

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: P686295

Luminaire Tested: SQ4R-F-075D-92765-1-UNV-STD-W-4\_5000K

Issue Date: 5/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P686295  
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\_5000K  
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**

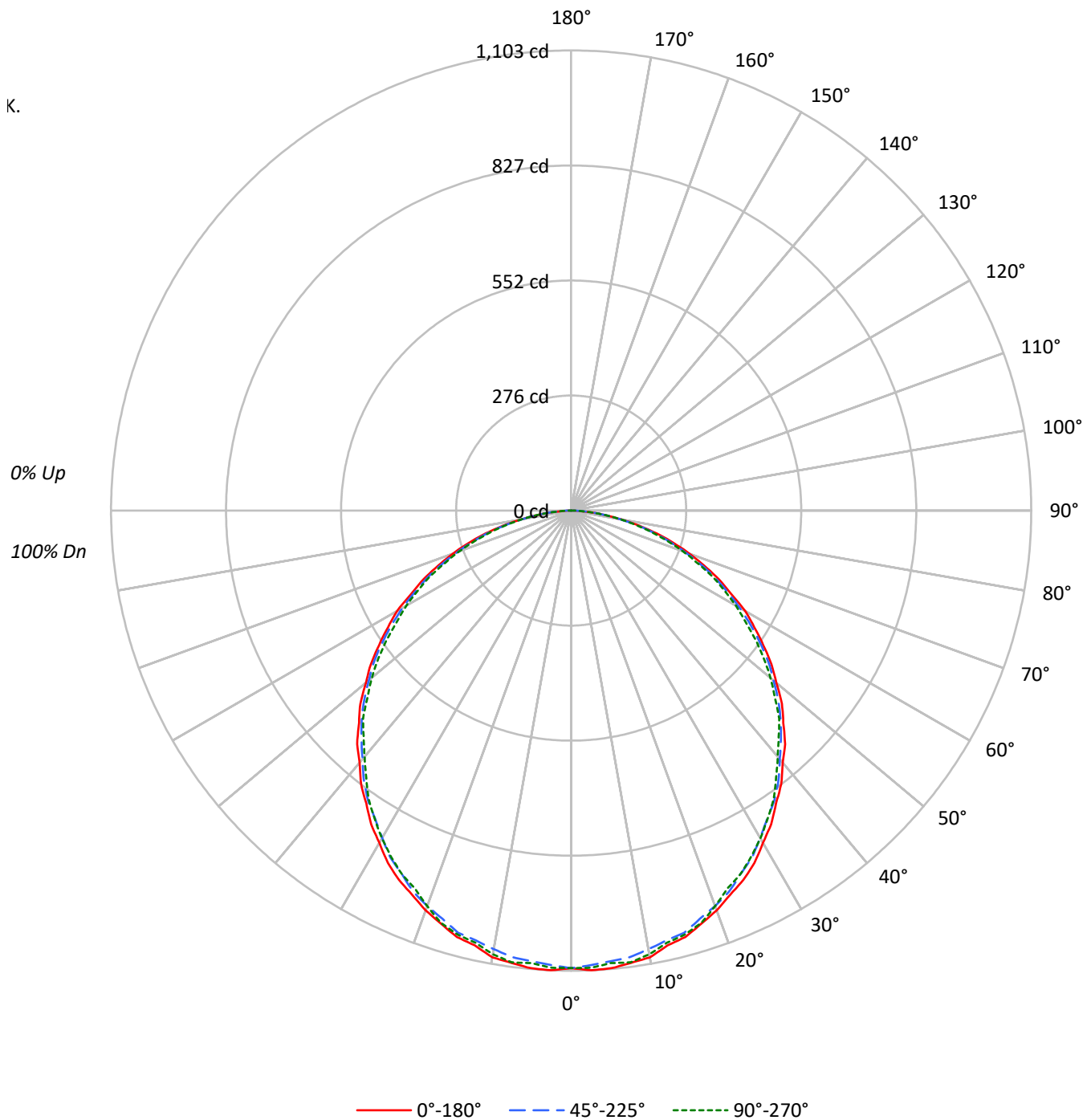
Lumens per Lamp: N/A  
Luminaire Lumens: 3066.7 lumens  
Efficiency: N/A  
Efficacy: 93.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 32.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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: P686295  
CATALOG NUMBER: SQ4R-F-075D-92765-1-UNV-STD-W-4\_5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P686295

CATALOG NUMBER: SQ4R-F-075D-92765-1-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	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°	10557	10557	10557
5°	10643	10479	10523
10°	10630	10435	10555
15°	10546	10439	10485
20°	10446	10335	10335
25°	10373	10209	10209
30°	10222	10068	10085
35°	10065	9975	9938
40°	9911	9775	9678
45°	9793	9667	9604
50°	9620	9481	9343
55°	9436	9280	9049
60°	9283	8986	8778
65°	8912	8666	8527
70°	8498	8152	8019
75°	7908	7618	7391
80°	6747	6575	6575
85°	4938	5103	4938

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 9814 cd/sqm



TEST NUMBER: P686295

CATALOG NUMBER: SQ4R-F-075D-92765-1-UNV-STD-W-4\_5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.9	3.4
10°-20°	296.3	9.7
20°-30°	445.2	14.5
30°-40°	531.5	17.3
40°-50°	548.4	17.9
50°-60°	493.9	16.1
60°-70°	375.8	12.3
70°-80°	215.7	7.0
80°-90°	56.1	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°	845.3	27.6
0°-40°	1376.8	44.9
0°-60°	2419.1	78.9
0°-90°	3066.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3066.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1097	1097	1097	1097	1097	
5°	1101	1097	1084	1097	1089	105
15°	1058	1054	1047	1050	1052	298
25°	976	969	961	964	961	449
35°	856	855	849	846	846	537
45°	719	721	710	704	705	556
55°	562	564	553	548	539	503
65°	391	387	380	373	374	386
75°	213	206	205	200	199	224
85°	45	46	46	46	45	56
90°	0	0	0	0	0	



TEST NUMBER: P686295

CATALOG NUMBER: SQ4R-F-075D-92765-1-UNV-STD-W-4\_5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1096.6	1096.6	1096.6	1096.6	1096.6
2.5°	1102.8	1102.8	1090.5	1098.2	1096.6
5°	1101.3	1096.6	1084.3	1096.6	1088.9
7.5°	1093.6	1085.9	1079.7	1087.4	1092.0
10°	1087.4	1085.9	1067.4	1076.6	1079.7
12.5°	1067.4	1075.1	1055.1	1061.2	1061.2
15°	1058.1	1053.5	1047.4	1050.4	1052.0
17.5°	1038.1	1035.0	1025.8	1033.5	1036.6
20°	1019.6	1015.0	1008.8	1010.4	1008.8
22.5°	996.5	993.4	988.8	988.8	979.6
25°	976.5	968.8	961.1	964.2	961.1
27.5°	951.9	945.7	938.0	939.5	934.9
30°	919.5	921.1	905.7	905.7	907.2
32.5°	891.8	885.6	874.8	874.8	876.4
35°	856.4	854.8	848.7	845.6	845.6
37.5°	827.1	827.1	816.3	811.7	807.1
40°	788.6	790.1	777.8	776.3	770.1
42.5°	759.3	756.2	743.9	742.4	736.2
45°	719.3	720.8	710.0	703.9	705.4
47.5°	685.4	680.8	673.1	666.9	662.3
50°	642.3	640.7	633.0	628.4	623.8
52.5°	605.3	600.7	596.1	585.3	582.2
55°	562.2	563.7	552.9	548.3	539.1
57.5°	520.6	519.1	509.8	502.1	494.4
60°	482.1	477.5	466.7	459.0	455.9
62.5°	431.3	429.7	422.0	415.9	412.8
65°	391.2	386.6	380.4	372.7	374.3
67.5°	345.0	341.9	335.8	329.6	326.5
70°	301.9	297.3	289.6	286.5	284.9
72.5°	257.2	252.6	246.4	240.3	241.8
75°	212.6	206.4	204.8	200.2	198.7
77.5°	166.3	163.3	160.2	158.6	157.1
80°	121.7	123.2	118.6	117.1	118.6
82.5°	83.2	83.2	81.6	80.1	81.6
85°	44.7	46.2	46.2	46.2	44.7
87.5°	15.4	18.5	20.0	20.0	18.5
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P686295

CATALOG NUMBER: SQ4R-F-075D-92765-1-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	20.02	21.66	20.38	21.97	22.28	19.77	21.41	20.14	21.73	22.04
	3H	21.85	23.33	22.23	23.66	24.02	21.58	23.06	21.96	23.39	23.75
	4H	22.54	23.94	22.94	24.28	24.66	22.25	23.64	22.64	23.99	24.37
	6H	23.03	24.32	23.44	24.69	25.08	22.73	24.03	23.14	24.39	24.78
	8H	23.17	24.41	23.59	24.80	25.19	22.88	24.12	23.31	24.51	24.91
	12H	23.25	24.44	23.68	24.82	25.25	22.97	24.16	23.40	24.54	24.97
4H	2H	20.63	22.03	21.03	22.37	22.75	20.44	21.84	20.84	22.18	22.56
	3H	22.68	23.85	23.09	24.25	24.65	22.46	23.63	22.87	24.03	24.43
	4H	23.50	24.56	23.93	24.97	25.41	23.25	24.31	23.68	24.73	25.16
	6H	24.11	25.04	24.56	25.48	25.93	23.86	24.79	24.31	25.23	25.68
	8H	24.30	25.17	24.76	25.61	26.08	24.05	24.92	24.51	25.36	25.83
	12H	24.42	25.20	24.90	25.67	26.14	24.18	24.96	24.66	25.43	25.90
8H	4H	23.79	24.66	24.25	25.10	25.57	23.58	24.45	24.04	24.89	25.35
	6H	24.52	25.25	25.02	25.73	26.21	24.30	25.02	24.79	25.51	25.98
	8H	24.78	25.43	25.29	25.94	26.42	24.56	25.21	25.07	25.71	26.20
	12H	24.96	25.53	25.47	26.02	26.58	24.75	25.32	25.25	25.81	26.37
12H	4H	23.82	24.60	24.30	25.08	25.55	23.61	24.39	24.09	24.87	25.34
	6H	24.57	25.22	25.08	25.73	26.21	24.35	25.00	24.86	25.51	25.99
	8H	24.88	25.46	25.39	25.95	26.51	24.67	25.24	25.18	25.73	26.29