

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: P688536

Luminaire Tested: SQ4R-PP3-050D-830-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688536
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2103-172-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PP3-050D-830-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1943.4 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

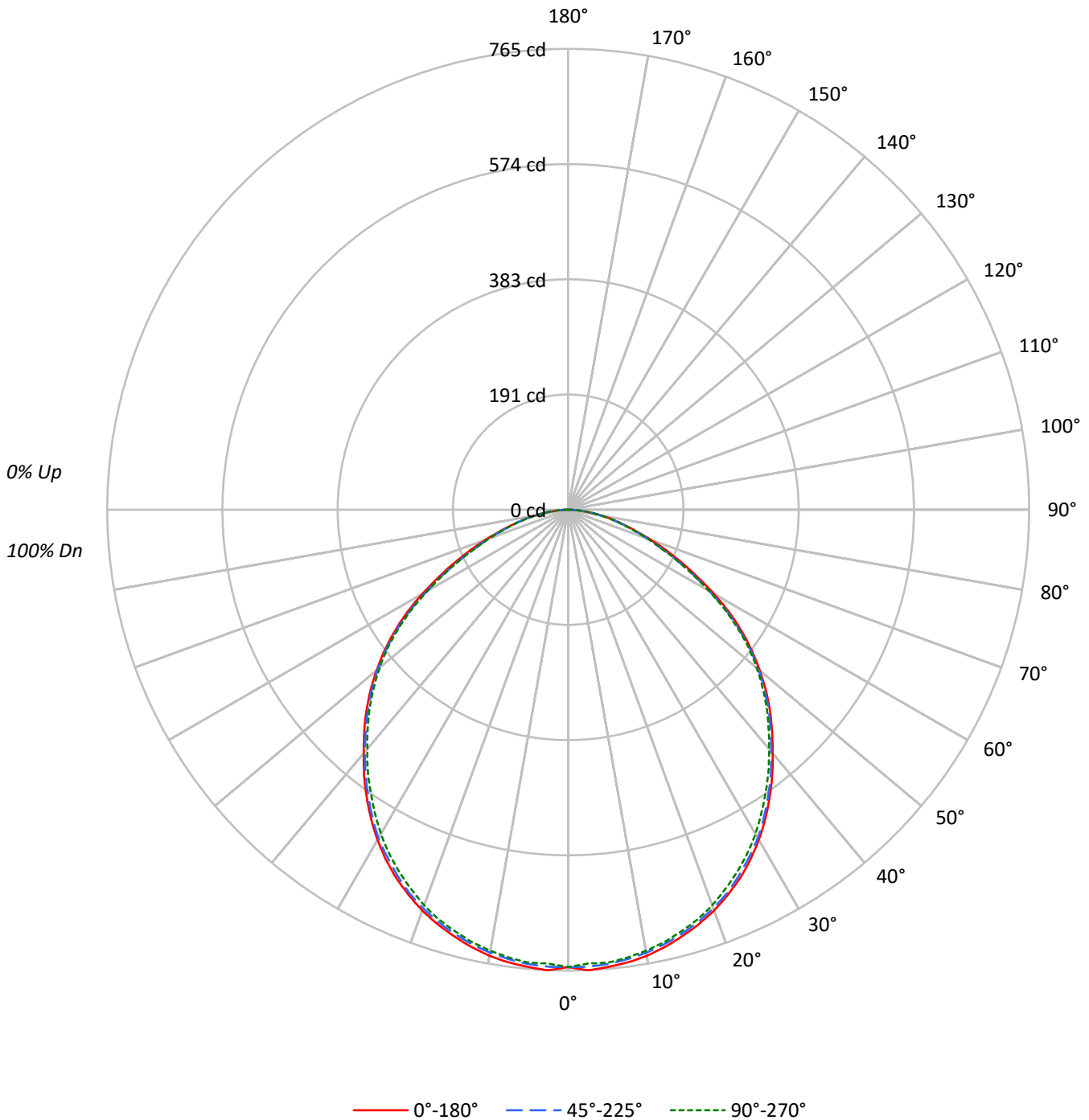
Input Watts (W): 18.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P688536

CATALOG NUMBER: SQ4R-PP3-050D-830-1-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER: P688536

CATALOG NUMBER: SQ4R-PP3-050D-830-1-UNV-STD-W-4

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	101	97	107	103	99	96	98	95	93		95	92	90		91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77		84	79	76		81	77	74	72
3	92	81	74	67	89	80	73	67	77	71	66		74	69	64		72	67	63	61
4	84	72	64	57	82	71	63	57	69	62	56		66	60	56		64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49		60	53	48		58	52	48	46
6	72	59	50	44	70	58	49	43	56	49	43		54	48	43		53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38		49	43	38		48	42	38	36
8	62	49	40	35	60	48	40	34	47	39	34		45	39	34		44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31		42	35	31		41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28		39	33	28		38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7310	7310	7310
5°	7364	7319	7294
10°	7351	7300	7267
15°	7303	7263	7223
20°	7255	7214	7159
25°	7168	7119	7048
30°	7036	6999	6910
35°	6852	6805	6719
40°	6632	6590	6515
45°	6451	6406	6342
50°	6220	6180	6120
55°	5898	5819	5776
60°	5368	5216	5189
65°	4729	4533	4517
70°	4084	3915	3915
75°	3515	3467	3415
80°	3099	3138	3060
85°	2430	2651	2651

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6451 cd/sqm

TEST NUMBER: P688536

CATALOG NUMBER: SQ4R-PP3-050D-830-1-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.8	3.7
10°-20°	205.1	10.6
20°-30°	307.3	15.8
30°-40°	360.4	18.5
40°-50°	361.5	18.6
50°-60°	308.7	15.9
60°-70°	200.6	10.3
70°-80°	100.5	5.2
80°-90°	27.6	1.4
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°	584.3	30.1
0°-40°	944.6	48.6
0°-60°	1614.8	83.1
0°-90°	1943.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1943.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	759	759	759	759	759	
5°	762	755	757	755	755	72
15°	733	725	729	726	725	207
25°	675	667	670	664	664	311
35°	583	577	579	572	572	364
45°	474	470	470	466	466	365
55°	351	350	347	345	344	313
65°	208	204	199	198	198	207
75°	94	94	93	92	92	102
85°	22	24	24	24	24	26
90°	0	0	0	0	0	

TEST NUMBER: P688536

CATALOG NUMBER: SQ4R-PP3-050D-830-1-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	759.3	759.3	759.3	759.3	759.3
2.5°	765.3	757.3	759.3	758.0	754.0
5°	762.0	754.7	757.3	754.7	754.7
7.5°	758.0	750.0	752.7	750.0	750.0
10°	752.0	744.0	746.7	744.0	743.4
12.5°	743.4	735.4	738.7	735.4	735.4
15°	732.7	725.4	728.7	726.1	724.7
17.5°	721.4	713.4	717.4	714.1	713.4
20°	708.1	700.1	704.1	698.8	698.8
22.5°	692.1	684.1	688.8	681.5	681.5
25°	674.8	666.8	670.2	664.2	663.5
27.5°	654.9	646.9	650.2	643.5	643.5
30°	632.9	625.6	629.6	622.2	621.6
32.5°	608.9	602.3	604.9	597.6	597.0
35°	583.0	577.0	579.0	572.3	571.7
37.5°	556.4	549.7	552.4	546.4	546.4
40°	527.7	523.7	524.4	519.8	518.4
42.5°	501.1	496.5	497.1	492.5	492.5
45°	473.8	470.5	470.5	465.8	465.8
47.5°	445.2	442.6	441.9	437.9	437.9
50°	415.3	413.3	412.6	409.3	408.6
52.5°	384.0	383.3	380.7	378.0	378.0
55°	351.4	350.1	346.7	344.7	344.1
57.5°	316.8	314.1	310.8	307.5	308.1
60°	278.8	276.2	270.9	269.5	269.5
62.5°	242.2	238.9	233.6	231.6	232.9
65°	207.6	203.6	199.0	197.7	198.3
67.5°	175.7	171.7	166.4	166.4	165.7
70°	145.1	143.1	139.1	139.1	139.1
72.5°	117.8	117.1	114.5	114.5	113.8
75°	94.5	94.5	93.2	92.5	91.8
77.5°	74.5	74.5	73.9	73.2	71.9
80°	55.9	57.2	56.6	55.9	55.2
82.5°	38.6	39.9	39.9	38.6	38.6
85°	22.0	24.0	24.0	24.0	24.0
87.5°	7.3	10.0	10.6	10.6	11.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)