

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: P845606

Luminaire Tested: SQ2R-PP3-100D-940-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845606
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-PP3-100D-940-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS
1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

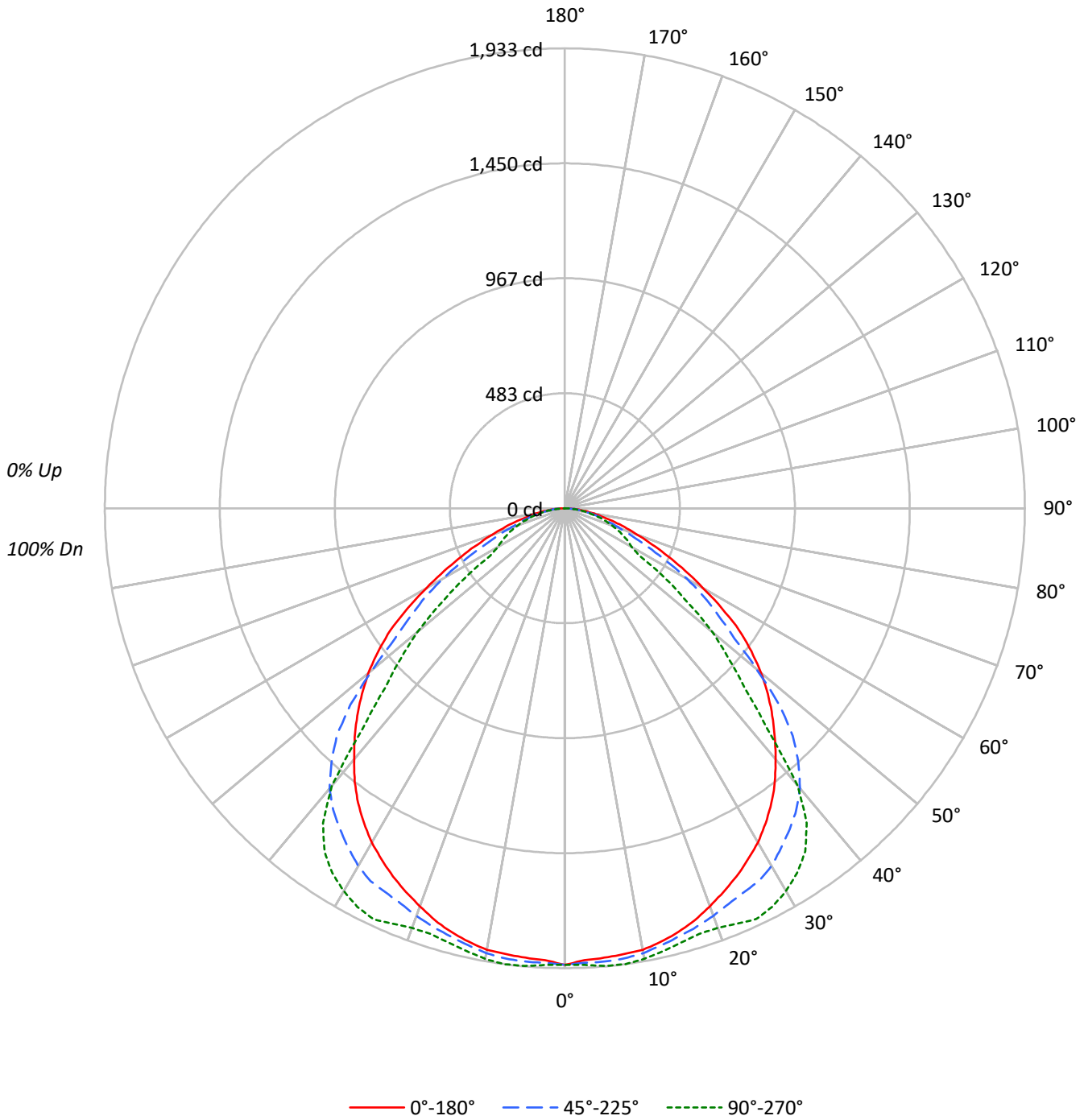
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4833.7 lumens
Efficiency: N/A
Efficacy: 128.6 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): 37.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9969
Total Harmonic Distortion (THDi): 0.066
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 3 HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P845606
CATALOG NUMBER: SQ2R-PP3-100D-940-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P845606

CATALOG NUMBER: SQ2R-PP3-100D-940-UNV-STD-W-4

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°	30984	30984	30984
5°	30739	31003	31298
10°	30896	31129	31527
15°	30822	31127	31602
20°	30601	31333	32240
25°	30428	31728	33934
30°	30255	32373	34642
35°	29828	32465	34704
40°	29029	32408	32066
45°	28161	30940	24409
50°	27055	26394	20331
55°	25182	22213	14618
60°	21681	19062	10482
65°	18288	14724	10308
70°	15224	11585	9862
75°	12907	10000	9239
80°	10944	8675	8303
85°	8651	7132	4502

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 30940 cd/sqm

TEST NUMBER: P845606

CATALOG NUMBER: SQ2R-PP3-100D-940-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.8	3.8
10°-20°	528.9	10.9
20°-30°	829.0	17.2
30°-40°	1023.6	21.2
40°-50°	963.7	19.9
50°-60°	681.2	14.1
60°-70°	387.0	8.0
70°-80°	191.7	4.0
80°-90°	45.7	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°	1540.7	31.9
0°-40°	2564.4	53.1
0°-60°	4209.3	87.1
0°-90°	4833.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4833.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1919	1919	1919	1919	1919	
5°	1897	1931	1913	1917	1931	181
15°	1844	1870	1862	1880	1891	520
25°	1708	1753	1781	1852	1905	787
35°	1513	1556	1647	1740	1761	945
45°	1233	1329	1355	1150	1069	950
55°	895	949	789	596	519	790
65°	479	505	385	272	270	480
75°	207	229	160	150	148	223
85°	47	43	38	30	24	56
90°	0	0	0	0	0	



TEST NUMBER: P845606

CATALOG NUMBER: SQ2R-PP3-100D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1919.0	1919.0	1919.0	1919.0	1919.0
2.5°	1900.7	1935.2	1912.9	1916.9	1921.0
5°	1896.6	1931.1	1912.9	1916.9	1931.1
7.5°	1890.6	1927.1	1908.8	1914.9	1933.2
10°	1884.5	1914.9	1898.7	1908.8	1923.0
12.5°	1866.2	1894.6	1880.4	1894.6	1906.8
15°	1843.9	1870.3	1862.2	1880.4	1890.6
17.5°	1815.5	1845.9	1843.9	1868.2	1876.4
20°	1781.0	1819.6	1823.6	1856.1	1876.4
22.5°	1744.5	1791.2	1799.3	1852.0	1890.6
25°	1708.0	1752.6	1781.0	1852.0	1904.8
27.5°	1665.4	1710.0	1766.8	1845.9	1888.5
30°	1622.8	1665.4	1736.4	1819.6	1858.1
32.5°	1570.1	1614.7	1691.8	1783.0	1817.5
35°	1513.3	1555.9	1647.1	1740.4	1760.7
37.5°	1450.4	1495.0	1598.5	1661.3	1669.4
40°	1377.3	1440.2	1537.6	1547.7	1521.4
42.5°	1306.3	1391.5	1452.4	1399.7	1259.7
45°	1233.3	1328.7	1355.0	1150.2	1069.0
47.5°	1156.2	1251.6	1221.2	989.9	933.1
50°	1077.1	1166.4	1050.8	862.1	809.4
52.5°	987.9	1065.0	898.6	740.4	653.2
55°	894.6	949.3	789.1	596.4	519.3
57.5°	783.0	823.6	695.8	468.6	371.2
60°	671.4	701.9	590.3	367.2	324.6
62.5°	570.0	596.4	480.8	306.3	298.2
65°	478.7	505.1	385.4	271.8	269.8
67.5°	395.6	424.0	308.3	243.4	241.4
70°	322.5	353.0	245.4	213.0	208.9
72.5°	261.7	290.1	198.8	180.5	178.5
75°	206.9	229.2	160.3	150.1	148.1
77.5°	158.2	174.5	125.8	119.7	117.7
80°	117.7	123.7	93.3	91.3	89.3
82.5°	81.1	77.1	64.9	62.9	58.8
85°	46.7	42.6	38.5	30.4	24.3
87.5°	18.3	18.3	8.1	6.1	6.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P845606

CATALOG NUMBER: SQ2R-PP3-100D-940-UNV-STD-W-4

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	23.38	24.90	23.74	25.21	25.53	19.78	21.30	20.14	21.62	21.93
	3H	24.52	25.88	24.90	26.21	26.57	20.93	22.29	21.31	22.62	22.98
	4H	24.89	26.17	25.29	26.52	26.90	21.42	22.70	21.82	23.05	23.42
	6H	25.14	26.32	25.55	26.68	27.08	21.80	22.98	22.21	23.34	23.73
	8H	25.21	26.33	25.63	26.72	27.12	21.90	23.02	22.33	23.41	23.81
	12H	25.24	26.31	25.67	26.70	27.12	21.94	23.01	22.37	23.39	23.82
4H	2H	23.56	24.84	23.96	25.19	25.57	20.57	21.85	20.97	22.19	22.57
	3H	24.93	25.99	25.34	26.39	26.79	21.88	22.93	22.29	23.33	23.73
	4H	25.43	26.38	25.87	26.79	27.23	22.46	23.40	22.89	23.82	24.26
	6H	25.80	26.63	26.26	27.07	27.53	22.93	23.75	23.39	24.19	24.65
	8H	25.91	26.68	26.37	27.12	27.59	23.06	23.83	23.53	24.28	24.74
	12H	25.97	26.66	26.46	27.14	27.61	23.12	23.81	23.60	24.28	24.76
8H	4H	25.50	26.26	25.96	26.71	27.18	22.78	23.54	23.24	23.99	24.45
	6H	25.95	26.58	26.45	27.08	27.55	23.34	23.98	23.84	24.47	24.95
	8H	26.11	26.68	26.62	27.19	27.68	23.53	24.10	24.04	24.61	25.10
	12H	26.22	26.73	26.73	27.22	27.78	23.63	24.14	24.14	24.63	25.19
12H	4H	25.48	26.17	25.97	26.65	27.12	22.81	23.50	23.29	23.98	24.45
	6H	25.94	26.51	26.45	27.02	27.51	23.39	23.97	23.91	24.48	24.96
	8H	26.14	26.64	26.64	27.13	27.70	23.63	24.14	24.14	24.63	25.19