

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: P845575

Luminaire Tested: SQ2R-PH1-075D-935-UNV-STD-W-4

Issue Date: 6/14/2024

**Test Information**

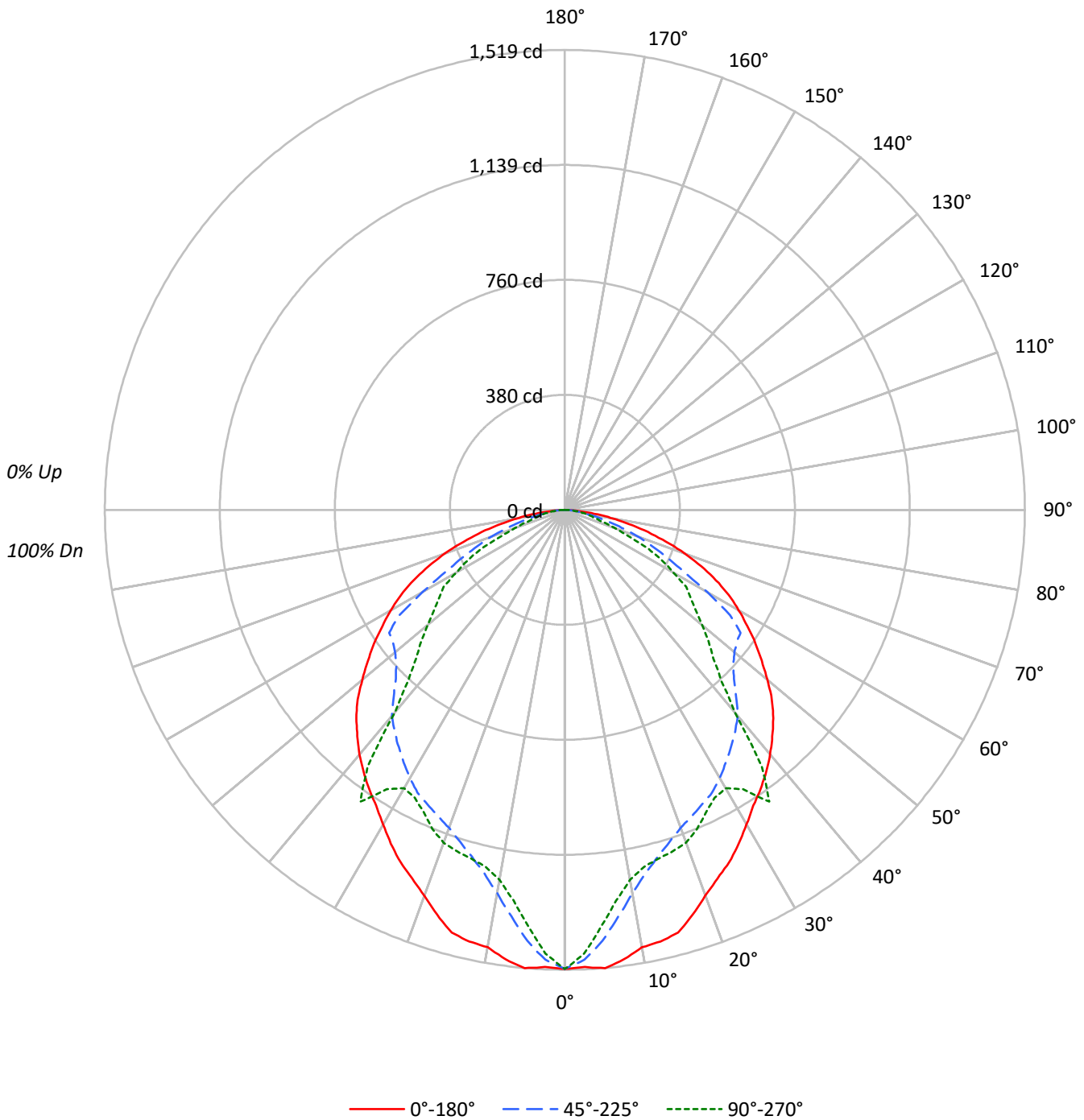
Test Method: LM-79-2019  
Report Number: P845575  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/14/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2R-PH1-075D-935-UNV-STD-W-4  
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS  
750 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3349.6 lumens  
Efficiency: N/A  
Efficacy: 125.5 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.03 / 1.23  
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: P845575  
CATALOG NUMBER: SQ2R-PH1-075D-935-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P845575

CATALOG NUMBER: SQ2R-PH1-075D-935-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				
1	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85				
2	100	92	86	80	97	90	84	79	87	82	77	84	79	76	81	77	74	72				
3	91	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61				
4	84	72	64	57	82	71	63	57	69	62	56	66	60	55	64	59	55	53				
5	77	65	56	50	75	64	56	49	62	54	49	60	53	48	58	52	48	46				
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40				
7	66	53	45	39	65	52	44	38	51	44	38	49	43	38	48	42	38	36				
8	62	49	40	35	60	48	40	34	47	39	34	45	39	34	44	38	34	32				
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29				
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26				

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

	0°	45°	90°
0°	24480	24480	24480
5°	24619	23148	22374
10°	24053	21072	20340
15°	24162	19821	19941
20°	23299	19210	20101
25°	22873	19121	19634
30°	22376	19069	19794
35°	22208	18851	23201
40°	22226	18729	18396
45°	22233	18018	15844
50°	21923	18372	14858
55°	21644	19938	14252
60°	21429	17470	13369
65°	21054	14162	11629
70°	19884	12052	8308
75°	17729	9089	6301
80°	14486	5904	5904
85°	9077	5354	4001

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 22233 cd/sqm

TEST NUMBER: P845575

CATALOG NUMBER: SQ2R-PH1-075D-935-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.8	4.0
10°-20°	350.6	10.5
20°-30°	514.2	15.4
30°-40°	623.3	18.6
40°-50°	612.3	18.3
50°-60°	533.4	15.9
60°-70°	369.8	11.0
70°-80°	174.5	5.2
80°-90°	37.6	1.1
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°	998.6	29.8
0°-40°	1621.9	48.4
0°-60°	2767.7	82.6
0°-90°	3349.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3349.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1516	1516	1516	1516	1516	
5°	1519	1518	1428	1383	1380	143
15°	1446	1284	1186	1177	1193	404
25°	1284	1088	1073	1106	1102	591
35°	1127	906	956	1036	1177	706
45°	974	716	789	819	694	749
55°	769	557	708	511	506	687
65°	551	382	371	304	304	542
75°	284	195	146	104	101	301
85°	49	32	29	23	22	65
90°	0	0	0	0	0	



TEST NUMBER: P845575

CATALOG NUMBER: SQ2R-PH1-075D-935-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1516.2	1516.2	1516.2	1516.2	1516.2
2.5°	1511.8	1532.0	1487.3	1470.0	1467.1
5°	1519.0	1517.6	1428.2	1383.4	1380.5
7.5°	1497.4	1458.4	1354.6	1304.1	1301.2
10°	1467.1	1399.3	1285.3	1240.6	1240.6
12.5°	1459.9	1343.0	1229.1	1198.8	1207.4
15°	1445.5	1283.9	1185.8	1177.1	1193.0
17.5°	1402.2	1227.6	1149.7	1164.2	1182.9
20°	1356.0	1184.4	1118.0	1152.6	1169.9
22.5°	1317.1	1142.5	1094.9	1133.9	1141.1
25°	1283.9	1087.7	1073.3	1106.5	1102.1
27.5°	1243.5	1038.7	1053.1	1073.3	1071.8
30°	1200.2	995.4	1022.8	1043.0	1061.7
32.5°	1158.4	944.9	989.6	1044.4	1093.5
35°	1126.7	905.9	956.4	1035.8	1177.1
37.5°	1092.0	858.3	923.3	986.7	1069.0
40°	1054.5	806.4	888.6	976.6	872.8
42.5°	1014.1	766.0	836.7	957.9	764.6
45°	973.7	715.5	789.1	819.4	693.9
47.5°	927.6	678.0	754.5	696.8	643.4
50°	872.8	640.5	731.4	623.2	591.5
52.5°	819.4	601.6	715.5	562.6	543.9
55°	768.9	556.8	708.3	510.7	506.3
57.5°	714.1	512.1	647.7	463.1	474.6
60°	663.6	468.8	541.0	422.7	414.0
62.5°	610.2	427.0	441.4	370.7	362.1
65°	551.1	382.3	370.7	304.4	304.4
67.5°	487.6	336.1	311.6	262.5	225.0
70°	421.2	291.4	255.3	199.1	176.0
72.5°	350.5	243.8	197.6	154.4	126.9
75°	284.2	194.7	145.7	103.9	101.0
77.5°	217.8	148.6	106.8	80.8	80.8
80°	155.8	106.8	63.5	62.0	63.5
82.5°	98.1	64.9	43.3	46.2	46.2
85°	49.0	31.7	28.9	23.1	21.6
87.5°	13.0	11.5	7.2	7.2	7.2
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P845575

CATALOG NUMBER: SQ2R-PH1-075D-935-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	22.25	23.84	22.61	24.15	24.47	20.96	22.55	21.32	22.86	23.18
	3H	24.33	25.76	24.71	26.09	26.45	22.05	23.48	22.42	23.80	24.16
	4H	25.10	26.44	25.49	26.79	27.16	22.29	23.64	22.69	23.98	24.36
	6H	25.62	26.86	26.03	27.23	27.62	22.47	23.72	22.88	24.08	24.47
	8H	25.76	26.95	26.19	27.34	27.74	22.53	23.71	22.95	24.10	24.50
	12H	25.83	26.97	26.26	27.35	27.78	22.55	23.68	22.98	24.06	24.49
4H	2H	22.71	24.06	23.11	24.41	24.78	21.68	23.03	22.08	23.38	23.75
	3H	24.88	26.00	25.29	26.40	26.80	22.93	24.05	23.34	24.45	24.85
	4H	25.73	26.74	26.16	27.15	27.59	23.24	24.24	23.67	24.66	25.09
	6H	26.36	27.23	26.81	27.67	28.13	23.48	24.36	23.94	24.80	25.26
	8H	26.54	27.36	27.00	27.80	28.27	23.56	24.38	24.02	24.82	25.28
	12H	26.64	27.38	27.12	27.85	28.32	23.60	24.33	24.08	24.81	25.28
8H	4H	25.80	26.62	26.27	27.07	27.53	23.51	24.32	23.97	24.77	25.23
	6H	26.49	27.16	26.98	27.65	28.13	23.81	24.48	24.30	24.97	25.45
	8H	26.72	27.32	27.23	27.83	28.32	23.92	24.52	24.43	25.03	25.52
	12H	26.86	27.40	27.37	27.89	28.45	23.99	24.53	24.50	25.02	25.58
12H	4H	25.79	26.52	26.27	27.00	27.47	23.54	24.27	24.02	24.75	25.22
	6H	26.46	27.07	26.98	27.58	28.07	23.84	24.45	24.35	24.96	25.44
	8H	26.73	27.27	27.24	27.76	28.32	23.99	24.53	24.50	25.02	25.58