

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: P845592

Luminaire Tested: SQ2R-PP3-050D-930-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845592
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-PP3-050D-930-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS
500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

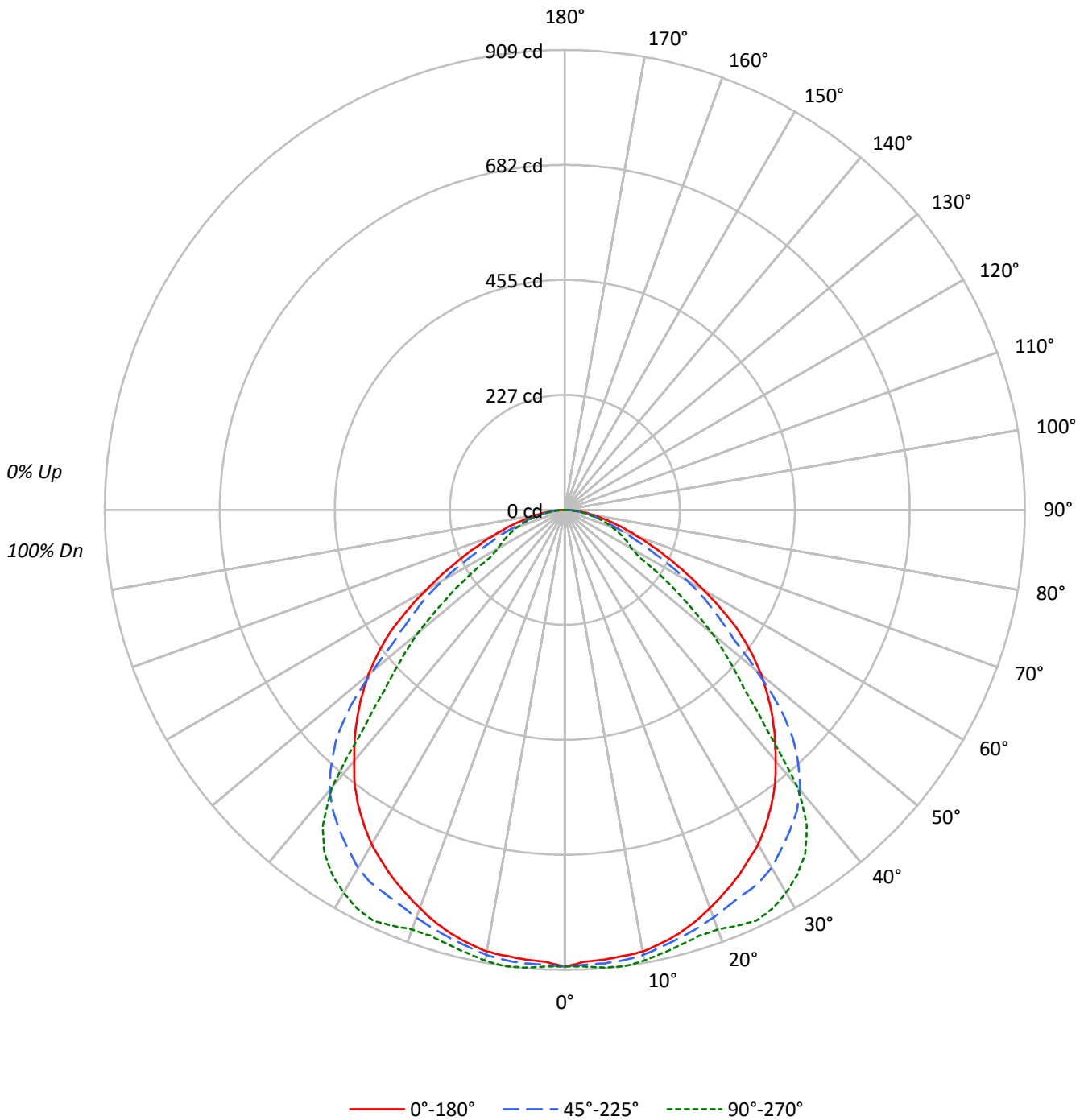
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2273.8 lumens
Efficiency: N/A
Efficacy: 127.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9973
Total Harmonic Distortion (THDi): 0.0531
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 3 HR
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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	89	87
2	101	94	88	82	99	92	86	82	88	84	80	85	81	78	82	79	76	74
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	61	57	55
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14575	14575	14575
5°	14460	14584	14723
10°	14534	14642	14831
15°	14499	14643	14865
20°	14395	14739	15165
25°	14313	14925	15962
30°	14233	15228	16296
35°	14030	15272	16326
40°	13656	15245	15085
45°	13248	14554	11483
50°	12728	12416	9563
55°	11845	10449	6877
60°	10198	8967	4931
65°	8604	6926	4848
70°	7161	5452	4640
75°	6070	4704	4348
80°	5142	4082	3905
85°	4057	3353	2130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 14554 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.0	3.8
10°-20°	248.8	10.9
20°-30°	390.0	17.2
30°-40°	481.5	21.2
40°-50°	453.3	19.9
50°-60°	320.5	14.1
60°-70°	182.1	8.0
70°-80°	90.2	4.0
80°-90°	21.5	0.9
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°	724.8	31.9
0°-40°	1206.3	53.1
0°-60°	1980.0	87.1
0°-90°	2273.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2273.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	903	903	903	903	903	
5°	892	908	900	902	908	85
15°	867	880	876	884	889	245
25°	803	824	838	871	896	370
35°	712	732	775	819	828	444
45°	580	625	637	541	503	447
55°	421	447	371	280	244	372
65°	225	238	181	128	127	226
75°	97	108	75	71	70	105
85°	22	20	18	14	12	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	902.7	902.7	902.7	902.7	902.7
2.5°	894.1	910.3	899.8	901.7	903.6
5°	892.2	908.4	899.8	901.7	908.4
7.5°	889.3	906.5	897.9	900.8	909.4
10°	886.5	900.8	893.1	897.9	904.6
12.5°	877.9	891.2	884.5	891.2	897.0
15°	867.4	879.8	876.0	884.5	889.3
17.5°	854.0	868.3	867.4	878.8	882.6
20°	837.8	855.9	857.8	873.1	882.6
22.5°	820.6	842.6	846.4	871.2	889.3
25°	803.4	824.4	837.8	871.2	896.0
27.5°	783.4	804.4	831.1	868.3	888.4
30°	763.4	783.4	816.8	855.9	874.1
32.5°	738.6	759.5	795.8	838.7	855.0
35°	711.8	731.9	774.8	818.7	828.3
37.5°	682.3	703.3	751.9	781.5	785.3
40°	647.9	677.5	723.3	728.1	715.7
42.5°	614.5	654.6	683.2	658.4	592.6
45°	580.2	625.0	637.4	541.0	502.9
47.5°	543.9	588.7	574.4	465.7	438.9
50°	506.7	548.7	494.3	405.5	380.7
52.5°	464.7	501.0	422.7	348.3	307.3
55°	420.8	446.6	371.2	280.5	244.3
57.5°	368.3	387.4	327.3	220.4	174.6
60°	315.8	330.2	277.7	172.7	152.7
62.5°	268.1	280.5	226.1	144.1	140.3
65°	225.2	237.6	181.3	127.9	126.9
67.5°	186.1	199.4	145.0	114.5	113.6
70°	151.7	166.0	115.5	100.2	98.3
72.5°	123.1	136.5	93.5	84.9	84.0
75°	97.3	107.8	75.4	70.6	69.7
77.5°	74.4	82.1	59.2	56.3	55.3
80°	55.3	58.2	43.9	42.9	42.0
82.5°	38.2	36.3	30.5	29.6	27.7
85°	21.9	20.0	18.1	14.3	11.5
87.5°	8.6	8.6	3.8	2.9	2.9
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	20.76	22.28	21.12	22.59	22.91	17.16	18.68	17.52	18.99	19.31
	3H	21.90	23.26	22.28	23.59	23.95	18.31	19.67	18.69	20.00	20.36
	4H	22.27	23.55	22.67	23.90	24.28	18.80	20.08	19.20	20.43	20.80
	6H	22.52	23.70	22.93	24.06	24.46	19.18	20.36	19.59	20.72	21.11
	8H	22.59	23.71	23.01	24.10	24.50	19.28	20.40	19.71	20.79	21.19
	12H	22.62	23.69	23.05	24.07	24.50	19.32	20.39	19.75	20.77	21.20
4H	2H	20.94	22.22	21.34	22.57	22.95	17.95	19.22	18.35	19.57	19.95
	3H	22.31	23.37	22.72	23.77	24.17	19.26	20.31	19.67	20.71	21.11
	4H	22.81	23.76	23.24	24.17	24.61	19.84	20.78	20.27	21.20	21.64
	6H	23.18	24.00	23.64	24.45	24.91	20.31	21.13	20.77	21.57	22.03
	8H	23.29	24.06	23.75	24.50	24.97	20.44	21.21	20.91	21.65	22.12
	12H	23.35	24.04	23.83	24.52	24.99	20.50	21.19	20.98	21.66	22.14
8H	4H	22.88	23.64	23.34	24.09	24.55	20.16	20.92	20.62	21.37	21.83
	6H	23.33	23.96	23.83	24.45	24.93	20.72	21.36	21.22	21.85	22.33
	8H	23.48	24.06	24.00	24.57	25.05	20.91	21.48	21.42	21.99	22.48
	12H	23.60	24.10	24.11	24.60	25.16	21.01	21.52	21.52	22.01	22.57
12H	4H	22.86	23.55	23.35	24.03	24.50	20.19	20.88	20.67	21.36	21.83
	6H	23.32	23.89	23.83	24.40	24.89	20.77	21.35	21.29	21.86	22.34
	8H	23.51	24.02	24.02	24.51	25.08	21.01	21.52	21.52	22.01	22.57