

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: P854442

Luminaire Tested: SQ2-WBN-075U-100D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854442
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-100D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

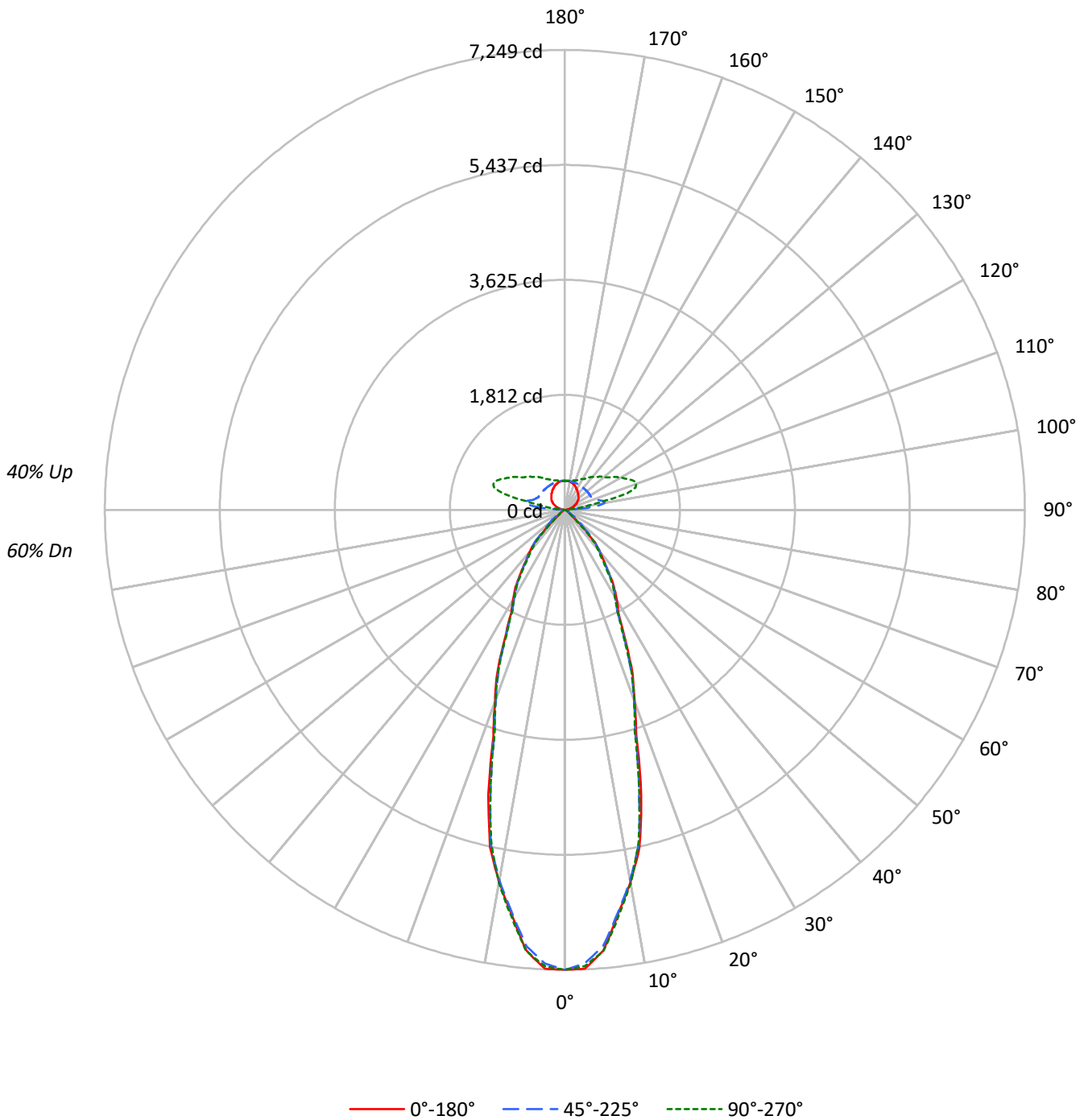
Lumens per Lamp: N/A
Luminaire Lumens: 7059.9 lumens
Efficiency: N/A
Efficacy: 115.0 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.58 / 0.63
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 61.4
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60				
1	103	99	96	94	96	93	91	88	82	80	78	71	70	69	62	61	60	56				
2	96	90	86	82	90	85	81	78	75	72	70	66	64	63	58	57	55	52				
3	90	83	77	72	84	78	73	69	70	66	63	62	59	57	55	53	51	48				
4	84	76	70	65	79	72	67	62	65	61	57	58	55	52	52	50	48	45				
5	79	70	64	59	75	67	61	57	60	56	53	54	51	48	49	46	45	42				
6	75	65	58	54	70	62	56	52	56	52	48	51	48	45	46	44	42	39				
7	70	60	54	49	66	58	52	48	53	48	45	48	45	42	44	41	39	37				
8	66	56	50	46	63	54	48	44	50	45	42	45	42	39	41	39	37	35				
9	63	53	47	42	60	51	45	41	47	42	39	43	39	37	39	37	35	33				
10	60	50	44	40	57	48	42	39	44	40	37	41	37	35	38	35	33	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	117048	117048	117048
5°	113013	111887	113138
10°	97684	97220	97915
15°	77732	75281	75582
20°	55220	54491	54888
25°	39727	38949	38673
30°	30354	29539	29466
35°	23828	23422	22813
40°	18052	17808	16942
45°	10102	12070	9015
50°	3554	7430	3132
55°	2173	4054	2063
60°	1660	2118	1537
65°	1524	1574	1425
70°	1459	1459	1336
75°	1366	1366	1285
80°	1199	1199	1199
85°	1186	945	945

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 12070 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	629.3	8.9
10°-20°	1250.7	17.7
20°-30°	1035.7	14.7
30°-40°	745.1	10.6
40°-50°	379.6	5.4
50°-60°	98.8	1.4
60°-70°	41.0	0.6
70°-80°	22.8	0.3
80°-90°	7.2	0.1
90°-100°	174.1	2.5
100°-110°	577.1	8.2
110°-120°	572.7	8.1
120°-130°	466.5	6.6
130°-140°	379.1	5.4
140°-150°	294.4	4.2
150°-160°	212.1	3.0
160°-170°	129.9	1.8
170°-180°	43.9	0.6
0°-30°	2915.6	41.3
0°-40°	3660.7	51.9
0°-60°	4139.1	58.6
0°-90°	4210.1	59.6
90°-120°	1323.9	18.8
90°-150°	2463.9	34.9
90°-180°	2850.0	40.4
0°-180°	7059.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7249	7249	7249	7249	7249	
5°	6973	6963	6903	7003	6981	629
15°	4650	4598	4504	4536	4522	1262
25°	2230	2226	2186	2167	2171	1049
35°	1209	1216	1188	1169	1157	759
45°	442	509	529	492	395	354
55°	77	90	144	83	73	76
65°	40	41	41	39	37	40
75°	22	22	22	21	21	23
85°	6	6	5	6	5	7
90°	0	1	3	4	4	1
95°	25	73	315	113	75	28
105°	101	144	578	1090	1019	107
115°	180	216	465	968	1132	178
125°	252	280	456	761	897	224
135°	301	332	453	653	737	233
145°	350	376	452	562	615	219
155°	399	413	455	502	520	184
165°	438	443	456	475	479	124
175°	458	458	459	462	461	44
180°	460	460	460	460	460	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7249.4	7249.4	7249.4	7249.4	7249.4
2.5°	7238.0	7226.0	7156.8	7214.1	7200.0
5°	6972.9	6962.8	6903.4	7003.2	6980.6
7.5°	6425.3	6433.8	6399.0	6487.2	6463.1
10°	5958.2	5980.8	5929.9	6057.8	5972.3
12.5°	5442.7	5428.2	5392.8	5412.6	5365.3
15°	4650.3	4597.5	4503.7	4535.5	4521.7
17.5°	3745.7	3766.1	3684.7	3681.3	3665.7
20°	3213.8	3220.1	3171.4	3197.0	3194.5
22.5°	2785.8	2787.1	2724.8	2762.4	2739.8
25°	2230.0	2226.2	2186.3	2167.0	2170.8
27.5°	1828.7	1813.1	1783.0	1795.6	1786.3
30°	1628.1	1615.5	1584.4	1591.8	1580.5
32.5°	1448.1	1448.6	1416.7	1412.9	1404.6
35°	1208.9	1216.4	1188.3	1168.7	1157.4
37.5°	995.4	1002.4	978.7	950.2	940.6
40°	856.5	861.5	844.9	811.3	803.8
42.5°	705.3	726.4	710.1	678.4	661.8
45°	442.4	509.0	528.6	491.6	394.8
47.5°	223.8	316.1	377.1	278.5	183.4
50°	141.5	205.6	295.8	167.5	124.7
52.5°	108.5	141.5	236.1	123.7	100.1
55°	77.2	89.7	144.0	83.4	73.3
57.5°	59.7	66.7	86.2	63.1	56.8
60°	51.4	56.5	65.6	53.9	47.6
62.5°	46.3	49.3	53.2	45.7	43.5
65°	39.9	41.1	41.2	38.6	37.3
67.5°	34.0	35.2	35.0	33.7	32.4
70°	30.9	32.1	30.9	29.6	28.3
72.5°	26.7	28.0	26.7	26.5	25.2
75°	21.9	21.9	21.9	20.6	20.6
77.5°	17.0	17.2	15.9	15.9	14.9
80°	12.9	14.1	12.9	12.9	12.9
82.5°	10.8	11.1	9.8	9.8	9.8
85°	6.4	6.4	5.1	6.4	5.1
87.5°	2.1	2.2	2.6	2.8	2.8
90°	0.0	0.9	2.9	3.8	3.8
92.5°	7.6	29.4	86.7	28.1	23.6
95°	24.8	73.2	315.4	112.6	75.3
97.5°	45.6	96.2	550.6	321.1	203.0
100°	60.0	108.5	637.5	547.6	363.1
102.5°	76.0	123.0	632.2	836.8	632.2
105°	101.0	143.9	577.5	1089.6	1018.7
107.5°	126.6	164.8	525.1	1115.3	1169.1
110°	141.0	179.2	498.4	1089.8	1198.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	156.3	193.7	482.4	1044.8	1183.6
115°	180.1	215.5	465.1	968.1	1132.1
117.5°	203.7	235.2	458.8	894.9	1067.0
120°	218.2	249.0	456.5	849.1	1015.9
122.5°	231.2	261.2	456.5	811.4	965.6
125°	251.6	279.5	456.5	760.7	896.8
127.5°	268.4	295.8	455.3	722.3	838.6
130°	278.3	307.2	454.6	700.0	804.3
132.5°	287.4	317.1	453.8	681.4	775.3
135°	301.1	331.9	452.7	652.8	736.7
137.5°	316.0	345.6	451.5	625.1	699.1
140°	325.9	354.8	450.8	606.7	674.7
142.5°	335.1	363.2	451.5	588.2	648.8
145°	349.7	375.8	451.7	561.6	614.7
147.5°	365.6	387.4	451.9	539.0	578.5
150°	375.5	395.0	452.7	525.9	559.4
152.5°	384.6	403.4	453.4	515.0	541.9
155°	399.3	413.3	454.6	501.7	520.3
157.5°	413.6	424.4	455.7	492.2	505.5
160°	421.2	430.5	456.5	485.3	495.6
162.5°	428.8	435.9	456.5	480.7	488.7
165°	438.4	443.0	456.5	474.7	479.4
167.5°	447.1	449.6	457.4	469.3	471.7
170°	451.7	452.6	457.4	467.0	467.9
172.5°	454.8	455.7	458.2	464.7	464.9
175°	458.4	458.4	459.3	462.2	461.2
177.5°	460.3	460.3	459.5	461.0	459.5
180°	460.3	460.3	460.3	460.3	460.3



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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	4.34	5.07	5.26	5.97	7.11	3.96	4.69	4.88	5.59	6.73
	3H	5.39	6.04	6.32	6.95	8.12	4.96	5.61	5.89	6.52	7.69
	4H	5.82	6.43	6.76	7.34	8.52	5.38	5.99	6.32	6.91	8.09
	6H	6.13	6.69	7.08	7.61	8.80	5.72	6.27	6.67	7.20	8.38
	8H	6.23	6.76	7.19	7.69	8.88	5.82	6.35	6.78	7.28	8.47
	12H	6.30	6.80	7.25	7.73	8.93	5.87	6.37	6.83	7.30	8.51
4H	2H	4.57	5.17	5.51	6.09	7.27	4.24	4.84	5.18	5.76	6.94
	3H	5.86	6.36	6.81	7.31	8.50	5.48	5.98	6.43	6.93	8.12
	4H	6.43	6.88	7.38	7.82	9.04	6.04	6.49	7.00	7.44	8.65
	6H	6.88	7.27	7.85	8.23	9.45	6.50	6.89	7.47	7.85	9.07
	8H	7.04	7.40	8.01	8.35	9.58	6.66	7.02	7.63	7.98	9.21
	12H	7.14	7.46	8.13	8.44	9.67	6.74	7.06	7.73	8.04	9.27
8H	4H	6.57	6.93	7.54	7.89	9.12	6.22	6.58	7.19	7.54	8.77
	6H	7.15	7.45	8.15	8.45	9.68	6.81	7.10	7.80	8.11	9.33
	8H	7.40	7.66	8.40	8.65	9.89	7.05	7.31	8.06	8.30	9.55
	12H	7.59	7.81	8.59	8.79	10.09	7.22	7.44	8.22	8.42	9.72
12H	4H	6.54	6.87	7.53	7.84	9.07	6.21	6.53	7.19	7.50	8.74
	6H	7.18	7.43	8.18	8.42	9.67	6.84	7.10	7.85	8.09	9.34
	8H	7.45	7.67	8.45	8.65	9.95	7.11	7.34	8.12	8.32	9.62