

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: P688647

Luminaire Tested: SQ4R-PC3-050D-92765-1-UNV-STD-W-4_4000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688647
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-PC3-050D-92765-1-UNV-STD-W-4_4000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1981.2 lumens
Efficiency: N/A
Efficacy: 93.5 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

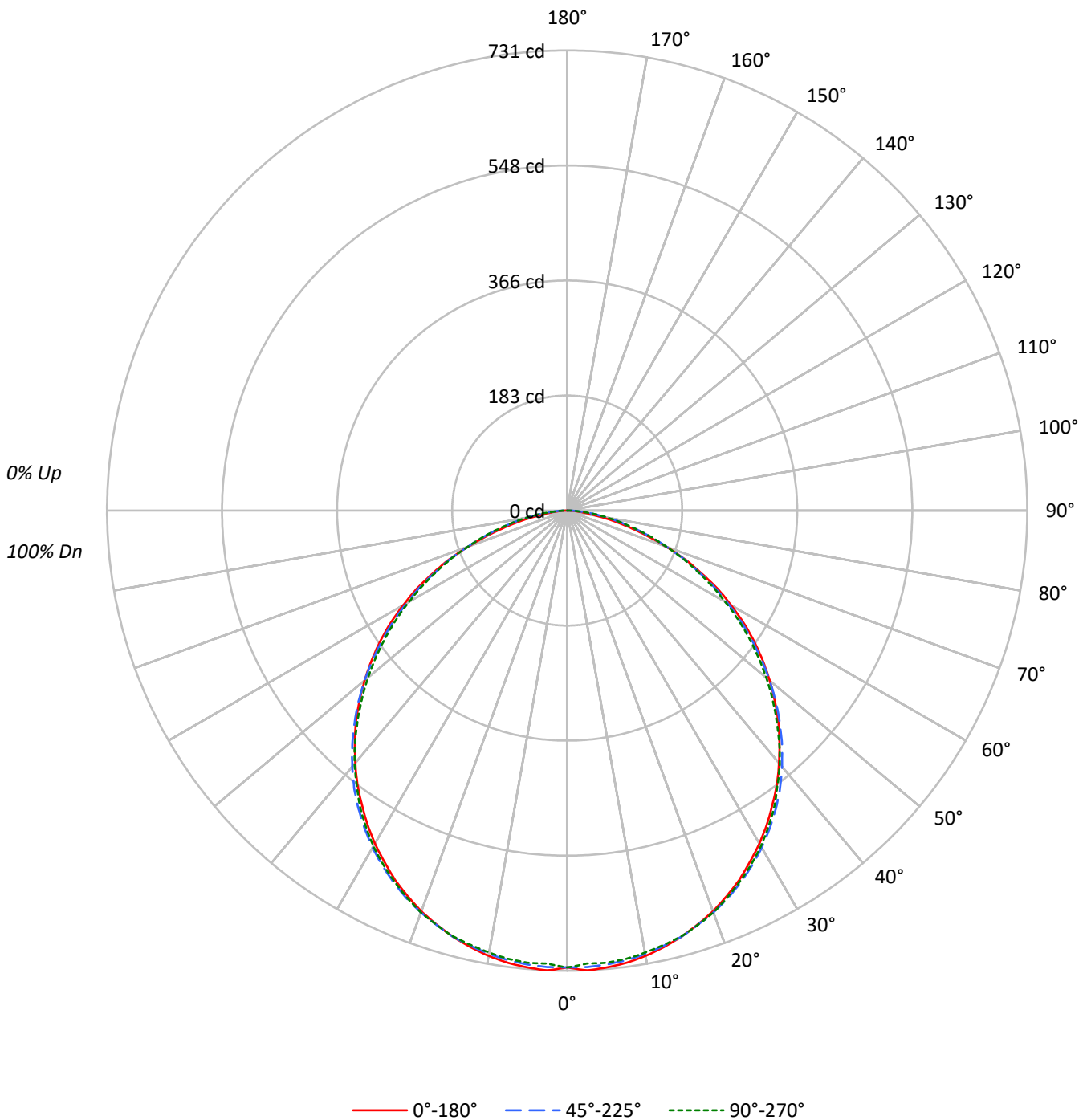
Input Watts (W): 21.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	6988	6988	6988
5°	7040	6995	6969
10°	7023	6991	6970
15°	6986	6986	6980
20°	6940	6961	6961
25°	6875	6925	6904
30°	6791	6873	6843
35°	6690	6793	6745
40°	6579	6672	6604
45°	6460	6505	6405
50°	6291	6291	6190
55°	6091	6012	5922
60°	5798	5680	5590
65°	5358	5251	5205
70°	4692	4729	4709
75°	3776	4174	4200
80°	2683	3537	3576
85°	1635	2971	2971

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6505 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.7	3.5
10°-20°	197.2	10.0
20°-30°	298.7	15.1
30°-40°	358.1	18.1
40°-50°	365.1	18.4
50°-60°	318.7	16.1
60°-70°	228.2	11.5
70°-80°	117.2	5.9
80°-90°	29.3	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°	564.6	28.5
0°-40°	922.7	46.6
0°-60°	1606.5	81.1
0°-90°	1981.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1981.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	726	726	726	726	726	
5°	728	721	724	722	721	69
15°	701	695	701	701	700	198
25°	647	642	652	650	650	298
35°	569	568	578	574	574	356
45°	474	473	478	472	470	365
55°	363	358	358	353	353	324
65°	235	230	230	228	228	233
75°	102	106	112	113	113	109
85°	15	23	27	28	27	20
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	725.8	725.8	725.8	725.8	725.8
2.5°	731.2	723.1	725.8	723.8	720.4
5°	728.5	721.1	723.8	721.8	721.1
7.5°	724.5	717.1	720.4	719.1	718.4
10°	718.4	711.0	715.1	713.7	713.0
12.5°	710.4	703.6	708.3	707.0	707.0
15°	700.9	694.9	700.9	700.9	700.3
17.5°	689.5	684.1	690.2	690.9	690.2
20°	677.4	671.4	679.4	678.8	679.4
22.5°	662.6	657.9	666.7	664.7	665.3
25°	647.2	642.5	651.9	649.9	649.9
27.5°	629.0	625.7	635.8	633.7	633.7
30°	610.9	607.5	618.3	615.6	615.6
32.5°	590.7	588.7	598.8	595.4	595.4
35°	569.2	567.9	578.0	573.9	573.9
37.5°	547.7	546.4	555.8	551.1	549.1
40°	523.5	522.9	530.9	525.5	525.5
42.5°	499.3	498.7	505.4	498.7	498.7
45°	474.5	473.1	477.8	471.8	470.4
47.5°	447.6	446.2	449.6	442.9	442.2
50°	420.0	418.7	420.0	414.0	413.3
52.5°	391.8	389.1	389.1	383.1	383.1
55°	362.9	358.2	358.2	352.8	352.8
57.5°	332.7	326.6	327.3	322.6	321.9
60°	301.1	294.4	295.0	291.0	290.3
62.5°	270.2	262.1	264.1	259.4	259.4
65°	235.2	229.8	230.5	228.5	228.5
67.5°	203.0	197.6	200.9	198.9	198.9
70°	166.7	163.3	168.0	168.0	167.3
72.5°	133.1	133.7	139.8	139.8	140.5
75°	101.5	106.2	112.2	112.9	112.9
77.5°	72.6	80.6	87.4	87.4	87.4
80°	48.4	57.8	63.8	65.2	64.5
82.5°	28.9	39.0	43.7	45.0	44.4
85°	14.8	22.8	26.9	27.6	26.9
87.5°	5.4	11.4	13.4	13.4	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)