

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: P688837

Luminaire Tested: SQ4R-PP3-100D-93050-1-UNV-STD-W-4_4500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688837
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2103-172-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PP3-100D-93050-1-UNV-STD-W-4_4500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM 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: 4070.6 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

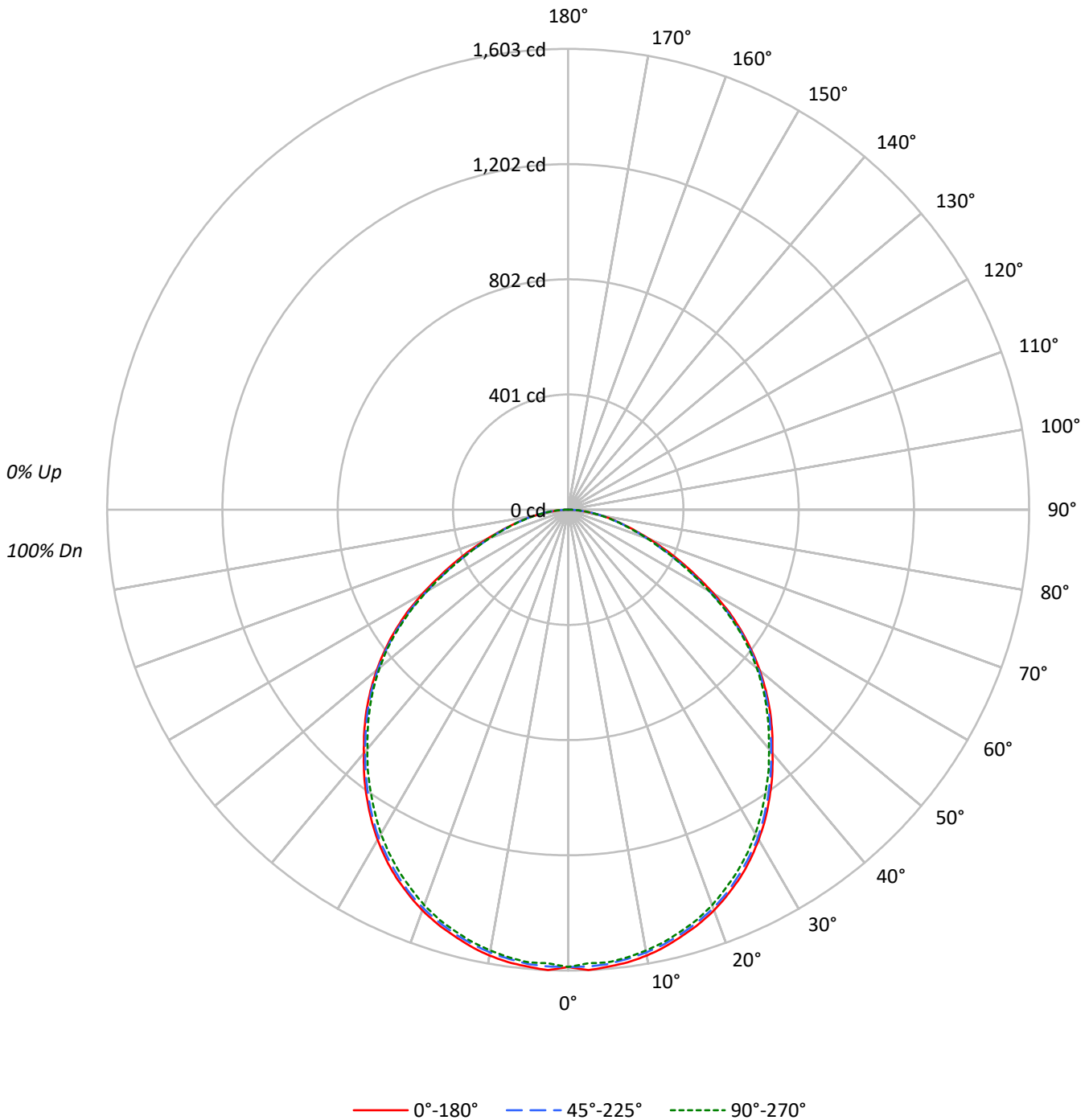
Input Watts (W): 46.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	98	95	93		95	92	90		91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77		84	79	76		81	77	74	72
3	92	81	74	67	89	80	73	67	77	71	66		74	69	64		72	67	63	61
4	84	72	64	57	82	71	63	57	69	62	56		66	60	56		64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49		60	53	48		58	52	48	46
6	72	59	50	44	70	58	49	43	56	49	43		54	48	43		53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38		49	43	38		48	42	38	36
8	62	49	40	35	60	48	40	34	47	39	34		45	39	34		44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31		42	35	31		41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28		39	33	28		38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15312	15312	15312
5°	15424	15330	15276
10°	15398	15289	15221
15°	15296	15213	15130
20°	15195	15110	14995
25°	15014	14911	14762
30°	14736	14660	14473
35°	14351	14253	14073
40°	13892	13804	13647
45°	13513	13418	13284
50°	13027	12944	12819
55°	12354	12189	12097
60°	11247	10923	10869
65°	9907	9495	9463
70°	8554	8200	8200
75°	7361	7257	7157
80°	6492	6570	6415
85°	5081	5545	5545

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13513 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.5	3.7
10°-20°	429.7	10.6
20°-30°	643.6	15.8
30°-40°	754.8	18.5
40°-50°	757.2	18.6
50°-60°	646.5	15.9
60°-70°	420.2	10.3
70°-80°	210.4	5.2
80°-90°	57.7	1.4
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°	1223.7	30.1
0°-40°	1978.6	48.6
0°-60°	3382.3	83.1
0°-90°	4070.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4070.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1590	1590	1590	1590	1590	
5°	1596	1581	1586	1581	1581	152
15°	1535	1519	1526	1521	1518	433
25°	1413	1397	1404	1391	1390	650
35°	1221	1208	1213	1199	1197	763
45°	992	986	986	976	976	765
55°	736	733	726	722	721	655
65°	435	426	417	414	415	434
75°	198	198	195	194	192	214
85°	46	50	50	50	50	55
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1590.5	1590.5	1590.5	1590.5	1590.5
2.5°	1603.0	1586.3	1590.5	1587.7	1579.3
5°	1596.0	1580.7	1586.3	1580.7	1580.7
7.5°	1587.7	1571.0	1576.5	1571.0	1571.0
10°	1575.1	1558.4	1564.0	1558.4	1557.0
12.5°	1557.0	1540.3	1547.3	1540.3	1540.3
15°	1534.7	1519.4	1526.3	1520.8	1518.0
17.5°	1511.0	1494.3	1502.7	1495.7	1494.3
20°	1483.1	1466.4	1474.8	1463.6	1463.6
22.5°	1449.7	1433.0	1442.7	1427.4	1427.4
25°	1413.4	1396.7	1403.7	1391.1	1389.7
27.5°	1371.6	1354.9	1361.9	1347.9	1347.9
30°	1325.6	1310.3	1318.7	1303.3	1301.9
32.5°	1275.4	1261.5	1267.1	1251.7	1250.4
35°	1221.1	1208.5	1212.7	1198.8	1197.4
37.5°	1165.3	1151.4	1157.0	1144.4	1144.4
40°	1105.4	1097.0	1098.4	1088.7	1085.9
42.5°	1049.6	1039.9	1041.3	1031.5	1031.5
45°	992.5	985.5	985.5	975.7	975.7
47.5°	932.5	927.0	925.6	917.2	917.2
50°	869.8	865.6	864.2	857.3	855.9
52.5°	804.3	802.9	797.3	791.7	791.7
55°	736.0	733.2	726.2	722.1	720.7
57.5°	663.5	657.9	651.0	644.0	645.4
60°	584.1	578.5	567.3	564.5	564.5
62.5°	507.4	500.4	489.3	485.1	487.9
65°	434.9	426.5	416.8	414.0	415.4
67.5°	368.0	359.6	348.5	348.5	347.1
70°	303.9	299.7	291.3	291.3	291.3
72.5°	246.7	245.3	239.8	239.8	238.4
75°	197.9	197.9	195.1	193.8	192.4
77.5°	156.1	156.1	154.7	153.3	150.5
80°	117.1	119.9	118.5	117.1	115.7
82.5°	80.8	83.6	83.6	80.8	80.8
85°	46.0	50.2	50.2	50.2	50.2
87.5°	15.3	20.9	22.3	22.3	23.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)