

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: P854398

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

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854398
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G3-2104-222-8)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBM-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

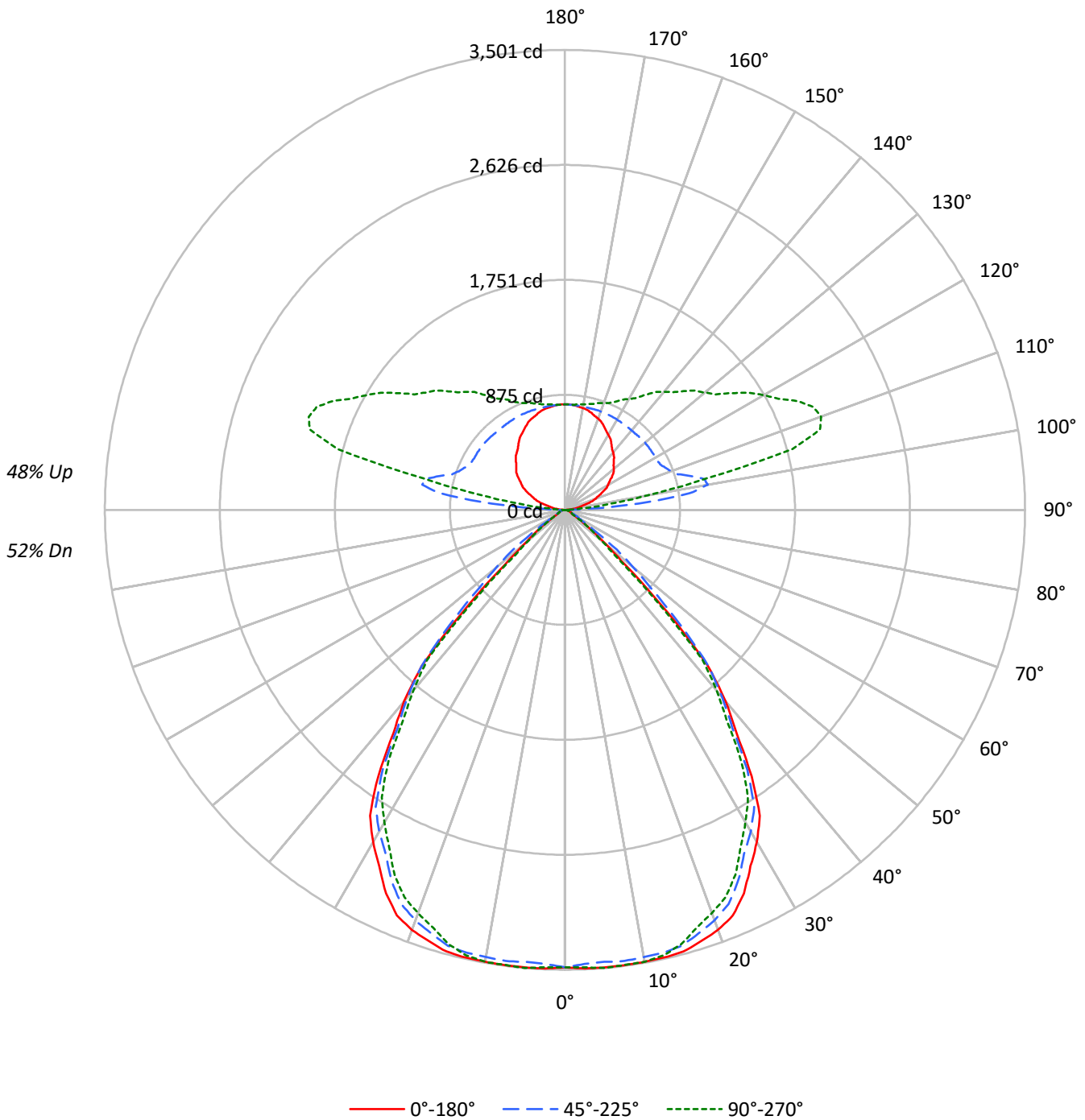
Lumens per Lamp: N/A
Luminaire Lumens: 10392.9 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

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	100	97	93	90	93	90	87	85	77	75	73	65	64	63	54	54	53	48
2	93	87	82	77	86	81	76	73	70	67	64	60	58	56	50	49	48	43
3	86	78	72	67	80	73	68	63	63	60	56	55	52	49	47	45	43	39
4	80	71	64	58	74	66	60	56	58	53	50	50	47	44	43	41	39	36
5	74	64	57	52	69	60	54	49	53	48	44	46	43	40	40	37	35	32
6	69	58	51	46	64	55	48	44	48	44	40	42	39	36	37	34	32	29
7	64	53	46	41	60	50	44	39	45	40	36	39	35	33	34	31	29	27
8	60	49	42	37	56	46	40	36	41	36	33	36	32	30	32	29	27	25
9	56	45	38	34	52	43	36	32	38	33	30	34	30	27	30	27	25	23
10	53	42	35	31	49	39	33	29	35	30	27	31	28	25	28	25	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	56225	56225	56225
5°	56666	55987	56747
10°	57272	56667	57289
15°	58191	57424	57190
20°	58477	57156	56127
25°	57377	55561	54619
30°	54441	52709	51220
35°	48817	47656	46180
40°	40078	39192	37761
45°	25060	28458	22735
50°	9909	16832	8854
55°	4808	7645	4752
60°	2257	3739	2063
65°	2021	2174	1945
70°	1978	2025	1836
75°	1934	1934	1747
80°	1860	1860	1674
85°	1667	1667	1667

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 28458 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	332.7	3.2
10°-20°	972.5	9.4
20°-30°	1437.8	13.8
30°-40°	1485.7	14.3
40°-50°	893.9	8.6
50°-60°	214.8	2.1
60°-70°	58.7	0.6
70°-80°	32.7	0.3
80°-90°	11.2	0.1
90°-100°	307.1	3.0
100°-110°	999.7	9.6
110°-120°	988.9	9.5
120°-130°	808.2	7.8
130°-140°	660.5	6.4
140°-150°	514.5	5.0
150°-160°	370.8	3.6
160°-170°	226.7	2.2
170°-180°	76.5	0.7
0°-30°	2743.0	26.4
0°-40°	4228.7	40.7
0°-60°	5337.5	51.4
0°-90°	5440.0	52.3
90°-120°	2295.8	22.1
90°-150°	4278.9	41.2
90°-180°	4953.0	47.7
0°-180°	10392.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3482	3482	3482	3482	3482	
5°	3496	3486	3454	3503	3501	334
15°	3481	3508	3435	3436	3421	981
25°	3221	3245	3119	3075	3066	1472
35°	2477	2471	2418	2371	2343	1524
45°	1098	1246	1246	1178	996	850
55°	171	192	272	183	169	174
65°	53	56	57	53	51	54
75°	31	33	31	30	28	32
85°	9	10	9	9	9	10
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°	3482.3	3482.3	3482.3	3482.3	3482.3
2.5°	3495.1	3486.5	3459.2	3491.0	3485.5
5°	3496.3	3485.6	3454.4	3503.3	3501.3
7.5°	3495.7	3490.1	3463.6	3501.1	3493.5
10°	3493.3	3496.2	3456.4	3497.2	3494.3
12.5°	3491.7	3504.8	3452.4	3481.2	3473.5
15°	3481.3	3507.7	3435.4	3436.1	3421.4
17.5°	3443.4	3475.4	3381.7	3353.9	3335.3
20°	3403.4	3434.7	3326.5	3285.2	3266.6
22.5°	3341.1	3370.0	3249.8	3207.7	3192.3
25°	3220.7	3245.1	3118.8	3074.7	3065.9
27.5°	3058.3	3068.7	2952.6	2909.4	2894.3
30°	2920.1	2921.1	2827.2	2775.6	2747.3
32.5°	2759.5	2752.7	2680.2	2628.5	2593.1
35°	2476.7	2470.8	2417.8	2371.2	2342.9
37.5°	2144.3	2143.3	2092.8	2052.6	2024.1
40°	1901.5	1908.3	1859.5	1809.2	1791.6
42.5°	1610.6	1661.2	1619.8	1564.8	1553.5
45°	1097.5	1246.0	1246.3	1178.3	995.7
47.5°	627.8	787.9	897.0	694.4	515.5
50°	394.5	515.6	670.1	422.8	352.5
52.5°	280.2	339.6	495.9	297.4	263.0
55°	170.8	192.3	271.6	183.4	168.8
57.5°	103.5	123.6	157.4	123.0	103.9
60°	69.9	88.5	115.8	81.5	63.9
62.5°	61.9	68.8	91.1	64.2	57.5
65°	52.9	55.9	56.9	52.9	50.9
67.5°	46.7	48.7	47.7	46.7	43.7
70°	41.9	43.9	42.9	41.9	38.9
72.5°	37.2	39.1	38.1	37.1	35.0
75°	31.0	32.9	31.0	29.9	28.0
77.5°	24.0	25.7	24.8	23.9	22.0
80°	20.0	20.9	20.0	19.9	18.0
82.5°	16.0	16.2	15.2	15.2	14.0
85°	9.0	10.0	9.0	9.0	9.0
87.5°	3.2	3.8	4.6	4.4	3.6
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	7.12	7.85	8.09	8.81	10.06	6.78	7.52	7.75	8.48	9.73
	3H	7.63	8.28	8.61	9.25	10.52	7.28	7.93	8.27	8.90	10.18
	4H	7.89	8.50	8.89	9.48	10.76	7.52	8.13	8.52	9.11	10.39
	6H	8.12	8.68	9.12	9.66	10.95	7.72	8.28	8.72	9.26	10.55
	8H	8.19	8.72	9.20	9.71	11.00	7.79	8.32	8.80	9.31	10.60
	12H	8.23	8.73	9.24	9.72	11.03	7.83	8.33	8.84	9.32	10.63
4H	2H	7.13	7.74	8.13	8.71	9.99	6.82	7.43	7.82	8.41	9.69
	3H	7.85	8.35	8.86	9.36	10.65	7.54	8.04	8.55	9.05	10.34
	4H	8.26	8.71	9.27	9.71	11.03	7.91	8.36	8.92	9.36	10.68
	6H	8.62	9.02	9.65	10.03	11.35	8.25	8.64	9.27	9.66	10.97
	8H	8.76	9.12	9.78	10.13	11.46	8.37	8.73	9.39	9.75	11.07
	12H	8.83	9.16	9.87	10.19	11.52	8.45	8.77	9.49	9.80	11.14
8H	4H	8.34	8.70	9.36	9.71	11.04	8.01	8.38	9.04	9.39	10.72
	6H	8.83	9.13	9.88	10.18	11.51	8.48	8.78	9.53	9.83	11.16
	8H	9.04	9.31	10.10	10.35	11.69	8.69	8.95	9.74	9.99	11.34
	12H	9.20	9.43	10.26	10.47	11.86	8.84	9.07	9.90	10.11	11.50
12H	4H	8.31	8.63	9.35	9.66	10.99	7.99	8.32	9.03	9.35	10.68
	6H	8.85	9.11	9.90	10.15	11.50	8.51	8.77	9.56	9.81	11.16
	8H	9.09	9.32	10.14	10.35	11.75	8.74	8.97	9.80	10.01	11.40