.8
55°	558.0	548.8	545.4	536.2	533.9
57.5°	479.9	473.0	471.9	462.7	461.6
60°	409.9	406.4	406.4	398.4	398.4
62.5°	350.2	347.9	350.2	345.6	344.4
65°	299.7	297.4	300.8	298.5	298.5
67.5°	257.2	257.2	259.5	258.3	258.3
70°	222.7	222.7	223.9	223.9	223.9
72.5°	191.7	190.6	194.0	194.0	192.9
75°	161.9	161.9	161.9	163.0	163.0
77.5°	132.0	132.0	133.2	133.2	132.0
80°	102.2	103.3	103.3	102.2	102.2
82.5°	72.3	73.5	73.5	73.5	72.3
85°	41.3	43.6	45.9	45.9	45.9
87.5°	14.9	19.5	23.0	23.0	21.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)