

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: P686297

Luminaire Tested: SQ4R-F-075D-92765-1-UNV-STD-W-4_6500K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686297
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_6500K
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

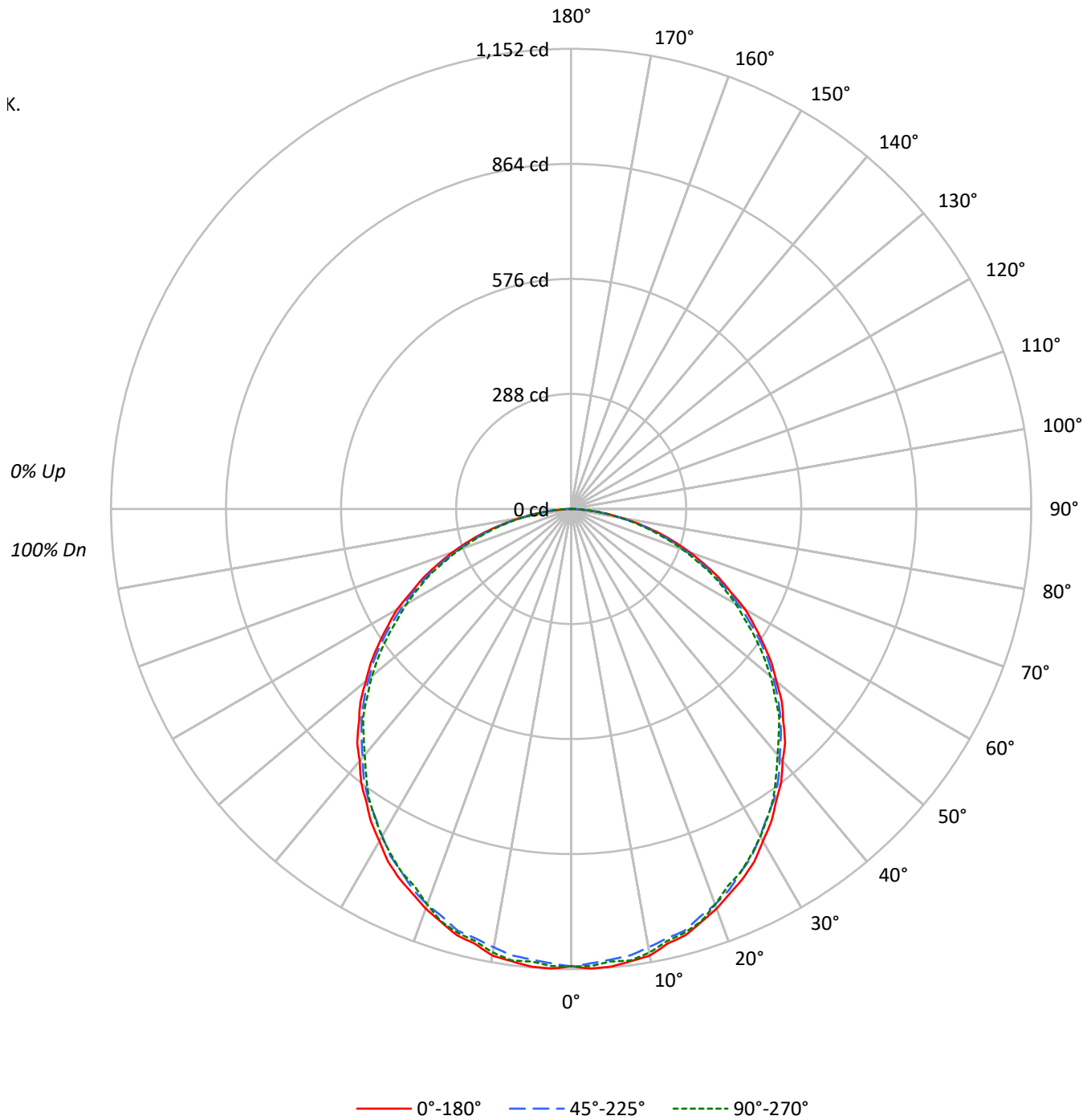
Lumens per Lamp: N/A
Luminaire Lumens: 3202.1 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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



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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	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°	11024	11024	11024
5°	11113	10942	10988
10°	11100	10895	11021
15°	11012	10900	10948
20°	10908	10792	10792
25°	10831	10660	10660
30°	10673	10512	10531
35°	10509	10414	10377
40°	10348	10207	10106
45°	10225	10094	10029
50°	10044	9900	9755
55°	9853	9692	9448
60°	9693	9383	9165
65°	9306	9048	8903
70°	8872	8509	8374
75°	8254	7956	7718
80°	7047	6864	6864
85°	5147	5324	5147

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 10248 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.5	3.4
10°-20°	309.3	9.7
20°-30°	464.9	14.5
30°-40°	554.9	17.3
40°-50°	572.6	17.9
50°-60°	515.7	16.1
60°-70°	392.3	12.3
70°-80°	225.2	7.0
80°-90°	58.6	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°	882.7	27.6
0°-40°	1437.6	44.9
0°-60°	2525.9	78.9
0°-90°	3202.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3202.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1145	1145	1145	1145	1145	
5°	1150	1145	1132	1145	1137	109
15°	1105	1100	1094	1097	1098	311
25°	1020	1012	1004	1007	1004	469
35°	894	893	886	883	883	561
45°	751	753	741	735	737	580
55°	587	589	577	572	563	526
65°	408	404	397	389	391	403
75°	222	216	214	209	208	233
85°	47	48	48	48	47	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1145.1	1145.1	1145.1	1145.1	1145.1
2.5°	1151.5	1151.5	1138.6	1146.7	1145.1
5°	1149.9	1145.1	1132.2	1145.1	1137.0
7.5°	1141.9	1133.8	1127.4	1135.4	1140.2
10°	1135.4	1133.8	1114.5	1124.2	1127.4
12.5°	1114.5	1122.6	1101.6	1108.1	1108.1
15°	1104.9	1100.0	1093.6	1096.8	1098.4
17.5°	1084.0	1080.7	1071.1	1079.1	1082.3
20°	1064.7	1059.8	1053.4	1055.0	1053.4
22.5°	1040.5	1037.3	1032.5	1032.5	1022.8
25°	1019.6	1011.6	1003.5	1006.8	1003.5
27.5°	993.9	987.5	979.4	981.0	976.2
30°	960.1	961.7	945.6	945.6	947.3
32.5°	931.2	924.7	913.5	913.5	915.1
35°	894.2	892.6	886.1	882.9	882.9
37.5°	863.6	863.6	852.4	847.5	842.7
40°	823.4	825.0	812.2	810.6	804.1
42.5°	792.9	789.6	776.8	775.2	768.7
45°	751.0	752.7	741.4	735.0	736.6
47.5°	715.7	710.8	702.8	696.4	691.5
50°	670.6	669.0	661.0	656.2	651.3
52.5°	632.0	627.2	622.4	611.1	607.9
55°	587.0	588.6	577.4	572.5	562.9
57.5°	543.6	542.0	532.3	524.3	516.2
60°	503.4	498.6	487.3	479.3	476.0
62.5°	450.3	448.7	440.7	434.2	431.0
65°	408.5	403.7	397.2	389.2	390.8
67.5°	360.2	357.0	350.6	344.2	340.9
70°	315.2	310.4	302.3	299.1	297.5
72.5°	268.6	263.8	257.3	250.9	252.5
75°	221.9	215.5	213.9	209.1	207.5
77.5°	173.7	170.5	167.3	165.6	164.0
80°	127.1	128.7	123.8	122.2	123.8
82.5°	86.8	86.8	85.2	83.6	85.2
85°	46.6	48.2	48.2	48.2	46.6
87.5°	16.1	19.3	20.9	20.9	19.3
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	20.17	21.81	20.53	22.12	22.43	19.92	21.56	20.29	21.88	22.19
	3H	22.00	23.48	22.38	23.81	24.17	21.73	23.21	22.11	23.54	23.90
	4H	22.69	24.09	23.09	24.43	24.81	22.40	23.79	22.80	24.14	24.52
	6H	23.18	24.47	23.59	24.84	25.23	22.88	24.18	23.29	24.54	24.93
	8H	23.32	24.56	23.74	24.95	25.34	23.03	24.27	23.46	24.66	25.06
	12H	23.40	24.59	23.83	24.97	25.40	23.12	24.30	23.55	24.69	25.11
4H	2H	20.78	22.18	21.18	22.52	22.90	20.59	21.99	20.99	22.33	22.71
	3H	22.83	24.00	23.24	24.40	24.80	22.61	23.78	23.02	24.18	24.58
	4H	23.65	24.71	24.08	25.12	25.56	23.40	24.46	23.83	24.88	25.31
	6H	24.26	25.19	24.71	25.63	26.08	24.01	24.94	24.46	25.38	25.83
	8H	24.45	25.32	24.91	25.76	26.22	24.20	25.07	24.66	25.51	25.98
	12H	24.57	25.35	25.05	25.82	26.29	24.33	25.11	24.81	25.58	26.05
8H	4H	23.94	24.81	24.40	25.25	25.72	23.73	24.60	24.19	25.04	25.50
	6H	24.67	25.40	25.17	25.88	26.36	24.45	25.17	24.94	25.66	26.13
	8H	24.93	25.58	25.44	26.09	26.57	24.71	25.36	25.22	25.86	26.35
	12H	25.11	25.68	25.62	26.17	26.73	24.90	25.47	25.40	25.96	26.52
12H	4H	23.97	24.75	24.45	25.23	25.70	23.76	24.54	24.24	25.02	25.49
	6H	24.72	25.37	25.23	25.88	26.36	24.50	25.15	25.01	25.66	26.14
	8H	25.03	25.61	25.54	26.10	26.66	24.82	25.39	25.33	25.88	26.44