

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P686277

Luminaire Tested: SQ4R-F-050D-92765-1-UNV-STD-W-4_2700K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686277
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-050D-92765-1-UNV-STD-W-4_2700K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 2700K-6500I
500 LUMENS PER FOOT
Light Source: 2700K AND 6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

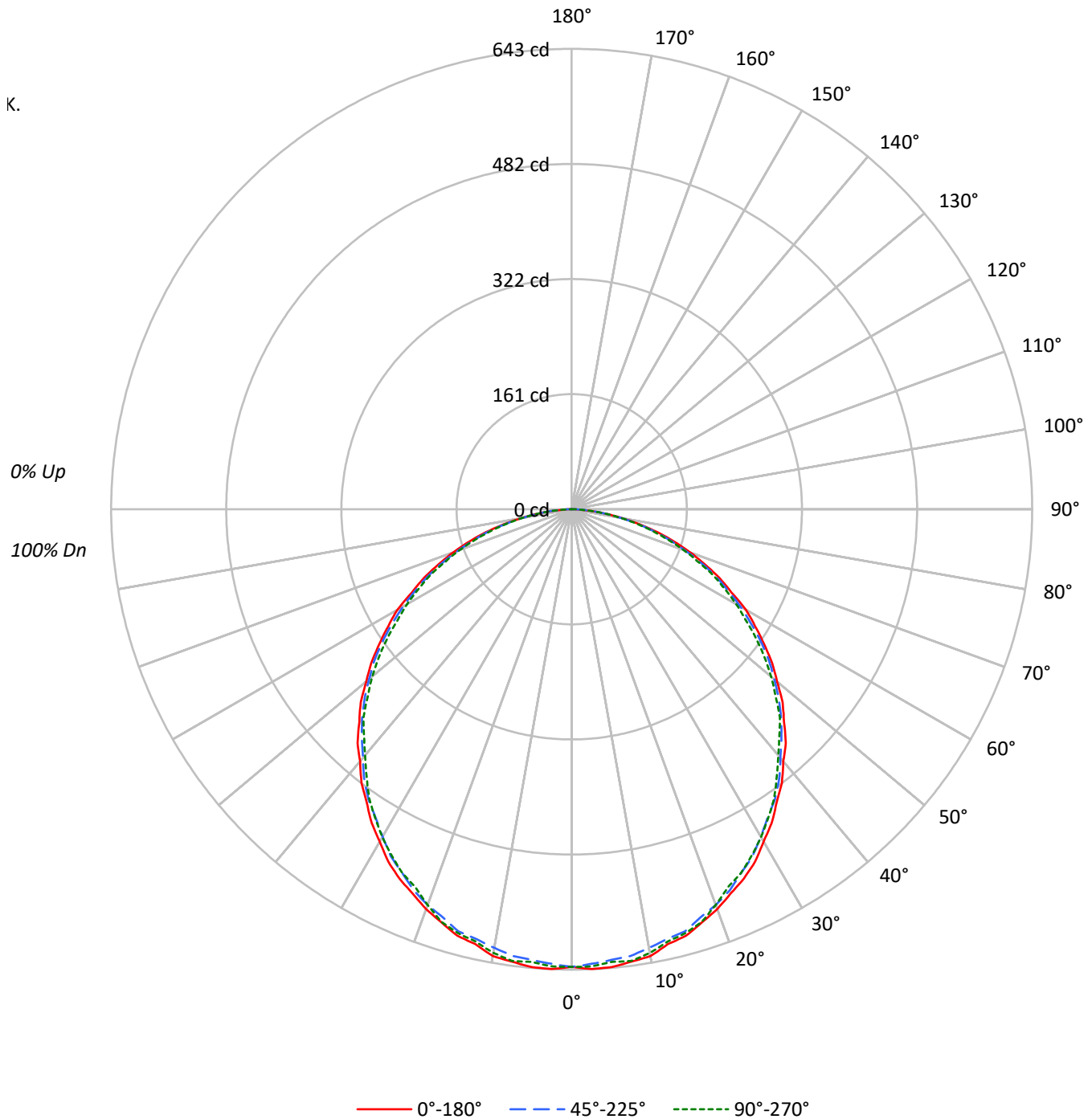
Lumens per Lamp: N/A
Luminaire Lumens: 1787.1 lumens
Efficiency: N/A
Efficacy: 85.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 21
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	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6153	6153	6153
5°	6202	6107	6133
10°	6195	6081	6151
15°	6146	6084	6110
20°	6088	6023	6023
25°	6045	5950	5950
30°	5957	5867	5877
35°	5866	5813	5792
40°	5776	5697	5640
45°	5707	5634	5597
50°	5606	5525	5444
55°	5499	5408	5274
60°	5409	5237	5116
65°	5194	5050	4968
70°	4951	4749	4675
75°	4609	4441	4307
80°	3931	3831	3831
85°	2872	2971	2872

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 5720 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.5	3.4
10°-20°	172.6	9.7
20°-30°	259.4	14.5
30°-40°	309.7	17.3
40°-50°	319.6	17.9
50°-60°	287.8	16.1
60°-70°	219.0	12.3
70°-80°	125.7	7.0
80°-90°	32.7	1.8
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°	492.6	27.6
0°-40°	802.3	44.9
0°-60°	1409.7	78.9
0°-90°	1787.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1787.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	639	639	639	639	639	
5°	642	639	632	639	635	61
15°	617	614	610	612	613	174
25°	569	565	560	562	560	262
35°	499	498	495	493	493	313
45°	419	420	414	410	411	324
55°	328	328	322	320	314	293
65°	228	225	222	217	218	225
75°	124	120	119	117	116	130
85°	26	27	27	27	26	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	639.1	639.1	639.1	639.1	639.1
2.5°	642.7	642.7	635.5	640.0	639.1
5°	641.8	639.1	631.9	639.1	634.6
7.5°	637.3	632.8	629.2	633.7	636.4
10°	633.7	632.8	622.0	627.4	629.2
12.5°	622.0	626.5	614.8	618.4	618.4
15°	616.6	613.9	610.4	612.1	613.0
17.5°	605.0	603.2	597.8	602.3	604.1
20°	594.2	591.5	587.9	588.8	587.9
22.5°	580.7	578.9	576.2	576.2	570.9
25°	569.1	564.6	560.1	561.9	560.1
27.5°	554.7	551.1	546.6	547.5	544.8
30°	535.9	536.7	527.8	527.8	528.7
32.5°	519.7	516.1	509.8	509.8	510.7
35°	499.1	498.2	494.6	492.8	492.8
37.5°	482.0	482.0	475.7	473.0	470.3
40°	459.6	460.5	453.3	452.4	448.8
42.5°	442.5	440.7	433.5	432.6	429.0
45°	419.2	420.1	413.8	410.2	411.1
47.5°	399.4	396.7	392.2	388.6	386.0
50°	374.3	373.4	368.9	366.2	363.5
52.5°	352.7	350.1	347.4	341.1	339.3
55°	327.6	328.5	322.2	319.5	314.2
57.5°	303.4	302.5	297.1	292.6	288.1
60°	280.9	278.2	272.0	267.5	265.7
62.5°	251.3	250.4	245.9	242.3	240.6
65°	228.0	225.3	221.7	217.2	218.1
67.5°	201.1	199.3	195.7	192.1	190.3
70°	175.9	173.2	168.7	166.9	166.1
72.5°	149.9	147.2	143.6	140.0	140.9
75°	123.9	120.3	119.4	116.7	115.8
77.5°	96.9	95.1	93.3	92.5	91.6
80°	70.9	71.8	69.1	68.2	69.1
82.5°	48.5	48.5	47.6	46.7	47.6
85°	26.0	26.9	26.9	26.9	26.0
87.5°	9.0	10.8	11.7	11.7	10.8
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	18.14	19.78	18.50	20.09	20.41	17.90	19.54	18.26	19.85	20.17
	3H	19.97	21.46	20.35	21.78	22.14	19.70	21.19	20.08	21.51	21.87
	4H	20.66	22.06	21.06	22.41	22.78	20.37	21.77	20.77	22.12	22.49
	6H	21.15	22.44	21.56	22.81	23.20	20.86	22.15	21.27	22.52	22.91
	8H	21.29	22.53	21.72	22.92	23.32	21.01	22.24	21.43	22.63	23.03
	12H	21.37	22.56	21.80	22.94	23.37	21.09	22.28	21.52	22.66	23.09
4H	2H	18.75	20.15	19.15	20.50	20.87	18.56	19.96	18.96	20.31	20.68
	3H	20.80	21.98	21.21	22.37	22.77	20.58	21.75	20.99	22.15	22.55
	4H	21.62	22.68	22.05	23.09	23.53	21.38	22.44	21.81	22.85	23.29
	6H	22.23	23.16	22.69	23.60	24.06	21.98	22.91	22.44	23.35	23.80
	8H	22.42	23.29	22.88	23.73	24.20	22.17	23.04	22.63	23.49	23.95
	12H	22.54	23.32	23.02	23.80	24.27	22.30	23.08	22.78	23.55	24.02
8H	4H	21.92	22.79	22.38	23.23	23.69	21.70	22.57	22.16	23.01	23.48
	6H	22.65	23.37	23.14	23.86	24.33	22.42	23.14	22.91	23.63	24.11
	8H	22.91	23.55	23.41	24.06	24.54	22.68	23.33	23.19	23.84	24.32
	12H	23.08	23.66	23.59	24.15	24.71	22.87	23.44	23.38	23.93	24.49
12H	4H	21.95	22.73	22.43	23.20	23.67	21.74	22.52	22.22	22.99	23.46
	6H	22.69	23.34	23.20	23.85	24.33	22.48	23.13	22.99	23.63	24.12
	8H	23.01	23.58	23.51	24.07	24.63	22.79	23.37	23.30	23.86	24.42