

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: P845552

Luminaire Tested: SQ2R-PC3-075D-940-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845552
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-940-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS
750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

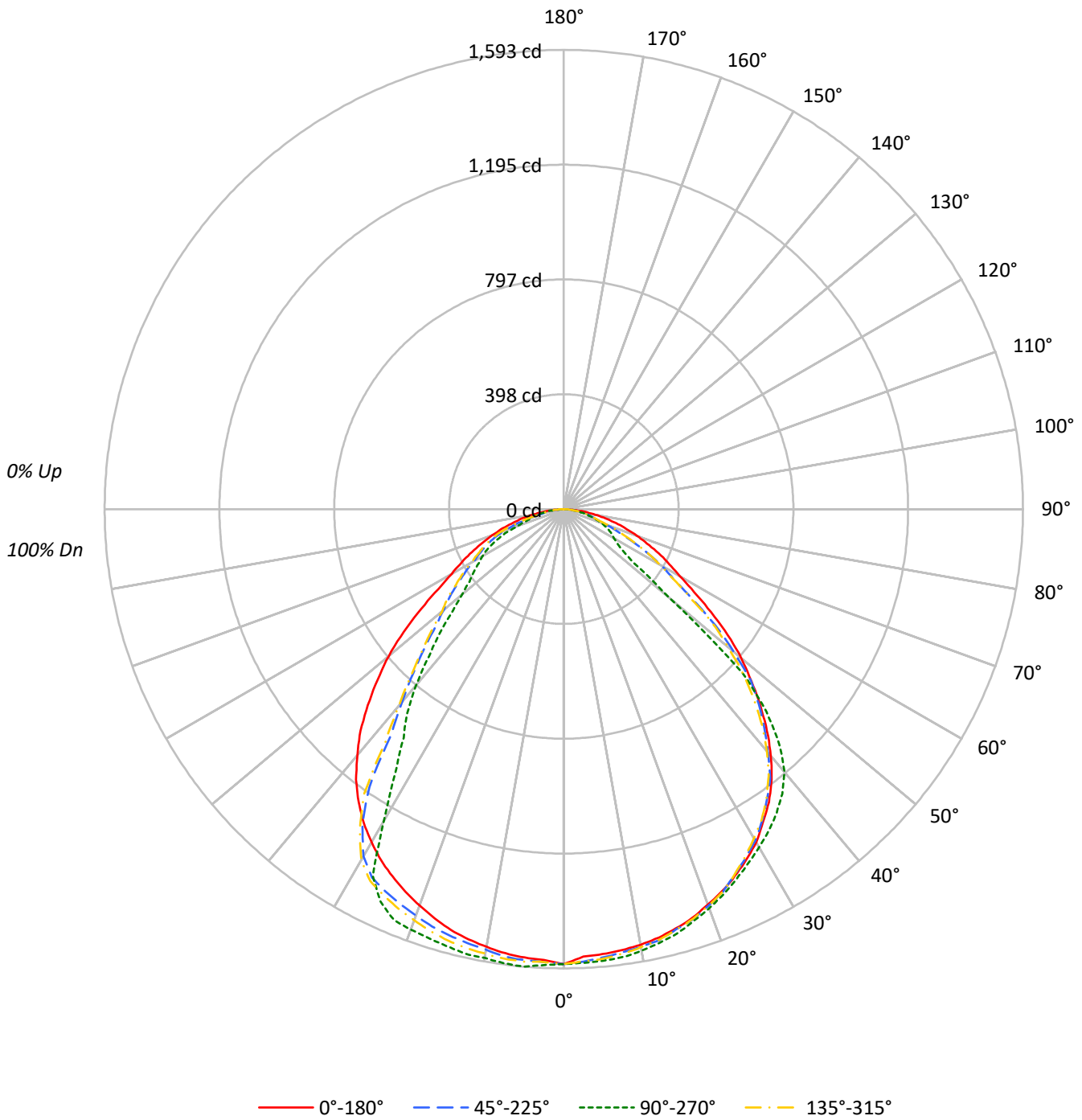
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3538.0 lumens
Efficiency: N/A
Efficacy: 132.5 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	100	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87	87	87	87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75	75	
3	93	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	65	65	65	65	
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	63	59	57	57	57	57	
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52	50	50	50	50	
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44	44	44	44	
7	69	57	48	43	67	56	48	42	54	47	42	53	47	42	52	46	42	40	40	40	40	
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36	36	36	36	
9	60	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33	33	33	33	
10	57	44	37	32	56	44	37	32	43	36	32	42	36	31	41	35	31	30	30	30	30	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	25480	25480	25480	25480
5°	25114	25480	25308	25822
10°	25156	25502	25279	25922
15°	25168	25471	25269	26228
20°	25093	25326	25146	26675
25°	25023	25238	25050	26771
30°	24893	25258	24865	23234
35°	24445	25365	24445	19092
40°	23564	25122	23467	16790
45°	22014	22701	21945	13883
50°	20198	11976	19934	11560
55°	17582	6922	16988	10745
60°	15006	6481	14518	10524
65°	13891	6628	13429	9971
70°	12751	6482	12392	7907
75°	11672	5833	11291	7155
80°	10377	5188	9819	7150
85°	7818	2797	7262	3631

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 22701 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.7	4.2
10°-20°	432.3	12.2
20°-30°	660.6	18.7
30°-40°	746.6	21.1
40°-50°	652.6	18.4
50°-60°	431.8	12.2
60°-70°	282.1	8.0
70°-80°	147.6	4.2
80°-90°	34.8	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°	1242.5	35.1
0°-40°	1989.1	56.2
0°-60°	3073.4	86.9
0°-90°	3538.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3538.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1578	1578	1578	1578	1578	
5°	1550	1572	1562	1593	1550	148
15°	1506	1524	1512	1569	1506	425
25°	1405	1417	1406	1503	1405	647
35°	1240	1287	1240	969	1240	773
45°	964	994	961	608	964	742
55°	625	246	604	382	625	561
65°	364	174	352	261	364	360
75°	187	94	181	115	187	199
85°	42	15	39	20	42	51
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°	1578.1	1578.1	1578.1	1578.1	1578.1	1578.1	1578.1	1578.1	1578.1	1578.1	1578.1
2.5°	1554.0	1593.2	1570.6	1569.1	1575.1	1576.6	1569.1	1585.7	1566.1	1587.2	1572.1
5°	1549.5	1588.7	1561.5	1558.5	1572.1	1567.6	1566.1	1581.1	1561.5	1578.1	1570.6
7.5°	1543.4	1579.6	1551.0	1549.5	1567.6	1561.5	1555.5	1573.6	1554.0	1572.1	1566.1
10°	1534.4	1566.1	1541.9	1543.4	1555.5	1549.5	1543.4	1558.5	1541.9	1564.5	1552.5
12.5°	1522.3	1554.0	1531.4	1526.8	1540.4	1529.8	1529.8	1541.9	1528.3	1552.5	1541.9
15°	1505.7	1537.4	1508.7	1511.7	1523.8	1513.2	1510.2	1525.3	1511.7	1535.9	1531.4
17.5°	1486.1	1513.2	1492.1	1493.6	1498.2	1493.6	1490.6	1502.7	1489.1	1514.8	1517.8
20°	1460.4	1492.1	1465.0	1465.0	1474.0	1462.0	1465.0	1475.5	1463.5	1493.6	1499.7
22.5°	1434.8	1465.0	1439.3	1439.3	1446.9	1430.3	1437.8	1445.4	1436.3	1469.5	1483.1
25°	1404.6	1428.8	1400.1	1409.1	1416.7	1401.6	1400.1	1412.2	1406.1	1439.3	1463.5
27.5°	1371.4	1392.6	1365.4	1377.5	1385.0	1374.4	1360.9	1376.0	1372.9	1410.7	1440.8
30°	1335.2	1354.8	1327.7	1344.3	1354.8	1339.7	1318.6	1332.2	1333.7	1377.5	1389.5
32.5°	1286.9	1306.6	1280.9	1308.1	1323.1	1302.0	1277.9	1285.4	1291.5	1335.2	1300.5
35°	1240.2	1249.2	1229.6	1264.3	1286.9	1261.3	1225.1	1234.1	1240.2	1290.0	1176.8
37.5°	1184.3	1184.3	1176.8	1214.5	1244.7	1207.0	1167.8	1172.3	1184.3	1226.6	980.7
40°	1118.0	1108.9	1101.4	1151.2	1191.9	1142.1	1095.3	1096.8	1113.4	1124.0	873.6
42.5°	1044.0	1033.5	1030.5	1083.3	1107.4	1066.7	1018.4	1019.9	1044.0	982.2	774.0
45°	964.1	959.5	956.5	992.7	994.2	968.6	933.9	941.4	961.1	847.9	685.0
47.5°	882.6	879.6	878.1	849.4	843.4	825.3	843.4	860.0	876.6	707.6	603.5
50°	804.1	783.0	771.0	665.3	476.8	654.8	742.3	771.0	793.6	617.1	543.1
52.5°	718.2	700.0	662.3	508.4	301.7	505.4	650.3	686.5	700.0	561.2	497.9
55°	624.6	624.6	543.1	325.9	245.9	342.5	534.1	614.1	603.5	502.4	446.6
57.5°	535.6	553.7	451.1	218.8	217.3	218.8	448.1	546.2	516.0	455.6	404.3
60°	464.7	491.8	390.8	194.6	200.7	191.6	383.2	485.8	449.6	405.8	357.6
62.5°	411.9	434.5	322.9	178.0	188.6	175.0	324.4	433.0	398.3	369.6	325.9
65°	363.6	386.2	255.0	162.9	173.5	159.9	262.5	383.2	351.5	328.9	297.2
67.5°	312.3	333.4	202.2	147.9	155.4	146.3	211.2	333.4	304.8	289.7	259.5
70°	270.1	294.2	153.9	132.8	137.3	131.3	164.5	288.2	262.5	256.5	221.8
72.5°	227.8	247.4	119.2	117.7	116.2	114.7	120.7	245.9	221.8	211.2	172.0
75°	187.1	200.7	98.1	98.1	93.5	95.0	98.1	200.7	181.0	172.0	122.2
77.5°	147.9	158.4	80.0	76.9	72.4	72.4	78.5	153.9	143.3	132.8	81.5
80°	111.6	114.7	60.3	57.3	55.8	55.8	60.3	111.6	105.6	95.0	63.4
82.5°	75.4	63.4	40.7	42.2	40.7	40.7	39.2	64.9	70.9	48.3	46.8
85°	42.2	28.7	25.6	19.6	15.1	16.6	24.1	27.2	39.2	25.6	30.2
87.5°	15.1	12.1	4.5	6.0	4.5	4.5	4.5	12.1	12.1	9.1	4.5
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°	1578.1	1578.1	1578.1	1578.1	1578.1	1578.1
2.5°	1573.6	1582.7	1581.1	1572.1	1591.7	1554.0
5°	1575.1	1593.2	1584.2	1575.1	1587.2	1549.5
7.5°	1567.6	1588.7	1578.1	1573.6	1585.7	1543.4
10°	1563.0	1581.1	1572.1	1566.1	1578.1	1534.4
12.5°	1558.5	1579.6	1567.6	1560.0	1567.6	1522.3
15°	1546.4	1569.1	1561.5	1549.5	1549.5	1505.7
17.5°	1537.4	1560.0	1552.5	1535.9	1528.3	1486.1
20°	1531.4	1552.5	1541.9	1517.8	1505.7	1460.4
22.5°	1517.8	1541.9	1525.3	1499.7	1483.1	1434.8
25°	1493.6	1502.7	1501.2	1478.5	1451.4	1404.6
27.5°	1430.3	1434.8	1439.3	1454.4	1424.2	1371.4
30°	1320.1	1246.2	1338.2	1406.1	1391.0	1335.2
32.5°	1111.9	1087.8	1142.1	1317.1	1347.3	1286.9
35°	997.3	968.6	1013.9	1208.5	1297.5	1240.2
37.5°	893.2	893.2	905.2	1015.4	1241.7	1184.3
40°	819.2	796.6	829.8	890.1	1157.2	1118.0
42.5°	700.0	692.5	713.6	784.5	1028.9	1044.0
45°	617.1	608.0	627.6	695.5	890.1	964.1
47.5°	553.7	520.5	564.3	620.1	754.4	882.6
50°	494.9	460.2	502.4	550.7	639.7	804.1
52.5°	443.6	411.9	454.1	506.9	580.9	718.2
55°	390.8	381.7	401.3	457.1	523.5	624.6
57.5°	347.0	350.0	353.0	413.4	470.7	535.6
60°	319.8	325.9	324.4	371.1	427.0	464.7
62.5°	292.7	295.7	295.7	333.4	384.7	411.9
65°	261.0	261.0	264.0	306.3	348.5	363.6
67.5°	226.3	220.3	230.8	270.1	309.3	312.3
70°	178.0	167.5	185.6	233.9	276.1	270.1
72.5°	128.2	134.3	131.3	184.1	236.9	227.8
75°	105.6	114.7	107.1	131.3	193.1	187.1
77.5°	89.0	96.6	89.0	84.5	155.4	147.9
80°	70.9	76.9	70.9	64.9	114.7	111.6
82.5°	51.3	52.8	51.3	48.3	75.4	75.4
85°	24.1	19.6	27.2	31.7	30.2	42.2
87.5°	4.5	4.5	4.5	6.0	16.6	15.1
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	21.47	22.96	21.84	23.27	23.59	18.98	20.46	19.34	20.78	21.09
	3H	23.11	24.44	23.49	24.77	25.13	20.46	21.79	20.84	22.12	22.48
	4H	23.71	24.96	24.11	25.31	25.69	20.91	22.16	21.31	22.51	22.88
	6H	24.14	25.29	24.56	25.66	26.05	21.30	22.45	21.71	22.82	23.21
	8H	24.27	25.36	24.70	25.75	26.16	21.42	22.51	21.84	22.90	23.30
	12H	24.33	25.38	24.76	25.76	26.19	21.46	22.50	21.89	22.89	23.32
4H	2H	21.74	22.99	22.14	23.34	23.72	19.79	21.03	20.19	21.38	21.76
	3H	23.64	24.67	24.05	25.07	25.47	21.43	22.46	21.84	22.86	23.26
	4H	24.39	25.31	24.82	25.73	26.17	21.94	22.87	22.37	23.28	23.72
	6H	24.97	25.78	25.43	26.22	26.68	22.41	23.22	22.87	23.66	24.12
	8H	25.15	25.90	25.61	26.34	26.81	22.56	23.31	23.03	23.76	24.23
	12H	25.24	25.91	25.73	26.39	26.86	22.62	23.29	23.11	23.77	24.25
8H	4H	24.45	25.21	24.92	25.65	26.12	22.25	23.00	22.71	23.45	23.91
	6H	25.14	25.76	25.64	26.26	26.73	22.80	23.42	23.30	23.91	24.39
	8H	25.38	25.94	25.89	26.45	26.94	23.00	23.56	23.52	24.07	24.56
	12H	25.53	26.02	26.04	26.51	27.08	23.11	23.60	23.62	24.10	24.66
12H	4H	24.44	25.11	24.92	25.59	26.06	22.29	22.96	22.77	23.44	23.91
	6H	25.12	25.68	25.64	26.19	26.68	22.85	23.40	23.36	23.91	24.40
	8H	25.40	25.90	25.91	26.39	26.95	23.09	23.59	23.60	24.08	24.64