

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: P845634

Luminaire Tested: SQ2R-PR1-125D-930-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845634
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-9)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-PR1-125D-930-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS
1250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

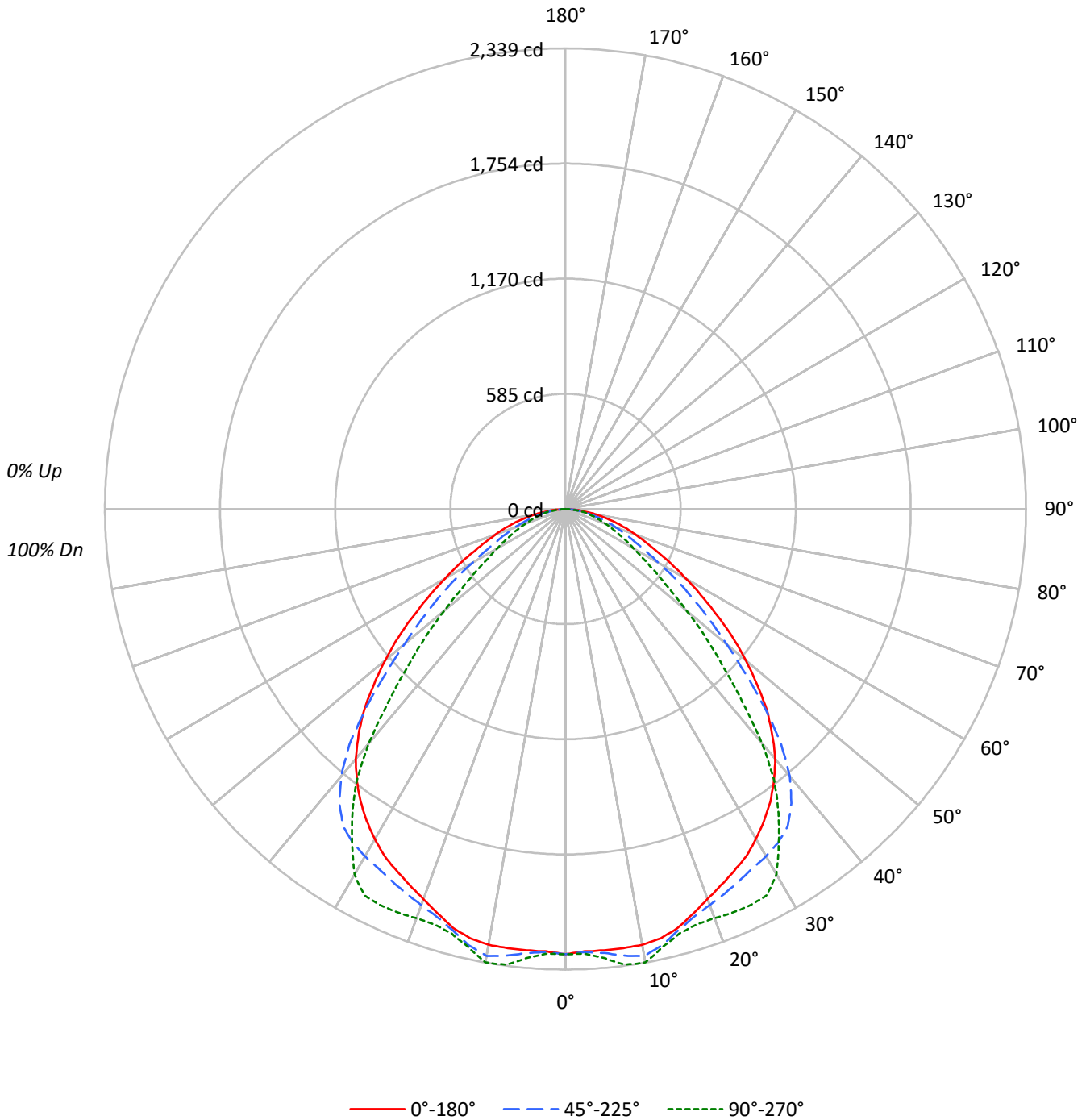
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5438.9 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.33 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 49.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9979
Total Harmonic Distortion (THDi): 0.0523
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	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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65				65
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				56
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44				44
7	69	56	48	42	67	55	48	42	54	47	42	52	46	41	51	45	41	39				39
8	64	51	43	38	63	51	43	38	49	42	38	48	42	37	47	41	37	35				35
9	60	47	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32				32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	40	35	31	29				29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	36501	36501	36501
5°	36454	36678	37125
10°	36838	37782	38348
15°	36826	37018	37325
20°	36230	36783	38012
25°	36127	37153	39576
30°	36090	37979	39957
35°	35747	38790	37201
40°	34922	37350	32737
45°	33045	32782	25889
50°	30042	26801	20085
55°	26401	22055	15634
60°	22846	17638	12875
65°	19721	14613	11270
70°	17731	12944	10008
75°	16244	11210	9201
80°	14142	9000	9000
85°	10244	8114	4261

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 35780 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.3	4.0
10°-20°	632.2	11.6
20°-30°	977.7	18.0
30°-40°	1177.2	21.6
40°-50°	1056.8	19.4
50°-60°	705.5	13.0
60°-70°	409.9	7.5
70°-80°	210.7	3.9
80°-90°	50.7	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°	1828.2	33.6
0°-40°	3005.4	55.3
0°-60°	4767.7	87.7
0°-90°	5438.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5438.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2261	2261	2261	2261	2261	
5°	2249	2288	2263	2268	2291	215
15°	2203	2295	2215	2222	2233	619
25°	2028	2111	2086	2162	2222	936
35°	1814	1830	1968	1931	1887	1132
45°	1447	1567	1436	1212	1134	1108
55°	938	975	784	606	555	842
65°	516	528	382	311	295	521
75°	260	254	180	152	148	276
85°	55	44	44	30	23	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2260.7	2260.7	2260.7	2260.7	2260.7
2.5°	2249.2	2283.7	2251.5	2253.8	2260.7
5°	2249.2	2288.3	2263.0	2267.6	2290.6
7.5°	2249.2	2302.2	2288.3	2304.5	2334.4
10°	2246.9	2313.7	2304.5	2306.8	2339.0
12.5°	2233.0	2313.7	2269.9	2265.3	2279.1
15°	2203.1	2295.2	2214.6	2221.5	2233.0
17.5°	2154.7	2251.5	2170.8	2193.9	2212.3
20°	2108.6	2203.1	2140.8	2173.1	2212.3
22.5°	2067.1	2161.6	2113.2	2161.6	2219.2
25°	2027.9	2110.9	2085.5	2161.6	2221.5
27.5°	1988.8	2041.8	2057.9	2163.9	2212.3
30°	1935.8	1968.0	2037.1	2127.0	2143.2
32.5°	1878.1	1894.3	2009.5	2046.4	2016.4
35°	1813.6	1829.7	1968.0	1931.1	1887.4
37.5°	1739.9	1767.5	1885.1	1790.6	1742.2
40°	1656.9	1712.2	1772.1	1610.8	1553.2
42.5°	1555.5	1652.3	1622.3	1405.7	1332.0
45°	1447.2	1567.0	1435.7	1212.1	1133.8
47.5°	1320.5	1449.5	1239.8	1037.0	965.6
50°	1196.0	1295.1	1067.0	880.3	799.6
52.5°	1069.3	1133.8	919.5	732.8	661.4
55°	937.9	974.8	783.5	606.1	555.4
57.5°	815.8	841.1	663.7	504.7	465.5
60°	707.5	723.6	546.2	428.6	398.7
62.5°	608.4	619.9	451.7	364.1	343.4
65°	516.2	527.7	382.5	311.1	295.0
67.5°	440.2	447.1	324.9	267.3	251.2
70°	375.6	377.9	274.2	223.5	212.0
72.5°	318.0	313.4	225.8	186.7	179.7
75°	260.4	253.5	179.7	152.1	147.5
77.5°	205.1	198.2	133.7	122.1	122.1
80°	152.1	142.9	96.8	96.8	96.8
82.5°	103.7	89.9	69.1	69.1	66.8
85°	55.3	43.8	43.8	30.0	23.0
87.5°	18.4	18.4	6.9	6.9	6.9
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	23.21	24.70	23.57	25.01	25.33	19.93	21.43	20.30	21.74	22.06
	3H	24.48	25.82	24.86	26.15	26.51	21.05	22.38	21.42	22.71	23.07
	4H	24.96	26.22	25.36	26.56	26.94	21.47	22.73	21.87	23.07	23.45
	6H	25.31	26.47	25.72	26.83	27.22	21.83	22.99	22.25	23.36	23.75
	8H	25.41	26.51	25.84	26.90	27.30	21.94	23.03	22.36	23.42	23.83
	12H	25.46	26.51	25.89	26.89	27.32	21.96	23.01	22.39	23.40	23.83
4H	2H	23.36	24.61	23.76	24.96	25.34	20.58	21.83	20.98	22.18	22.56
	3H	24.89	25.92	25.30	26.32	26.72	21.90	22.93	22.31	23.33	23.73
	4H	25.50	26.43	25.94	26.85	27.29	22.43	23.35	22.86	23.77	24.21
	6H	25.99	26.79	26.44	27.23	27.70	22.89	23.70	23.35	24.14	24.60
	8H	26.13	26.88	26.59	27.33	27.79	23.03	23.78	23.49	24.22	24.69
	12H	26.21	26.88	26.69	27.36	27.83	23.08	23.75	23.56	24.23	24.70
8H	4H	25.57	26.32	26.04	26.77	27.24	22.77	23.53	23.24	23.97	24.44
	6H	26.14	26.76	26.64	27.25	27.73	23.33	23.95	23.83	24.44	24.92
	8H	26.34	26.90	26.85	27.41	27.89	23.51	24.07	24.03	24.58	25.07
	12H	26.47	26.96	26.98	27.45	28.02	23.60	24.10	24.11	24.59	25.16
12H	4H	25.56	26.23	26.04	26.71	27.18	22.82	23.49	23.30	23.97	24.44
	6H	26.12	26.68	26.64	27.19	27.68	23.39	23.95	23.90	24.46	24.95
	8H	26.36	26.86	26.87	27.35	27.92	23.62	24.12	24.13	24.61	25.18