

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: P854482

Luminaire Tested: SQ2-WBN-125U-125D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854482
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G3-2308-130-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBN-125U-125D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

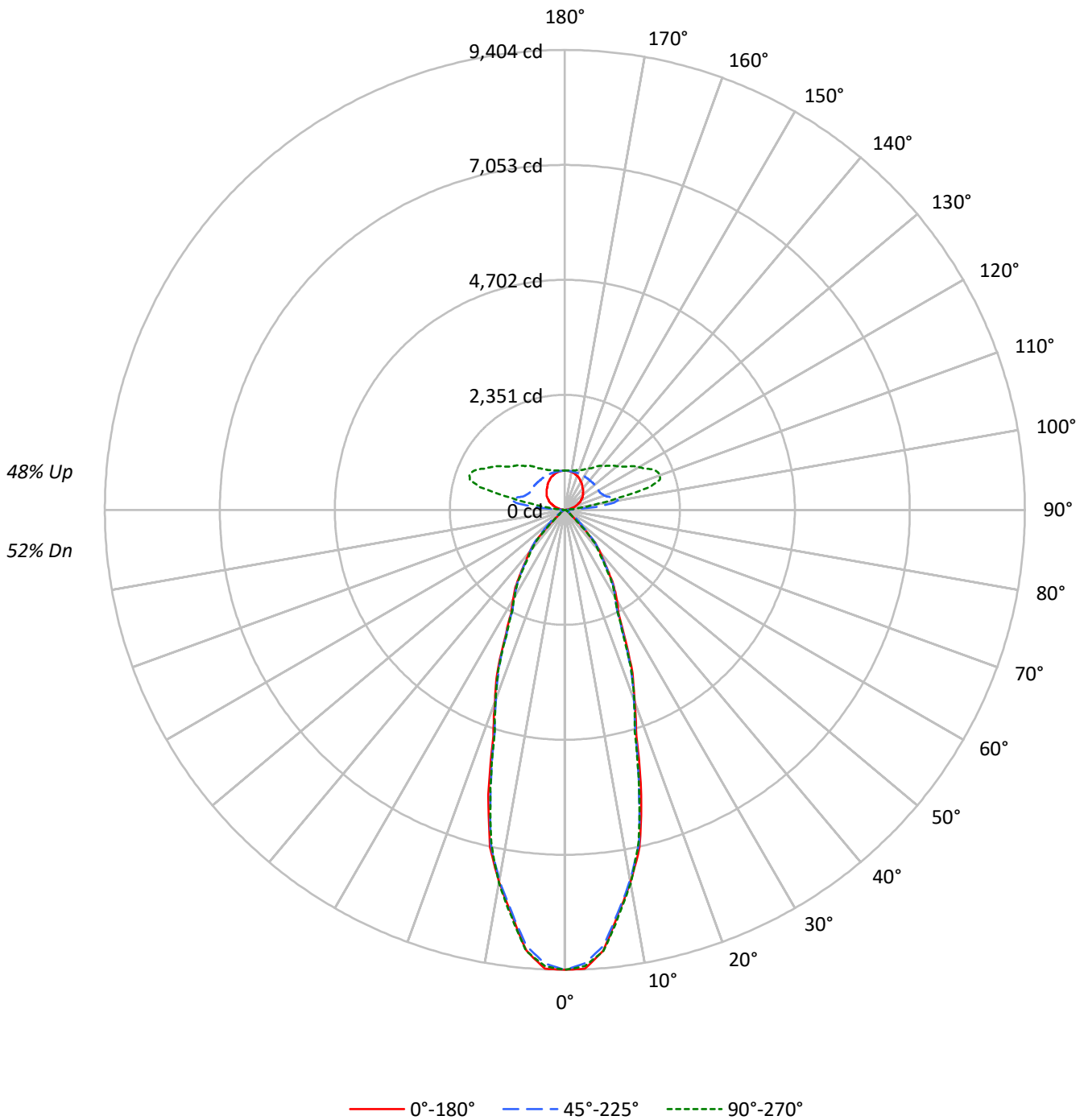
Lumens per Lamp: N/A
Luminaire Lumens: 10414.8 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.58 / 0.63
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 93.6
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	58	58	58	52
1	101	97	94	91	93	90	88	86	78	76	74	66	65	64	55	55	54	49
2	94	88	83	79	87	82	78	75	71	69	66	61	59	58	52	51	50	45
3	88	80	74	70	82	75	70	66	66	62	59	57	55	52	49	47	46	42
4	82	73	67	62	76	69	64	59	61	57	54	53	50	48	46	44	43	39
5	77	67	61	56	72	64	58	54	56	52	49	50	47	44	44	41	40	37
6	72	62	56	51	67	59	53	49	53	48	45	47	43	41	41	39	37	35
7	68	58	51	47	64	55	49	45	49	45	41	44	41	38	39	37	35	32
8	64	54	47	43	60	51	45	41	46	42	38	41	38	36	37	35	33	31
9	61	50	44	40	57	48	42	38	43	39	36	39	36	33	35	33	31	29
10	57	47	41	37	54	45	39	36	41	37	34	37	34	31	33	31	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	151842	151842	151842
5°	146608	145148	146770
10°	126723	126121	127023
15°	100839	97660	98051
20°	71635	70689	71204
25°	51537	50527	50169
30°	39377	38320	38227
35°	30910	30384	29595
40°	23419	23102	21977
45°	13104	15657	11695
50°	4609	9638	4064
55°	2818	5261	2677
60°	2154	2748	1992
65°	1975	2040	1849
70°	1888	1888	1733
75°	1772	1772	1666
80°	1553	1553	1553
85°	1538	1241	1241

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15657 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	816.3	7.8
10°-20°	1622.4	15.6
20°-30°	1343.6	12.9
30°-40°	966.6	9.3
40°-50°	492.4	4.7
50°-60°	128.2	1.2
60°-70°	53.2	0.5
70°-80°	29.5	0.3
80°-90°	9.7	0.1
90°-100°	307.1	2.9
100°-110°	999.7	9.6
110°-120°	988.9	9.5
120°-130°	808.2	7.8
130°-140°	660.5	6.3
140°-150°	514.5	4.9
150°-160°	370.8	3.6
160°-170°	226.7	2.2
170°-180°	76.5	0.7
0°-30°	3782.3	36.3
0°-40°	4748.9	45.6
0°-60°	5369.5	51.6
0°-90°	5461.9	52.4
90°-120°	2295.8	22.0
90°-150°	4278.9	41.1
90°-180°	4953.0	47.6
0°-180°	10414.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9404	9404	9404	9404	9404	
5°	9046	9033	8956	9085	9056	816
15°	6033	5964	5842	5884	5866	1638
25°	2893	2888	2836	2811	2816	1361
35°	1568	1578	1542	1516	1502	984
45°	574	660	686	638	512	459
55°	100	116	187	108	95	98
65°	52	53	53	50	48	52
75°	28	28	28	27	27	30
85°	8	8	7	8	7	9
90°	0	3	7	6	6	2
95°	42	126	563	201	123	48
105°	170	245	990	1892	1791	181
115°	314	375	807	1663	1956	311
125°	436	487	796	1313	1547	388
135°	527	582	792	1133	1278	407
145°	616	662	790	976	1068	386
155°	703	726	795	874	906	324
165°	767	774	797	827	836	216
175°	800	800	800	806	804	76
180°	803	803	803	803	803	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9404.4	9404.4	9404.4	9404.4	9404.4
2.5°	9389.7	9374.0	9284.3	9358.6	9340.3
5°	9045.7	9032.6	8955.6	9085.1	9055.7
7.5°	8335.3	8346.4	8301.3	8415.7	8384.4
10°	7729.4	7758.7	7692.7	7858.7	7747.7
12.5°	7060.7	7041.8	6996.0	7021.6	6960.3
15°	6032.7	5964.2	5842.5	5883.8	5865.9
17.5°	4859.2	4885.6	4780.1	4775.6	4755.4
20°	4169.2	4177.3	4114.1	4147.4	4144.1
22.5°	3613.9	3615.6	3534.9	3583.6	3554.2
25°	2892.9	2888.0	2836.2	2811.3	2816.1
27.5°	2372.4	2352.1	2313.0	2329.4	2317.3
30°	2112.1	2095.8	2055.4	2065.1	2050.4
32.5°	1878.5	1879.2	1837.8	1832.9	1822.2
35°	1568.2	1578.0	1541.5	1516.2	1501.5
37.5°	1291.3	1300.4	1269.6	1232.6	1220.2
40°	1111.1	1117.6	1096.1	1052.5	1042.7
42.5°	914.9	942.3	921.3	880.1	858.5
45°	573.9	660.4	685.7	637.8	512.2
47.5°	290.3	410.0	489.2	361.2	237.9
50°	183.5	266.7	383.7	217.3	161.8
52.5°	140.8	183.5	306.3	160.5	129.8
55°	100.1	116.4	186.9	108.1	95.1
57.5°	77.4	86.5	111.8	81.9	73.7
60°	66.7	73.3	85.1	69.9	61.7
62.5°	60.1	64.0	69.1	59.3	56.4
65°	51.7	53.3	53.4	50.0	48.4
67.5°	44.0	45.7	45.4	43.7	42.0
70°	40.0	41.7	40.0	38.3	36.7
72.5°	34.7	36.3	34.7	34.3	32.7
75°	28.4	28.4	28.4	26.7	26.7
77.5°	22.0	22.3	20.7	20.7	19.4
80°	16.7	18.3	16.7	16.7	16.7
82.5°	14.0	14.3	12.7	12.7	12.7
85°	8.3	8.3	6.7	8.3	6.7
87.5°	2.7	3.2	4.1	3.9	3.9
90°	0.0	2.9	6.9	5.9	5.9
92.5°	14.2	51.1	163.3	53.8	41.5
95°	41.5	126.4	562.8	200.7	123.4
97.5°	78.0	164.5	955.2	581.8	355.1
100°	101.7	186.7	1102.9	983.5	637.9
102.5°	128.6	210.4	1084.8	1455.0	1106.3
105°	169.8	245.1	990.4	1891.6	1791.2
107.5°	214.5	285.3	900.7	1929.4	2035.8
110°	246.9	311.5	858.1	1882.4	2074.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	273.7	337.6	831.2	1797.6	2045.3
115°	314.0	374.8	806.7	1662.6	1956.1
117.5°	355.5	410.3	797.2	1538.9	1831.1
120°	379.2	433.2	794.9	1462.9	1745.7
122.5°	402.1	455.4	795.7	1396.9	1660.4
125°	436.4	486.6	795.9	1312.7	1547.3
127.5°	465.9	517.2	795.7	1249.6	1445.2
130°	484.8	537.0	794.9	1213.5	1388.3
132.5°	501.4	555.9	794.1	1180.1	1344.1
135°	527.3	582.3	791.9	1132.9	1277.7
137.5°	552.6	608.0	789.7	1084.9	1213.5
140°	570.7	623.8	788.9	1052.4	1174.0
142.5°	588.1	638.9	788.9	1021.3	1129.8
145°	616.1	661.5	789.9	975.7	1068.4
147.5°	643.4	682.8	791.3	936.9	1008.5
150°	661.6	696.3	792.9	913.7	974.6
152.5°	679.7	708.3	793.7	896.1	944.6
155°	703.0	726.2	794.9	873.6	906.4
157.5°	725.2	741.8	796.1	857.0	880.0
160°	738.6	752.1	796.8	846.6	865.0
162.5°	750.4	760.9	796.8	837.8	851.5
165°	767.2	774.0	796.8	826.7	836.3
167.5°	779.1	783.3	797.0	818.3	823.3
170°	787.0	788.9	797.8	812.7	814.6
172.5°	792.5	793.7	799.4	809.5	809.1
175°	799.8	799.8	799.8	805.7	803.8
177.5°	802.8	802.0	801.2	805.1	802.0
180°	802.8	802.8	802.8	802.8	802.8



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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	4.58	5.28	5.56	6.24	7.49	4.19	4.89	5.17	5.85	7.10
	3H	5.63	6.24	6.61	7.21	8.49	5.19	5.81	6.18	6.78	8.05
	4H	6.05	6.63	7.05	7.61	8.89	5.61	6.19	6.61	7.17	8.45
	6H	6.37	6.90	7.37	7.88	9.17	5.95	6.48	6.95	7.46	8.75
	8H	6.46	6.97	7.48	7.96	9.25	6.05	6.55	7.06	7.55	8.84
	12H	6.53	7.01	7.54	7.99	9.30	6.10	6.57	7.11	7.56	8.87
4H	2H	4.80	5.38	5.81	6.35	7.64	4.47	5.05	5.48	6.02	7.31
	3H	6.09	6.57	7.10	7.58	8.87	5.71	6.19	6.72	7.19	8.49
	4H	6.66	7.09	7.67	8.09	9.41	6.27	6.70	7.28	7.70	9.02
	6H	7.11	7.48	8.14	8.50	9.82	6.73	7.10	7.76	8.12	9.44
	8H	7.27	7.61	8.29	8.63	9.95	6.88	7.23	7.91	8.24	9.57
	12H	7.37	7.68	8.41	8.71	10.04	6.97	7.28	8.01	8.31	9.64
8H	4H	6.80	7.15	7.83	8.16	9.49	6.45	6.80	7.48	7.81	9.14
	6H	7.39	7.67	8.43	8.72	10.05	7.04	7.32	8.09	8.38	9.70
	8H	7.63	7.88	8.69	8.92	10.27	7.28	7.53	8.34	8.57	9.91
	12H	7.82	8.03	8.87	9.07	10.46	7.45	7.66	8.51	8.70	10.09
12H	4H	6.77	7.08	7.82	8.11	9.45	6.43	6.74	7.48	7.77	9.11
	6H	7.41	7.66	8.47	8.70	10.04	7.07	7.32	8.13	8.36	9.71
	8H	7.68	7.90	8.74	8.93	10.32	7.34	7.56	8.40	8.59	9.98