

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: P688608

Luminaire Tested: SQ4R-PW1-050D-830-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688608
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-PW1-050D-830-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES 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: 1858.1 lumens
Efficiency: N/A
Efficacy: 98.3 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

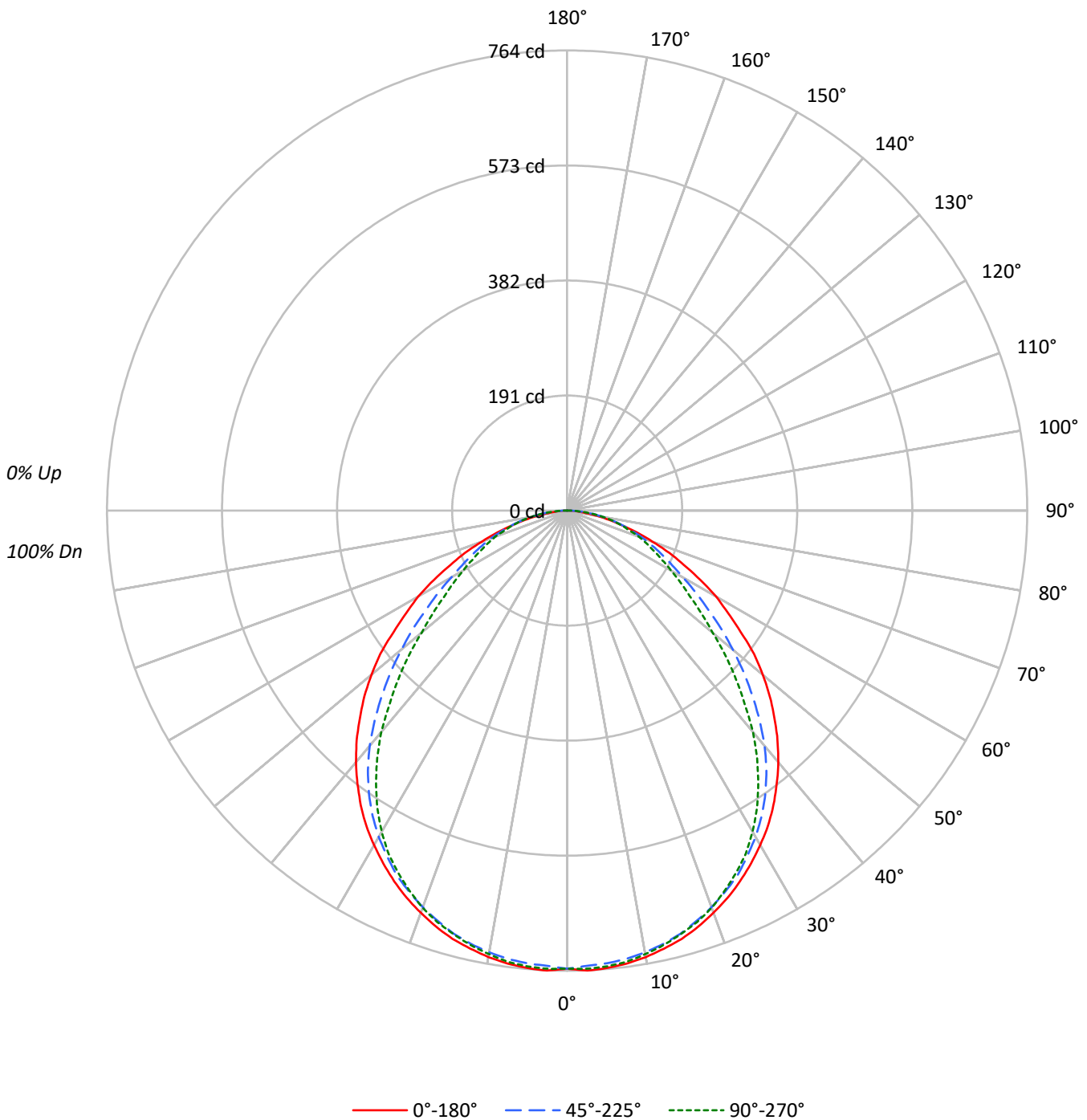
Input Watts (W): 18.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	101	97	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78		84	80	76		81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66		75	69	65		72	68	64	62
4	85	73	65	58	82	72	64	58	69	63	57		67	61	56		65	60	56	54
5	78	66	57	51	76	65	57	50	63	55	50		61	54	49		59	53	49	47
6	72	59	51	45	70	59	50	44	57	49	44		55	49	44		54	48	43	41
7	67	54	46	40	65	53	45	40	52	45	39		50	44	39		49	43	39	37
8	63	50	41	36	61	49	41	36	48	40	35		46	40	35		45	39	35	33
9	59	46	38	32	57	45	37	32	44	37	32		43	36	32		42	36	32	30
10	55	42	34	29	54	42	34	29	41	34	29		40	33	29		39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7322	7322	7322
5°	7368	7293	7340
10°	7358	7281	7310
15°	7336	7248	7258
20°	7280	7180	7190
25°	7216	7102	7050
30°	7128	6955	6846
35°	7019	6744	6502
40°	6854	6412	6031
45°	6628	5923	5404
50°	6353	5372	4728
55°	5907	4774	4184
60°	5495	4273	3839
65°	4877	3964	3629
70°	4236	3769	3578
75°	3489	3563	3418
80°	2767	3360	3360
85°	2055	3027	3126

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6628 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.2	3.9
10°-20°	206.1	11.1
20°-30°	308.7	16.6
30°-40°	358.7	19.3
40°-50°	338.4	18.2
50°-60°	264.0	14.2
60°-70°	179.2	9.6
70°-80°	100.9	5.4
80°-90°	30.0	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°	586.9	31.6
0°-40°	945.6	50.9
0°-60°	1548.0	83.3
0°-90°	1858.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1858.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	760	760	760	760	760	
5°	762	760	755	760	760	72
15°	736	733	727	731	728	208
25°	679	676	669	667	664	313
35°	597	591	574	561	553	373
45°	487	472	435	408	397	375
55°	352	331	284	257	249	316
65°	214	194	174	163	159	214
75°	94	98	96	92	92	102
85°	19	26	27	27	28	22
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	760.5	760.5	760.5	760.5	760.5
2.5°	764.4	762.4	756.6	762.4	761.5
5°	762.4	760.5	754.6	760.5	759.5
7.5°	758.5	757.5	750.7	756.6	755.6
10°	752.7	751.7	744.8	749.7	747.8
12.5°	744.8	743.9	737.0	740.9	739.0
15°	736.0	733.1	727.2	731.2	728.2
17.5°	724.3	721.4	714.5	717.5	716.5
20°	710.6	707.7	700.8	703.8	701.8
22.5°	696.0	693.0	685.2	686.2	683.3
25°	679.3	676.4	668.6	666.6	663.7
27.5°	660.8	658.8	647.1	645.1	642.2
30°	641.2	638.3	625.6	621.7	615.8
32.5°	620.7	614.8	601.1	593.3	586.5
35°	597.2	591.4	573.8	561.1	553.2
37.5°	571.8	563.0	543.5	525.9	518.1
40°	545.4	535.7	510.2	486.8	479.9
42.5°	517.1	505.4	473.1	448.7	436.9
45°	486.8	472.1	435.0	407.6	396.9
47.5°	456.5	437.9	397.8	368.5	356.8
50°	424.2	401.7	358.7	327.5	315.7
52.5°	391.0	366.6	322.6	290.3	281.5
55°	351.9	331.4	284.4	257.1	249.3
57.5°	316.7	294.2	253.2	229.7	223.8
60°	285.4	258.1	221.9	204.3	199.4
62.5°	249.3	224.8	196.5	182.8	177.9
65°	214.1	194.5	174.0	163.2	159.3
67.5°	183.8	167.1	153.5	144.7	142.7
70°	150.5	141.7	133.9	127.1	127.1
72.5°	122.2	119.3	114.4	110.5	107.5
75°	93.8	97.7	95.8	91.9	91.9
77.5°	71.4	77.2	78.2	76.2	77.2
80°	49.9	58.6	60.6	59.6	60.6
82.5°	31.3	42.0	44.0	44.0	45.0
85°	18.6	26.4	27.4	27.4	28.3
87.5°	7.8	12.7	13.7	13.7	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)