

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: P688680

Luminaire Tested: SQ4R-PC3-100D-93050-1-UNV-STD-W-4_4000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688680
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PC3-100D-93050-1-UNV-STD-W-4_4000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4112.6 lumens
Efficiency: N/A
Efficacy: 88.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

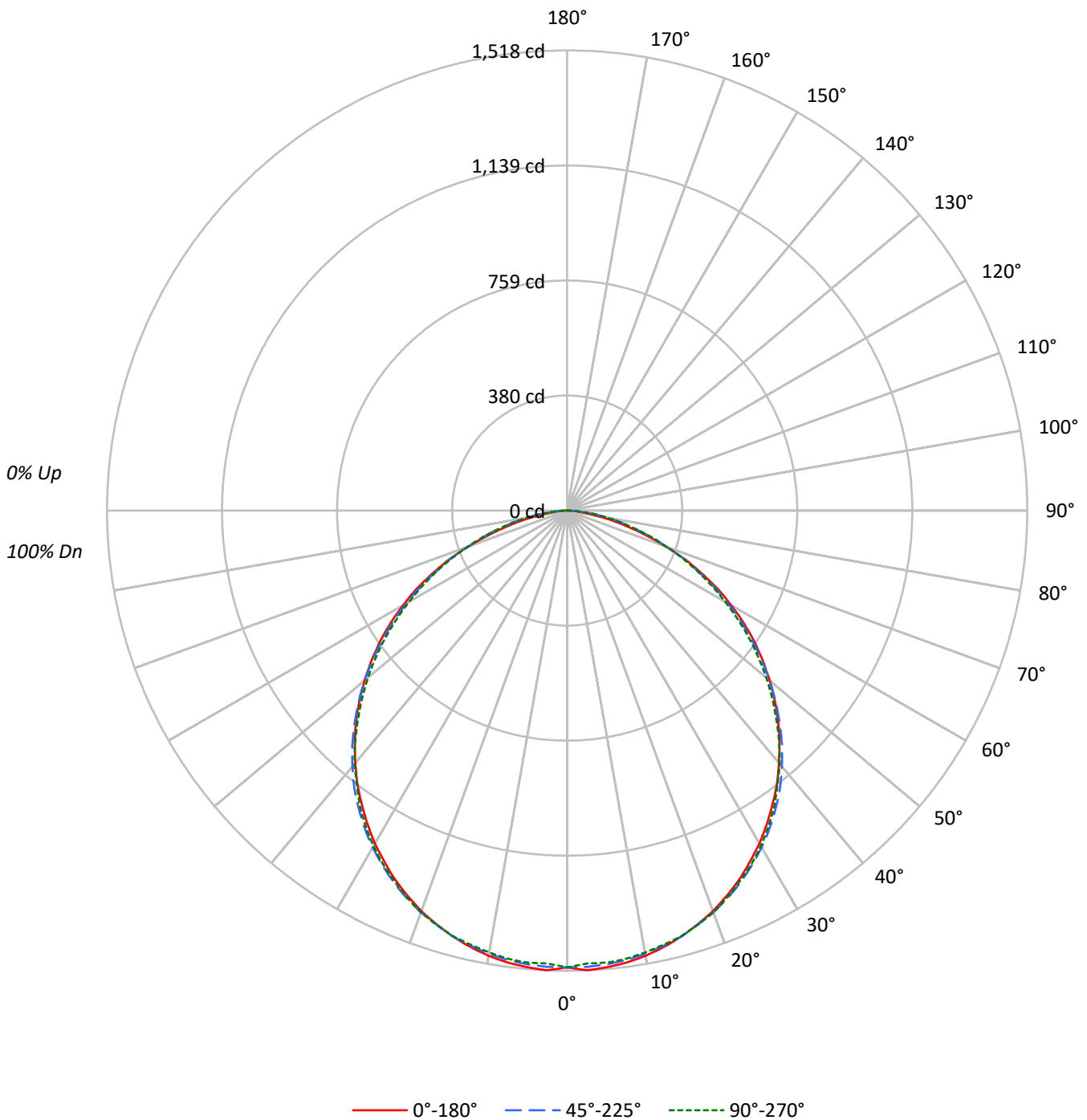
Input Watts (W): 46.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87	85				85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71				71
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	60				60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51				51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44				44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39				39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34				34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31				31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28				28
10	54	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25				25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14505	14505	14505
5°	14614	14519	14465
10°	14579	14510	14469
15°	14502	14502	14488
20°	14407	14450	14450
25°	14270	14374	14330
30°	14097	14267	14205
35°	13887	14100	14001
40°	13657	13851	13710
45°	13410	13503	13295
50°	13059	13059	12849
55°	12644	12479	12293
60°	12034	11792	11603
65°	11124	10900	10805
70°	9739	9818	9779
75°	7834	8667	8719
80°	5566	7346	7424
85°	3391	6164	6164

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 13503 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.7	3.5
10°-20°	409.4	10.0
20°-30°	620.0	15.1
30°-40°	743.3	18.1
40°-50°	757.9	18.4
50°-60°	661.5	16.1
60°-70°	473.6	11.5
70°-80°	243.3	5.9
80°-90°	60.9	1.5
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°	1172.0	28.5
0°-40°	1915.4	46.6
0°-60°	3334.8	81.1
0°-90°	4112.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4112.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1507	1507	1507	1507	1507	
5°	1512	1497	1502	1498	1497	144
15°	1455	1442	1455	1455	1454	410
25°	1343	1334	1353	1349	1349	619
35°	1182	1179	1200	1191	1191	739
45°	985	982	992	979	976	759
55°	753	744	744	732	732	672
65°	488	477	478	474	474	484
75°	211	220	233	234	234	227
85°	31	47	56	57	56	41
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1506.6	1506.6	1506.6	1506.6	1506.6
2.5°	1517.8	1501.0	1506.6	1502.4	1495.4
5°	1512.2	1496.8	1502.4	1498.2	1496.8
7.5°	1503.8	1488.5	1495.4	1492.7	1491.3
10°	1491.3	1475.9	1484.3	1481.5	1480.1
12.5°	1474.5	1460.6	1470.3	1467.5	1467.5
15°	1455.0	1442.4	1455.0	1455.0	1453.6
17.5°	1431.3	1420.1	1432.7	1434.1	1432.7
20°	1406.2	1393.6	1410.4	1409.0	1410.4
22.5°	1375.5	1365.7	1383.8	1379.7	1381.1
25°	1343.4	1333.6	1353.2	1349.0	1349.0
27.5°	1305.7	1298.8	1319.7	1315.5	1315.5
30°	1268.1	1261.1	1283.4	1277.8	1277.8
32.5°	1226.2	1222.0	1242.9	1236.0	1236.0
35°	1181.6	1178.8	1199.7	1191.3	1191.3
37.5°	1136.9	1134.1	1153.7	1143.9	1139.7
40°	1086.7	1085.3	1102.1	1090.9	1090.9
42.5°	1036.5	1035.1	1049.0	1035.1	1035.1
45°	984.9	982.1	991.8	979.3	976.5
47.5°	929.1	926.3	933.3	919.3	917.9
50°	871.9	869.1	871.9	859.3	857.9
52.5°	813.3	807.7	807.7	795.2	795.2
55°	753.3	743.5	743.5	732.4	732.4
57.5°	690.5	678.0	679.4	669.6	668.2
60°	625.0	611.0	612.4	604.0	602.6
62.5°	560.8	544.1	548.2	538.5	538.5
65°	488.3	477.1	478.5	474.3	474.3
67.5°	421.3	410.1	417.1	412.9	412.9
70°	346.0	339.0	348.8	348.8	347.4
72.5°	276.2	277.6	290.2	290.2	291.6
75°	210.6	220.4	233.0	234.4	234.4
77.5°	150.7	167.4	181.4	181.4	181.4
80°	100.4	120.0	132.5	135.3	133.9
82.5°	60.0	80.9	90.7	93.5	92.1
85°	30.7	47.4	55.8	57.2	55.8
87.5°	11.2	23.7	27.9	27.9	25.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)