

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: P688916

Luminaire Tested: SQ4R-PR1-100D-93050-1-UNV-STD-W-4_5000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688916
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-93050-1-UNV-STD-W-4_5000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3888.4 lumens
Efficiency: N/A
Efficacy: 84.2 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

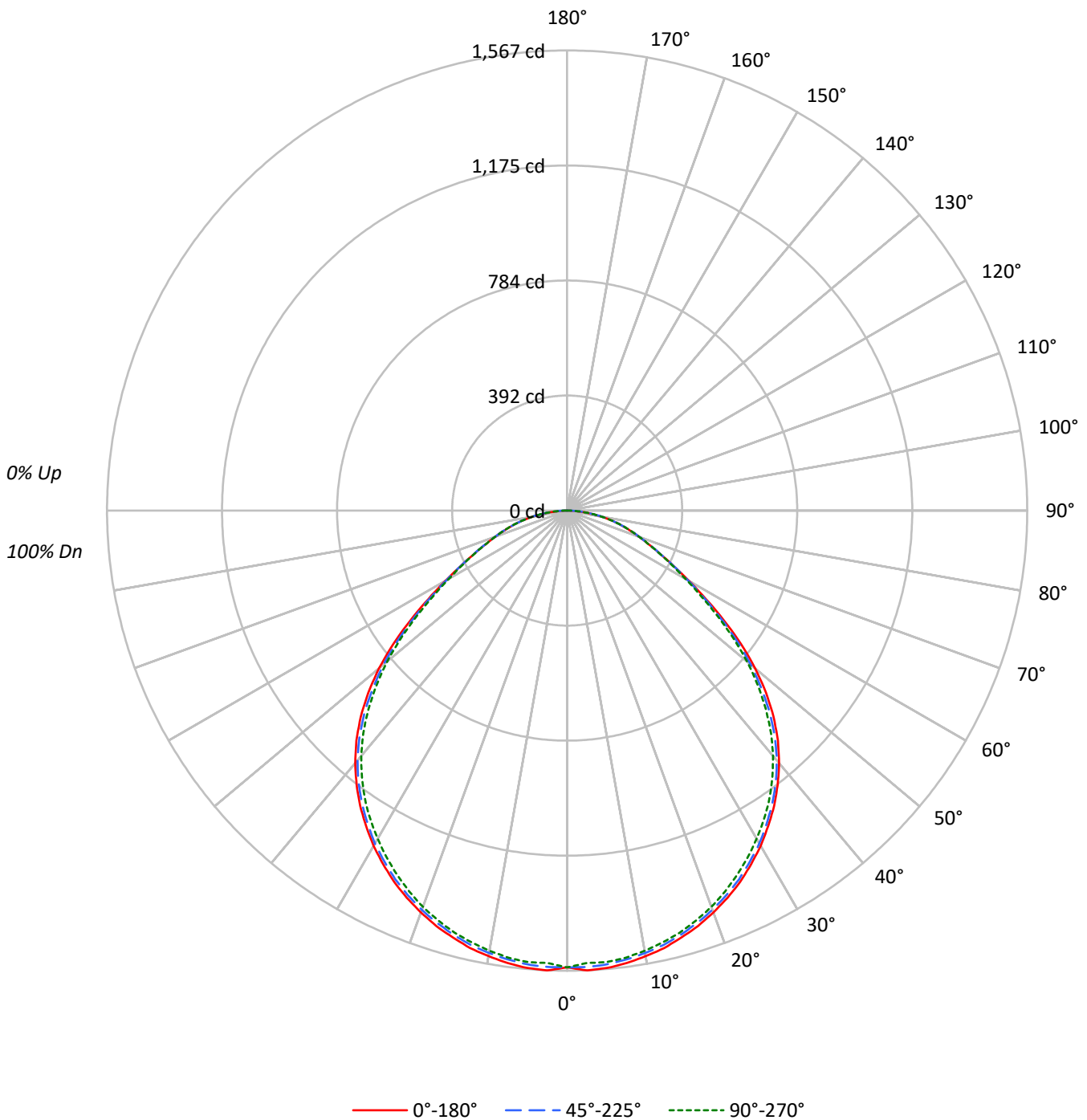
Input Watts (W): 46.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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°	14974	14974	14974
5°	15109	14992	14915
10°	15061	14956	14878
15°	14995	14902	14821
20°	14919	14824	14713
25°	14814	14714	14544
30°	14654	14551	14342
35°	14438	14313	14108
40°	14110	13958	13705
45°	13533	13297	13023
50°	12521	12220	11979
55°	10929	10680	10457
60°	9210	9131	8952
65°	7966	7996	7934
70°	7316	7352	7352
75°	7027	7027	7075
80°	6609	6686	6609
85°	5324	5921	5921

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13533 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.2	3.8
10°-20°	421.1	10.8
20°-30°	635.0	16.3
30°-40°	756.8	19.5
40°-50°	746.6	19.2
50°-60°	569.5	14.6
60°-70°	351.5	9.0
70°-80°	200.3	5.2
80°-90°	60.4	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°	1203.3	30.9
0°-40°	1960.1	50.4
0°-60°	3276.2	84.3
0°-90°	3888.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3888.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1555	1555	1555	1555	1555	
5°	1563	1546	1551	1546	1543	148
15°	1504	1488	1495	1490	1487	425
25°	1395	1377	1385	1370	1369	642
35°	1228	1214	1218	1202	1200	767
45°	994	981	977	959	956	763
55°	651	640	636	626	623	583
65°	350	347	351	348	348	353
75°	189	189	189	190	190	199
85°	48	51	54	54	54	57
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1555.4	1555.4	1555.4	1555.4	1555.4
2.5°	1567.4	1550.0	1555.4	1551.3	1542.0
5°	1563.4	1546.0	1551.3	1546.0	1543.3
7.5°	1554.0	1536.6	1542.0	1536.6	1535.3
10°	1540.6	1524.6	1529.9	1524.6	1521.9
12.5°	1525.9	1508.5	1515.2	1508.5	1505.8
15°	1504.5	1488.4	1495.1	1489.7	1487.0
17.5°	1483.0	1465.6	1472.3	1466.9	1462.9
20°	1456.2	1440.2	1446.9	1437.5	1436.1
22.5°	1426.8	1410.7	1417.4	1404.0	1404.0
25°	1394.6	1377.2	1385.2	1370.5	1369.2
27.5°	1357.1	1341.0	1347.7	1333.0	1331.6
30°	1318.2	1302.2	1308.9	1292.8	1290.1
32.5°	1274.0	1259.3	1264.7	1248.6	1247.2
35°	1228.5	1213.7	1217.8	1201.7	1200.4
37.5°	1177.6	1164.2	1166.9	1149.4	1148.1
40°	1122.7	1109.3	1110.6	1091.8	1090.5
42.5°	1062.4	1049.0	1047.6	1028.9	1027.5
45°	994.0	980.6	976.6	959.2	956.5
47.5°	919.0	905.6	897.6	882.8	881.5
50°	836.0	822.6	815.9	803.8	799.8
52.5°	746.2	732.8	727.4	716.7	712.7
55°	651.1	640.4	636.3	625.6	623.0
57.5°	560.0	551.9	550.6	539.9	538.6
60°	478.3	474.2	474.2	464.9	464.9
62.5°	408.6	405.9	408.6	403.2	401.9
65°	349.7	347.0	351.0	348.3	348.3
67.5°	300.1	300.1	302.8	301.4	301.4
70°	259.9	259.9	261.2	261.2	261.2
72.5°	223.7	222.4	226.4	226.4	225.1
75°	188.9	188.9	188.9	190.2	190.2
77.5°	154.1	154.1	155.4	155.4	154.1
80°	119.2	120.6	120.6	119.2	119.2
82.5°	84.4	85.7	85.7	85.7	84.4
85°	48.2	50.9	53.6	53.6	53.6
87.5°	17.4	22.8	26.8	26.8	25.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)