

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: P686287

Luminaire Tested: SQ4R-F-050D-93050-1-UNV-STD-W-4_4000K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686287
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_4000K
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

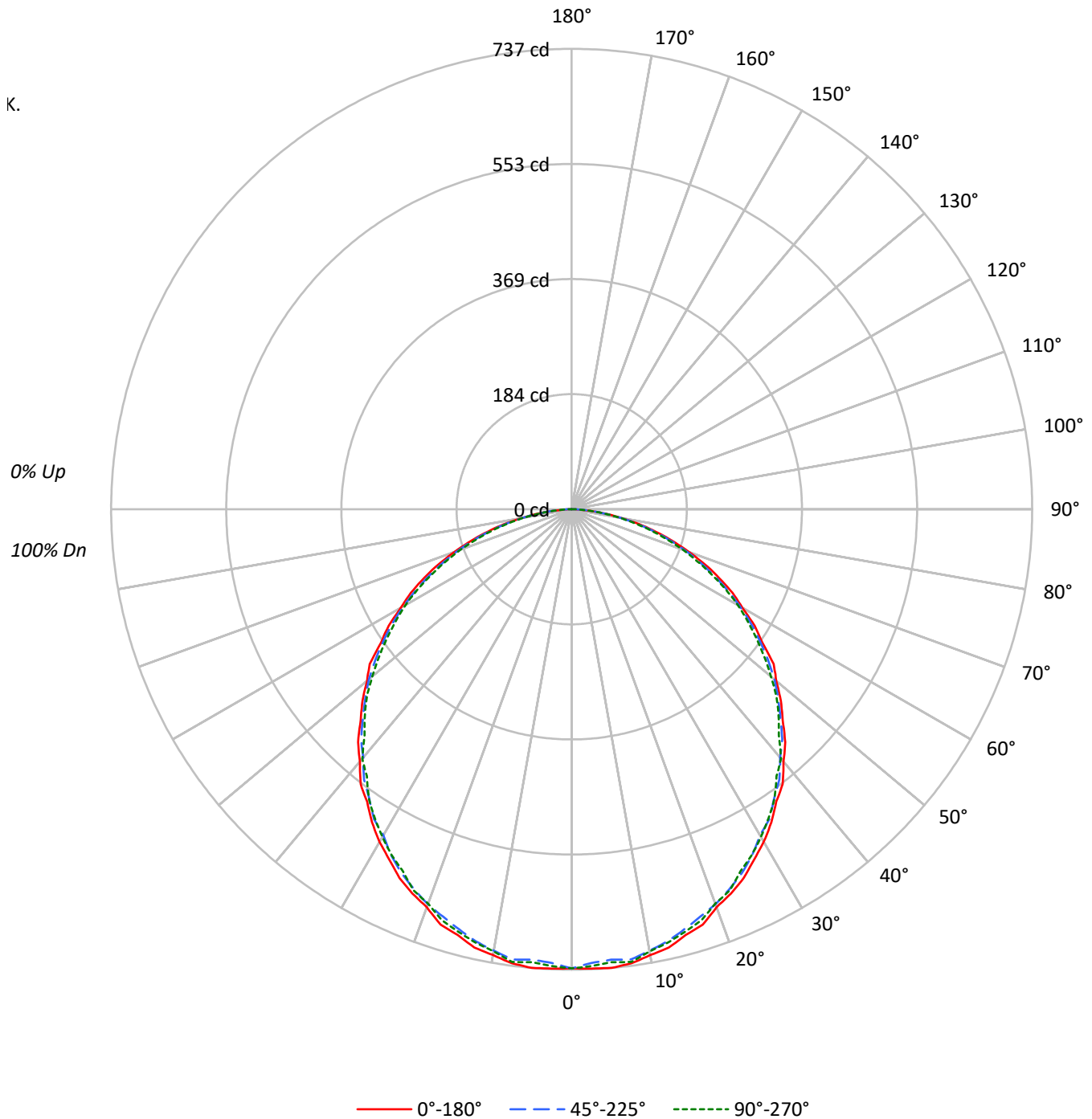
Lumens per Lamp: N/A
Luminaire Lumens: 2044.7 lumens
Efficiency: N/A
Efficacy: 96.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 21.3
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	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°	7075	7075	7075
5°	7121	6994	7034
10°	7085	7015	7025
15°	7031	6939	6980
20°	6945	6893	6883
25°	6920	6834	6790
30°	6835	6699	6732
35°	6711	6639	6651
40°	6627	6524	6550
45°	6500	6430	6375
50°	6403	6341	6235
55°	6252	6168	6064
60°	6075	5979	5919
65°	5937	5727	5634
70°	5616	5444	5329
75°	5189	5037	4884
80°	4458	4402	4291
85°	3259	3369	3259

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 6527 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.5	3.4
10°-20°	198.0	9.7
20°-30°	297.3	14.5
30°-40°	355.2	17.4
40°-50°	365.5	17.9
50°-60°	329.4	16.1
60°-70°	250.2	12.2
70°-80°	142.9	7.0
80°-90°	36.8	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°	564.7	27.6
0°-40°	919.9	45.0
0°-60°	1614.8	79.0
0°-90°	2044.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2044.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	735	735	735	735	735	
5°	737	732	724	732	728	70
15°	705	704	696	703	700	199
25°	651	644	643	644	639	299
35°	571	574	565	563	566	359
45°	477	479	472	469	468	370
55°	372	377	368	364	361	335
65°	261	258	251	247	247	257
75°	140	137	135	132	131	147
85°	30	30	30	30	30	37
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	734.9	734.9	734.9	734.9	734.9
2.5°	735.9	735.9	726.8	736.9	731.9
5°	736.9	731.9	723.7	731.9	727.8
7.5°	732.9	725.8	726.8	727.8	730.8
10°	724.7	721.7	717.6	721.7	718.6
12.5°	718.6	718.6	708.4	712.5	710.5
15°	705.4	704.4	696.2	703.4	700.3
17.5°	697.3	692.2	684.0	689.1	690.1
20°	677.9	678.9	672.8	677.9	671.8
22.5°	665.7	669.8	658.6	664.7	660.6
25°	651.4	644.3	643.3	644.3	639.2
27.5°	632.1	631.1	625.0	622.9	624.0
30°	614.8	616.8	602.6	602.6	605.6
32.5°	594.4	593.4	588.3	583.2	586.3
35°	571.0	574.1	564.9	562.9	565.9
37.5°	554.7	550.7	545.6	542.5	538.5
40°	527.3	529.3	519.1	519.1	521.2
42.5°	505.9	504.9	498.8	494.7	490.6
45°	477.4	479.4	472.3	469.2	468.2
47.5°	454.0	453.0	447.9	441.8	444.8
50°	427.5	426.5	423.4	417.3	416.3
52.5°	407.2	403.1	396.0	390.9	388.8
55°	372.5	376.6	367.5	364.4	361.3
57.5°	347.1	345.1	340.0	334.9	333.9
60°	315.5	315.5	310.5	307.4	307.4
62.5°	290.1	287.0	280.9	278.9	277.9
65°	260.6	258.5	251.4	247.3	247.3
67.5°	231.1	229.0	221.9	217.8	217.8
70°	199.5	197.5	193.4	190.3	189.3
72.5°	169.0	168.0	163.9	160.8	158.8
75°	139.5	137.4	135.4	132.3	131.3
77.5°	110.9	108.9	106.9	103.8	102.8
80°	80.4	79.4	79.4	76.3	77.4
82.5°	55.0	55.0	53.9	51.9	52.9
85°	29.5	30.5	30.5	29.5	29.5
87.5°	10.2	12.2	13.2	12.2	12.2
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	18.57	20.21	18.93	20.52	20.84	18.38	20.02	18.75	20.33	20.65
	3H	20.41	21.89	20.79	22.22	22.58	20.17	21.65	20.54	21.98	22.34
	4H	21.09	22.49	21.49	22.83	23.21	20.83	22.22	21.22	22.57	22.95
	6H	21.57	22.86	21.98	23.23	23.62	21.30	22.59	21.71	22.96	23.35
	8H	21.71	22.95	22.14	23.34	23.74	21.44	22.68	21.87	23.07	23.47
	12H	21.79	22.98	22.22	23.36	23.79	21.52	22.71	21.95	23.09	23.52
4H	2H	19.18	20.57	19.58	20.92	21.30	19.03	20.43	19.43	20.77	21.15
	3H	21.24	22.41	21.65	22.81	23.21	21.04	22.21	21.45	22.61	23.01
	4H	22.05	23.11	22.48	23.52	23.96	21.82	22.88	22.25	23.29	23.73
	6H	22.65	23.58	23.10	24.02	24.47	22.41	23.34	22.87	23.78	24.23
	8H	22.84	23.70	23.30	24.15	24.61	22.60	23.47	23.06	23.91	24.37
	12H	22.95	23.73	23.43	24.21	24.68	22.72	23.50	23.20	23.97	24.44
8H	4H	22.35	23.21	22.81	23.66	24.12	22.15	23.01	22.61	23.46	23.92
	6H	23.06	23.78	23.55	24.27	24.75	22.85	23.57	23.34	24.06	24.53
	8H	23.32	23.96	23.82	24.47	24.95	23.10	23.75	23.61	24.25	24.74
	12H	23.49	24.06	24.00	24.55	25.12	23.28	23.85	23.79	24.34	24.90
12H	4H	22.38	23.16	22.86	23.63	24.10	22.18	22.96	22.66	23.44	23.90
	6H	23.11	23.76	23.62	24.26	24.75	22.90	23.55	23.41	24.06	24.54
	8H	23.42	23.99	23.92	24.48	25.04	23.21	23.78	23.72	24.27	24.83