

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: P688913

Luminaire Tested: SQ4R-PR1-100D-93050-1-UNV-STD-W-4_3500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688913
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_3500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3745.8 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

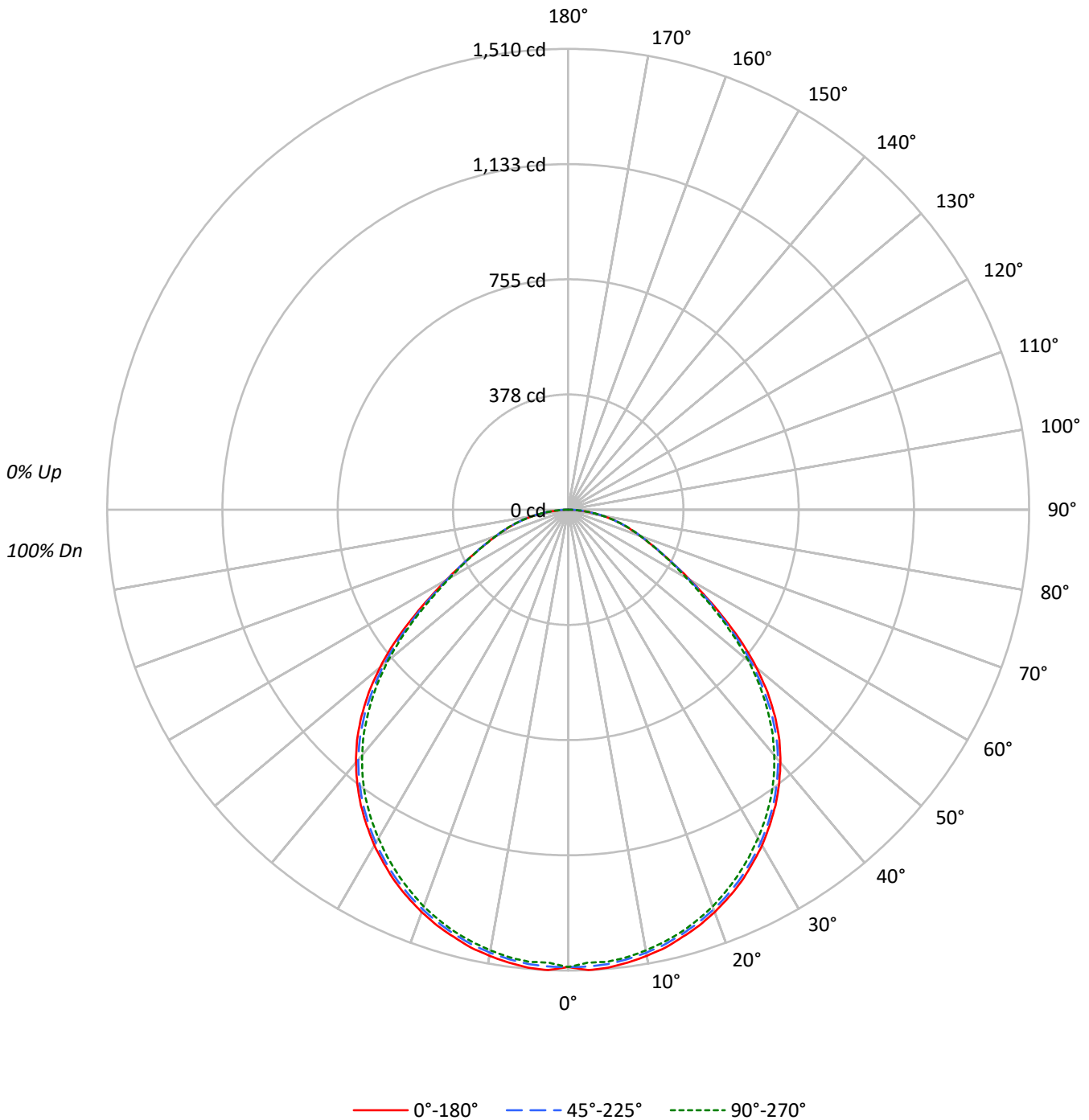
Input Watts (W): 46.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	14425	14425	14425
5°	14555	14442	14368
10°	14508	14408	14332
15°	14445	14354	14278
20°	14372	14280	14174
25°	14271	14175	14010
30°	14117	14017	13816
35°	13908	13787	13590
40°	13592	13446	13202
45°	13038	12809	12545
50°	12061	11771	11540
55°	10527	10289	10073
60°	8871	8797	8622
65°	7672	7702	7643
70°	7048	7085	7085
75°	6770	6770	6818
80°	6370	6437	6370
85°	5136	5700	5700

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13038 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.8	3.8
10°-20°	405.6	10.8
20°-30°	611.8	16.3
30°-40°	729.1	19.5
40°-50°	719.2	19.2
50°-60°	548.6	14.6
60°-70°	338.6	9.0
70°-80°	192.9	5.2
80°-90°	58.2	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°	1159.1	30.9
0°-40°	1888.2	50.4
0°-60°	3156.0	84.3
0°-90°	3745.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3745.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1498	1498	1498	1498	1498	
5°	1506	1489	1494	1489	1487	143
15°	1449	1434	1440	1435	1432	409
25°	1344	1327	1334	1320	1319	619
35°	1183	1169	1173	1158	1156	739
45°	958	945	941	924	921	735
55°	627	617	613	603	600	562
65°	337	334	338	336	336	340
75°	182	182	182	183	183	192
85°	46	49	52	52	52	55
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1498.3	1498.3	1498.3	1498.3	1498.3
2.5°	1509.9	1493.2	1498.3	1494.4	1485.4
5°	1506.1	1489.3	1494.4	1489.3	1486.7
7.5°	1497.0	1480.3	1485.4	1480.3	1479.0
10°	1484.1	1468.6	1473.8	1468.6	1466.1
12.5°	1469.9	1453.2	1459.6	1453.2	1450.6
15°	1449.3	1433.8	1440.2	1435.1	1432.5
17.5°	1428.6	1411.9	1418.3	1413.1	1409.3
20°	1402.8	1387.3	1393.8	1384.8	1383.5
22.5°	1374.4	1358.9	1365.4	1352.5	1352.5
25°	1343.5	1326.7	1334.4	1320.2	1318.9
27.5°	1307.3	1291.8	1298.3	1284.1	1282.8
30°	1269.9	1254.4	1260.9	1245.4	1242.8
32.5°	1227.3	1213.1	1218.3	1202.8	1201.5
35°	1183.4	1169.2	1173.1	1157.6	1156.3
37.5°	1134.4	1121.5	1124.1	1107.3	1106.0
40°	1081.5	1068.6	1069.9	1051.8	1050.5
42.5°	1023.4	1010.5	1009.2	991.1	989.8
45°	957.6	944.7	940.8	924.0	921.4
47.5°	885.3	872.4	864.7	850.5	849.2
50°	805.3	792.4	785.9	774.3	770.5
52.5°	718.8	705.9	700.8	690.4	686.6
55°	627.2	616.9	613.0	602.7	600.1
57.5°	539.4	531.7	530.4	520.1	518.8
60°	460.7	456.9	456.9	447.8	447.8
62.5°	393.6	391.0	393.6	388.5	387.2
65°	336.8	334.3	338.1	335.5	335.5
67.5°	289.1	289.1	291.7	290.4	290.4
70°	250.4	250.4	251.7	251.7	251.7
72.5°	215.5	214.2	218.1	218.1	216.8
75°	182.0	182.0	182.0	183.3	183.3
77.5°	148.4	148.4	149.7	149.7	148.4
80°	114.9	116.1	116.1	114.9	114.9
82.5°	81.3	82.6	82.6	82.6	81.3
85°	46.5	49.0	51.6	51.6	51.6
87.5°	16.8	21.9	25.8	25.8	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)