

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: P686300

Luminaire Tested: SQ4R-F-075D-93050-1-UNV-STD-W-4_4000K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686300
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-075D-93050-1-UNV-STD-W-4_4000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 3000K-5000K
750 LUMENS PER FOOT
Light Source: 3000K AND 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

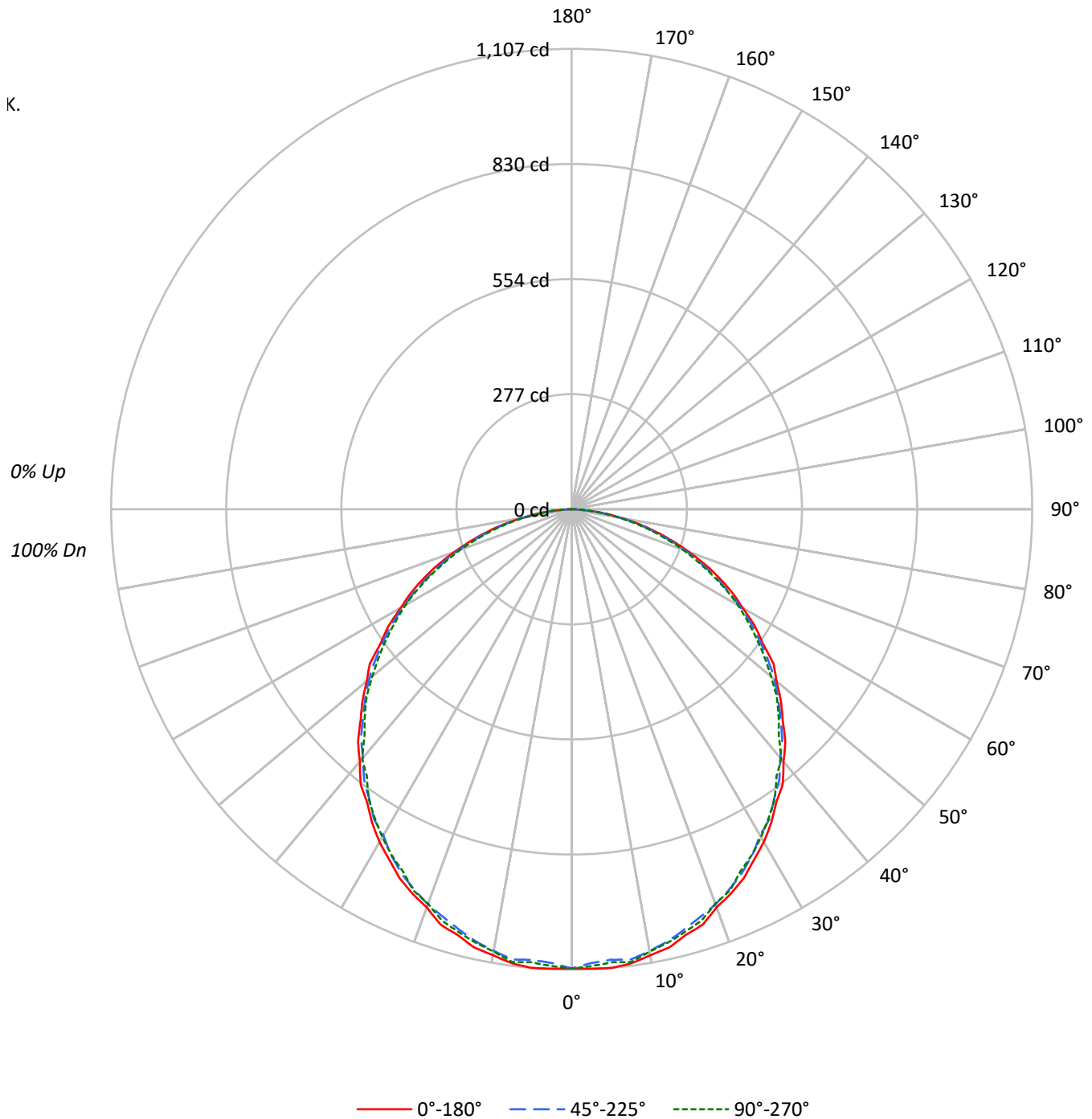
Lumens per Lamp: N/A
Luminaire Lumens: 3071.9 lumens
Efficiency: N/A
Efficacy: 93.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 33
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°	10630	10630	10630
5°	10699	10508	10567
10°	10644	10539	10554
15°	10562	10425	10486
20°	10435	10356	10340
25°	10396	10267	10201
30°	10267	10064	10115
35°	10083	9975	9992
40°	9955	9801	9840
45°	9765	9661	9577
50°	9620	9529	9367
55°	9394	9265	9112
60°	9129	8980	8892
65°	8918	8604	8465
70°	8436	8177	8005
75°	7793	7566	7339
80°	6697	6614	6442
85°	4893	5070	4893

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 9807 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.4	3.4
10°-20°	297.5	9.7
20°-30°	446.6	14.5
30°-40°	533.6	17.4
40°-50°	549.1	17.9
50°-60°	494.8	16.1
60°-70°	375.9	12.2
70°-80°	214.7	7.0
80°-90°	55.2	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°	848.4	27.6
0°-40°	1382.1	45.0
0°-60°	2426.0	79.0
0°-90°	3071.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3071.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1104	1104	1104	1104	1104	
5°	1107	1100	1087	1100	1093	105
15°	1060	1058	1046	1057	1052	300
25°	979	968	966	968	960	450
35°	858	862	849	846	850	539
45°	717	720	710	705	703	555
55°	560	566	552	548	543	503
65°	392	388	378	372	372	386
75°	210	206	203	199	197	222
85°	44	46	46	44	44	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1104.1	1104.1	1104.1	1104.1	1104.1
2.5°	1105.6	1105.6	1091.9	1107.1	1099.5
5°	1107.1	1099.5	1087.3	1099.5	1093.4
7.5°	1101.0	1090.3	1091.9	1093.4	1098.0
10°	1088.8	1084.2	1078.1	1084.2	1079.6
12.5°	1079.6	1079.6	1064.3	1070.4	1067.4
15°	1059.7	1058.2	1046.0	1056.7	1052.1
17.5°	1047.5	1039.9	1027.6	1035.3	1036.8
20°	1018.5	1020.0	1010.8	1018.5	1009.3
22.5°	1000.1	1006.2	989.4	998.6	992.5
25°	978.7	968.0	966.5	968.0	960.3
27.5°	949.6	948.1	938.9	935.9	937.4
30°	923.6	926.7	905.3	905.3	909.9
32.5°	893.1	891.5	883.9	876.2	880.8
35°	857.9	862.5	848.7	845.7	850.2
37.5°	833.4	827.3	819.7	815.1	809.0
40°	792.1	795.2	779.9	779.9	783.0
42.5°	760.0	758.5	749.3	743.2	737.1
45°	717.2	720.3	709.6	705.0	703.4
47.5°	682.0	680.5	672.9	663.7	668.3
50°	642.3	640.7	636.2	627.0	625.4
52.5°	611.7	605.6	594.9	587.2	584.2
55°	559.7	565.8	552.0	547.5	542.9
57.5°	521.5	518.4	510.8	503.1	501.6
60°	474.1	474.1	466.4	461.8	461.8
62.5°	435.8	431.2	422.1	419.0	417.5
65°	391.5	388.4	377.7	371.6	371.6
67.5°	347.1	344.1	333.4	327.3	327.3
70°	299.7	296.7	290.5	286.0	284.4
72.5°	253.8	252.3	246.2	241.6	238.6
75°	209.5	206.4	203.4	198.8	197.3
77.5°	166.7	163.6	160.6	156.0	154.5
80°	120.8	119.3	119.3	114.7	116.2
82.5°	82.6	82.6	81.0	78.0	79.5
85°	44.3	45.9	45.9	44.3	44.3
87.5°	15.3	18.4	19.9	18.4	18.4
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	19.98	21.62	20.35	21.94	22.25	19.80	21.43	20.16	21.75	22.06
	3H	21.83	23.31	22.20	23.63	23.99	21.58	23.06	21.96	23.39	23.75
	4H	22.51	23.90	22.90	24.25	24.62	22.24	23.64	22.64	23.98	24.36
	6H	22.98	24.28	23.39	24.64	25.03	22.71	24.01	23.12	24.37	24.76
	8H	23.13	24.36	23.55	24.75	25.15	22.86	24.09	23.28	24.48	24.88
	12H	23.20	24.39	23.63	24.77	25.20	22.94	24.12	23.37	24.51	24.93
4H	2H	20.59	21.99	20.99	22.34	22.71	20.44	21.84	20.84	22.19	22.56
	3H	22.66	23.83	23.06	24.22	24.62	22.45	23.62	22.86	24.02	24.42
	4H	23.46	24.52	23.89	24.94	25.37	23.24	24.30	23.67	24.71	25.14
	6H	24.07	24.99	24.52	25.43	25.89	23.83	24.75	24.28	25.19	25.65
	8H	24.25	25.12	24.71	25.56	26.03	24.01	24.88	24.47	25.32	25.79
	12H	24.37	25.15	24.85	25.62	26.09	24.13	24.91	24.61	25.39	25.86
8H	4H	23.76	24.63	24.22	25.07	25.54	23.56	24.43	24.02	24.87	25.33
	6H	24.48	25.20	24.97	25.68	26.16	24.26	24.98	24.76	25.47	25.95
	8H	24.73	25.38	25.24	25.88	26.37	24.52	25.16	25.02	25.67	26.15
	12H	24.91	25.48	25.41	25.97	26.53	24.70	25.27	25.20	25.76	26.32
12H	4H	23.79	24.57	24.27	25.04	25.51	23.60	24.37	24.08	24.85	25.32
	6H	24.52	25.17	25.03	25.68	26.16	24.32	24.97	24.83	25.47	25.96
	8H	24.83	25.40	25.34	25.89	26.45	24.63	25.20	25.13	25.69	26.25