

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: P845551

Luminaire Tested: SQ2R-PC3-075D-935-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845551
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-6)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-PC3-075D-935-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS
750 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

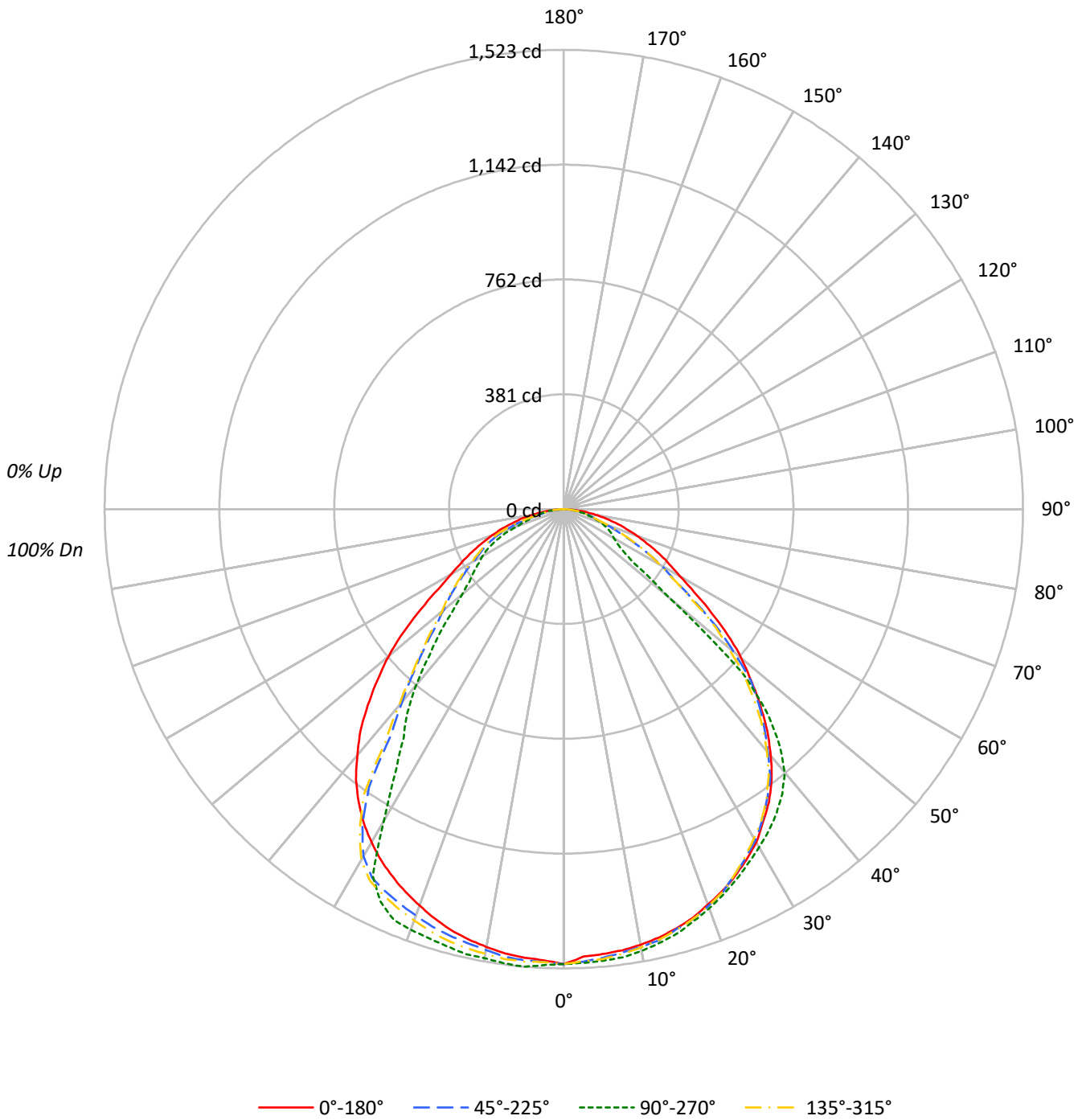
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3382.9 lumens
Efficiency: N/A
Efficacy: 126.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.21 / 1.25
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 26.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
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	100	97	100	97	94	96	94	91	92	90	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	83	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	63	59	57				57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52	50				50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44				44
7	69	57	48	43	67	56	48	42	54	47	42	53	47	42	52	46	42	40				40
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36				36
9	60	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33				33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	31	41	35	31	30				30

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	24362	24362	24362	24362
5°	24011	24363	24199	24691
10°	24053	24384	24171	24786
15°	24065	24354	24162	25078
20°	23993	24216	24043	25505
25°	23925	24132	23952	25597
30°	23802	24151	23774	22216
35°	23373	24254	23373	18254
40°	22531	24019	22438	16054
45°	21048	21708	20982	13275
50°	19314	11452	19060	11052
55°	16811	6618	16242	10275
60°	14347	6197	13882	10062
65°	13284	6338	12840	9536
70°	12189	6198	11849	7558
75°	11160	5577	10798	6837
80°	9930	4965	9391	6843
85°	7484	2668	6947	3483

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 21708 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.1	4.2
10°-20°	413.4	12.2
20°-30°	631.6	18.7
30°-40°	713.8	21.1
40°-50°	624.0	18.4
50°-60°	412.9	12.2
60°-70°	269.7	8.0
70°-80°	141.2	4.2
80°-90°	33.3	1.0
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°	1188.1	35.1
0°-40°	1901.9	56.2
0°-60°	2938.7	86.9
0°-90°	3382.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3382.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1509	1509	1509	1509	1509	
5°	1482	1503	1493	1523	1482	141
15°	1440	1457	1446	1500	1440	406
25°	1343	1355	1344	1437	1343	619
35°	1186	1230	1186	926	1186	739
45°	922	951	919	581	922	710
55°	597	235	577	365	597	536
65°	348	166	336	250	348	344
75°	179	89	173	110	179	190
85°	40	14	38	19	40	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1508.9	1508.9	1508.9	1508.9	1508.9	1508.9	1508.9	1508.9	1508.9	1508.9	1508.9
2.5°	1485.9	1523.4	1501.7	1500.3	1506.1	1507.5	1500.3	1516.2	1497.4	1517.6	1503.2
5°	1481.5	1519.0	1493.1	1490.2	1503.2	1498.8	1497.4	1511.8	1493.1	1508.9	1501.7
7.5°	1475.8	1510.4	1483.0	1481.5	1498.8	1493.1	1487.3	1504.6	1485.9	1503.2	1497.4
10°	1467.1	1497.4	1474.3	1475.8	1487.3	1481.5	1475.8	1490.2	1474.3	1496.0	1484.4
12.5°	1455.6	1485.9	1464.2	1459.9	1472.9	1462.8	1462.8	1474.3	1461.3	1484.4	1474.3
15°	1439.7	1470.0	1442.6	1445.5	1457.0	1446.9	1444.0	1458.5	1445.5	1468.5	1464.2
17.5°	1420.9	1446.9	1426.7	1428.2	1432.5	1428.2	1425.3	1436.8	1423.8	1448.4	1451.2
20°	1396.4	1426.7	1400.7	1400.7	1409.4	1397.9	1400.7	1410.8	1399.3	1428.2	1433.9
22.5°	1371.9	1400.7	1376.2	1376.2	1383.4	1367.6	1374.8	1382.0	1373.3	1405.1	1418.1
25°	1343.0	1366.1	1338.7	1347.4	1354.6	1340.2	1338.7	1350.3	1344.5	1376.2	1399.3
27.5°	1311.3	1331.5	1305.5	1317.1	1324.3	1314.2	1301.2	1315.6	1312.7	1348.8	1377.7
30°	1276.7	1295.4	1269.5	1285.3	1295.4	1281.0	1260.8	1273.8	1275.2	1317.1	1328.6
32.5°	1230.5	1249.3	1224.8	1250.7	1265.1	1244.9	1221.9	1229.1	1234.8	1276.7	1243.5
35°	1185.8	1194.5	1175.7	1208.9	1230.5	1206.0	1171.4	1180.0	1185.8	1233.4	1125.2
37.5°	1132.4	1132.4	1125.2	1161.3	1190.1	1154.1	1116.6	1120.9	1132.4	1172.8	937.7
40°	1069.0	1060.3	1053.1	1100.7	1139.6	1092.0	1047.3	1048.8	1064.6	1074.7	835.3
42.5°	998.3	988.2	985.3	1035.8	1058.9	1019.9	973.7	975.2	998.3	939.1	740.0
45°	921.8	917.5	914.6	949.2	950.7	926.1	893.0	900.2	918.9	810.7	654.9
47.5°	843.9	841.0	839.6	812.2	806.4	789.1	806.4	822.3	838.1	676.6	577.0
50°	768.9	748.7	737.2	636.2	455.9	626.1	709.8	737.2	758.8	590.0	519.3
52.5°	686.7	669.4	633.3	486.2	288.5	483.3	621.8	656.4	669.4	536.6	476.1
55°	597.2	597.2	519.3	311.6	235.1	327.5	510.7	587.1	577.0	480.4	427.0
57.5°	512.1	529.4	431.3	209.2	207.7	209.2	428.4	522.2	493.4	435.7	386.6
60°	444.3	470.3	373.6	186.1	191.9	183.2	366.4	464.5	429.9	388.1	341.9
62.5°	393.8	415.5	308.7	170.2	180.3	167.3	310.2	414.0	380.8	353.4	311.6
65°	347.7	369.3	243.8	155.8	165.9	152.9	251.0	366.4	336.1	314.5	284.2
67.5°	298.6	318.8	193.3	141.4	148.6	139.9	202.0	318.8	291.4	277.0	248.1
70°	258.2	281.3	147.1	126.9	131.3	125.5	157.2	275.5	251.0	245.2	212.1
72.5°	217.8	236.6	114.0	112.5	111.1	109.6	115.4	235.1	212.1	202.0	164.5
75°	178.9	191.9	93.8	93.8	89.4	90.9	93.8	191.9	173.1	164.5	116.8
77.5°	141.4	151.5	76.5	73.6	69.2	69.2	75.0	147.1	137.0	126.9	77.9
80°	106.8	109.6	57.7	54.8	53.4	53.4	57.7	106.8	101.0	90.9	60.6
82.5°	72.1	60.6	38.9	40.4	38.9	38.9	37.5	62.0	67.8	46.2	44.7
85°	40.4	27.4	24.5	18.8	14.4	15.9	23.1	26.0	37.5	24.5	28.9
87.5°	14.4	11.5	4.3	5.8	4.3	4.3	4.3	11.5	11.5	8.7	4.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1508.9	1508.9	1508.9	1508.9	1508.9	1508.9
2.5°	1504.6	1513.3	1511.8	1503.2	1521.9	1485.9
5°	1506.1	1523.4	1514.7	1506.1	1517.6	1481.5
7.5°	1498.8	1519.0	1508.9	1504.6	1516.2	1475.8
10°	1494.5	1511.8	1503.2	1497.4	1508.9	1467.1
12.5°	1490.2	1510.4	1498.8	1491.6	1498.8	1455.6
15°	1478.6	1500.3	1493.1	1481.5	1481.5	1439.7
17.5°	1470.0	1491.6	1484.4	1468.5	1461.3	1420.9
20°	1464.2	1484.4	1474.3	1451.2	1439.7	1396.4
22.5°	1451.2	1474.3	1458.5	1433.9	1418.1	1371.9
25°	1428.2	1436.8	1435.4	1413.7	1387.8	1343.0
27.5°	1367.6	1371.9	1376.2	1390.6	1361.8	1311.3
30°	1262.3	1191.6	1279.6	1344.5	1330.1	1276.7
32.5°	1063.2	1040.1	1092.0	1259.4	1288.2	1230.5
35°	953.5	926.1	969.4	1155.5	1240.6	1185.8
37.5°	854.0	854.0	865.5	970.9	1187.2	1132.4
40°	783.3	761.7	793.4	851.1	1106.5	1069.0
42.5°	669.4	662.1	682.3	750.1	983.8	998.3
45°	590.0	581.4	600.1	665.0	851.1	921.8
47.5°	529.4	497.7	539.5	592.9	721.3	843.9
50°	473.2	440.0	480.4	526.5	611.7	768.9
52.5°	424.1	393.8	434.2	484.7	555.4	686.7
55°	373.6	365.0	383.7	437.1	500.6	597.2
57.5°	331.8	334.7	337.6	395.3	450.1	512.1
60°	305.8	311.6	310.2	354.9	408.3	444.3
62.5°	279.9	282.7	282.7	318.8	367.9	393.8
65°	249.6	249.6	252.5	292.8	333.2	347.7
67.5°	216.4	210.6	220.7	258.2	295.7	298.6
70°	170.2	160.1	177.4	223.6	264.0	258.2
72.5°	122.6	128.4	125.5	176.0	226.5	217.8
75°	101.0	109.6	102.4	125.5	184.7	178.9
77.5°	85.1	92.3	85.1	80.8	148.6	141.4
80°	67.8	73.6	67.8	62.0	109.6	106.8
82.5°	49.0	50.5	49.0	46.2	72.1	72.1
85°	23.1	18.8	26.0	30.3	28.9	40.4
87.5°	4.3	4.3	4.3	5.8	15.9	14.4
90°	0.0	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	21.32	22.81	21.68	23.12	23.43	18.82	20.31	19.18	20.62	20.93
	3H	22.96	24.29	23.34	24.62	24.98	20.30	21.63	20.68	21.96	22.32
	4H	23.56	24.80	23.96	25.15	25.53	20.75	22.00	21.15	22.35	22.73
	6H	23.99	25.14	24.40	25.51	25.90	21.14	22.29	21.56	22.66	23.05
	8H	24.11	25.21	24.54	25.60	26.00	21.26	22.36	21.69	22.75	23.15
	12H	24.18	25.23	24.61	25.61	26.04	21.30	22.35	21.73	22.73	23.16
4H	2H	21.59	22.83	21.99	23.18	23.56	19.63	20.88	20.03	21.23	21.61
	3H	23.48	24.51	23.89	24.92	25.32	21.27	22.31	21.69	22.71	23.11
	4H	24.23	25.16	24.66	25.57	26.01	21.78	22.71	22.22	23.13	23.57
	6H	24.82	25.62	25.27	26.07	26.53	22.26	23.06	22.71	23.50	23.97
	8H	24.99	25.74	25.46	26.19	26.66	22.41	23.16	22.87	23.60	24.07
	12H	25.09	25.76	25.57	26.24	26.71	22.47	23.14	22.95	23.62	24.09
8H	4H	24.30	25.05	24.76	25.50	25.96	22.09	22.85	22.56	23.29	23.76
	6H	24.99	25.61	25.48	26.10	26.58	22.64	23.26	23.14	23.76	24.23
	8H	25.22	25.78	25.74	26.29	26.78	22.85	23.40	23.36	23.91	24.40
	12H	25.37	25.86	25.88	26.36	26.92	22.96	23.45	23.47	23.94	24.51
12H	4H	24.28	24.95	24.77	25.43	25.90	22.13	22.80	22.61	23.28	23.75
	6H	24.97	25.53	25.48	26.04	26.53	22.69	23.25	23.20	23.76	24.25
	8H	25.25	25.74	25.76	26.23	26.80	22.94	23.43	23.45	23.92	24.49