

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: P845610

Luminaire Tested: SQ2R-PP3-125D-930-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845610
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-930-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS
1250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

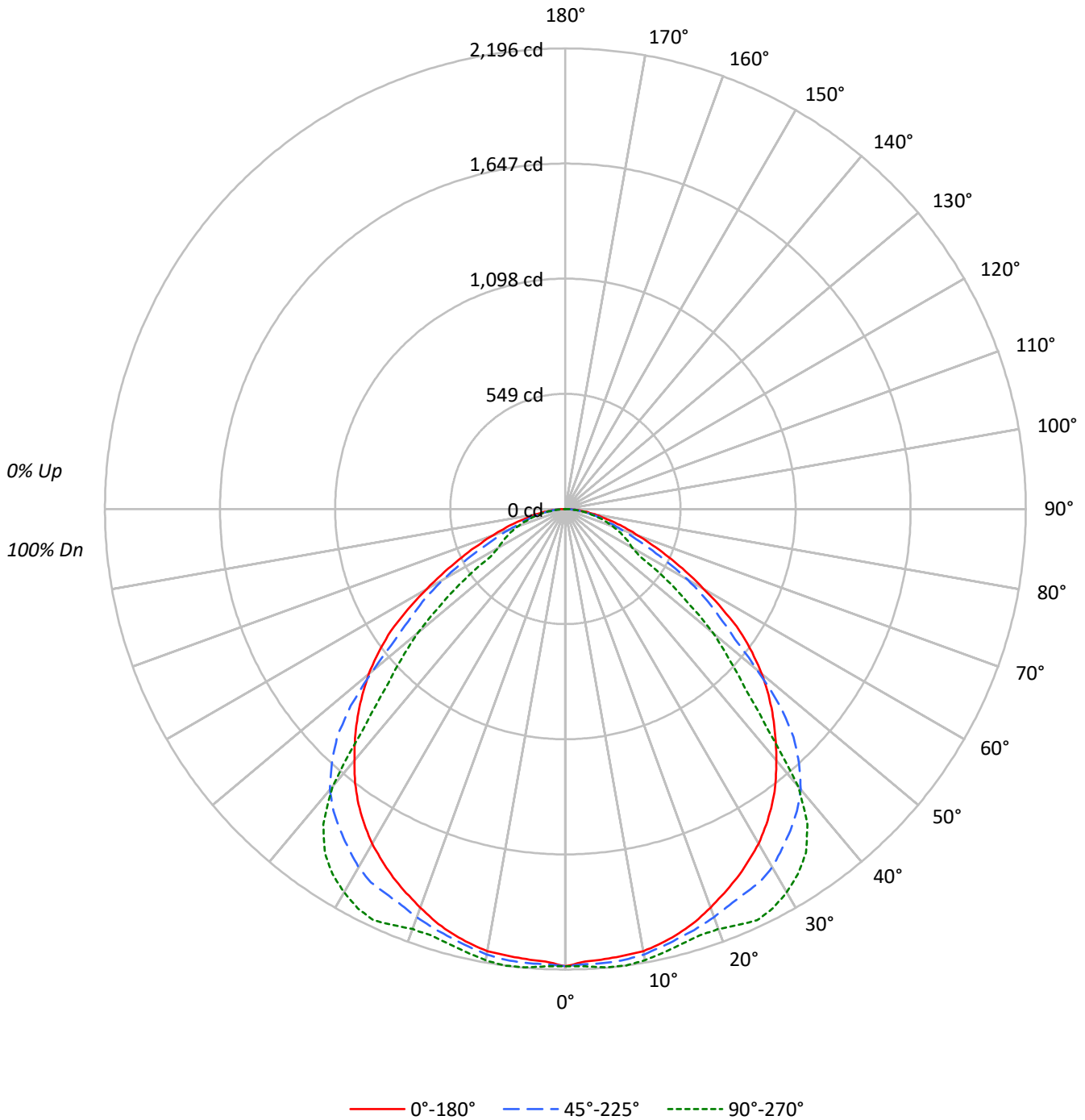
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5491.3 lumens
Efficiency: N/A
Efficacy: 111.6 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°	35198	35198	35198
5°	34922	35221	35558
10°	35098	35364	35816
15°	35015	35361	35901
20°	34764	35596	36625
25°	34568	36045	38550
30°	34371	36776	39355
35°	33884	36882	39427
40°	32979	36817	36427
45°	31992	35150	27731
50°	30737	29984	23096
55°	28608	25233	16605
60°	24632	21655	11906
65°	20779	16726	11710
70°	17297	13161	11207
75°	14666	11360	10493
80°	12431	9856	9428
85°	9818	8114	5132

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 35150 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.7	3.8
10°-20°	600.9	10.9
20°-30°	941.8	17.2
30°-40°	1162.9	21.2
40°-50°	1094.8	19.9
50°-60°	773.9	14.1
60°-70°	439.7	8.0
70°-80°	217.8	4.0
80°-90°	51.9	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°	1750.3	31.9
0°-40°	2913.2	53.1
0°-60°	4781.9	87.1
0°-90°	5491.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5491.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2180	2180	2180	2180	2180	
5°	2155	2194	2173	2178	2194	205
15°	2095	2125	2116	2136	2148	591
25°	1940	1991	2023	2104	2164	894
35°	1719	1768	1871	1977	2000	1073
45°	1401	1509	1539	1307	1214	1079
55°	1016	1078	896	678	590	898
65°	544	574	438	309	306	545
75°	235	260	182	170	168	254
85°	53	48	44	35	28	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2180.0	2180.0	2180.0	2180.0	2180.0
2.5°	2159.3	2198.5	2173.1	2177.7	2182.3
5°	2154.7	2193.9	2173.1	2177.7	2193.9
7.5°	2147.8	2189.2	2168.5	2175.4	2196.2
10°	2140.8	2175.4	2157.0	2168.5	2184.6
12.5°	2120.1	2152.4	2136.2	2152.4	2166.2
15°	2094.8	2124.7	2115.5	2136.2	2147.8
17.5°	2062.5	2097.1	2094.8	2122.4	2131.6
20°	2023.3	2067.1	2071.7	2108.6	2131.6
22.5°	1981.8	2034.8	2044.1	2104.0	2147.8
25°	1940.4	1991.1	2023.3	2104.0	2163.9
27.5°	1892.0	1942.7	2007.2	2097.1	2145.5
30°	1843.6	1892.0	1972.6	2067.1	2110.9
32.5°	1783.7	1834.4	1921.9	2025.6	2064.8
35°	1719.1	1767.5	1871.2	1977.2	2000.3
37.5°	1647.7	1698.4	1815.9	1887.4	1896.6
40°	1564.7	1636.2	1746.8	1758.3	1728.3
42.5°	1484.1	1580.9	1650.0	1590.1	1431.1
45°	1401.1	1509.4	1539.4	1306.6	1214.5
47.5°	1313.5	1421.9	1387.3	1124.6	1060.1
50°	1223.7	1325.1	1193.7	979.4	919.5
52.5°	1122.3	1209.8	1020.9	841.1	742.0
55°	1016.3	1078.5	896.4	677.5	589.9
57.5°	889.5	935.6	790.4	532.3	421.7
60°	762.8	797.3	670.6	417.1	368.7
62.5°	647.6	677.5	546.2	348.0	338.8
65°	543.9	573.8	437.8	308.8	306.5
67.5°	449.4	481.6	350.3	276.5	274.2
70°	366.4	401.0	278.8	242.0	237.4
72.5°	297.3	329.5	225.8	205.1	202.8
75°	235.1	260.4	182.1	170.5	168.2
77.5°	179.7	198.2	142.9	136.0	133.7
80°	133.7	140.6	106.0	103.7	101.4
82.5°	92.2	87.6	73.7	71.4	66.8
85°	53.0	48.4	43.8	34.6	27.7
87.5°	20.7	20.7	9.2	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	23.82	25.34	24.18	25.66	25.97	20.22	21.74	20.59	22.06	22.37
	3H	24.96	26.33	25.34	26.65	27.02	21.37	22.73	21.75	23.06	23.42
	4H	25.34	26.61	25.74	26.96	27.34	21.86	23.14	22.26	23.49	23.87
	6H	25.58	26.76	26.00	27.13	27.52	22.24	23.42	22.65	23.79	24.18
	8H	25.65	26.77	26.08	27.16	27.56	22.34	23.47	22.77	23.85	24.26
	12H	25.68	26.76	26.12	27.14	27.57	22.38	23.45	22.81	23.83	24.26
4H	2H	24.01	25.28	24.41	25.63	26.01	21.01	22.29	21.41	22.64	23.02
	3H	25.38	26.43	25.79	26.83	27.23	22.32	23.37	22.73	23.77	24.18
	4H	25.88	26.82	26.31	27.24	27.68	22.90	23.85	23.33	24.26	24.70
	6H	26.25	27.07	26.70	27.51	27.97	23.37	24.19	23.83	24.64	25.10
	8H	26.35	27.12	26.82	27.56	28.03	23.51	24.27	23.97	24.72	25.19
	12H	26.42	27.10	26.90	27.58	28.05	23.56	24.25	24.05	24.73	25.20
8H	4H	25.94	26.71	26.40	27.15	27.62	23.22	23.99	23.68	24.43	24.90
	6H	26.39	27.03	26.89	27.52	28.00	23.78	24.42	24.28	24.91	25.39
	8H	26.55	27.12	27.06	27.63	28.12	23.97	24.54	24.49	25.05	25.54
	12H	26.66	27.17	27.17	27.66	28.23	24.07	24.58	24.58	25.07	25.64
12H	4H	25.93	26.61	26.41	27.09	27.56	23.25	23.94	23.74	24.42	24.89
	6H	26.38	26.95	26.90	27.46	27.95	23.84	24.41	24.35	24.92	25.41
	8H	26.58	27.09	27.09	27.58	28.14	24.07	24.58	24.58	25.07	25.64