

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: P686308

Luminaire Tested: SQ4R-F-100D-92765-1-UNV-STD-W-4_5000K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686308
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-100D-92765-1-UNV-STD-W-4_5000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 2700K-6500I
1000 LUMENS PER FOOT
Light Source: 2700K AND 6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

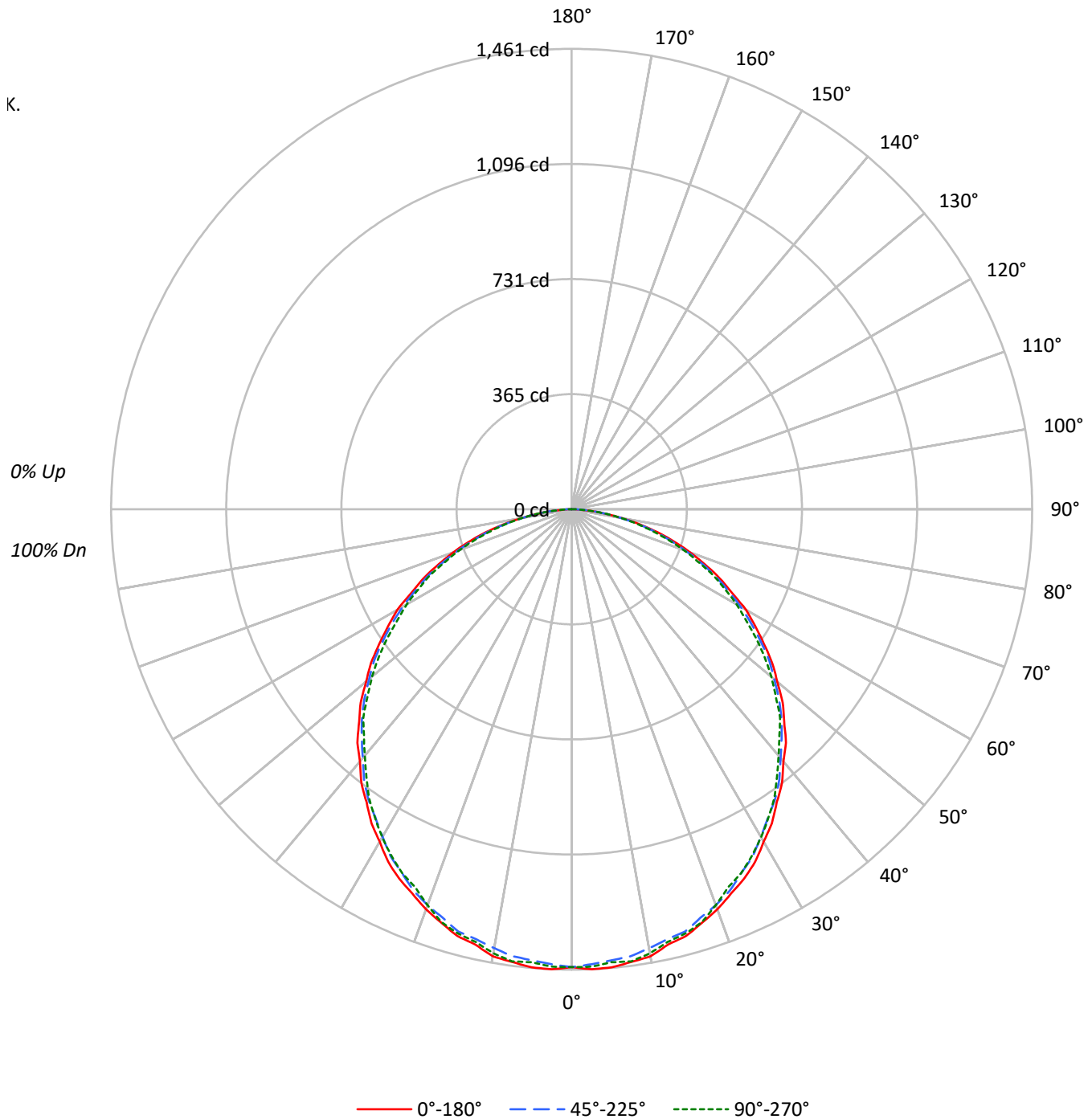
Lumens per Lamp: N/A
Luminaire Lumens: 4063.3 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 46.4
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	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°	13989	13989	13989
5°	14101	13884	13943
10°	14085	13825	13985
15°	13974	13831	13892
20°	13841	13695	13695
25°	13744	13527	13527
30°	13543	13340	13362
35°	13336	13216	13168
40°	13132	12952	12824
45°	12975	12809	12726
50°	12746	12563	12379
55°	12503	12297	11989
60°	12300	11907	11632
65°	11809	11484	11297
70°	11259	10801	10626
75°	10475	10095	9794
80°	8937	8710	8710
85°	6539	6760	6539

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 13004 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.6	3.4
10°-20°	392.5	9.7
20°-30°	589.9	14.5
30°-40°	704.2	17.3
40°-50°	726.6	17.9
50°-60°	654.4	16.1
60°-70°	497.9	12.3
70°-80°	285.8	7.0
80°-90°	74.4	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°	1120.0	27.6
0°-40°	1824.2	44.9
0°-60°	3205.2	78.9
0°-90°	4063.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4063.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1453	1453	1453	1453	1453	
5°	1459	1453	1437	1453	1443	139
15°	1402	1396	1388	1392	1394	395
25°	1294	1284	1273	1278	1273	595
35°	1135	1133	1124	1120	1120	711
45°	953	955	941	933	935	737
55°	745	747	733	726	714	667
65°	518	512	504	494	496	511
75°	282	274	271	265	263	296
85°	59	61	61	61	59	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1453.0	1453.0	1453.0	1453.0	1453.0
2.5°	1461.2	1461.2	1444.9	1455.1	1453.0
5°	1459.1	1453.0	1436.7	1453.0	1442.8
7.5°	1448.9	1438.7	1430.6	1440.8	1446.9
10°	1440.8	1438.7	1414.2	1426.5	1430.6
12.5°	1414.2	1424.5	1397.9	1406.1	1406.1
15°	1402.0	1395.9	1387.7	1391.8	1393.8
17.5°	1375.5	1371.4	1359.1	1369.4	1373.4
20°	1351.0	1344.9	1336.7	1338.7	1336.7
22.5°	1320.4	1316.3	1310.2	1310.2	1297.9
25°	1293.8	1283.6	1273.4	1277.5	1273.4
27.5°	1261.2	1253.0	1242.8	1244.9	1238.7
30°	1218.3	1220.4	1200.0	1200.0	1202.0
32.5°	1181.6	1173.4	1159.2	1159.2	1161.2
35°	1134.7	1132.6	1124.5	1120.4	1120.4
37.5°	1095.9	1095.9	1081.6	1075.5	1069.4
40°	1044.9	1046.9	1030.6	1028.5	1020.4
42.5°	1006.1	1002.0	985.7	983.6	975.5
45°	953.0	955.1	940.8	932.6	934.7
47.5°	908.1	902.0	891.8	883.6	877.5
50°	851.0	849.0	838.8	832.6	826.5
52.5°	802.0	795.9	789.8	775.5	771.4
55°	744.9	746.9	732.6	726.5	714.3
57.5°	689.8	687.7	675.5	665.3	655.1
60°	638.8	632.6	618.4	608.1	604.1
62.5°	571.4	569.4	559.2	551.0	546.9
65°	518.4	512.2	504.1	493.9	495.9
67.5°	457.1	453.0	444.9	436.7	432.6
70°	400.0	393.9	383.7	379.6	377.5
72.5°	340.8	334.7	326.5	318.4	320.4
75°	281.6	273.5	271.4	265.3	263.3
77.5°	220.4	216.3	212.2	210.2	208.2
80°	161.2	163.3	157.1	155.1	157.1
82.5°	110.2	110.2	108.2	106.1	108.2
85°	59.2	61.2	61.2	61.2	59.2
87.5°	20.4	24.5	26.5	26.5	24.5
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	20.99	22.63	21.36	22.95	23.26	20.75	22.39	21.12	22.70	23.02
	3H	22.83	24.31	23.21	24.64	25.00	22.56	24.04	22.93	24.37	24.73
	4H	23.52	24.91	23.91	25.26	25.64	23.22	24.62	23.62	24.97	25.35
	6H	24.00	25.30	24.41	25.66	26.05	23.71	25.01	24.12	25.37	25.76
	8H	24.15	25.38	24.57	25.77	26.17	23.86	25.10	24.28	25.49	25.89
	12H	24.23	25.41	24.66	25.79	26.22	23.95	25.13	24.38	25.51	25.94
4H	2H	21.61	23.00	22.00	23.35	23.73	21.42	22.81	21.81	23.16	23.54
	3H	23.66	24.83	24.07	25.23	25.63	23.43	24.61	23.84	25.00	25.40
	4H	24.47	25.53	24.90	25.95	26.38	24.23	25.29	24.66	25.70	26.14
	6H	25.09	26.02	25.54	26.46	26.91	24.84	25.76	25.29	26.20	26.66
	8H	25.28	26.15	25.74	26.59	27.05	25.03	25.90	25.49	26.34	26.80
	12H	25.40	26.18	25.87	26.65	27.12	25.15	25.93	25.63	26.41	26.88
8H	4H	24.77	25.64	25.23	26.08	26.55	24.56	25.42	25.02	25.87	26.33
	6H	25.50	26.22	25.99	26.71	27.19	25.27	26.00	25.77	26.48	26.96
	8H	25.76	26.41	26.27	26.91	27.40	25.54	26.18	26.04	26.69	27.18
	12H	25.94	26.51	26.45	27.00	27.56	25.72	26.30	26.23	26.79	27.35
12H	4H	24.80	25.58	25.28	26.06	26.53	24.59	25.37	25.07	25.85	26.32
	6H	25.55	26.20	26.06	26.70	27.19	25.33	25.98	25.84	26.49	26.97
	8H	25.86	26.43	26.37	26.92	27.48	25.65	26.22	26.15	26.71	27.27