

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: P686302

Luminaire Tested: SQ4R-F-075D-93050-1-UNV-STD-W-4_5000K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686302
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_5000K
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

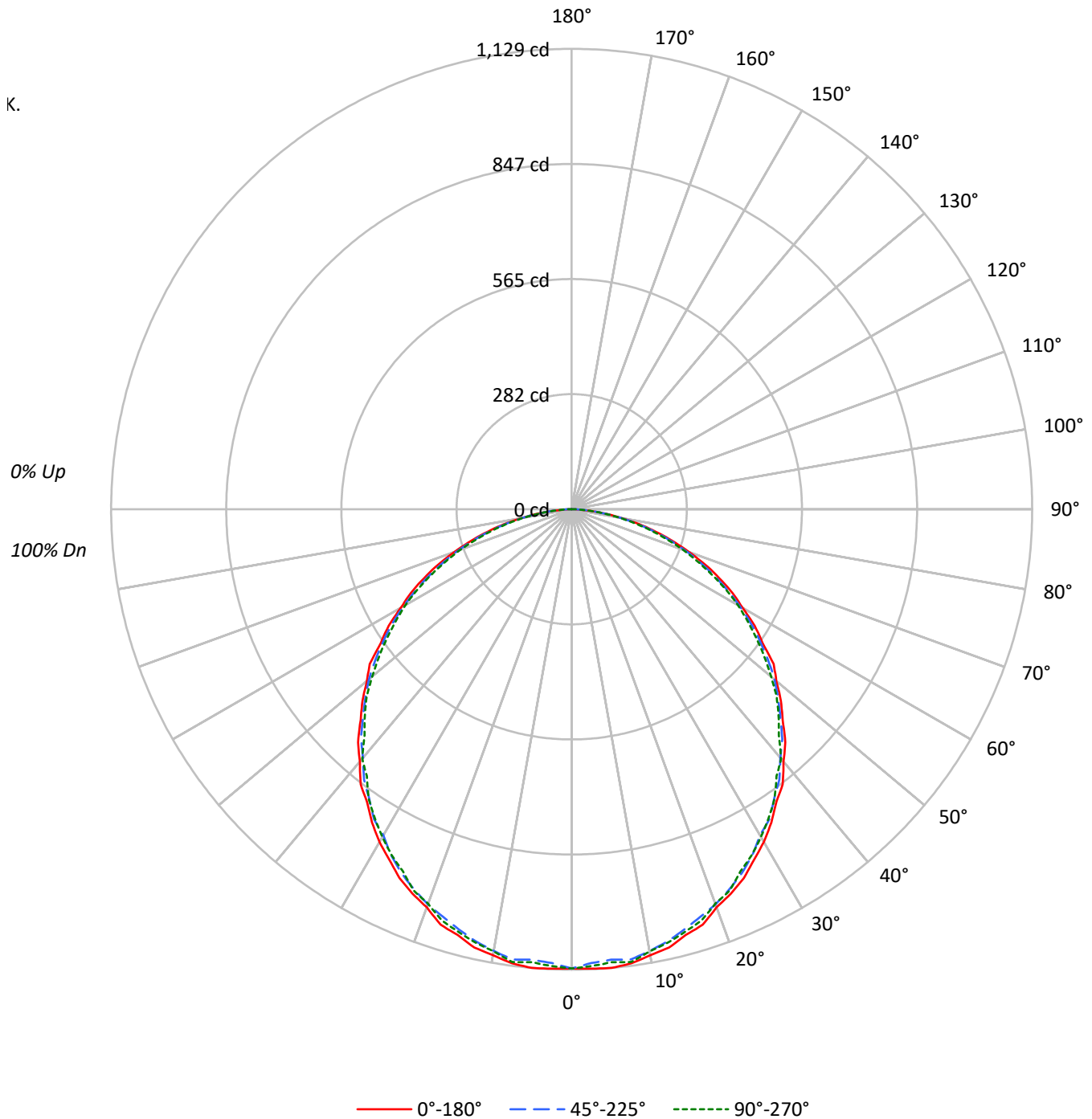
Lumens per Lamp: N/A
Luminaire Lumens: 3132.7 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 32.8
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



TEST NUMBER: P686302
CATALOG NUMBER: SQ4R-F-075D-93050-1-UNV-STD-W-4_5000K

Luminous Intensity Polar Plot





TEST NUMBER: P686302

CATALOG NUMBER: SQ4R-F-075D-93050-1-UNV-STD-W-4_5000K

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°	10840	10840	10840
5°	10912	10716	10776
10°	10855	10749	10763
15°	10772	10632	10695
20°	10642	10562	10545
25°	10602	10470	10404
30°	10472	10263	10315
35°	10283	10172	10191
40°	10152	9996	10035
45°	9958	9852	9767
50°	9810	9717	9554
55°	9581	9450	9292
60°	9310	9159	9069
65°	9094	8775	8634
70°	8605	8340	8166
75°	7949	7715	7484
80°	6830	6742	6570
85°	4993	5170	4993

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 10000 cd/sqm



TEST NUMBER: P686302

CATALOG NUMBER: SQ4R-F-075D-93050-1-UNV-STD-W-4_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.4	3.4
10°-20°	303.4	9.7
20°-30°	455.5	14.5
30°-40°	544.2	17.4
40°-50°	560.0	17.9
50°-60°	504.6	16.1
60°-70°	383.4	12.2
70°-80°	219.0	7.0
80°-90°	56.3	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°	865.3	27.6
0°-40°	1409.5	45.0
0°-60°	2474.0	79.0
0°-90°	3132.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3132.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1126	1126	1126	1126	1126	
5°	1129	1121	1109	1121	1115	107
15°	1081	1079	1067	1078	1073	305
25°	998	987	986	987	979	459
35°	875	880	866	862	867	550
45°	731	734	724	719	717	566
55°	571	577	563	558	554	513
65°	399	396	385	379	379	394
75°	214	210	207	203	201	226
85°	45	47	47	45	45	56
90°	0	0	0	0	0	



TEST NUMBER: P686302

CATALOG NUMBER: SQ4R-F-075D-93050-1-UNV-STD-W-4_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1126.0	1126.0	1126.0	1126.0	1126.0
2.5°	1127.5	1127.5	1113.5	1129.1	1121.3
5°	1129.1	1121.3	1108.8	1121.3	1115.1
7.5°	1122.9	1111.9	1113.5	1115.1	1119.7
10°	1110.4	1105.7	1099.5	1105.7	1101.0
12.5°	1101.0	1101.0	1085.4	1091.7	1088.6
15°	1080.8	1079.2	1066.7	1077.6	1073.0
17.5°	1068.3	1060.5	1048.0	1055.8	1057.4
20°	1038.7	1040.2	1030.9	1038.7	1029.3
22.5°	1019.9	1026.2	1009.0	1018.4	1012.1
25°	998.1	987.2	985.6	987.2	979.4
27.5°	968.5	966.9	957.6	954.4	956.0
30°	942.0	945.1	923.2	923.2	927.9
32.5°	910.8	909.2	901.4	893.6	898.3
35°	874.9	879.6	865.5	862.4	867.1
37.5°	849.9	843.7	835.9	831.2	825.0
40°	807.8	811.0	795.4	795.4	798.5
42.5°	775.1	773.5	764.2	757.9	751.7
45°	731.4	734.5	723.6	718.9	717.4
47.5°	695.6	694.0	686.2	676.8	681.5
50°	655.0	653.4	648.8	639.4	637.9
52.5°	623.8	617.6	606.7	598.9	595.7
55°	570.8	577.0	563.0	558.3	553.6
57.5°	531.8	528.7	520.9	513.1	511.5
60°	483.5	483.5	475.7	471.0	471.0
62.5°	444.5	439.8	430.4	427.3	425.8
65°	399.2	396.1	385.2	379.0	379.0
67.5°	354.0	350.9	340.0	333.7	333.7
70°	305.7	302.6	296.3	291.6	290.1
72.5°	258.9	257.3	251.1	246.4	243.3
75°	213.7	210.5	207.4	202.7	201.2
77.5°	170.0	166.9	163.8	159.1	157.5
80°	123.2	121.6	121.6	117.0	118.5
82.5°	84.2	84.2	82.7	79.5	81.1
85°	45.2	46.8	46.8	45.2	45.2
87.5°	15.6	18.7	20.3	18.7	18.7
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P686302

CATALOG NUMBER: SQ4R-F-075D-93050-1-UNV-STD-W-4_5000K

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	20.05	21.69	20.42	22.01	22.32	19.86	21.50	20.23	21.82	22.13
	3H	21.89	23.38	22.27	23.70	24.06	21.65	23.13	22.03	23.46	23.82
	4H	22.57	23.97	22.97	24.32	24.69	22.31	23.71	22.71	24.05	24.43
	6H	23.05	24.35	23.46	24.71	25.10	22.78	24.07	23.19	24.44	24.83
	8H	23.19	24.43	23.62	24.82	25.22	22.92	24.16	23.35	24.55	24.95
	12H	23.27	24.46	23.70	24.84	25.27	23.01	24.19	23.44	24.57	25.00
4H	2H	20.66	22.06	21.06	22.41	22.78	20.51	21.91	20.91	22.26	22.63
	3H	22.72	23.90	23.13	24.29	24.69	22.52	23.69	22.93	24.09	24.49
	4H	23.53	24.59	23.96	25.00	25.44	23.30	24.36	23.74	24.78	25.21
	6H	24.13	25.06	24.59	25.50	25.96	23.89	24.82	24.35	25.26	25.72
	8H	24.32	25.19	24.78	25.63	26.09	24.08	24.95	24.54	25.39	25.85
	12H	24.44	25.22	24.92	25.69	26.16	24.20	24.98	24.68	25.46	25.92
8H	4H	23.83	24.70	24.29	25.14	25.60	23.63	24.50	24.09	24.94	25.40
	6H	24.54	25.26	25.04	25.75	26.23	24.33	25.05	24.82	25.54	26.01
	8H	24.80	25.44	25.31	25.95	26.44	24.58	25.23	25.09	25.74	26.22
	12H	24.98	25.55	25.48	26.04	26.60	24.76	25.34	25.27	25.83	26.39
12H	4H	23.86	24.64	24.34	25.11	25.58	23.66	24.44	24.14	24.92	25.39
	6H	24.59	25.24	25.10	25.75	26.23	24.39	25.03	24.90	25.54	26.03
	8H	24.90	25.47	25.41	25.96	26.52	24.69	25.27	25.20	25.76	26.32