

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: P854020

Luminaire Tested: SQ2-PH1-075U-075D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

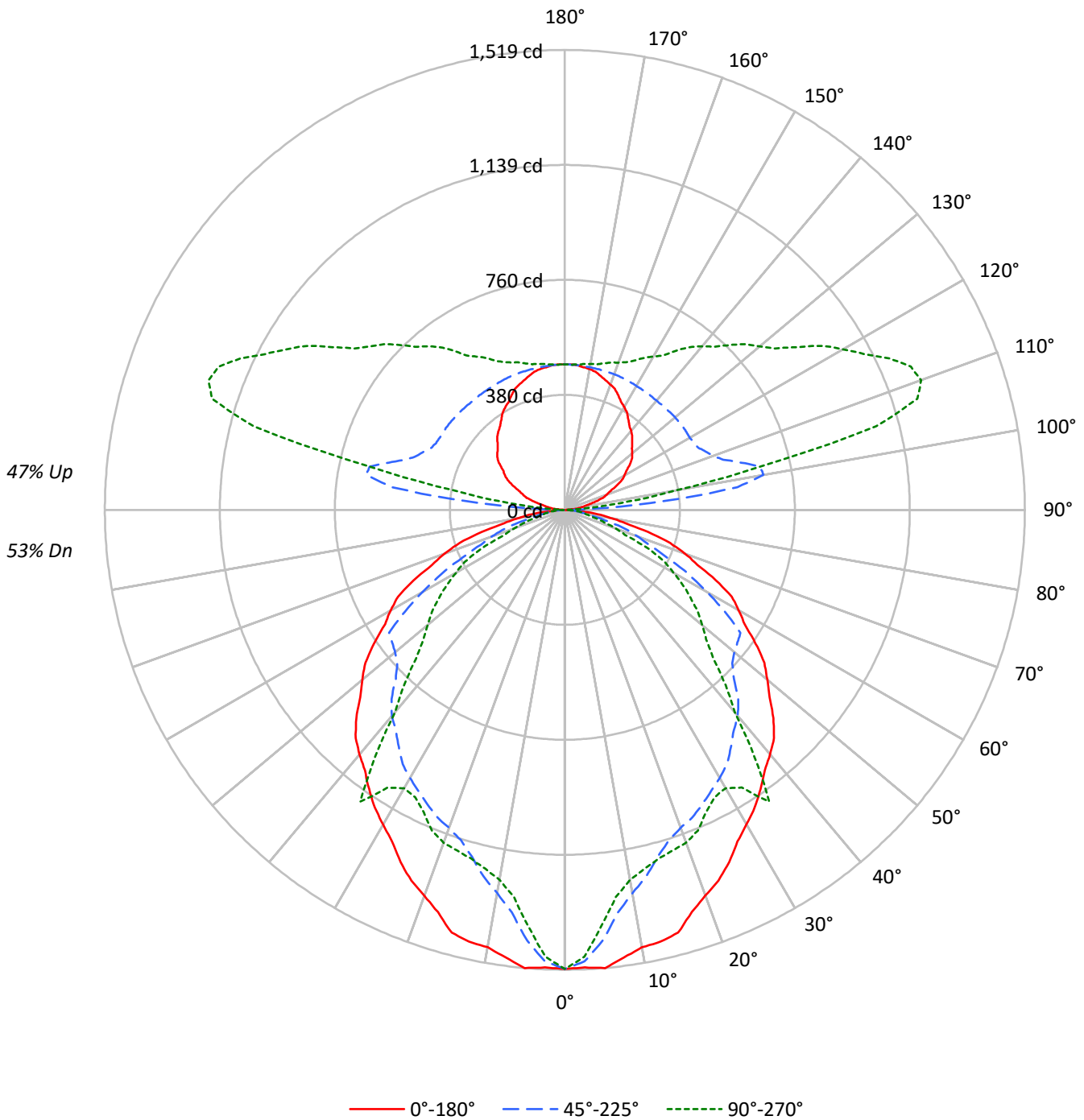
Test Method: LM-79-2019  
Report Number: P854020  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G2-2308-131-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PH1-075U-075D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6330.6 lumens  
Efficiency: N/A  
Efficacy: 126.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.02 / 1.23  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 50  
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	0
RCR																		
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53
1	99	94	91	87	91	88	84	81	75	73	70	63	62	60	52	51	50	45
2	90	83	77	72	83	77	72	67	66	62	59	56	53	50	46	44	43	38
3	82	73	65	60	76	68	61	56	58	53	49	49	46	43	41	39	36	32
4	75	64	57	51	69	60	53	48	52	46	42	44	40	37	37	34	31	28
5	69	57	49	43	64	54	46	41	46	41	36	40	35	32	33	30	27	24
6	64	52	43	38	59	48	41	36	42	36	32	36	31	28	30	27	24	21
7	59	47	39	33	54	44	36	31	38	32	28	33	28	25	28	24	21	19
8	55	42	35	29	51	40	33	28	35	29	25	30	25	22	25	22	19	17
9	51	39	31	26	47	36	29	25	32	26	22	27	23	20	23	20	17	15
10	48	35	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16	14

**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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.4	2.1
10°-20°	350.9	5.5
20°-30°	514.5	8.1
30°-40°	623.1	9.8
40°-50°	612.8	9.7
50°-60°	533.4	8.4
60°-70°	370.8	5.9
70°-80°	175.8	2.8
80°-90°	39.2	0.6
90°-100°	181.8	2.9
100°-110°	602.7	9.5
110°-120°	598.2	9.4
120°-130°	487.2	7.7
130°-140°	396.0	6.3
140°-150°	307.5	4.9
150°-160°	221.6	3.5
160°-170°	135.7	2.1
170°-180°	45.8	0.7
0°-30°	998.9	15.8
0°-40°	1622.0	25.6
0°-60°	2768.2	43.7
0°-90°	3354.1	53.0
90°-120°	1382.7	21.8
90°-150°	2573.4	40.7
90°-180°	2977.0	47.0
0°-180°	6330.6	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	1288	1186	1178	1193	403
25°	1284	1092	1073	1106	1102	590
35°	1127	911	956	1039	1177	706
45°	974	721	789	817	694	748
55°	769	562	708	511	506	687
65°	551	386	371	304	304	541
75°	284	197	146	104	101	301
85°	49	32	29	23	22	66
90°	0	1	3	4	4	3
95°	26	76	330	118	79	30
105°	106	150	603	1138	1064	111
115°	188	225	486	1011	1182	186
125°	263	292	477	794	937	234
135°	314	347	473	682	769	243
145°	365	392	472	586	642	229
155°	417	432	475	524	543	192
165°	458	463	477	496	501	129
175°	479	479	480	483	482	45
180°	481	481	481	481	481	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1516.2	1516.2	1516.2	1516.2	1516.2
2.5°	1512.7	1528.5	1493.1	1479.2	1476.9
5°	1519.0	1517.6	1428.2	1383.4	1380.5
7.5°	1491.3	1447.6	1340.7	1291.3	1289.1
10°	1467.1	1400.8	1285.3	1240.6	1240.6
12.5°	1461.3	1356.7	1240.3	1207.3	1214.1
15°	1445.5	1287.5	1185.8	1177.5	1193.0
17.5°	1393.0	1222.8	1143.4	1162.3	1180.3
20°	1356.0	1188.2	1118.0	1153.0	1169.9
22.5°	1324.9	1154.8	1099.5	1137.8	1146.9
25°	1283.9	1092.1	1073.3	1106.4	1102.1
27.5°	1234.8	1034.6	1047.0	1067.3	1069.8
30°	1200.2	999.9	1022.8	1043.4	1061.7
32.5°	1166.8	959.7	996.2	1045.1	1087.1
35°	1126.7	910.8	956.4	1038.9	1177.1
37.5°	1084.5	853.2	916.3	985.7	1029.7
40°	1054.5	811.9	888.6	974.3	872.8
42.5°	1022.2	779.6	847.1	957.7	786.2
45°	973.7	721.3	789.1	816.6	693.9
47.5°	916.6	676.0	749.9	681.0	633.0
50°	872.8	645.7	731.4	622.5	591.5
52.5°	830.1	614.3	718.7	574.2	553.4
55°	768.9	561.5	708.3	510.6	506.3
57.5°	704.0	507.9	626.4	455.2	462.5
60°	663.6	473.2	541.0	422.5	414.0
62.5°	620.9	439.5	461.3	380.9	372.5
65°	551.1	386.0	370.7	304.4	304.4
67.5°	474.3	330.4	300.3	249.1	215.2
70°	421.2	294.3	255.3	198.6	176.0
72.5°	364.7	255.8	209.2	162.7	136.8
75°	284.2	196.7	145.7	103.8	101.0
77.5°	205.4	141.7	98.1	77.0	77.3
80°	155.8	107.8	63.5	62.1	63.5
82.5°	109.6	74.1	47.3	49.3	49.6
85°	49.0	32.1	28.9	23.0	21.6
87.5°	10.4	9.5	6.4	6.6	6.6
90°	0.0	1.0	3.0	4.0	4.0
92.5°	8.0	30.7	90.6	29.4	24.7
95°	25.9	76.5	329.5	117.6	78.6
97.5°	47.6	100.5	575.1	335.4	212.0
100°	62.7	113.3	665.9	571.9	379.2
102.5°	79.4	128.5	660.3	874.0	660.3
105°	105.5	150.3	603.2	1138.0	1064.0
107.5°	132.2	172.1	548.4	1164.8	1221.1
110°	147.3	187.2	520.6	1138.2	1252.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	163.2	202.4	503.8	1091.2	1236.2
115°	188.1	225.1	485.7	1011.2	1182.4
117.5°	212.8	245.7	479.1	934.7	1114.4
120°	227.9	260.0	476.8	886.8	1061.0
122.5°	241.5	272.8	476.8	847.5	1008.5
125°	262.8	292.0	476.8	794.5	936.6
127.5°	280.3	308.9	475.6	754.4	875.9
130°	290.6	320.8	474.8	731.0	840.0
132.5°	300.2	331.1	474.0	711.7	809.8
135°	314.5	346.6	472.8	681.8	769.4
137.5°	330.0	361.0	471.6	652.9	730.2
140°	340.4	370.6	470.8	633.6	704.7
142.5°	350.0	379.3	471.6	614.4	677.6
145°	365.3	392.5	471.8	586.5	642.0
147.5°	381.8	404.6	472.0	562.9	604.2
150°	392.2	412.6	472.8	549.2	584.3
152.5°	401.7	421.4	473.6	537.9	565.9
155°	417.0	431.6	474.8	524.0	543.4
157.5°	432.0	443.3	476.0	514.1	527.9
160°	439.9	449.7	476.8	506.9	517.6
162.5°	447.9	455.3	476.8	502.0	510.4
165°	457.8	462.7	476.8	495.8	500.6
167.5°	467.0	469.5	477.8	490.2	492.7
170°	471.8	472.8	477.8	487.7	488.7
172.5°	475.0	475.9	478.5	485.3	485.5
175°	478.7	478.7	479.7	482.7	481.7
177.5°	480.7	480.7	479.9	481.5	479.9
180°	480.7	480.7	480.7	480.7	480.7



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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	18.71	19.59	19.64	20.54	21.77	17.38	18.26	18.32	19.21	20.44
	3H	20.74	21.53	21.68	22.48	23.74	18.42	19.21	19.36	20.17	21.42
	4H	21.47	22.21	22.43	23.18	24.44	18.63	19.38	19.59	20.34	21.60
	6H	21.96	22.64	22.93	23.61	24.88	18.78	19.47	19.75	20.43	21.71
	8H	22.08	22.73	23.06	23.72	24.99	18.81	19.47	19.79	20.45	21.72
	12H	22.13	22.75	23.11	23.73	25.02	18.81	19.43	19.79	20.41	21.71
4H	2H	19.09	19.83	20.05	20.80	22.06	18.03	18.77	18.99	19.74	21.00
	3H	21.20	21.82	22.17	22.81	24.08	19.21	19.83	20.18	20.82	22.10
	4H	22.01	22.58	23.00	23.56	24.86	19.49	20.05	20.47	21.04	22.34
	6H	22.60	23.09	23.59	24.10	25.39	19.69	20.18	20.69	21.19	22.49
	8H	22.77	23.22	23.77	24.23	25.54	19.75	20.21	20.75	21.21	22.52
	12H	22.84	23.25	23.85	24.27	25.58	19.76	20.17	20.78	21.19	22.51
8H	4H	22.03	22.49	23.03	23.49	24.80	19.70	20.16	20.70	21.16	22.47
	6H	22.68	23.06	23.71	24.10	25.41	19.98	20.35	21.00	21.40	22.71
	8H	22.91	23.24	23.94	24.27	25.60	20.08	20.41	21.11	21.44	22.77
	12H	23.02	23.31	24.06	24.34	25.71	20.12	20.41	21.16	21.44	22.81
12H	4H	21.98	22.39	23.00	23.41	24.73	19.70	20.11	20.72	21.13	22.45
	6H	22.66	22.99	23.69	24.02	25.35	20.01	20.34	21.04	21.37	22.70
	8H	22.89	23.18	23.93	24.21	25.58	20.12	20.41	21.16	21.44	22.81