

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: P854283

Luminaire Tested: SQ2-PW1-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

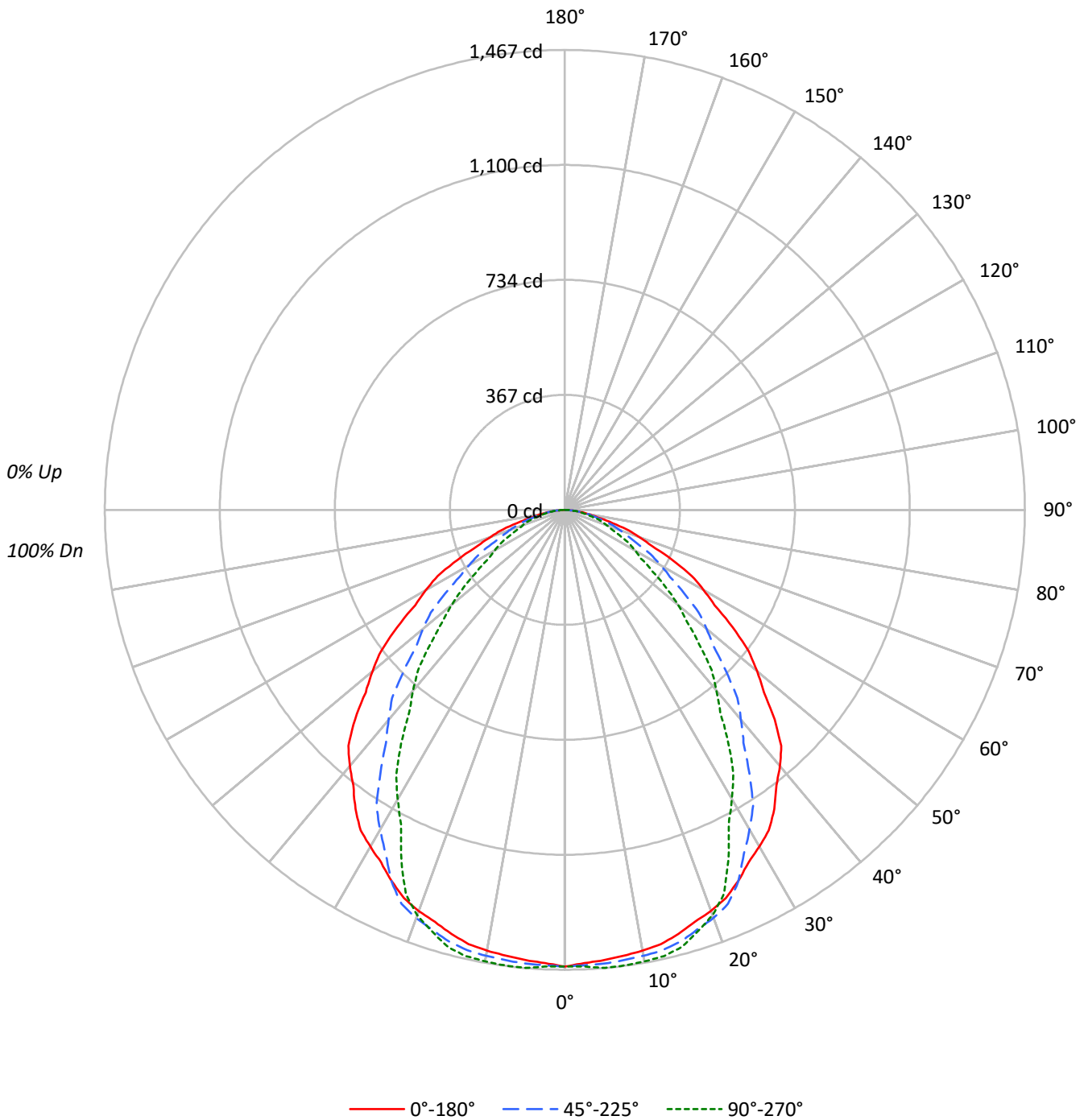
Test Method: LM-79-2019  
Report Number: P854283  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PW1-075D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SURFACE LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3232.5 lumens  
Efficiency: N/A  
Efficacy: 121.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.11 / 1.22  
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	100	97	100	97	94	96	93	91	92	90	89	87				
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	74				
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64				
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56				
5	80	68	59	53	78	67	59	53	65	58	52	63	57	52	61	56	51	49				
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	46	41	39				
8	64	52	44	38	63	51	43	38	50	43	38	48	42	37	47	42	37	35				
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34	32				
10	57	44	37	32	55	44	36	31	43	36	31	42	36	31	41	35	31	29				

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

	0°	45°	90°
0°	23521	23521	23521
5°	23365	23545	23770
10°	23407	23681	23976
15°	23402	23841	24120
20°	23411	23816	23649
25°	23284	23309	21975
30°	23126	21962	19867
35°	22945	20209	17940
40°	22489	18423	15850
45°	21607	16568	13844
50°	20110	14812	11848
55°	18396	13084	9607
60°	16488	11380	8289
65°	14418	9807	7370
70°	11788	8710	6680
75°	9177	7530	6145
80°	6834	6453	5421
85°	4631	4891	3075

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 21607 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.7	4.3
10°-20°	401.9	12.4
20°-30°	591.5	18.3
30°-40°	646.7	20.0
40°-50°	580.2	17.9
50°-60°	432.8	13.4
60°-70°	273.5	8.5
70°-80°	135.5	4.2
80°-90°	31.7	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°	1132.2	35.0
0°-40°	1778.9	55.0
0°-60°	2791.8	86.4
0°-90°	3232.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3232.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1457	1457	1457	1457	1457	
5°	1442	1465	1453	1454	1467	137
15°	1400	1427	1426	1436	1443	395
25°	1307	1336	1308	1254	1234	602
35°	1164	1152	1025	936	910	726
45°	946	870	726	635	606	726
55°	654	591	465	364	341	584
65°	377	346	257	206	193	374
75°	147	158	121	101	98	162
85°	25	32	26	18	17	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1456.8	1456.8	1456.8	1456.8	1456.8
2.5°	1446.9	1465.3	1453.5	1454.7	1458.0
5°	1441.6	1464.6	1452.7	1454.4	1466.6
7.5°	1434.4	1457.7	1448.8	1453.8	1465.7
10°	1427.7	1452.1	1444.4	1451.5	1462.4
12.5°	1418.8	1444.3	1438.8	1447.1	1458.0
15°	1400.0	1427.1	1426.3	1436.2	1443.0
17.5°	1378.0	1405.2	1403.8	1406.4	1409.7
20°	1362.5	1389.6	1386.1	1376.4	1376.4
22.5°	1340.3	1369.6	1360.6	1334.0	1325.3
25°	1307.0	1335.5	1308.4	1253.8	1233.5
27.5°	1268.2	1291.2	1236.8	1159.3	1131.1
30°	1240.4	1258.0	1178.0	1092.7	1065.6
32.5°	1211.5	1218.3	1118.0	1029.4	1000.1
35°	1164.1	1151.9	1025.3	936.0	910.2
37.5°	1108.0	1071.7	936.3	842.7	814.2
40°	1067.0	1015.4	874.1	780.5	752.0
42.5°	1021.5	956.9	815.3	721.6	692.1
45°	946.3	870.3	725.6	634.8	606.3
47.5°	861.6	786.2	641.8	553.9	529.5
50°	800.6	727.3	589.7	501.6	471.7
52.5°	738.4	672.8	538.6	448.1	407.4
55°	653.5	591.1	464.8	364.4	341.3
57.5°	566.1	512.1	397.9	306.8	287.8
60°	510.6	463.1	352.4	275.7	256.7
62.5°	457.3	415.3	308.0	246.9	231.2
65°	377.4	346.2	256.7	206.4	192.9
67.5°	299.7	282.3	213.4	169.3	160.4
70°	249.7	244.3	184.5	148.3	141.5
72.5°	206.5	208.6	156.8	128.4	123.8
75°	147.1	157.9	120.7	101.2	98.5
77.5°	100.2	116.5	89.4	74.9	72.7
80°	73.5	89.8	69.4	58.3	58.3
82.5°	51.3	64.4	49.4	43.8	43.8
85°	25.0	31.8	26.4	18.0	16.6
87.5°	6.7	9.9	4.4	3.3	3.3
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	21.94	23.45	22.31	23.76	24.07	18.43	19.93	18.79	20.25	20.56
	3H	23.31	24.66	23.69	24.98	25.35	19.68	21.03	20.06	21.35	21.72
	4H	23.71	24.97	24.11	25.32	25.70	20.16	21.42	20.56	21.77	22.14
	6H	23.95	25.11	24.36	25.48	25.87	20.50	21.67	20.92	22.03	22.43
	8H	24.00	25.10	24.42	25.49	25.90	20.60	21.70	21.02	22.09	22.49
	12H	24.01	25.07	24.44	25.45	25.88	20.63	21.69	21.06	22.07	22.50
4H	2H	22.12	23.38	22.52	23.73	24.11	19.19	20.45	19.59	20.80	21.18
	3H	23.72	24.76	24.13	25.16	25.57	20.63	21.67	21.04	22.07	22.47
	4H	24.25	25.19	24.68	25.61	26.05	21.20	22.14	21.63	22.55	22.99
	6H	24.62	25.43	25.07	25.87	26.34	21.64	22.45	22.09	22.89	23.35
	8H	24.71	25.47	25.17	25.91	26.38	21.75	22.51	22.22	22.96	23.43
	12H	24.75	25.43	25.23	25.91	26.38	21.80	22.48	22.29	22.96	23.43
8H	4H	24.33	25.10	24.80	25.54	26.01	21.57	22.33	22.03	22.78	23.24
	6H	24.79	25.42	25.29	25.91	26.39	22.10	22.72	22.59	23.22	23.69
	8H	24.94	25.50	25.45	26.01	26.50	22.26	22.83	22.78	23.34	23.82
	12H	25.03	25.53	25.54	26.02	26.59	22.35	22.85	22.86	23.34	23.91
12H	4H	24.32	25.00	24.80	25.48	25.95	21.61	22.29	22.10	22.77	23.24
	6H	24.78	25.35	25.30	25.86	26.35	22.16	22.73	22.68	23.24	23.73
	8H	24.97	25.47	25.48	25.97	26.53	22.38	22.88	22.89	23.37	23.93