

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: P845604

Luminaire Tested: SQ2R-PP3-100D-930-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845604
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-930-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS
1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

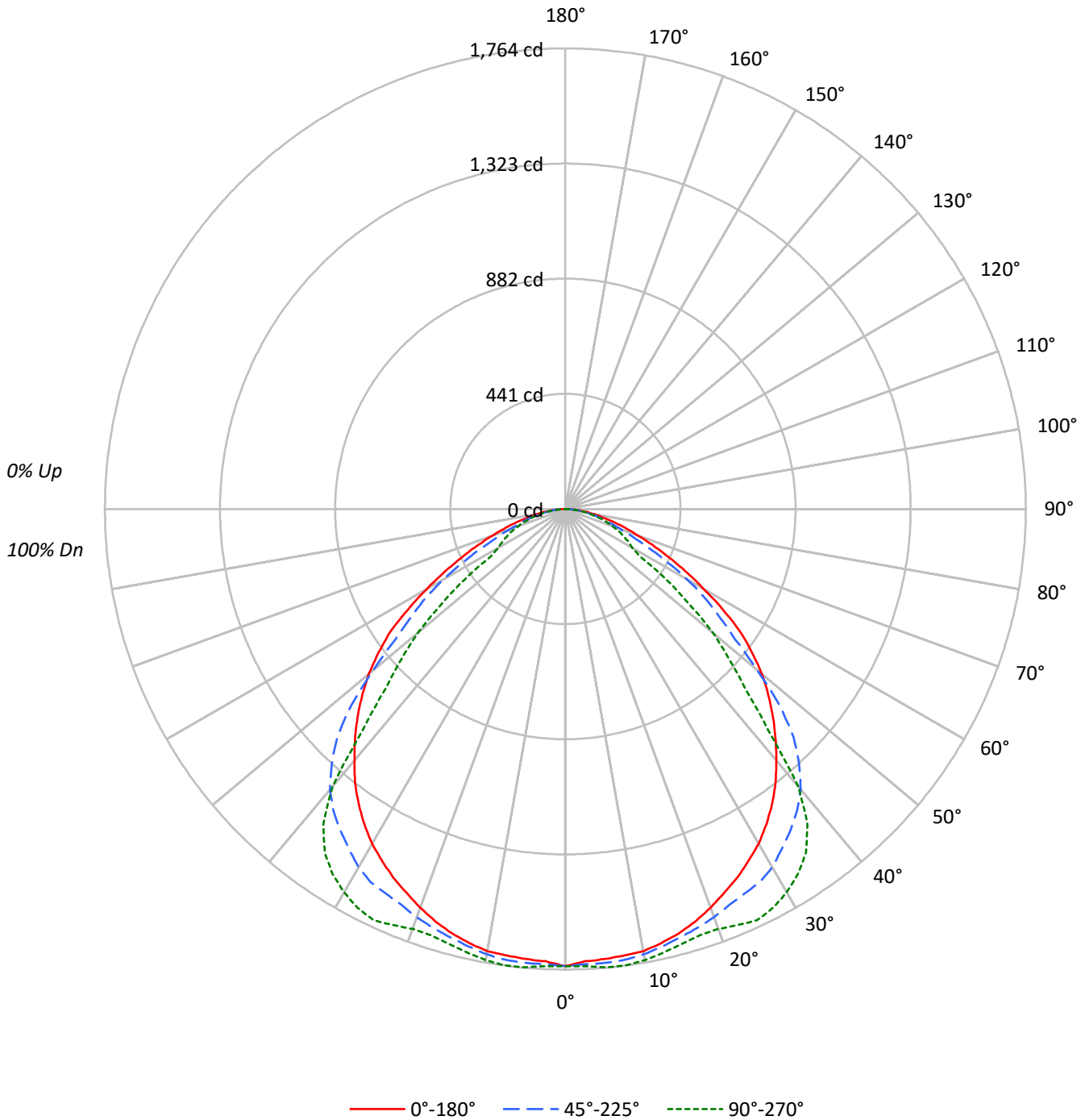
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4410.1 lumens
Efficiency: N/A
Efficacy: 117.3 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): 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

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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°	28268	28268	28268
5°	28045	28287	28556
10°	28188	28401	28765
15°	28120	28399	28832
20°	27921	28587	29414
25°	27761	28949	30961
30°	27604	29535	31607
35°	27214	29621	31663
40°	26487	29569	29257
45°	25695	28229	22270
50°	24684	24081	18547
55°	22976	20265	13337
60°	19782	17392	9562
65°	16688	13433	9402
70°	13893	10570	8998
75°	11778	9120	8428
80°	9977	7913	7569
85°	7892	6521	4113

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 28229 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.8	3.8
10°-20°	482.6	10.9
20°-30°	756.3	17.2
30°-40°	933.9	21.2
40°-50°	879.2	19.9
50°-60°	621.5	14.1
60°-70°	353.1	8.0
70°-80°	174.9	4.0
80°-90°	41.7	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°	1405.7	31.9
0°-40°	2339.7	53.1
0°-60°	3840.4	87.1
0°-90°	4410.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4410.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1751	1751	1751	1751	1751	
5°	1730	1762	1745	1749	1762	165
15°	1682	1706	1699	1716	1725	474
25°	1558	1599	1625	1690	1738	718
35°	1381	1420	1503	1588	1606	862
45°	1125	1212	1236	1049	975	867
55°	816	866	720	544	474	721
65°	437	461	352	248	246	438
75°	189	209	146	137	135	204
85°	43	39	35	28	22	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1750.8	1750.8	1750.8	1750.8	1750.8
2.5°	1734.2	1765.6	1745.3	1749.0	1752.7
5°	1730.4	1761.9	1745.3	1749.0	1761.9
7.5°	1724.9	1758.2	1741.6	1747.1	1763.8
10°	1719.3	1747.1	1732.3	1741.6	1754.5
12.5°	1702.7	1728.6	1715.6	1728.6	1739.7
15°	1682.3	1706.4	1699.0	1715.6	1724.9
17.5°	1656.4	1684.2	1682.3	1704.5	1711.9
20°	1625.0	1660.1	1663.8	1693.4	1711.9
22.5°	1591.6	1634.2	1641.6	1689.7	1724.9
25°	1558.3	1599.0	1625.0	1689.7	1737.9
27.5°	1519.5	1560.2	1612.0	1684.2	1723.0
30°	1480.6	1519.5	1584.2	1660.1	1695.3
32.5°	1432.5	1473.2	1543.5	1626.8	1658.3
35°	1380.7	1419.5	1502.8	1587.9	1606.4
37.5°	1323.3	1364.0	1458.4	1515.8	1523.2
40°	1256.7	1314.0	1402.9	1412.1	1388.1
42.5°	1191.9	1269.6	1325.1	1277.0	1149.3
45°	1125.3	1212.2	1236.3	1049.4	975.3
47.5°	1054.9	1141.9	1114.2	903.2	851.3
50°	982.7	1064.2	958.7	786.6	738.4
52.5°	901.3	971.6	819.9	675.5	595.9
55°	816.2	866.2	719.9	544.1	473.8
57.5°	714.4	751.4	634.8	427.5	338.7
60°	612.6	640.4	538.6	335.0	296.1
62.5°	520.1	544.1	438.6	279.5	272.1
65°	436.8	460.8	351.6	248.0	246.1
67.5°	360.9	386.8	281.3	222.1	220.2
70°	294.3	322.0	223.9	194.3	190.6
72.5°	238.7	264.7	181.4	164.7	162.9
75°	188.8	209.1	146.2	137.0	135.1
77.5°	144.4	159.2	114.7	109.2	107.3
80°	107.3	112.9	85.1	83.3	81.4
82.5°	74.0	70.3	59.2	57.4	53.7
85°	42.6	38.9	35.2	27.8	22.2
87.5°	16.7	16.7	7.4	5.6	5.6
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	23.06	24.58	23.42	24.89	25.21	19.46	20.98	19.83	21.30	21.61
	3H	24.20	25.56	24.58	25.89	26.25	20.61	21.97	20.99	22.30	22.66
	4H	24.58	25.85	24.98	26.20	26.58	21.10	22.38	21.50	22.73	23.11
	6H	24.82	26.00	25.23	26.37	26.76	21.48	22.66	21.89	23.02	23.42
	8H	24.89	26.01	25.32	26.40	26.80	21.58	22.70	22.01	23.09	23.49
	12H	24.92	25.99	25.35	26.38	26.81	21.62	22.69	22.05	23.07	23.50
4H	2H	23.25	24.52	23.65	24.87	25.25	20.25	21.53	20.65	21.88	22.25
	3H	24.61	25.67	25.03	26.07	26.47	21.56	22.61	21.97	23.01	23.41
	4H	25.11	26.06	25.55	26.48	26.91	22.14	23.08	22.57	23.50	23.94
	6H	25.49	26.31	25.94	26.75	27.21	22.61	23.43	23.07	23.88	24.34
	8H	25.59	26.36	26.05	26.80	27.27	22.74	23.51	23.21	23.96	24.42
	12H	25.65	26.34	26.14	26.82	27.29	22.80	23.49	23.28	23.96	24.44
8H	4H	25.18	25.94	25.64	26.39	26.86	22.46	23.22	22.92	23.67	24.14
	6H	25.63	26.26	26.13	26.76	27.23	23.02	23.66	23.52	24.15	24.63
	8H	25.79	26.36	26.30	26.87	27.36	23.21	23.78	23.72	24.29	24.78
	12H	25.90	26.41	26.41	26.90	27.46	23.31	23.82	23.82	24.31	24.87
12H	4H	25.16	25.85	25.65	26.33	26.80	22.49	23.18	22.98	23.66	24.13
	6H	25.62	26.19	26.13	26.70	27.19	23.08	23.65	23.59	24.16	24.65
	8H	25.82	26.32	26.33	26.82	27.38	23.31	23.82	23.82	24.31	24.87