

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: P854410

Luminaire Tested: SQ2-WBM-150U-125D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854410
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G3-2104-222-8)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBM-150U-125D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

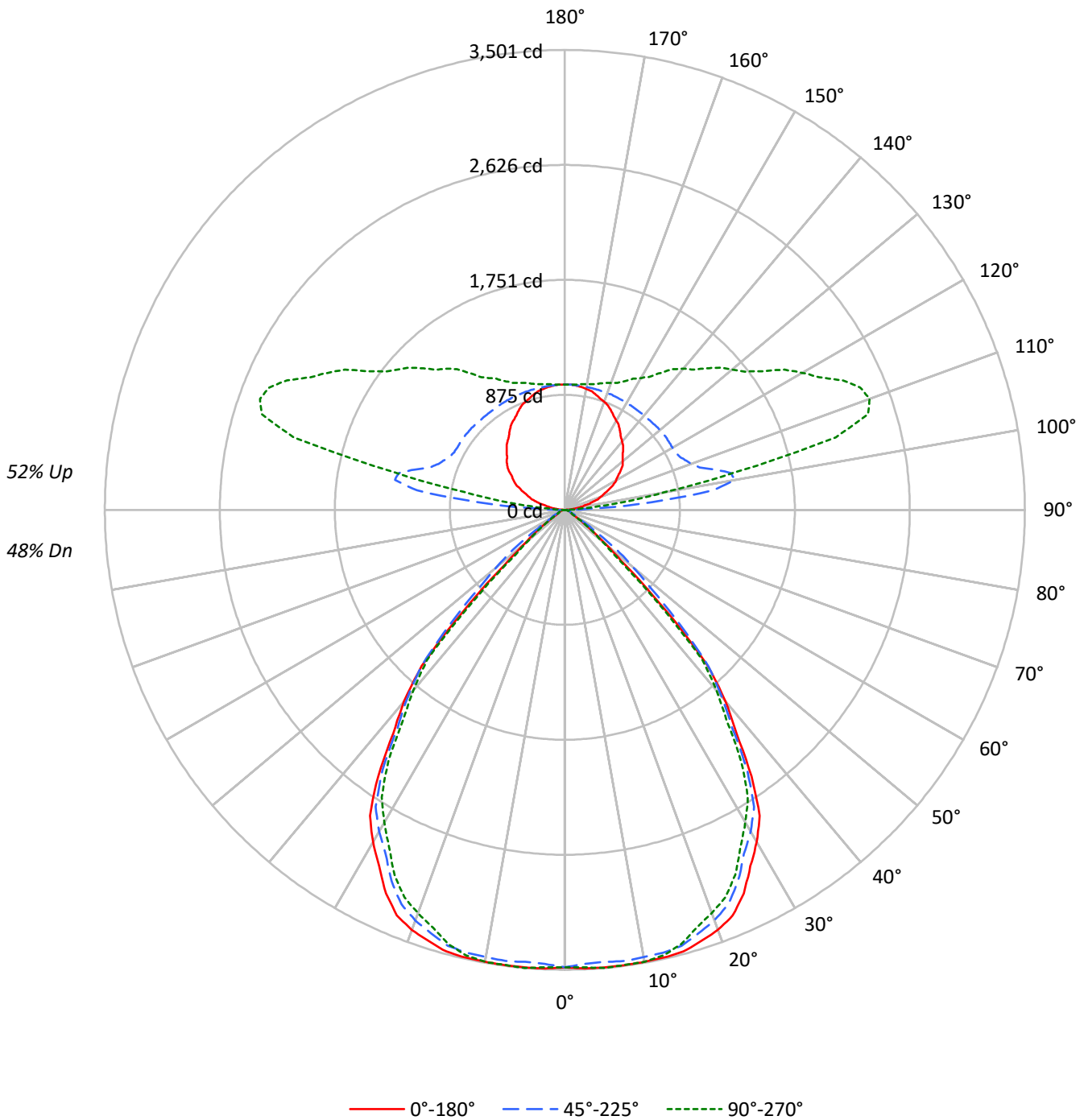
Lumens per Lamp: N/A
Luminaire Lumens: 11334.9 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 106.3
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48
1	99	95	92	89	91	88	85	83	75	73	71	62	61	60	51	50	49	44
2	92	85	80	76	84	79	75	71	68	64	62	57	55	53	47	45	44	40
3	85	77	71	66	78	71	66	62	61	57	54	52	49	47	43	41	40	36
4	79	69	62	57	73	65	59	54	56	51	48	48	44	42	40	38	36	33
5	73	63	56	50	67	59	52	48	51	46	43	44	40	38	37	35	33	30
6	68	57	50	45	63	53	47	42	47	42	38	40	37	34	34	32	30	27
7	63	52	45	40	58	49	43	38	43	38	34	37	33	31	32	29	27	25
8	59	48	41	36	55	45	39	34	39	35	31	34	31	28	30	27	25	23
9	55	44	37	32	51	41	35	31	36	32	28	32	28	26	28	25	23	21
10	52	41	34	29	48	38	32	28	34	29	26	30	26	23	26	23	21	19

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	2.9
10°-20°	972.5	8.6
20°-30°	1437.8	12.7
30°-40°	1485.7	13.1
40°-50°	893.9	7.9
50°-60°	214.8	1.9
60°-70°	58.7	0.5
70°-80°	32.7	0.3
80°-90°	11.3	0.1
90°-100°	363.9	3.2
100°-110°	1191.6	10.5
110°-120°	1178.0	10.4
120°-130°	963.0	8.5
130°-140°	785.9	6.9
140°-150°	611.6	5.4
150°-160°	440.4	3.9
160°-170°	269.4	2.4
170°-180°	91.0	0.8
0°-30°	2743.0	24.2
0°-40°	4228.7	37.3
0°-60°	5337.5	47.1
0°-90°	5440.2	48.0
90°-120°	2733.5	24.1
90°-150°	5093.9	44.9
90°-180°	5895.0	52.0
0°-180°	11334.9	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°	1	3	8	7	8	3
95°	51	148	662	236	153	58
105°	207	295	1183	2247	2135	218
115°	373	446	961	1986	2331	368
125°	519	579	947	1566	1839	462
135°	625	692	939	1351	1522	484
145°	731	785	937	1162	1273	458
155°	833	861	943	1039	1080	384
165°	910	918	947	984	994	256
175°	951	951	952	959	957	90
180°	955	955	955	955	955	



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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°	3.4	3.8	4.8	4.6	4.0
90°	1.0	2.9	7.9	6.9	7.9
92.5°	16.7	60.8	186.9	60.8	48.7
95°	51.0	148.0	661.6	235.7	153.1
97.5°	92.7	195.2	1135.1	686.6	425.6
100°	121.7	219.6	1313.3	1172.8	777.4
102.5°	154.7	250.3	1293.7	1728.1	1339.6
105°	207.1	295.4	1182.8	2247.2	2134.9
107.5°	258.7	339.7	1074.6	2295.7	2419.1
110°	292.5	371.2	1022.8	2239.2	2468.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	324.7	401.1	991.4	2141.0	2434.8
115°	373.0	445.9	960.9	1985.7	2331.2
117.5°	419.9	488.0	949.4	1833.1	2183.9
120°	450.5	514.8	946.2	1744.1	2085.8
122.5°	478.0	540.8	946.2	1667.4	1984.5
125°	519.2	578.7	947.2	1565.9	1839.4
127.5°	554.2	614.8	946.0	1491.1	1729.1
130°	576.2	637.6	945.2	1445.8	1660.8
132.5°	595.8	658.8	942.9	1406.9	1601.9
135°	625.2	691.5	939.3	1350.6	1522.4
137.5°	656.3	721.9	937.2	1291.9	1447.2
140°	678.3	741.6	936.4	1254.8	1401.7
142.5°	700.2	759.7	936.4	1215.2	1348.3
145°	731.3	785.0	937.4	1161.7	1273.1
147.5°	763.8	808.6	938.8	1115.2	1199.3
150°	784.3	823.6	940.3	1088.2	1159.2
152.5°	804.7	839.4	941.1	1065.9	1124.7
155°	833.3	861.2	943.3	1039.4	1079.7
157.5°	859.1	879.2	945.4	1018.5	1047.7
160°	875.5	891.9	946.2	1006.6	1029.6
162.5°	889.7	902.9	946.2	997.0	1013.9
165°	909.9	918.5	947.2	983.8	994.3
167.5°	927.0	931.2	948.4	973.4	979.2
170°	936.4	938.3	949.2	967.9	969.8
172.5°	943.5	944.6	951.5	963.9	964.3
175°	951.1	951.1	952.1	958.9	957.0
177.5°	955.0	954.3	953.5	958.1	955.0
180°	955.0	955.0	955.0	955.0	955.0



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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	6.69	7.40	7.70	8.40	9.71	6.36	7.07	7.37	8.06	9.38
	3H	7.20	7.83	8.22	8.83	10.17	6.86	7.49	7.88	8.49	9.83
	4H	7.47	8.06	8.50	9.07	10.41	7.10	7.69	8.12	8.69	10.04
	6H	7.69	8.23	8.73	9.25	10.60	7.29	7.84	8.33	8.85	10.20
	8H	7.76	8.28	8.80	9.30	10.65	7.36	7.88	8.40	8.90	10.25
	12H	7.80	8.29	8.84	9.31	10.68	7.40	7.89	8.44	8.91	10.28
4H	2H	6.70	7.29	7.73	8.30	9.64	6.40	6.99	7.43	8.00	9.34
	3H	7.42	7.91	8.46	8.95	10.30	7.11	7.60	8.15	8.64	9.99
	4H	7.83	8.27	8.87	9.30	10.68	7.48	7.92	8.52	8.95	10.33
	6H	8.20	8.58	9.25	9.63	11.00	7.82	8.20	8.87	9.25	10.62
	8H	8.33	8.68	9.38	9.72	11.11	7.94	8.30	9.00	9.34	10.72
	12H	8.40	8.72	9.47	9.78	11.17	8.02	8.34	9.09	9.40	10.79
8H	4H	7.91	8.26	8.96	9.31	10.69	7.58	7.94	8.64	8.98	10.37
	6H	8.40	8.69	9.48	9.78	11.16	8.05	8.34	9.13	9.43	10.81
	8H	8.62	8.87	9.70	9.94	11.34	8.26	8.51	9.34	9.58	10.99
	12H	8.77	9.00	9.86	10.06	11.51	8.41	8.64	9.50	9.70	11.15
12H	4H	7.88	8.20	8.95	9.25	10.64	7.56	7.88	8.63	8.94	10.33
	6H	8.42	8.68	9.50	9.75	11.15	8.08	8.34	9.17	9.41	10.81
	8H	8.66	8.89	9.75	9.95	11.39	8.31	8.54	9.40	9.60	11.05

END OF REPORT