

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: P686319

Luminaire Tested: SQ4R-F-125D-92765-1-UNV-STD-W-4_4000K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686319
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-125D-92765-1-UNV-STD-W-4_4000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 2700K-6500I
1250 LUMENS PER FOOT
Light Source: 2700K AND 6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

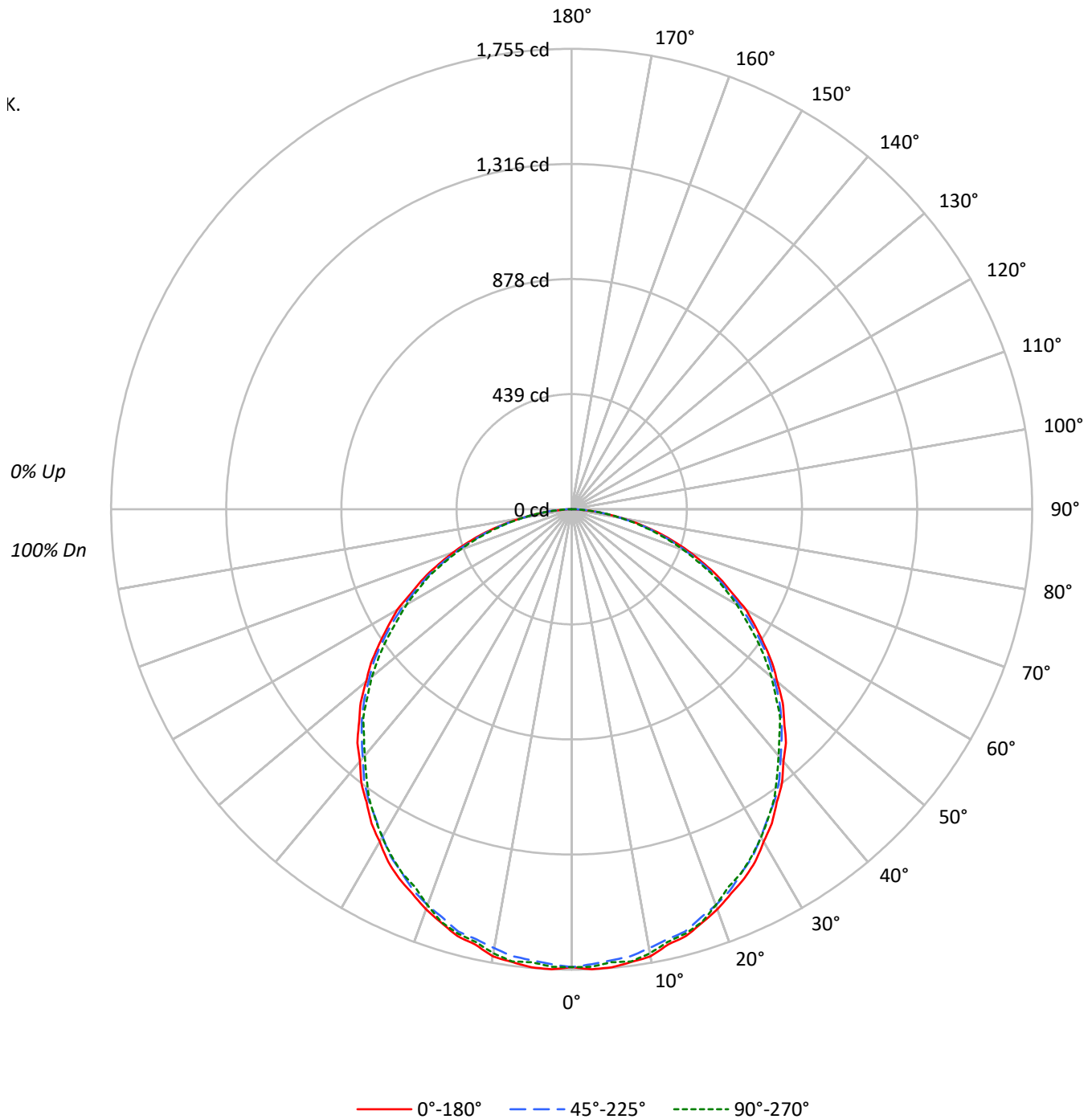
Lumens per Lamp: N/A
Luminaire Lumens: 4881.0 lumens
Efficiency: N/A
Efficacy: 79.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 61.2
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



TEST NUMBER: P686319
CATALOG NUMBER: SQ4R-F-125D-92765-1-UNV-STD-W-4_4000K

Luminous Intensity Polar Plot





TEST NUMBER: P686319

CATALOG NUMBER: SQ4R-F-125D-92765-1-UNV-STD-W-4_4000K

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°	16805	16805	16805
5°	16939	16679	16750
10°	16920	16608	16800
15°	16786	16615	16689
20°	16627	16451	16451
25°	16510	16249	16249
30°	16269	16025	16051
35°	16019	15876	15818
40°	15775	15559	15404
45°	15587	15386	15287
50°	15311	15091	14871
55°	15019	14772	14401
60°	14774	14302	13971
65°	14185	13793	13570
70°	13525	12974	12765
75°	12584	12126	11762
80°	10739	10467	10467
85°	7854	8119	7854

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15621 cd/sqm



TEST NUMBER: P686319

CATALOG NUMBER: SQ4R-F-125D-92765-1-UNV-STD-W-4_4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.3	3.4
10°-20°	471.5	9.7
20°-30°	708.6	14.5
30°-40°	845.9	17.3
40°-50°	872.8	17.9
50°-60°	786.1	16.1
60°-70°	598.1	12.3
70°-80°	343.3	7.0
80°-90°	89.3	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°	1345.5	27.6
0°-40°	2191.4	44.9
0°-60°	3850.3	78.9
0°-90°	4881.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4881.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1746	1746	1746	1746	1746	
5°	1753	1746	1726	1746	1733	166
15°	1684	1677	1667	1672	1674	474
25°	1554	1542	1530	1535	1530	715
35°	1363	1361	1351	1346	1346	855
45°	1145	1147	1130	1120	1123	885
55°	895	897	880	873	858	801
65°	623	615	606	593	596	614
75°	338	328	326	319	316	356
85°	71	74	74	74	71	88
90°	0	0	0	0	0	



TEST NUMBER: P686319

CATALOG NUMBER: SQ4R-F-125D-92765-1-UNV-STD-W-4_4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1745.5	1745.5	1745.5	1745.5	1745.5
2.5°	1755.3	1755.3	1735.7	1747.9	1745.5
5°	1752.8	1745.5	1725.9	1745.5	1733.2
7.5°	1740.6	1728.3	1718.5	1730.8	1738.1
10°	1730.8	1728.3	1698.9	1713.6	1718.5
12.5°	1698.9	1711.1	1679.3	1689.1	1689.1
15°	1684.2	1676.8	1667.0	1671.9	1674.4
17.5°	1652.3	1647.4	1632.7	1645.0	1649.9
20°	1622.9	1615.5	1605.7	1608.2	1605.7
22.5°	1586.1	1581.2	1573.9	1573.9	1559.2
25°	1554.2	1542.0	1529.7	1534.6	1529.7
27.5°	1515.0	1505.2	1493.0	1495.4	1488.1
30°	1463.5	1466.0	1441.5	1441.5	1443.9
32.5°	1419.4	1409.6	1392.5	1392.5	1394.9
35°	1363.0	1360.6	1350.8	1345.9	1345.9
37.5°	1316.5	1316.5	1299.3	1291.9	1284.6
40°	1255.2	1257.6	1238.0	1235.6	1225.7
42.5°	1208.6	1203.7	1184.1	1181.6	1171.8
45°	1144.8	1147.3	1130.1	1120.3	1122.8
47.5°	1090.9	1083.6	1071.3	1061.5	1054.1
50°	1022.3	1019.8	1007.6	1000.2	992.9
52.5°	963.4	956.1	948.7	931.6	926.7
55°	894.8	897.2	880.1	872.7	858.0
57.5°	828.6	826.2	811.4	799.2	786.9
60°	767.3	760.0	742.8	730.5	725.6
62.5°	686.4	684.0	671.7	661.9	657.0
65°	622.7	615.3	605.5	593.3	595.7
67.5°	549.1	544.2	534.4	524.6	519.7
70°	480.5	473.1	460.9	456.0	453.5
72.5°	409.4	402.0	392.2	382.4	384.9
75°	338.3	328.5	326.0	318.7	316.2
77.5°	264.8	259.9	255.0	252.5	250.1
80°	193.7	196.1	188.8	186.3	188.8
82.5°	132.4	132.4	129.9	127.5	129.9
85°	71.1	73.5	73.5	73.5	71.1
87.5°	24.5	29.4	31.9	31.9	29.4
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P686319

CATALOG NUMBER: SQ4R-F-125D-92765-1-UNV-STD-W-4_4000K

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	21.63	23.27	22.00	23.58	23.90	21.39	23.03	21.75	23.34	23.66
	3H	23.47	24.95	23.84	25.28	25.64	23.19	24.68	23.57	25.00	25.36
	4H	24.15	25.55	24.55	25.90	26.27	23.86	25.26	24.26	25.61	25.98
	6H	24.64	25.94	25.05	26.30	26.69	24.35	25.64	24.76	26.01	26.40
	8H	24.78	26.02	25.21	26.41	26.81	24.50	25.73	24.92	26.12	26.52
	12H	24.86	26.05	25.29	26.43	26.86	24.58	25.77	25.01	26.15	26.58
4H	2H	22.24	23.64	22.64	23.99	24.36	22.05	23.45	22.45	23.80	24.17
	3H	24.30	25.47	24.71	25.87	26.27	24.07	25.24	24.48	25.64	26.04
	4H	25.11	26.17	25.54	26.58	27.02	24.87	25.93	25.30	26.34	26.78
	6H	25.72	26.65	26.18	27.09	27.55	25.47	26.40	25.93	26.84	27.30
	8H	25.91	26.78	26.37	27.22	27.69	25.67	26.53	26.13	26.98	27.44
	12H	26.03	26.81	26.51	27.29	27.76	25.79	26.57	26.27	27.05	27.52
8H	4H	25.41	26.28	25.87	26.72	27.18	25.19	26.06	25.65	26.50	26.97
	6H	26.14	26.86	26.63	27.35	27.82	25.91	26.63	26.40	27.12	27.60
	8H	26.40	27.04	26.91	27.55	28.04	26.17	26.82	26.68	27.33	27.81
	12H	26.58	27.15	27.08	27.64	28.20	26.36	26.93	26.87	27.42	27.98
12H	4H	25.44	26.22	25.92	26.69	27.16	25.23	26.01	25.71	26.48	26.95
	6H	26.19	26.83	26.69	27.34	27.83	25.97	26.62	26.48	27.12	27.61
	8H	26.50	27.07	27.00	27.56	28.12	26.28	26.86	26.79	27.35	27.91