

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: P845622

Luminaire Tested: SQ2R-PR1-075D-930-UNV-STD-W-4

Issue Date: 6/14/2024

**Test Information**

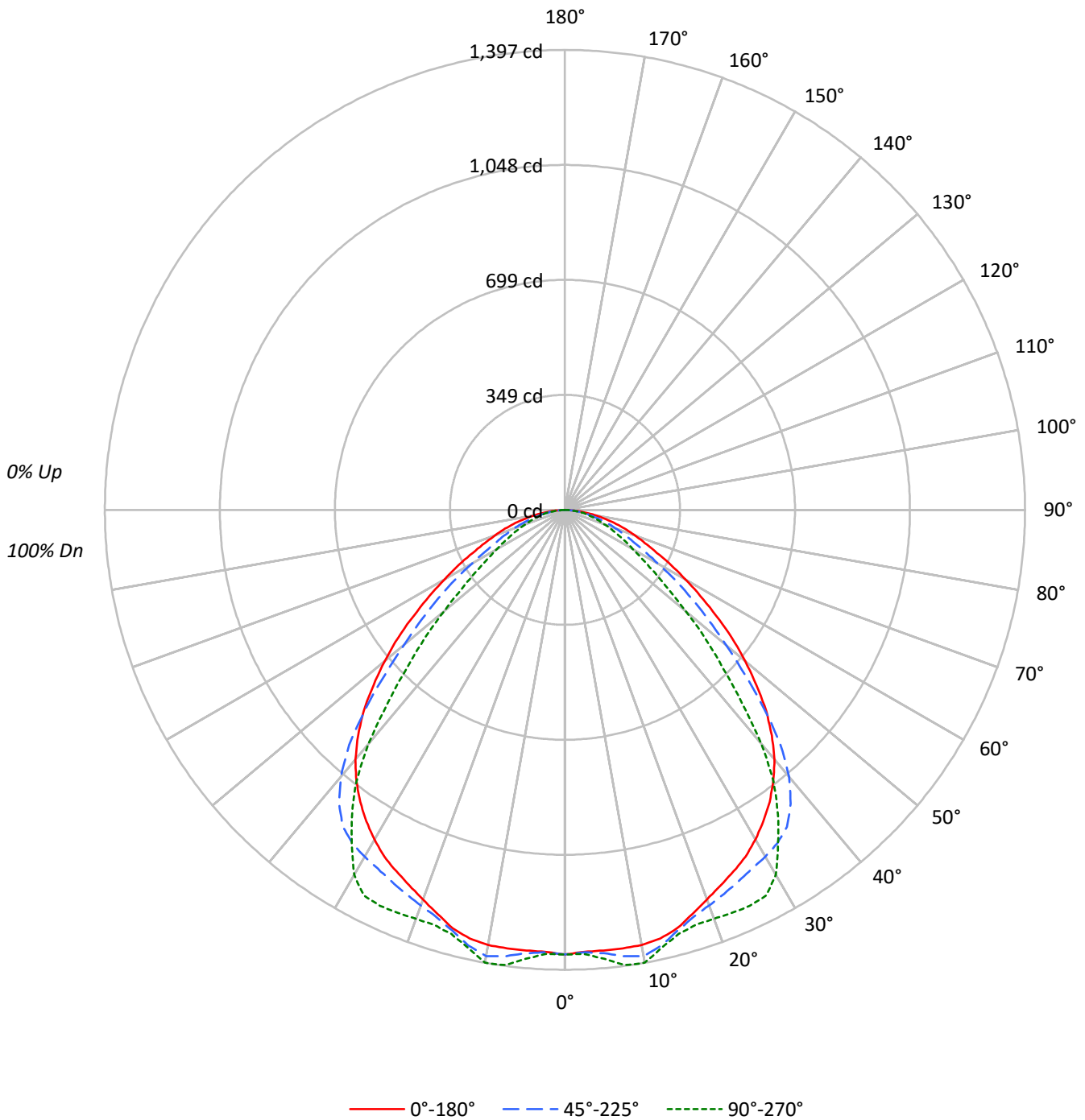
Test Method: LM-79-2019  
Report Number: P845622  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/14/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2R-PR1-075D-930-UNV-STD-W-4  
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS  
750 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3248.8 lumens  
Efficiency: N/A  
Efficacy: 121.7 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.33 / 1.36  
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				
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65				
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	52	50				
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44				
7	69	56	48	42	67	55	48	42	54	47	42	52	46	41	51	45	41	39				
8	64	51	43	38	63	51	43	38	49	42	38	48	42	37	47	41	37	35				
9	60	47	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32				
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	40	35	31	29				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	21803	21803	21803
5°	21775	21908	22177
10°	22004	22568	22907
15°	21997	22111	22295
20°	21641	21972	22706
25°	21579	22194	23640
30°	21558	22686	23868
35°	21352	23170	22222
40°	20860	22310	19555
45°	19740	19582	15463
50°	17945	16008	11999
55°	15769	13174	9337
60°	13646	10534	7689
65°	11778	8730	6732
70°	10593	7733	5976
75°	9701	6700	5496
80°	8452	5374	5374
85°	6113	4854	2556

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 21372 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.4	4.0
10°-20°	377.7	11.6
20°-30°	584.0	18.0
30°-40°	703.2	21.6
40°-50°	631.3	19.4
50°-60°	421.4	13.0
60°-70°	244.8	7.5
70°-80°	125.9	3.9
80°-90°	30.3	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°	1092.0	33.6
0°-40°	1795.2	55.3
0°-60°	2847.9	87.7
0°-90°	3248.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3248.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1350	1350	1350	1350	1350	
5°	1344	1367	1352	1354	1368	128
15°	1316	1371	1323	1327	1334	370
25°	1211	1261	1246	1291	1327	559
35°	1083	1093	1176	1154	1127	676
45°	864	936	858	724	677	662
55°	560	582	468	362	332	503
65°	308	315	228	186	176	311
75°	156	151	107	91	88	165
85°	33	26	26	18	14	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1350.4	1350.4	1350.4	1350.4	1350.4
2.5°	1343.5	1364.1	1344.9	1346.2	1350.4
5°	1343.5	1366.9	1351.7	1354.5	1368.3
7.5°	1343.5	1375.1	1366.9	1376.5	1394.4
10°	1342.1	1382.0	1376.5	1377.9	1397.2
12.5°	1333.8	1382.0	1355.9	1353.1	1361.4
15°	1316.0	1371.0	1322.8	1327.0	1333.8
17.5°	1287.0	1344.9	1296.7	1310.4	1321.5
20°	1259.5	1316.0	1278.8	1298.1	1321.5
22.5°	1234.7	1291.2	1262.3	1291.2	1325.6
25°	1211.3	1260.9	1245.8	1291.2	1327.0
27.5°	1187.9	1219.6	1229.2	1292.6	1321.5
30°	1156.3	1175.5	1216.8	1270.5	1280.2
32.5°	1121.9	1131.5	1200.3	1222.4	1204.5
35°	1083.3	1093.0	1175.5	1153.5	1127.4
37.5°	1039.3	1055.8	1126.0	1069.6	1040.7
40°	989.7	1022.8	1058.5	962.2	927.8
42.5°	929.2	987.0	969.1	839.7	795.6
45°	864.5	936.0	857.6	724.1	677.2
47.5°	788.7	865.8	740.6	619.4	576.8
50°	714.4	773.6	637.3	525.8	477.7
52.5°	638.7	677.2	549.2	437.7	395.1
55°	560.2	582.3	468.0	362.0	331.7
57.5°	487.3	502.4	396.4	301.5	278.1
60°	422.6	432.2	326.2	256.0	238.1
62.5°	363.4	370.3	269.8	217.5	205.1
65°	308.3	315.2	228.5	185.8	176.2
67.5°	262.9	267.0	194.1	159.7	150.0
70°	224.4	225.7	163.8	133.5	126.6
72.5°	190.0	187.2	134.9	111.5	107.4
75°	155.5	151.4	107.4	90.9	88.1
77.5°	122.5	118.4	79.8	73.0	73.0
80°	90.9	85.3	57.8	57.8	57.8
82.5°	61.9	53.7	41.3	41.3	39.9
85°	33.0	26.2	26.2	17.9	13.8
87.5°	11.0	11.0	4.1	4.1	4.1
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	21.42	22.91	21.78	23.22	23.54	18.14	19.64	18.51	19.95	20.27
	3H	22.69	24.03	23.07	24.36	24.72	19.26	20.59	19.63	20.92	21.28
	4H	23.17	24.43	23.57	24.77	25.15	19.68	20.93	20.08	21.28	21.66
	6H	23.52	24.67	23.93	25.04	25.43	20.04	21.20	20.46	21.57	21.96
	8H	23.62	24.72	24.05	25.11	25.51	20.15	21.24	20.57	21.63	22.04
	12H	23.67	24.72	24.10	25.10	25.53	20.17	21.22	20.60	21.61	22.04
4H	2H	21.57	22.82	21.97	23.17	23.55	18.79	20.04	19.19	20.39	20.77
	3H	23.10	24.13	23.51	24.53	24.93	20.11	21.14	20.52	21.54	21.94
	4H	23.71	24.64	24.14	25.06	25.49	20.64	21.56	21.07	21.98	22.42
	6H	24.20	25.00	24.65	25.44	25.90	21.10	21.91	21.56	22.35	22.81
	8H	24.34	25.09	24.80	25.54	26.00	21.24	21.99	21.70	22.43	22.90
	12H	24.42	25.09	24.90	25.57	26.04	21.29	21.96	21.77	22.44	22.91
8H	4H	23.78	24.53	24.24	24.98	25.45	20.98	21.74	21.45	22.18	22.65
	6H	24.35	24.97	24.85	25.46	25.94	21.54	22.16	22.04	22.65	23.13
	8H	24.55	25.10	25.06	25.62	26.10	21.72	22.28	22.24	22.79	23.28
	12H	24.67	25.17	25.19	25.66	26.23	21.81	22.31	22.32	22.80	23.37
12H	4H	23.77	24.44	24.25	24.92	25.39	21.03	21.70	21.51	22.18	22.65
	6H	24.33	24.89	24.85	25.40	25.89	21.60	22.16	22.11	22.67	23.16
	8H	24.57	25.07	25.08	25.56	26.12	21.83	22.33	22.34	22.82	23.39