

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: P845550

Luminaire Tested: SQ2R-PC3-075D-930-UNV-STD-W-4

Issue Date: 6/14/2024

**Test Information**

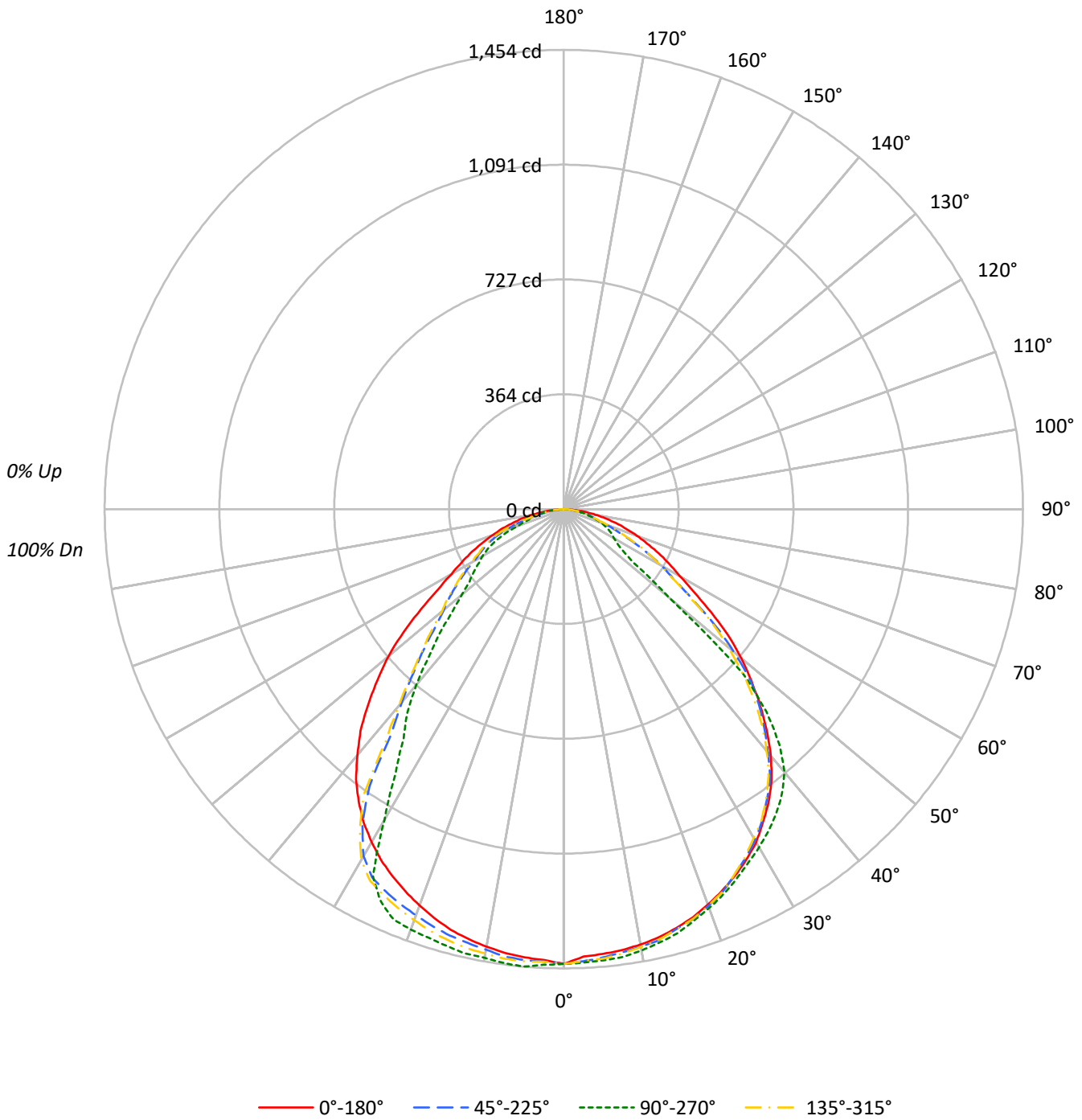
Test Method: LM-79-2019  
Report Number: P845550  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/14/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2R-PC3-075D-930-UNV-STD-W-4  
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS  
750 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3228.0 lumens  
Efficiency: N/A  
Efficacy: 120.9 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

TEST NUMBER: P845550  
CATALOG NUMBER: SQ2R-PC3-075D-930-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P845550

CATALOG NUMBER: SQ2R-PC3-075D-930-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	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°	23247	23247	23247	23247
5°	22913	23246	23091	23559
10°	22951	23268	23064	23651
15°	22964	23239	23056	23930
20°	22895	23108	22941	24337
25°	22830	23028	22855	24424
30°	22712	23045	22686	21198
35°	22302	23144	22302	17418
40°	21498	22921	21412	15319
45°	20084	20712	20021	12666
50°	18429	10927	18188	10545
55°	16042	6317	15499	9804
60°	13692	5913	13246	9600
65°	12672	6048	12252	9096
70°	11632	5915	11306	7213
75°	10649	5321	10306	6525
80°	9475	4733	8963	6527
85°	7132	2556	6632	3316

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 20712 cd/sqm

TEST NUMBER: P845550

CATALOG NUMBER: SQ2R-PC3-075D-930-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.5	4.2
10°-20°	394.4	12.2
20°-30°	602.7	18.7
30°-40°	681.2	21.1
40°-50°	595.4	18.4
50°-60°	393.9	12.2
60°-70°	257.4	8.0
70°-80°	134.7	4.2
80°-90°	31.8	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°	1133.6	35.1
0°-40°	1814.8	56.2
0°-60°	2804.1	86.9
0°-90°	3228.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3228.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1440	1440	1440	1440	1440	
5°	1414	1434	1425	1454	1414	135
15°	1374	1390	1379	1432	1374	388
25°	1282	1293	1283	1371	1282	591
35°	1132	1174	1132	884	1132	705
45°	880	907	877	555	880	677
55°	570	224	551	348	570	511
65°	332	158	321	238	332	328
75°	171	85	165	105	171	181
85°	38	14	36	18	38	47
90°	0	0	0	0	0	



TEST NUMBER: P845550

CATALOG NUMBER: SQ2R-PC3-075D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8
2.5°	1417.8	1453.6	1433.0	1431.6	1437.1	1438.5	1431.6	1446.7	1428.8	1448.1	1434.3
5°	1413.7	1449.5	1424.7	1421.9	1434.3	1430.2	1428.8	1442.6	1424.7	1439.8	1433.0
7.5°	1408.2	1441.2	1415.1	1413.7	1430.2	1424.7	1419.2	1435.7	1417.8	1434.3	1428.8
10°	1399.9	1428.8	1406.8	1408.2	1419.2	1413.7	1408.2	1421.9	1406.8	1427.5	1416.4
12.5°	1388.9	1417.8	1397.2	1393.0	1405.4	1395.8	1395.8	1406.8	1394.4	1416.4	1406.8
15°	1373.8	1402.7	1376.5	1379.3	1390.3	1380.7	1377.9	1391.7	1379.3	1401.3	1397.2
17.5°	1355.9	1380.7	1361.4	1362.8	1366.9	1362.8	1360.0	1371.0	1358.6	1382.0	1384.8
20°	1332.5	1361.4	1336.6	1336.6	1344.9	1333.9	1336.6	1346.2	1335.2	1362.8	1368.3
22.5°	1309.1	1336.6	1313.2	1313.2	1320.1	1304.9	1311.8	1318.7	1310.5	1340.7	1353.1
25°	1281.5	1303.6	1277.4	1285.7	1292.6	1278.8	1277.4	1288.4	1282.9	1313.2	1335.2
27.5°	1251.3	1270.5	1245.8	1256.8	1263.6	1254.0	1241.6	1255.4	1252.6	1287.0	1314.6
30°	1218.2	1236.1	1211.3	1226.5	1236.1	1222.4	1203.1	1215.5	1216.8	1256.8	1267.8
32.5°	1174.2	1192.1	1168.7	1193.4	1207.2	1187.9	1165.9	1172.8	1178.3	1218.2	1186.6
35°	1131.5	1139.8	1121.9	1153.5	1174.2	1150.8	1117.7	1126.0	1131.5	1176.9	1073.7
37.5°	1080.6	1080.6	1073.7	1108.1	1135.6	1101.2	1065.4	1069.6	1080.6	1119.1	894.7
40°	1020.0	1011.7	1004.9	1050.3	1087.5	1042.0	999.4	1000.7	1015.9	1025.5	797.0
42.5°	952.6	942.9	940.2	988.3	1010.4	973.2	929.2	930.5	952.6	896.1	706.2
45°	879.6	875.5	872.7	905.8	907.1	883.7	852.1	859.0	876.8	773.6	624.9
47.5°	805.3	802.5	801.1	775.0	769.5	753.0	769.5	784.6	799.8	645.6	550.6
50°	733.7	714.4	703.4	607.0	435.0	597.4	677.2	703.4	724.1	563.0	495.5
52.5°	655.2	638.7	604.3	463.9	275.3	461.1	593.3	626.3	638.7	512.1	454.3
55°	569.9	569.9	495.5	297.3	224.4	312.5	487.3	560.2	550.6	458.4	407.5
57.5°	488.7	505.2	411.6	199.6	198.2	199.6	408.8	498.3	470.8	415.7	368.9
60°	424.0	448.7	356.5	177.6	183.1	174.8	349.6	443.2	410.2	370.3	326.2
62.5°	375.8	396.4	294.6	162.4	172.1	159.7	296.0	395.1	363.4	337.2	297.3
65°	331.7	352.4	232.6	148.7	158.3	145.9	239.5	349.6	320.7	300.1	271.2
67.5°	284.9	304.2	184.5	134.9	141.8	133.5	192.7	304.2	278.1	264.3	236.8
70°	246.4	268.4	140.4	121.1	125.3	119.8	150.0	262.9	239.5	234.0	202.3
72.5°	207.9	225.7	108.7	107.4	106.0	104.6	110.1	224.4	202.3	192.7	156.9
75°	170.7	183.1	89.5	89.5	85.3	86.7	89.5	183.1	165.2	156.9	111.5
77.5°	134.9	144.5	73.0	70.2	66.1	66.1	71.6	140.4	130.8	121.1	74.3
80°	101.9	104.6	55.1	52.3	50.9	50.9	55.1	101.9	96.4	86.7	57.8
82.5°	68.8	57.8	37.2	38.5	37.2	37.2	35.8	59.2	64.7	44.0	42.7
85°	38.5	26.2	23.4	17.9	13.8	15.1	22.0	24.8	35.8	23.4	27.5
87.5°	13.8	11.0	4.1	5.5	4.1	4.1	4.1	11.0	11.0	8.3	4.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P845550

CATALOG NUMBER: SQ2R-PC3-075D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8
2.5°	1435.7	1444.0	1442.6	1434.3	1452.2	1417.8
5°	1437.1	1453.6	1445.3	1437.1	1448.1	1413.7
7.5°	1430.2	1449.5	1439.8	1435.7	1446.7	1408.2
10°	1426.1	1442.6	1434.3	1428.8	1439.8	1399.9
12.5°	1421.9	1441.2	1430.2	1423.3	1430.2	1388.9
15°	1410.9	1431.6	1424.7	1413.7	1413.7	1373.8
17.5°	1402.7	1423.3	1416.4	1401.3	1394.4	1355.9
20°	1397.2	1416.4	1406.8	1384.8	1373.8	1332.5
22.5°	1384.8	1406.8	1391.7	1368.3	1353.1	1309.1
25°	1362.8	1371.0	1369.6	1349.0	1324.2	1281.5
27.5°	1304.9	1309.1	1313.2	1327.0	1299.4	1251.3
30°	1204.5	1137.0	1221.0	1282.9	1269.2	1218.2
32.5°	1014.5	992.5	1042.0	1201.7	1229.2	1174.2
35°	909.9	883.7	925.0	1102.6	1183.8	1131.5
37.5°	814.9	814.9	825.9	926.4	1132.9	1080.6
40°	747.5	726.8	757.1	812.1	1055.8	1020.0
42.5°	638.7	631.8	651.1	715.8	938.8	952.6
45°	563.0	554.7	572.6	634.6	812.1	879.6
47.5°	505.2	474.9	514.8	565.8	688.3	805.3
50°	451.5	419.8	458.4	502.4	583.6	733.7
52.5°	404.7	375.8	414.3	462.5	530.0	655.2
55°	356.5	348.3	366.2	417.1	477.7	569.9
57.5°	316.6	319.4	322.1	377.2	429.5	488.7
60°	291.8	297.3	296.0	338.6	389.6	424.0
62.5°	267.0	269.8	269.8	304.2	351.0	375.8
65°	238.1	238.1	240.9	279.4	318.0	331.7
67.5°	206.5	201.0	210.6	246.4	282.2	284.9
70°	162.4	152.8	169.3	213.4	251.9	246.4
72.5°	117.0	122.5	119.8	167.9	216.1	207.9
75°	96.4	104.6	97.7	119.8	176.2	170.7
77.5°	81.2	88.1	81.2	77.1	141.8	134.9
80°	64.7	70.2	64.7	59.2	104.6	101.9
82.5°	46.8	48.2	46.8	44.0	68.8	68.8
85°	22.0	17.9	24.8	28.9	27.5	38.5
87.5°	4.1	4.1	4.1	5.5	15.1	13.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P845550

CATALOG NUMBER: SQ2R-PC3-075D-930-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	21.16	22.64	21.52	22.96	23.27	18.66	20.14	19.02	20.46	20.77
	3H	22.79	24.13	23.17	24.45	24.82	20.14	21.47	20.52	21.80	22.16
	4H	23.40	24.64	23.80	24.99	25.37	20.59	21.84	20.99	22.19	22.57
	6H	23.83	24.98	24.24	25.34	25.74	20.98	22.13	21.39	22.50	22.89
	8H	23.95	25.05	24.38	25.44	25.84	21.10	22.19	21.53	22.58	22.98
	12H	24.02	25.06	24.45	25.44	25.87	21.14	22.19	21.57	22.57	23.00
4H	2H	21.42	22.67	21.82	23.02	23.40	19.47	20.71	19.87	21.06	21.44
	3H	23.32	24.35	23.73	24.75	25.15	21.11	22.14	21.52	22.54	22.95
	4H	24.07	24.99	24.50	25.41	25.85	21.62	22.55	22.05	22.96	23.40
	6H	24.65	25.46	25.11	25.90	26.36	22.09	22.90	22.55	23.34	23.80
	8H	24.83	25.58	25.29	26.02	26.49	22.24	22.99	22.71	23.44	23.91
	12H	24.92	25.59	25.41	26.07	26.55	22.31	22.98	22.79	23.46	23.93
8H	4H	24.14	24.89	24.60	25.33	25.80	21.93	22.68	22.40	23.13	23.60
	6H	24.82	25.44	25.32	25.94	26.41	22.48	23.10	22.98	23.59	24.07
	8H	25.06	25.62	25.58	26.13	26.62	22.68	23.24	23.20	23.75	24.24
	12H	25.21	25.70	25.72	26.19	26.76	22.79	23.29	23.30	23.78	24.34
12H	4H	24.12	24.79	24.60	25.27	25.74	21.97	22.64	22.45	23.12	23.59
	6H	24.81	25.36	25.32	25.88	26.36	22.53	23.08	23.04	23.60	24.08
	8H	25.08	25.58	25.59	26.07	26.64	22.77	23.27	23.29	23.76	24.33