

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: P686284

Luminaire Tested: SQ4R-F-050D-92765-1-UNV-STD-W-4_6500K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686284
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_6500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 2700K-6500K
500 LUMENS PER FOOT
Light Source: 2700K AND 6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

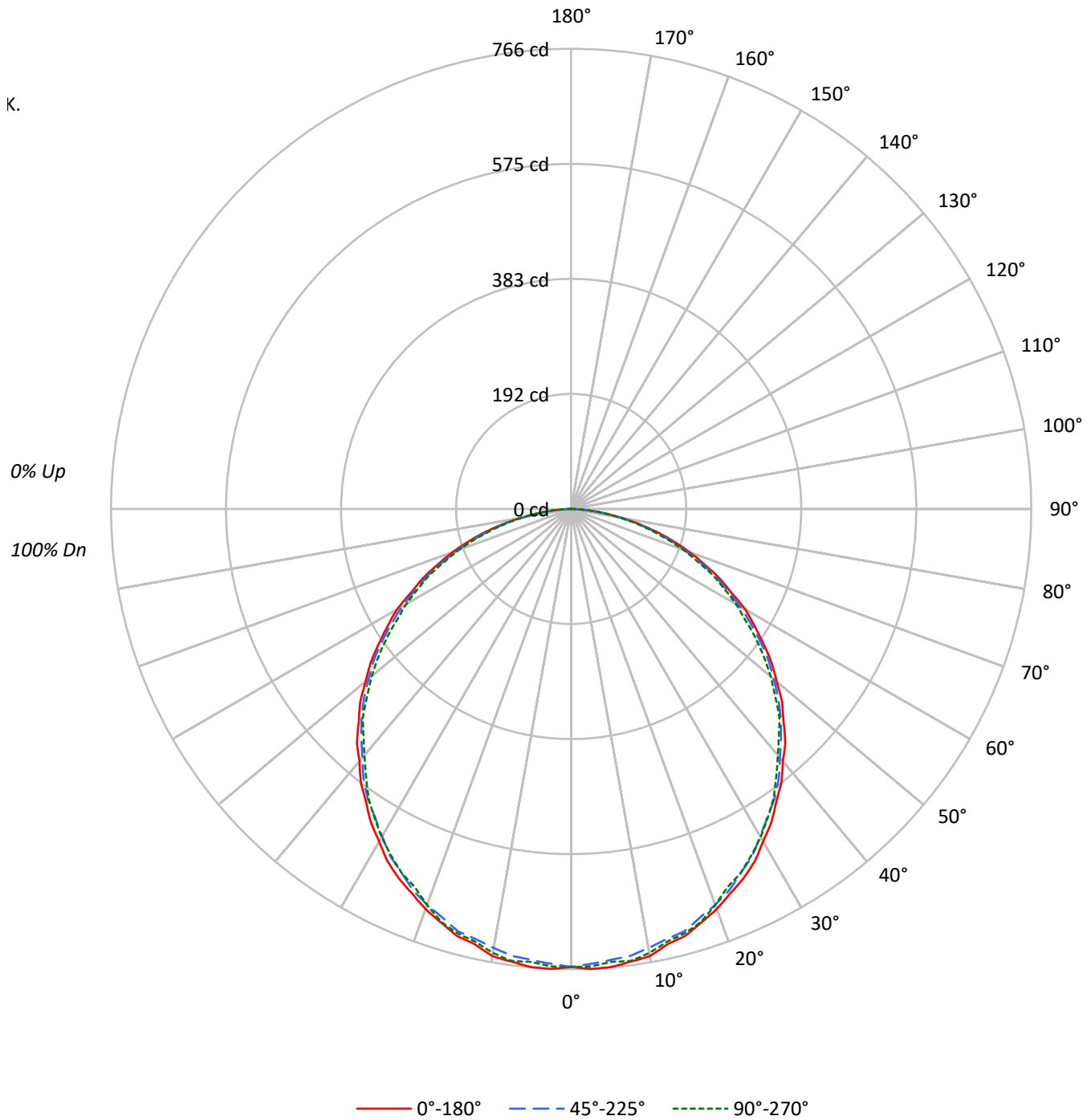
Lumens per Lamp: N/A
Luminaire Lumens: 2131.4 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 21.2
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	93	91	88	90	88	86	84					84			
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70					70			
3	90	79	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	34	29	41	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7338	7338	7338
5°	7397	7283	7314
10°	7389	7253	7336
15°	7330	7255	7287
20°	7261	7184	7184
25°	7210	7096	7096
30°	7105	6997	7009
35°	6995	6932	6907
40°	6888	6794	6726
45°	6806	6719	6675
50°	6686	6590	6493
55°	6558	6450	6289
60°	6452	6246	6102
65°	6194	6023	5925
70°	5906	5666	5573
75°	5494	5297	5137
80°	4690	4568	4568
85°	3424	3546	3424

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 6821 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.2	3.4
10°-20°	205.9	9.7
20°-30°	309.4	14.5
30°-40°	369.4	17.3
40°-50°	381.1	17.9
50°-60°	343.3	16.1
60°-70°	261.2	12.3
70°-80°	149.9	7.0
80°-90°	39.0	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°	587.5	27.6
0°-40°	956.9	44.9
0°-60°	1681.3	78.9
0°-90°	2131.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2131.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	762	762	762	762	762	
5°	765	762	754	762	757	73
15°	735	732	728	730	731	207
25°	679	673	668	670	668	312
35°	595	594	590	588	588	373
45°	500	501	494	489	490	386
55°	391	392	384	381	375	350
65°	272	269	264	259	260	268
75°	148	143	142	139	138	155
85°	31	32	32	32	31	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	762.2	762.2	762.2	762.2	762.2
2.5°	766.5	766.5	757.9	763.3	762.2
5°	765.4	762.2	753.6	762.2	756.8
7.5°	760.0	754.7	750.4	755.8	759.0
10°	755.8	754.7	741.9	748.3	750.4
12.5°	741.9	747.2	733.3	737.6	737.6
15°	735.4	732.2	727.9	730.1	731.1
17.5°	721.5	719.4	712.9	718.3	720.4
20°	708.7	705.5	701.2	702.2	701.2
22.5°	692.6	690.5	687.3	687.3	680.8
25°	678.7	673.3	668.0	670.1	668.0
27.5°	661.6	657.3	651.9	653.0	649.8
30°	639.1	640.2	629.4	629.4	630.5
32.5°	619.8	615.5	608.0	608.0	609.1
35°	595.2	594.1	589.8	587.7	587.7
37.5°	574.9	574.9	567.4	564.1	560.9
40°	548.1	549.2	540.6	539.5	535.2
42.5°	527.8	525.6	517.0	516.0	511.7
45°	499.9	501.0	493.5	489.2	490.3
47.5°	476.4	473.2	467.8	463.5	460.3
50°	446.4	445.3	440.0	436.8	433.5
52.5°	420.7	417.5	414.3	406.8	404.6
55°	390.7	391.8	384.3	381.1	374.7
57.5°	361.8	360.8	354.3	349.0	343.6
60°	335.1	331.9	324.4	319.0	316.9
62.5°	299.7	298.7	293.3	289.0	286.9
65°	271.9	268.7	264.4	259.1	260.1
67.5°	239.8	237.6	233.4	229.1	226.9
70°	209.8	206.6	201.3	199.1	198.0
72.5°	178.8	175.6	171.3	167.0	168.1
75°	147.7	143.4	142.4	139.2	138.1
77.5°	115.6	113.5	111.3	110.3	109.2
80°	84.6	85.6	82.4	81.4	82.4
82.5°	57.8	57.8	56.7	55.7	56.7
85°	31.0	32.1	32.1	32.1	31.0
87.5°	10.7	12.8	13.9	13.9	12.8
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	18.75	20.39	19.12	20.71	21.02	18.51	20.15	18.87	20.46	20.78
	3H	20.59	22.07	20.96	22.40	22.76	20.31	21.80	20.69	22.12	22.48
	4H	21.27	22.67	21.67	23.02	23.39	20.98	22.38	21.38	22.73	23.10
	6H	21.76	23.06	22.17	23.42	23.81	21.47	22.76	21.88	23.13	23.52
	8H	21.90	23.14	22.33	23.53	23.93	21.62	22.86	22.04	23.24	23.64
	12H	21.98	23.17	22.41	23.55	23.98	21.70	22.89	22.13	23.27	23.70
4H	2H	19.37	20.76	19.76	21.11	21.49	19.17	20.57	19.57	20.92	21.29
	3H	21.42	22.59	21.83	22.99	23.39	21.19	22.37	21.60	22.76	23.16
	4H	22.23	23.29	22.66	23.71	24.14	21.99	23.05	22.42	23.46	23.90
	6H	22.85	23.77	23.30	24.21	24.67	22.59	23.52	23.05	23.96	24.42
	8H	23.04	23.90	23.49	24.35	24.81	22.79	23.66	23.25	24.10	24.56
	12H	23.15	23.93	23.63	24.41	24.88	22.91	23.69	23.39	24.17	24.64
8H	4H	22.53	23.40	22.99	23.84	24.30	22.31	23.18	22.77	23.62	24.09
	6H	23.26	23.98	23.75	24.47	24.94	23.03	23.76	23.53	24.24	24.72
	8H	23.52	24.16	24.03	24.67	25.16	23.29	23.94	23.80	24.45	24.93
	12H	23.70	24.27	24.20	24.76	25.32	23.48	24.05	23.99	24.55	25.11
12H	4H	22.56	23.34	23.04	23.81	24.28	22.35	23.13	22.83	23.61	24.07
	6H	23.31	23.96	23.81	24.46	24.95	23.09	23.74	23.60	24.24	24.73
	8H	23.62	24.19	24.13	24.68	25.24	23.41	23.98	23.91	24.47	25.03