

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: P686296

Luminaire Tested: SQ4R-F-075D-92765-1-UNV-STD-W-4_5700K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686296
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-075D-92765-1-UNV-STD-W-4_5700K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 2700K-6500K
750 LUMENS PER FOOT
Light Source: 2700K AND 6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

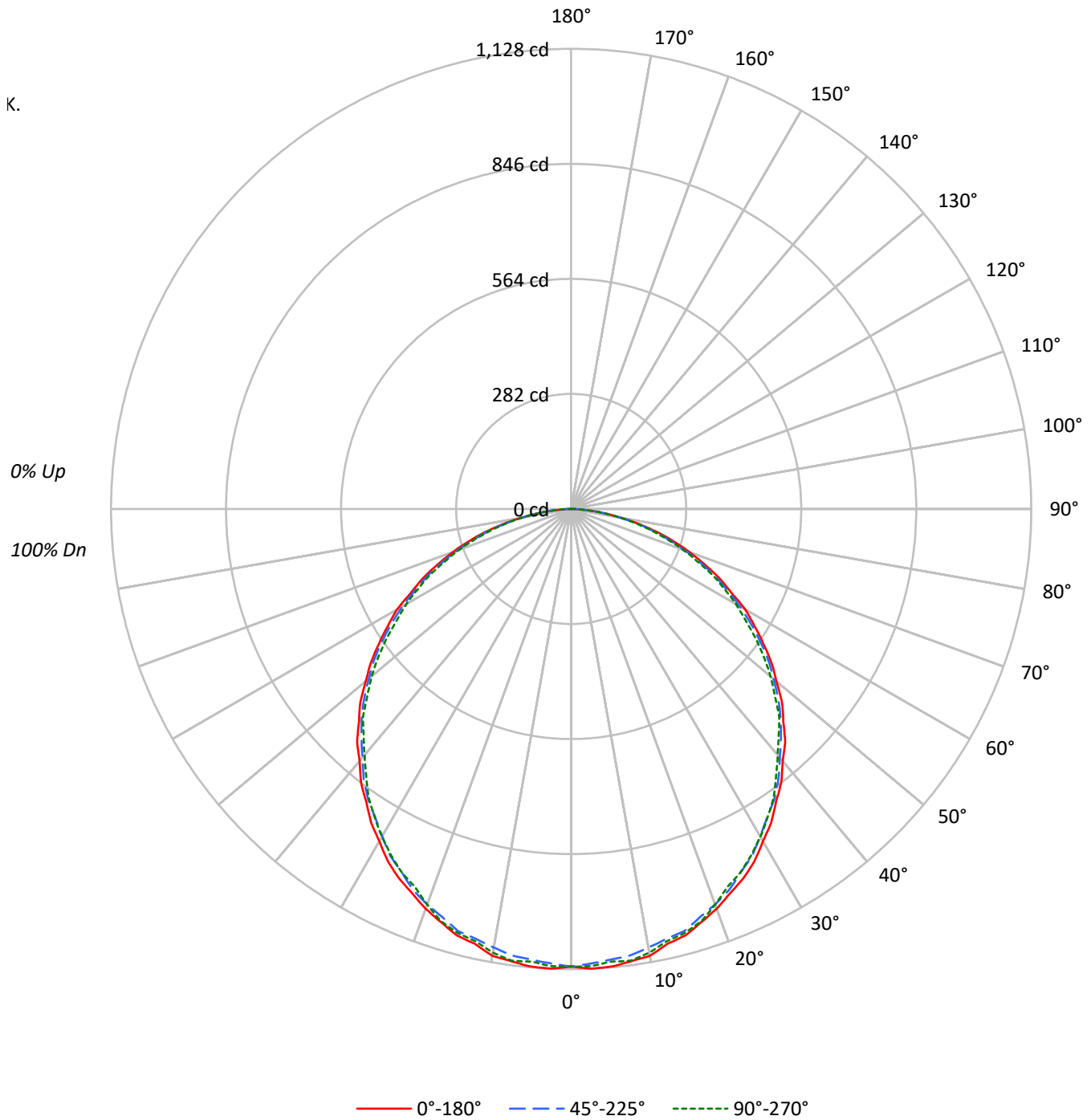
Lumens per Lamp: N/A
Luminaire Lumens: 3136.4 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 32.9
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	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°	10798	10798	10798
5°	10885	10718	10763
10°	10872	10671	10795
15°	10786	10677	10723
20°	10684	10571	10571
25°	10609	10441	10441
30°	10454	10296	10314
35°	10293	10201	10164
40°	10136	9998	9898
45°	10015	9887	9823
50°	9839	9696	9556
55°	9651	9492	9253
60°	9493	9190	8978
65°	9114	8864	8720
70°	8689	8335	8202
75°	8087	7793	7558
80°	6897	6725	6725
85°	5048	5225	5048

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 10037 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.2	3.4
10°-20°	303.0	9.7
20°-30°	455.3	14.5
30°-40°	543.6	17.3
40°-50°	560.8	17.9
50°-60°	505.1	16.1
60°-70°	384.3	12.3
70°-80°	220.6	7.0
80°-90°	57.4	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°	864.5	27.6
0°-40°	1408.1	44.9
0°-60°	2474.0	78.9
0°-90°	3136.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3136.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1122	1122	1122	1122	1122	
5°	1126	1122	1109	1122	1114	107
15°	1082	1078	1071	1074	1076	305
25°	999	991	983	986	983	460
35°	876	874	868	865	865	549
45°	736	737	726	720	722	569
55°	575	576	566	561	551	515
65°	400	395	389	381	383	395
75°	217	211	210	205	203	229
85°	46	47	47	47	46	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1121.6	1121.6	1121.6	1121.6	1121.6
2.5°	1127.9	1127.9	1115.3	1123.1	1121.6
5°	1126.3	1121.6	1109.0	1121.6	1113.7
7.5°	1118.4	1110.5	1104.2	1112.1	1116.8
10°	1112.1	1110.5	1091.6	1101.1	1104.2
12.5°	1091.6	1099.5	1079.0	1085.3	1085.3
15°	1082.2	1077.5	1071.2	1074.3	1075.9
17.5°	1061.7	1058.6	1049.1	1057.0	1060.1
20°	1042.8	1038.1	1031.8	1033.4	1031.8
22.5°	1019.2	1016.0	1011.3	1011.3	1001.8
25°	998.7	990.8	982.9	986.1	982.9
27.5°	973.5	967.2	959.3	960.9	956.2
30°	940.4	942.0	926.2	926.2	927.8
32.5°	912.1	905.8	894.7	894.7	896.3
35°	875.8	874.3	868.0	864.8	864.8
37.5°	845.9	845.9	834.9	830.1	825.4
40°	806.5	808.1	795.5	793.9	787.6
42.5°	776.6	773.4	760.8	759.3	753.0
45°	735.6	737.2	726.2	719.9	721.5
47.5°	701.0	696.3	688.4	682.1	677.4
50°	656.9	655.3	647.4	642.7	638.0
52.5°	619.1	614.3	609.6	598.6	595.4
55°	575.0	576.5	565.5	560.8	551.3
57.5°	532.4	530.9	521.4	513.5	505.6
60°	493.0	488.3	477.3	469.4	466.3
62.5°	441.1	439.5	431.6	425.3	422.2
65°	400.1	395.4	389.1	381.2	382.8
67.5°	352.9	349.7	343.4	337.1	333.9
70°	308.7	304.0	296.1	293.0	291.4
72.5°	263.1	258.3	252.0	245.7	247.3
75°	217.4	211.1	209.5	204.8	203.2
77.5°	170.1	167.0	163.8	162.2	160.7
80°	124.4	126.0	121.3	119.7	121.3
82.5°	85.1	85.1	83.5	81.9	83.5
85°	45.7	47.3	47.3	47.3	45.7
87.5°	15.8	18.9	20.5	20.5	18.9
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	20.09	21.73	20.46	22.05	22.36	19.85	21.49	20.22	21.81	22.12
	3H	21.93	23.41	22.31	23.74	24.10	21.66	23.14	22.03	23.47	23.83
	4H	22.62	24.01	23.01	24.36	24.74	22.32	23.72	22.72	24.07	24.45
	6H	23.10	24.40	23.51	24.76	25.15	22.81	24.11	23.22	24.47	24.86
	8H	23.25	24.48	23.67	24.87	25.27	22.96	24.20	23.38	24.59	24.99
	12H	23.33	24.51	23.76	24.89	25.32	23.05	24.23	23.48	24.61	25.04
4H	2H	20.71	22.10	21.10	22.45	22.83	20.52	21.91	20.91	22.26	22.64
	3H	22.76	23.93	23.17	24.33	24.73	22.54	23.71	22.94	24.11	24.50
	4H	23.57	24.63	24.00	25.05	25.48	23.33	24.39	23.76	24.80	25.24
	6H	24.19	25.12	24.64	25.56	26.01	23.94	24.86	24.39	25.30	25.76
	8H	24.38	25.25	24.84	25.69	26.15	24.13	25.00	24.59	25.44	25.90
	12H	24.50	25.28	24.97	25.75	26.22	24.25	25.03	24.73	25.51	25.98
8H	4H	23.87	24.74	24.33	25.18	25.65	23.66	24.52	24.12	24.97	25.43
	6H	24.60	25.32	25.09	25.81	26.29	24.38	25.10	24.87	25.58	26.06
	8H	24.86	25.51	25.37	26.01	26.50	24.64	25.28	25.15	25.79	26.28
	12H	25.04	25.61	25.55	26.10	26.66	24.82	25.40	25.33	25.89	26.45
12H	4H	23.90	24.68	24.38	25.16	25.63	23.69	24.47	24.17	24.95	25.42
	6H	24.65	25.30	25.16	25.80	26.29	24.43	25.08	24.94	25.59	26.07
	8H	24.96	25.53	25.47	26.02	26.58	24.75	25.32	25.25	25.81	26.37