

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: P688993

Luminaire Tested: SQ4R-PW1-100D-93050-1-UNV-STD-W-4_4500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688993
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-35)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PW1-100D-93050-1-UNV-STD-W-4_4500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES 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: 4032.1 lumens
Efficiency: N/A
Efficacy: 86.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

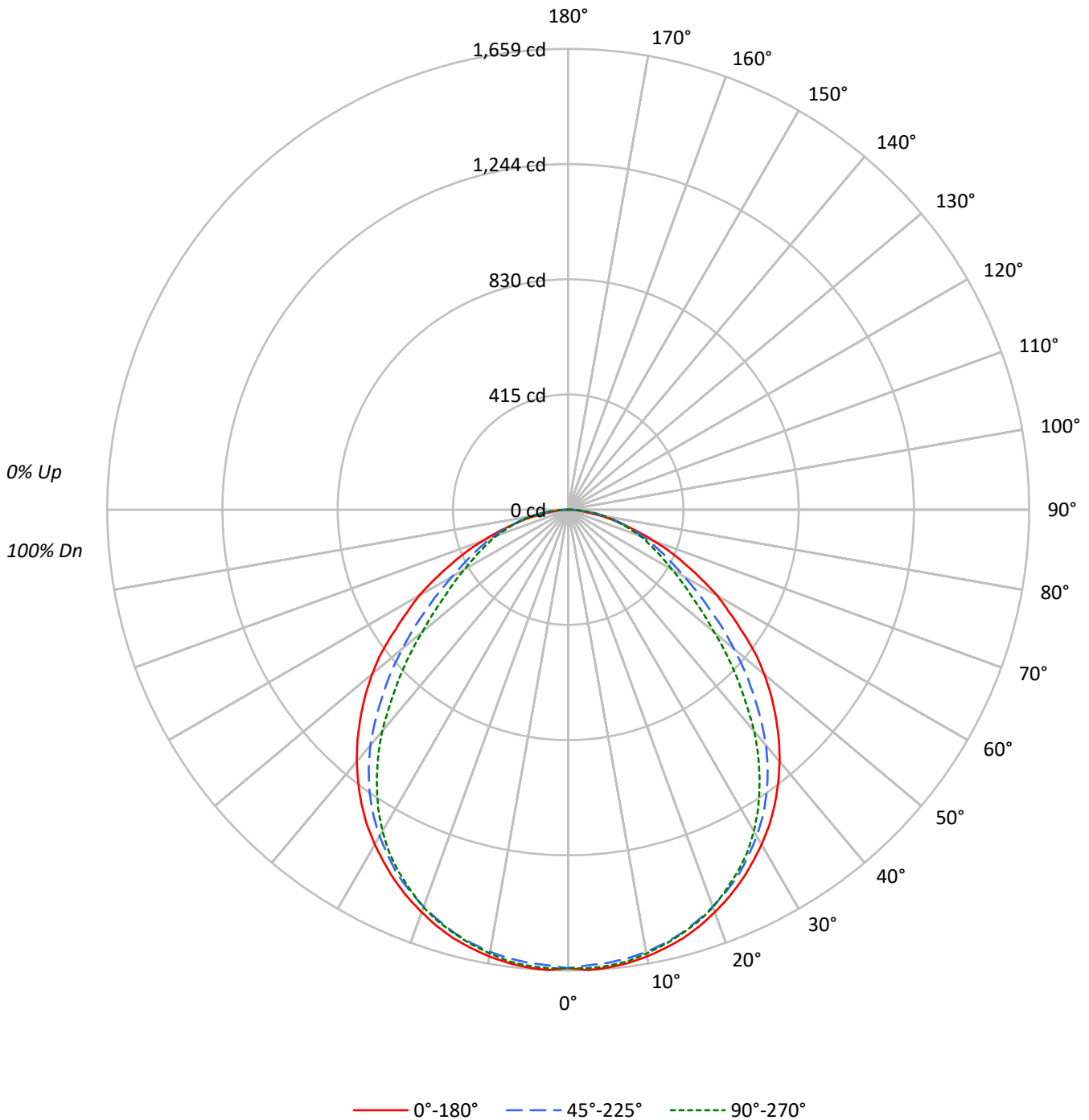
Input Watts (W): 46.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85				85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72				72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	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	59	50	44	57	49	44	55	49	44	54	48	43	41				41
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37				37
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	33				33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30				30
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27				27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15887	15887	15887
5°	15989	15825	15927
10°	15967	15801	15862
15°	15919	15729	15750
20°	15798	15581	15603
25°	15660	15411	15299
30°	15468	15091	14855
35°	15232	14633	14109
40°	14875	13915	13089
45°	14382	12851	11725
50°	13788	11658	10261
55°	12817	10360	9079
60°	11926	9271	8332
65°	10581	8602	7875
70°	9196	8180	7761
75°	7573	7733	7417
80°	5999	7291	7291
85°	4452	6561	6793

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14382 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.6	3.9
10°-20°	447.2	11.1
20°-30°	669.8	16.6
30°-40°	778.3	19.3
40°-50°	734.3	18.2
50°-60°	572.9	14.2
60°-70°	388.9	9.6
70°-80°	219.0	5.4
80°-90°	65.0	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°	1273.6	31.6
0°-40°	2051.9	50.9
0°-60°	3359.1	83.3
0°-90°	4032.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4032.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1650	1650	1650	1650	1650	
5°	1654	1650	1638	1650	1648	157
15°	1597	1591	1578	1587	1580	450
25°	1474	1468	1451	1447	1440	679
35°	1296	1283	1245	1218	1200	810
45°	1056	1024	944	884	861	814
55°	764	719	617	558	541	686
65°	464	422	378	354	346	464
75°	204	212	208	199	199	222
85°	40	57	59	59	62	49
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1650.2	1650.2	1650.2	1650.2	1650.2
2.5°	1658.7	1654.5	1641.7	1654.5	1652.3
5°	1654.5	1650.2	1637.5	1650.2	1648.1
7.5°	1646.0	1643.9	1629.0	1641.7	1639.6
10°	1633.3	1631.1	1616.3	1626.9	1622.6
12.5°	1616.3	1614.2	1599.3	1607.8	1603.6
15°	1597.2	1590.8	1578.1	1586.6	1580.2
17.5°	1571.7	1565.4	1550.5	1556.9	1554.8
20°	1542.0	1535.7	1520.8	1527.2	1523.0
22.5°	1510.2	1503.9	1486.9	1489.0	1482.7
25°	1474.2	1467.8	1450.8	1446.6	1440.2
27.5°	1433.9	1429.6	1404.2	1399.9	1393.6
30°	1391.4	1385.1	1357.5	1349.0	1336.3
32.5°	1346.9	1334.2	1304.5	1287.5	1272.7
35°	1296.0	1283.3	1245.1	1217.5	1200.5
37.5°	1240.8	1221.8	1179.3	1141.2	1124.2
40°	1183.6	1162.4	1107.2	1056.3	1041.5
42.5°	1122.1	1096.6	1026.6	973.6	948.1
45°	1056.3	1024.5	943.9	884.5	861.2
47.5°	990.6	950.3	863.3	799.7	774.2
50°	920.6	871.8	778.4	710.6	685.1
52.5°	848.4	795.4	700.0	630.0	610.9
55°	763.6	719.1	617.2	557.9	540.9
57.5°	687.2	638.5	549.4	498.5	485.7
60°	619.4	560.0	481.5	443.3	432.7
62.5°	540.9	487.9	426.3	396.6	386.0
65°	464.5	422.1	377.6	354.2	345.7
67.5°	398.8	362.7	333.0	313.9	309.7
70°	326.7	307.6	290.6	275.7	275.7
72.5°	265.1	258.8	248.2	239.7	233.3
75°	203.6	212.1	207.9	199.4	199.4
77.5°	154.8	167.6	169.7	165.4	167.6
80°	108.2	127.3	131.5	129.4	131.5
82.5°	67.9	91.2	95.4	95.4	97.6
85°	40.3	57.3	59.4	59.4	61.5
87.5°	17.0	27.6	29.7	29.7	29.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)