

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: P845479

Luminaire Tested: SQ2R-F-075D-935-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845479
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-1)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-F-075D-935-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH FROSTED LENS
750 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

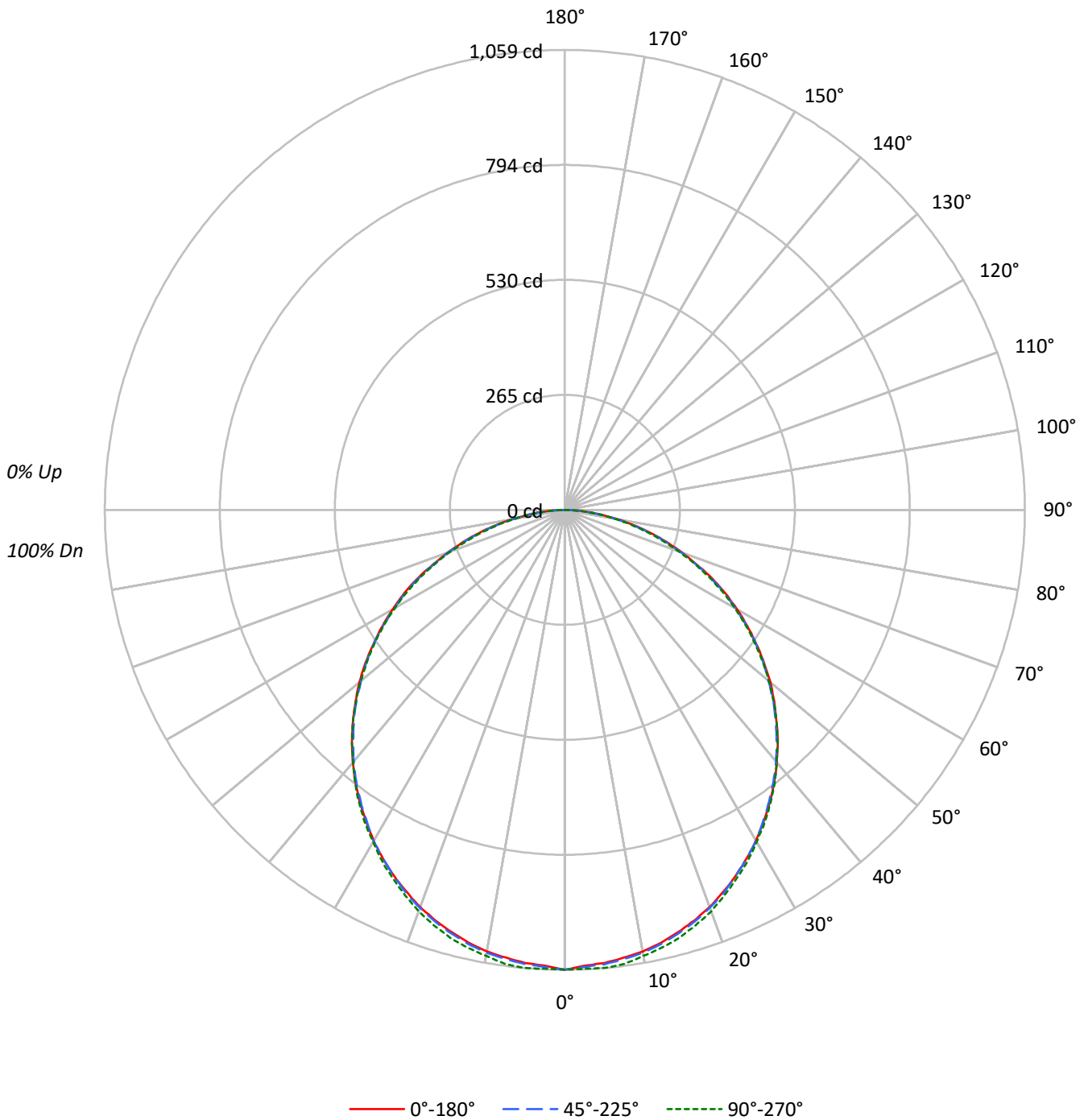
Lumens per Lamp: N/A
Luminaire Lumens: 2972.5 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 26.7
Input Voltage (V): 120
Input Current (Ain): 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
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	66	62	69	65	61	59		
4	82	70	61	55	80	69	61	54	66	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	42	36	63	50	42	36	49	41	36	47	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	33	29	39	33	29	27		
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17097	17097	17097
5°	16974	17021	17162
10°	16934	16982	17100
15°	16831	16879	17048
20°	16730	16756	16904
25°	16577	16577	16678
30°	16406	16406	16460
35°	16208	16151	16265
40°	15993	15932	15993
45°	15746	15680	15746
50°	15508	15365	15400
55°	15147	15105	15026
60°	14767	14673	14580
65°	14330	14162	13998
70°	13482	13416	13143
75°	12689	12420	12059
80°	11269	11000	10600
85°	9077	8281	7744

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15844 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.2	3.4
10°-20°	286.2	9.6
20°-30°	430.5	14.5
30°-40°	515.1	17.3
40°-50°	531.5	17.9
50°-60°	479.5	16.1
60°-70°	365.8	12.3
70°-80°	210.2	7.1
80°-90°	53.6	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°	816.8	27.5
0°-40°	1331.9	44.8
0°-60°	2342.9	78.8
0°-90°	2972.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2972.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1047	1062	1050	1052	1059	99
15°	1007	1020	1010	1013	1020	284
25°	930	941	930	932	936	429
35°	822	828	819	822	825	514
45°	690	694	687	688	690	532
55°	538	541	537	534	534	481
65°	375	374	371	368	366	369
75°	203	202	199	195	193	215
85°	49	46	45	40	42	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1058.9	1058.9	1058.9	1058.9	1058.9
2.5°	1050.2	1066.1	1053.1	1056.0	1057.4
5°	1047.3	1061.7	1050.2	1051.6	1058.9
7.5°	1040.1	1056.0	1043.0	1045.9	1054.5
10°	1032.9	1047.3	1035.8	1037.2	1043.0
12.5°	1021.3	1035.8	1024.2	1027.1	1032.9
15°	1006.9	1019.9	1009.8	1012.7	1019.9
17.5°	991.1	1005.5	993.9	998.3	1002.6
20°	973.7	985.3	975.2	976.6	983.8
22.5°	952.1	963.6	955.0	955.0	960.8
25°	930.5	940.6	930.5	931.9	936.2
27.5°	905.9	914.6	905.9	907.4	911.7
30°	880.0	888.6	880.0	881.4	882.9
32.5°	851.1	858.3	849.7	851.1	855.5
35°	822.3	828.0	819.4	822.3	825.2
37.5°	792.0	796.3	789.1	790.5	793.4
40°	758.8	763.1	755.9	757.4	758.8
42.5°	725.6	728.5	721.3	722.7	725.6
45°	689.6	693.9	686.7	688.1	689.6
47.5°	653.5	656.4	650.6	649.2	652.0
50°	617.4	618.9	611.7	611.7	613.1
52.5°	578.5	579.9	575.6	572.7	574.1
55°	538.1	541.0	536.6	533.8	533.8
57.5°	497.7	500.6	494.8	493.4	493.4
60°	457.3	458.7	454.4	453.0	451.5
62.5°	416.9	416.9	412.6	411.1	409.7
65°	375.1	373.6	370.7	367.9	366.4
67.5°	327.5	328.9	326.0	321.7	321.7
70°	285.6	287.1	284.2	278.4	278.4
72.5°	245.2	243.8	242.4	238.0	235.1
75°	203.4	202.0	199.1	194.7	193.3
77.5°	161.6	160.1	158.7	152.9	154.4
80°	121.2	119.7	118.3	114.0	114.0
82.5°	85.1	82.2	80.8	76.5	76.5
85°	49.0	46.2	44.7	40.4	41.8
87.5°	17.3	15.9	14.4	11.5	11.5
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	21.63	23.27	21.99	23.58	23.90	21.55	23.19	21.92	23.51	23.82
	3H	23.46	24.95	23.84	25.27	25.63	23.34	24.83	23.72	25.15	25.51
	4H	24.15	25.55	24.55	25.90	26.28	24.00	25.40	24.40	25.75	26.12
	6H	24.66	25.96	25.07	26.32	26.71	24.48	25.77	24.89	26.14	26.53
	8H	24.82	26.06	25.24	26.45	26.85	24.62	25.86	25.04	26.25	26.64
	12H	24.92	26.11	25.35	26.49	26.92	24.70	25.88	25.13	26.27	26.69
4H	2H	22.27	23.66	22.66	24.01	24.39	22.20	23.60	22.60	23.95	24.33
	3H	24.32	25.49	24.73	25.89	26.29	24.21	25.38	24.62	25.78	26.18
	4H	25.14	26.20	25.57	26.62	27.05	25.00	26.06	25.43	26.47	26.91
	6H	25.77	26.70	26.23	27.14	27.60	25.59	26.52	26.05	26.96	27.42
	8H	25.98	26.85	26.44	27.29	27.75	25.78	26.65	26.24	27.09	27.55
	12H	26.12	26.90	26.60	27.37	27.84	25.89	26.67	26.37	27.15	27.62
8H	4H	25.45	26.32	25.91	26.76	27.22	25.32	26.19	25.78	26.63	27.10
	6H	26.20	26.92	26.69	27.41	27.88	26.03	26.76	26.53	27.24	27.72
	8H	26.48	27.12	26.98	27.63	28.11	26.28	26.93	26.79	27.44	27.92
	12H	26.68	27.25	27.19	27.74	28.30	26.45	27.03	26.96	27.52	28.08
12H	4H	25.48	26.26	25.96	26.74	27.21	25.36	26.14	25.84	26.62	27.08
	6H	26.25	26.90	26.76	27.41	27.89	26.09	26.74	26.60	27.25	27.73
	8H	26.58	27.15	27.09	27.64	28.20	26.40	26.97	26.90	27.46	28.02