

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: P845612

Luminaire Tested: SQ2R-PP3-125D-940-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845612
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-PP3-125D-940-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS
1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

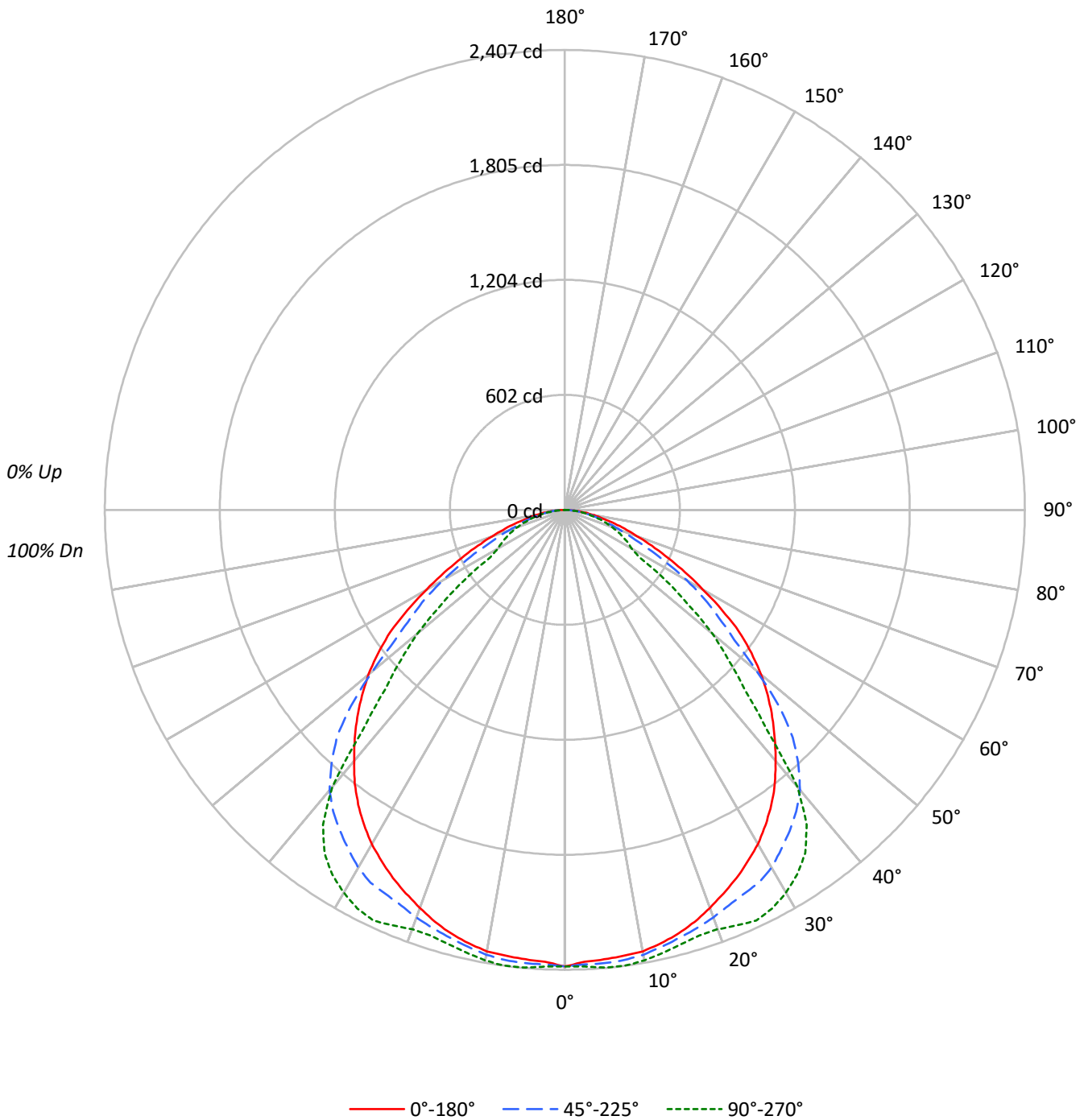
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6018.6 lumens
Efficiency: N/A
Efficacy: 122.3 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): 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	107	104	100	97	99	97	94	96	93	91	92	90	89	87				87
2	101	94	88	82	99	92	86	82	88	84	80	85	81	78	82	79	76	74				74
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	69	66	64				64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	61	57	55				55
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49				49
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43				43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38				38
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34				34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31				31
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	38579	38579	38579
5°	38276	38603	38971
10°	38471	38759	39256
15°	38377	38758	39348
20°	38103	39015	40142
25°	37887	39506	42252
30°	37671	40309	43134
35°	37138	40424	43213
40°	36147	40352	39926
45°	35066	38525	30394
50°	33689	32865	25314
55°	31356	27657	18201
60°	26996	23734	13049
65°	22774	18334	12833
70°	18958	14427	12283
75°	16070	12445	11503
80°	13622	10804	10330
85°	10763	8892	5613

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 38525 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.6	3.8
10°-20°	658.6	10.9
20°-30°	1032.2	17.2
30°-40°	1274.6	21.2
40°-50°	1199.9	19.9
50°-60°	848.2	14.1
60°-70°	481.9	8.0
70°-80°	238.7	4.0
80°-90°	56.9	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°	1918.4	31.9
0°-40°	3193.0	53.1
0°-60°	5241.2	87.1
0°-90°	6018.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6018.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2389	2389	2389	2389	2389	
5°	2362	2404	2382	2387	2404	225
15°	2296	2329	2319	2341	2354	647
25°	2127	2182	2218	2306	2372	980
35°	1884	1937	2051	2167	2192	1176
45°	1536	1654	1687	1432	1331	1183
55°	1114	1182	982	743	647	984
65°	596	629	480	338	336	597
75°	258	285	200	187	184	278
85°	58	53	48	38	30	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2389.4	2389.4	2389.4	2389.4	2389.4
2.5°	2366.7	2409.6	2381.8	2386.9	2391.9
5°	2361.6	2404.5	2381.8	2386.9	2404.5
7.5°	2354.0	2399.5	2376.8	2384.3	2407.1
10°	2346.5	2384.3	2364.1	2376.8	2394.4
12.5°	2323.7	2359.1	2341.4	2359.1	2374.2
15°	2295.9	2328.8	2318.7	2341.4	2354.0
17.5°	2260.6	2298.5	2295.9	2326.2	2336.3
20°	2217.6	2265.6	2270.7	2311.1	2336.3
22.5°	2172.2	2230.3	2240.4	2306.0	2354.0
25°	2126.7	2182.3	2217.6	2306.0	2371.7
27.5°	2073.7	2129.2	2200.0	2298.5	2351.5
30°	2020.6	2073.7	2162.1	2265.6	2313.6
32.5°	1955.0	2010.5	2106.5	2220.2	2263.1
35°	1884.2	1937.3	2050.9	2167.1	2192.4
37.5°	1805.9	1861.5	1990.3	2068.6	2078.7
40°	1715.0	1793.3	1914.5	1927.2	1894.3
42.5°	1626.6	1732.7	1808.5	1742.8	1568.5
45°	1535.7	1654.4	1687.2	1432.1	1331.1
47.5°	1439.7	1558.4	1520.5	1232.6	1161.9
50°	1341.2	1452.3	1308.4	1073.5	1007.8
52.5°	1230.1	1326.0	1118.9	921.9	813.3
55°	1113.9	1182.1	982.5	742.6	646.6
57.5°	975.0	1025.5	866.3	583.5	462.2
60°	836.0	873.9	735.0	457.2	404.1
62.5°	709.7	742.6	598.6	381.4	371.3
65°	596.1	628.9	479.9	338.5	335.9
67.5°	492.5	527.9	383.9	303.1	300.6
70°	401.6	439.5	305.6	265.2	260.2
72.5°	325.8	361.2	247.5	224.8	222.3
75°	257.6	285.4	199.5	186.9	184.4
77.5°	197.0	217.2	156.6	149.0	146.5
80°	146.5	154.1	116.2	113.7	111.1
82.5°	101.0	96.0	80.8	78.3	73.2
85°	58.1	53.0	48.0	37.9	30.3
87.5°	22.7	22.7	10.1	7.6	7.6
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	24.14	25.66	24.50	25.97	26.29	20.54	22.06	20.91	22.38	22.69
	3H	25.28	26.64	25.66	26.97	27.33	21.69	23.05	22.07	23.38	23.74
	4H	25.66	26.93	26.06	27.28	27.66	22.18	23.46	22.58	23.81	24.19
	6H	25.90	27.08	26.31	27.45	27.84	22.56	23.74	22.97	24.10	24.50
	8H	25.97	27.09	26.40	27.48	27.88	22.66	23.78	23.09	24.17	24.57
	12H	26.00	27.08	26.43	27.46	27.89	22.70	23.77	23.13	24.15	24.58
4H	2H	24.33	25.60	24.73	25.95	26.33	21.33	22.61	21.73	22.96	23.33
	3H	25.70	26.75	26.11	27.15	27.55	22.64	23.69	23.05	24.09	24.49
	4H	26.19	27.14	26.63	27.56	27.99	23.22	24.16	23.65	24.58	25.02
	6H	26.57	27.39	27.02	27.83	28.29	23.69	24.51	24.15	24.96	25.42
	8H	26.67	27.44	27.13	27.88	28.35	23.82	24.59	24.29	25.04	25.50
	12H	26.74	27.42	27.22	27.90	28.37	23.88	24.57	24.36	25.05	25.52
8H	4H	26.26	27.03	26.72	27.47	27.94	23.54	24.30	24.00	24.75	25.22
	6H	26.71	27.35	27.21	27.84	28.31	24.10	24.74	24.60	25.23	25.71
	8H	26.87	27.44	27.38	27.95	28.44	24.29	24.86	24.80	25.37	25.86
	12H	26.98	27.49	27.49	27.98	28.54	24.39	24.90	24.90	25.39	25.95
12H	4H	26.25	26.93	26.73	27.41	27.88	23.57	24.26	24.06	24.74	25.21
	6H	26.70	27.27	27.21	27.78	28.27	24.16	24.73	24.67	25.24	25.73
	8H	26.90	27.40	27.41	27.90	28.46	24.39	24.90	24.90	25.39	25.96