

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: P688682

Luminaire Tested: SQ4R-PC3-100D-93050-1-UNV-STD-W-4_5000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688682
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_5000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE PYRAMID 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: 4194.1 lumens
Efficiency: N/A
Efficacy: 90.8 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

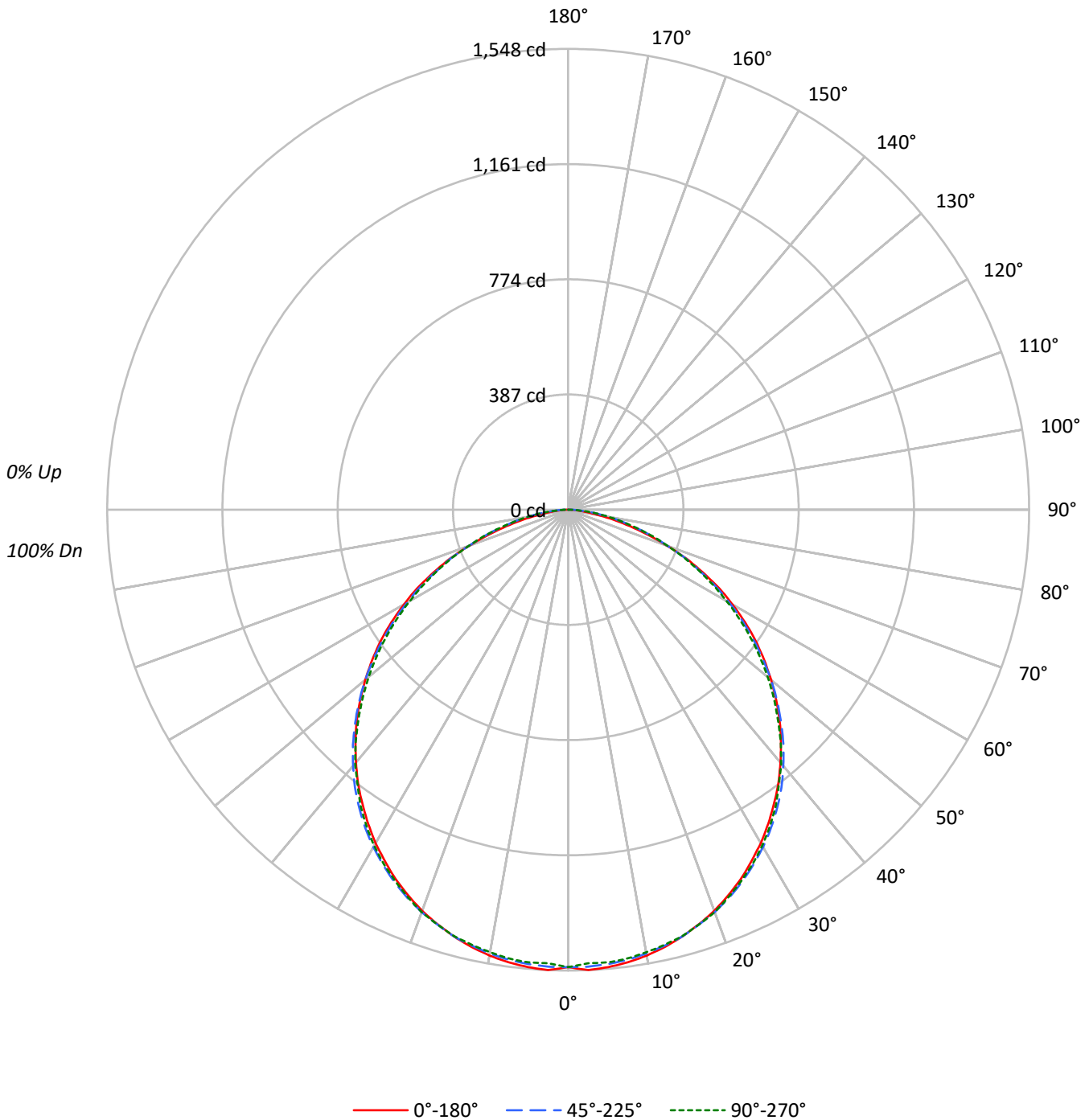
Input Watts (W): 46.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14792	14792	14792
5°	14904	14807	14752
10°	14867	14798	14757
15°	14789	14789	14775
20°	14693	14736	14736
25°	14553	14659	14614
30°	14376	14551	14487
35°	14162	14380	14280
40°	13929	14125	13981
45°	13675	13772	13559
50°	13318	13318	13104
55°	12894	12728	12537
60°	12273	12026	11834
65°	11342	11117	11019
70°	9931	10012	9970
75°	7990	8838	8890
80°	5677	7496	7573
85°	3457	6285	6285

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 13772 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.5	3.5
10°-20°	417.5	10.0
20°-30°	632.3	15.1
30°-40°	758.1	18.1
40°-50°	772.9	18.4
50°-60°	674.6	16.1
60°-70°	483.0	11.5
70°-80°	248.1	5.9
80°-90°	62.1	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°	1195.2	28.5
0°-40°	1953.3	46.6
0°-60°	3400.9	81.1
0°-90°	4194.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4194.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1536	1536	1536	1536	1536	
5°	1542	1526	1532	1528	1526	147
15°	1484	1471	1484	1484	1482	419
25°	1370	1360	1380	1376	1376	631
35°	1205	1202	1224	1215	1215	754
45°	1004	1002	1012	999	996	774
55°	768	758	758	747	747	685
65°	498	487	488	484	484	493
75°	215	225	238	239	239	231
85°	31	48	57	58	57	42
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1536.5	1536.5	1536.5	1536.5	1536.5
2.5°	1547.9	1530.8	1536.5	1532.2	1525.1
5°	1542.2	1526.5	1532.2	1527.9	1526.5
7.5°	1533.6	1518.0	1525.1	1522.3	1520.8
10°	1520.8	1505.2	1513.7	1510.9	1509.5
12.5°	1503.8	1489.5	1499.5	1496.7	1496.7
15°	1483.8	1471.0	1483.8	1483.8	1482.4
17.5°	1459.7	1448.3	1461.1	1462.5	1461.1
20°	1434.1	1421.2	1438.3	1436.9	1438.3
22.5°	1402.8	1392.8	1411.3	1407.0	1408.4
25°	1370.0	1360.1	1380.0	1375.7	1375.7
27.5°	1331.6	1324.5	1345.8	1341.6	1341.6
30°	1293.2	1286.1	1308.9	1303.2	1303.2
32.5°	1250.5	1246.3	1267.6	1260.5	1260.5
35°	1205.0	1202.2	1223.5	1215.0	1215.0
37.5°	1159.5	1156.6	1176.5	1166.6	1162.3
40°	1108.3	1106.8	1123.9	1112.5	1112.5
42.5°	1057.0	1055.6	1069.8	1055.6	1055.6
45°	1004.4	1001.6	1011.5	998.7	995.9
47.5°	947.5	944.7	951.8	937.5	936.1
50°	889.2	886.3	889.2	876.4	874.9
52.5°	829.4	823.7	823.7	810.9	810.9
55°	768.2	758.3	758.3	746.9	746.9
57.5°	704.2	691.4	692.8	682.9	681.5
60°	637.4	623.1	624.6	616.0	614.6
62.5°	571.9	554.8	559.1	549.2	549.2
65°	497.9	486.6	488.0	483.7	483.7
67.5°	429.6	418.3	425.4	421.1	421.1
70°	352.8	345.7	355.7	355.7	354.2
72.5°	281.7	283.1	295.9	295.9	297.3
75°	214.8	224.8	237.6	239.0	239.0
77.5°	153.6	170.7	184.9	184.9	184.9
80°	102.4	122.3	135.2	138.0	136.6
82.5°	61.2	82.5	92.5	95.3	93.9
85°	31.3	48.4	56.9	58.3	56.9
87.5°	11.4	24.2	28.5	28.5	25.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)