

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: P686285

Luminaire Tested: SQ4R-F-050D-93050-1-UNV-STD-W-4_3000K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686285
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-21)
Test Lab: INNOVATION CENTER
Issue Date: 5/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-050D-93050-1-UNV-STD-W-4_3000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 3000K-5000K
500 LUMENS PER FOOT
Light Source: 3000K AND 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

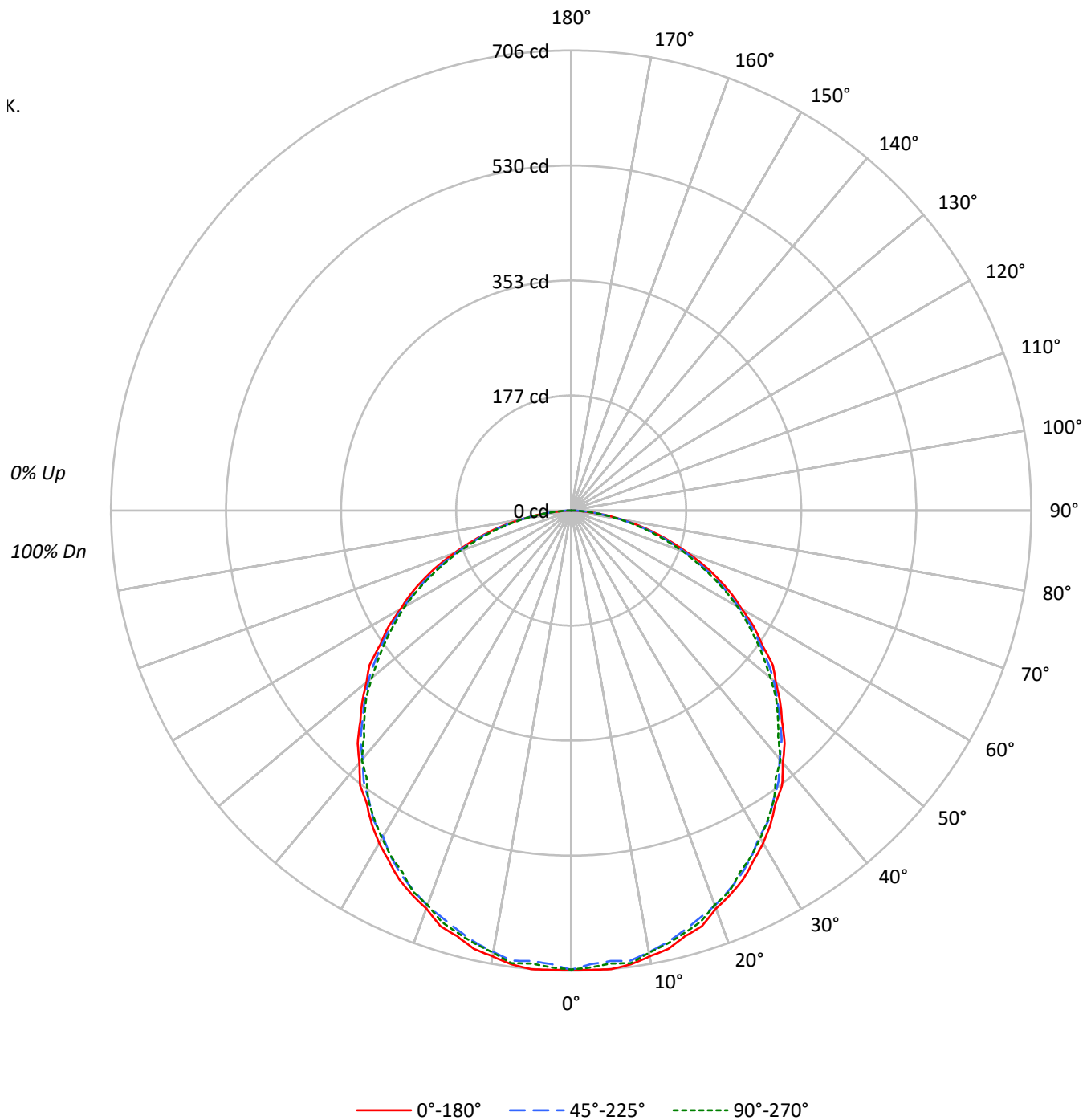
Lumens per Lamp: N/A
Luminaire Lumens: 1959.5 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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	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					100			
1	109	104	100	96	106	102	98	94	97	94	91	94	91	88	90	88	86	84					84			
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70					70			
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59					59			
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50					50			
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43					43			
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38					38			
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6781	6781	6781
5°	6825	6703	6741
10°	6789	6723	6733
15°	6738	6650	6689
20°	6656	6606	6596
25°	6632	6549	6507
30°	6550	6420	6452
35°	6431	6363	6375
40°	6350	6252	6276
45°	6229	6162	6109
50°	6136	6078	5976
55°	5992	5910	5813
60°	5823	5728	5672
65°	5688	5488	5399
70°	5382	5216	5106
75°	4970	4824	4679
80°	4275	4219	4108
85°	3126	3237	3126

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 6256 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.6	3.4
10°-20°	189.8	9.7
20°-30°	284.9	14.5
30°-40°	340.4	17.4
40°-50°	350.3	17.9
50°-60°	315.6	16.1
60°-70°	239.8	12.2
70°-80°	137.0	7.0
80°-90°	35.2	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°	541.2	27.6
0°-40°	881.6	45.0
0°-60°	1547.5	79.0
0°-90°	1959.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1959.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	704	704	704	704	704	
5°	706	701	694	701	698	67
15°	676	675	667	674	671	191
25°	624	618	616	618	613	287
35°	547	550	541	539	542	344
45°	458	460	453	450	449	354
55°	357	361	352	349	346	321
65°	250	248	241	237	237	246
75°	134	132	130	127	126	141
85°	28	29	29	28	28	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	704.3	704.3	704.3	704.3	704.3
2.5°	705.3	705.3	696.5	706.2	701.4
5°	706.2	701.4	693.6	701.4	697.5
7.5°	702.3	695.5	696.5	697.5	700.4
10°	694.5	691.6	687.7	691.6	688.7
12.5°	688.7	688.7	678.9	682.8	680.9
15°	676.0	675.0	667.2	674.1	671.1
17.5°	668.2	663.3	655.5	660.4	661.4
20°	649.7	650.6	644.8	649.7	643.8
22.5°	638.0	641.9	631.1	637.0	633.1
25°	624.3	617.5	616.5	617.5	612.6
27.5°	605.8	604.8	598.9	597.0	598.0
30°	589.2	591.1	577.5	577.5	580.4
32.5°	569.7	568.7	563.8	559.0	561.9
35°	547.2	550.2	541.4	539.4	542.4
37.5°	531.6	527.7	522.9	519.9	516.0
40°	505.3	507.3	497.5	497.5	499.4
42.5°	484.8	483.8	478.0	474.1	470.2
45°	457.5	459.5	452.6	449.7	448.7
47.5°	435.1	434.1	429.2	423.4	426.3
50°	409.7	408.7	405.8	399.9	399.0
52.5°	390.2	386.3	379.5	374.6	372.6
55°	357.0	360.9	352.1	349.2	346.3
57.5°	332.6	330.7	325.8	320.9	320.0
60°	302.4	302.4	297.5	294.6	294.6
62.5°	278.0	275.1	269.2	267.3	266.3
65°	249.7	247.8	240.9	237.0	237.0
67.5°	221.4	219.5	212.7	208.8	208.8
70°	191.2	189.2	185.3	182.4	181.4
72.5°	161.9	161.0	157.1	154.1	152.2
75°	133.6	131.7	129.7	126.8	125.8
77.5°	106.3	104.4	102.4	99.5	98.5
80°	77.1	76.1	76.1	73.2	74.1
82.5°	52.7	52.7	51.7	49.7	50.7
85°	28.3	29.3	29.3	28.3	28.3
87.5°	9.8	11.7	12.7	11.7	11.7
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	18.42	20.06	18.79	20.37	20.69	18.23	19.87	18.60	20.19	20.50
	3H	20.26	21.74	20.64	22.07	22.43	20.02	21.50	20.40	21.83	22.19
	4H	20.94	22.34	21.34	22.69	23.06	20.68	22.07	21.08	22.42	22.80
	6H	21.42	22.72	21.83	23.08	23.47	21.15	22.44	21.56	22.81	23.20
	8H	21.56	22.80	21.99	23.19	23.59	21.29	22.53	21.72	22.92	23.32
	12H	21.64	22.83	22.07	23.21	23.64	21.38	22.56	21.81	22.94	23.37
4H	2H	19.03	20.43	19.43	20.77	21.15	18.88	20.28	19.28	20.63	21.00
	3H	21.09	22.26	21.50	22.66	23.06	20.89	22.06	21.30	22.46	22.86
	4H	21.90	22.96	22.33	23.37	23.81	21.67	22.73	22.10	23.15	23.58
	6H	22.50	23.43	22.96	23.87	24.32	22.26	23.19	22.72	23.63	24.09
	8H	22.69	23.56	23.15	24.00	24.46	22.45	23.32	22.91	23.76	24.22
	12H	22.81	23.59	23.29	24.06	24.53	22.57	23.35	23.05	23.83	24.29
8H	4H	22.20	23.07	22.66	23.51	23.97	22.00	22.87	22.46	23.31	23.77
	6H	22.91	23.63	23.41	24.12	24.60	22.70	23.42	23.19	23.91	24.38
	8H	23.17	23.81	23.68	24.32	24.81	22.95	23.60	23.46	24.11	24.59
	12H	23.35	23.92	23.85	24.41	24.97	23.13	23.71	23.64	24.20	24.76
12H	4H	22.23	23.01	22.71	23.48	23.95	22.03	22.81	22.51	23.29	23.76
	6H	22.96	23.61	23.47	24.12	24.60	22.76	23.40	23.26	23.91	24.40
	8H	23.27	23.84	23.78	24.33	24.89	23.06	23.63	23.57	24.12	24.69