

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: P854440

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

Issue Date: 7/12/2024

**Test Information**

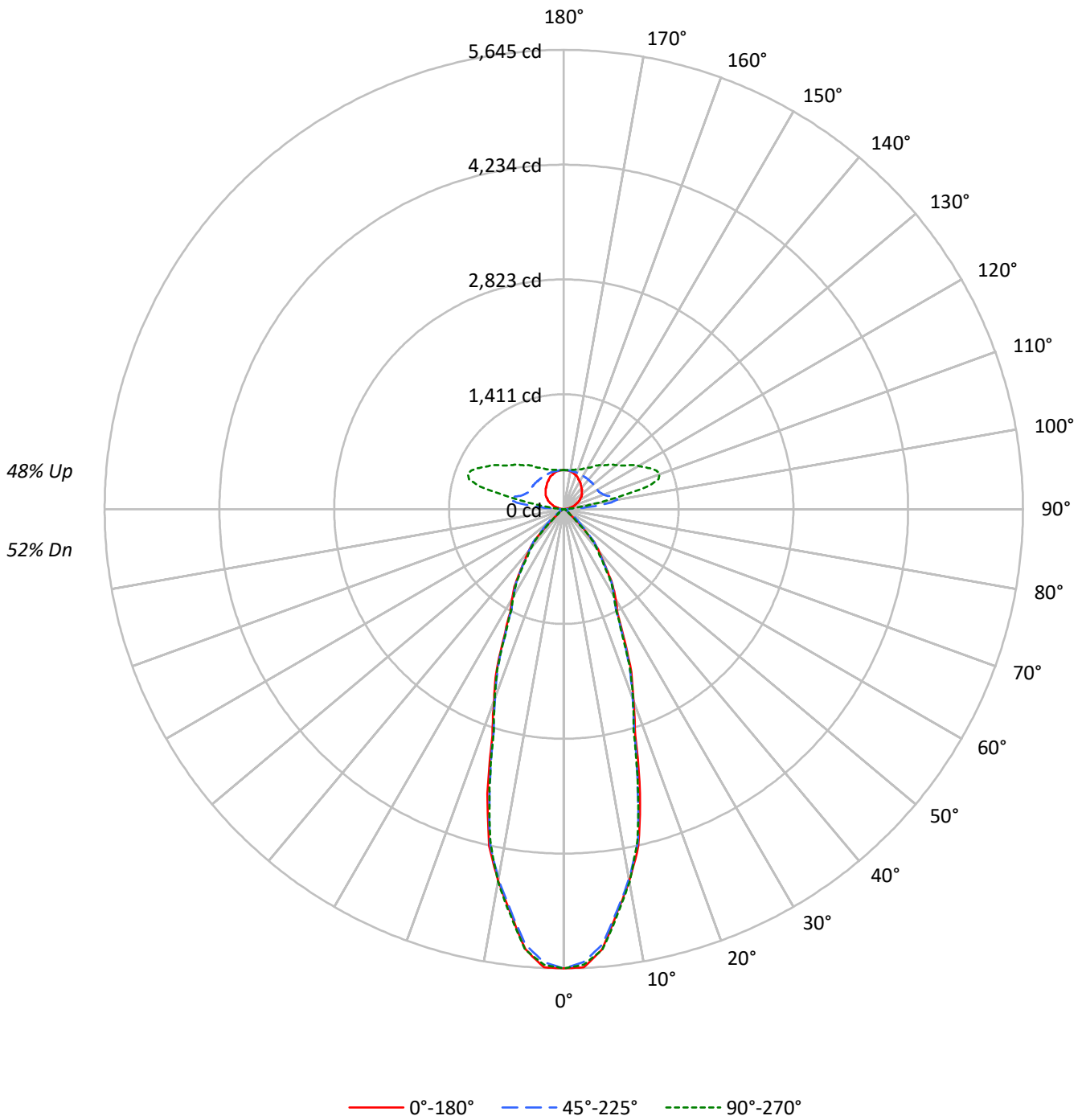
Test Method: LM-79-2019  
Report Number: P854440  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G3-2308-130-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBN-075U-075D-935-UNV-STD-W-4  
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: 6254.9 lumens  
Efficiency: N/A  
Efficacy: 122.9 lumens/watt  
Spacing Criteria (0/90/45): 0.59 / 0.58 / 0.63  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 50.9  
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: P854440  
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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	52	52	52
1	101	97	94	91	93	90	88	86	78	76	74	66	65	64	55	54	54	49	49	49
2	94	88	83	79	87	82	78	75	71	68	66	61	59	58	52	51	50	45	45	45
3	88	80	74	70	82	75	70	66	66	62	59	57	55	52	49	47	46	42	42	42
4	82	73	67	62	76	69	64	59	61	57	54	53	50	48	46	44	43	39	39	39
5	77	67	61	56	72	64	58	54	56	52	49	50	47	44	44	41	40	37	37	37
6	72	62	56	51	67	59	53	49	53	48	45	47	43	41	41	39	37	34	34	34
7	68	58	51	47	64	55	49	45	49	45	41	44	41	38	39	37	35	32	32	32
8	64	54	47	43	60	51	45	41	46	42	38	41	38	36	37	34	33	31	31	31
9	61	50	44	40	57	48	42	38	43	39	36	39	36	33	35	33	31	29	29	29
10	57	47	41	37	54	45	39	36	41	37	34	37	34	31	33	31	29	27	27	27

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

	0°	45°	90°
0°	91142	91142	91142
5°	88000	87123	88098
10°	76064	75704	76245
15°	60528	58619	58853
20°	42998	42431	42740
25°	30934	30328	30114
30°	23636	23001	22945
35°	18553	18238	17765
40°	14056	13866	13192
45°	7866	9398	7019
50°	2768	5785	2439
55°	1692	3158	1607
60°	1295	1650	1198
65°	1184	1223	1108
70°	1133	1133	1039
75°	1061	1061	998
80°	930	930	930
85°	926	741	741

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 9398 cd/sqm



TEST NUMBER: P854440

CATALOG NUMBER: SQ2-WBN-075U-075D-935-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	490.0	7.8
10°-20°	973.9	15.6
20°-30°	806.5	12.9
30°-40°	580.2	9.3
40°-50°	295.6	4.7
50°-60°	77.0	1.2
60°-70°	31.9	0.5
70°-80°	17.7	0.3
80°-90°	5.7	0.1
90°-100°	181.8	2.9
100°-110°	602.7	9.6
110°-120°	598.2	9.6
120°-130°	487.2	7.8
130°-140°	396.0	6.3
140°-150°	307.5	4.9
150°-160°	221.6	3.5
160°-170°	135.7	2.2
170°-180°	45.8	0.7
0°-30°	2270.3	36.3
0°-40°	2850.5	45.6
0°-60°	3223.0	51.5
0°-90°	3278.4	52.4
90°-120°	1382.7	22.1
90°-150°	2573.4	41.1
90°-180°	2977.0	47.6
0°-180°	6254.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5645	5645	5645	5645	5645	
5°	5430	5422	5376	5453	5436	490
15°	3621	3580	3507	3532	3521	983
25°	1736	1734	1702	1687	1690	817
35°	941	947	925	910	901	591
45°	344	396	412	383	307	275
55°	60	70	112	65	57	59
65°	31	32	32	30	29	31
75°	17	17	17	16	16	18
85°	5	5	4	5	4	5
90°	0	1	3	4	4	1
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°	5644.9	5644.9	5644.9	5644.9	5644.9
2.5°	5636.1	5626.7	5572.8	5617.4	5606.5
5°	5429.6	5421.8	5375.5	5453.3	5435.6
7.5°	5003.2	5009.9	4982.8	5051.5	5032.7
10°	4639.5	4657.1	4617.5	4717.1	4650.5
12.5°	4238.1	4226.8	4199.3	4214.7	4177.9
15°	3621.1	3580.0	3506.9	3531.7	3520.9
17.5°	2916.7	2932.6	2869.2	2866.5	2854.4
20°	2502.5	2507.4	2469.5	2489.4	2487.5
22.5°	2169.2	2170.2	2121.8	2151.0	2133.4
25°	1736.4	1733.5	1702.4	1687.4	1690.4
27.5°	1424.0	1411.9	1388.3	1398.2	1391.0
30°	1267.8	1258.0	1233.7	1239.5	1230.7
32.5°	1127.6	1128.0	1103.1	1100.2	1093.7
35°	941.3	947.2	925.3	910.1	901.3
37.5°	775.1	780.6	762.1	739.9	732.4
40°	666.9	670.9	657.9	631.8	625.9
42.5°	549.2	565.6	553.0	528.2	515.3
45°	344.5	396.4	411.6	382.8	307.4
47.5°	174.2	246.1	293.6	216.8	142.8
50°	110.2	160.1	230.3	130.4	97.1
52.5°	84.5	110.2	183.9	96.3	77.9
55°	60.1	69.9	112.2	64.9	57.1
57.5°	46.5	51.9	67.1	49.2	44.3
60°	40.1	44.0	51.1	41.9	37.1
62.5°	36.1	38.4	41.5	35.6	33.8
65°	31.0	32.0	32.0	30.0	29.0
67.5°	26.4	27.4	27.2	26.2	25.2
70°	24.0	25.0	24.0	23.0	22.0
72.5°	20.8	21.8	20.8	20.6	19.6
75°	17.0	17.0	17.0	16.0	16.0
77.5°	13.2	13.4	12.4	12.4	11.6
80°	10.0	11.0	10.0	10.0	10.0
82.5°	8.4	8.6	7.6	7.6	7.6
85°	5.0	5.0	4.0	5.0	4.0
87.5°	1.6	1.8	2.2	2.4	2.4
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



TEST NUMBER: P854440

CATALOG NUMBER: SQ2-WBN-075U-075D-935-UNV-STD-W-4

**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	2.81	3.50	3.79	4.46	5.71	2.42	3.11	3.40	4.07	5.32
	3H	3.85	4.47	4.84	5.44	6.71	3.41	4.03	4.40	5.00	6.28
	4H	4.27	4.85	5.28	5.83	7.11	3.83	4.41	4.84	5.39	6.67
	6H	4.59	5.12	5.59	6.10	7.39	4.17	4.70	5.17	5.68	6.97
	8H	4.68	5.19	5.70	6.18	7.47	4.27	4.77	5.28	5.77	7.06
	12H	4.75	5.23	5.77	6.21	7.53	4.31	4.79	5.33	5.78	7.09
4H	2H	3.02	3.60	4.03	4.58	5.86	2.69	3.27	3.70	4.25	5.53
	3H	4.32	4.79	5.33	5.80	7.09	3.93	4.41	4.94	5.42	6.71
	4H	4.88	5.31	5.89	6.31	7.63	4.49	4.92	5.50	5.92	7.24
	6H	5.33	5.70	6.36	6.72	8.04	4.95	5.32	5.97	6.34	7.66
	8H	5.49	5.83	6.51	6.85	8.17	5.10	5.45	6.13	6.46	7.79
	12H	5.59	5.90	6.63	6.93	8.26	5.19	5.50	6.23	6.53	7.86
8H	4H	5.02	5.37	6.05	6.38	7.71	4.67	5.02	5.70	6.03	7.36
	6H	5.60	5.89	6.65	6.94	8.27	5.25	5.54	6.30	6.59	7.92
	8H	5.85	6.10	6.91	7.14	8.49	5.50	5.74	6.55	6.79	8.13
	12H	6.04	6.25	7.09	7.29	8.68	5.66	5.88	6.72	6.91	8.31
12H	4H	4.99	5.30	6.03	6.33	7.67	4.65	4.96	5.69	5.99	7.32
	6H	5.63	5.87	6.68	6.92	8.26	5.29	5.54	6.35	6.58	7.92
	8H	5.90	6.11	6.96	7.15	8.54	5.56	5.77	6.62	6.81	8.20