

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: P854383

Luminaire Tested: SQ2-WBM-100U-100D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854383
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G3-2104-222-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBM-100U-100D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

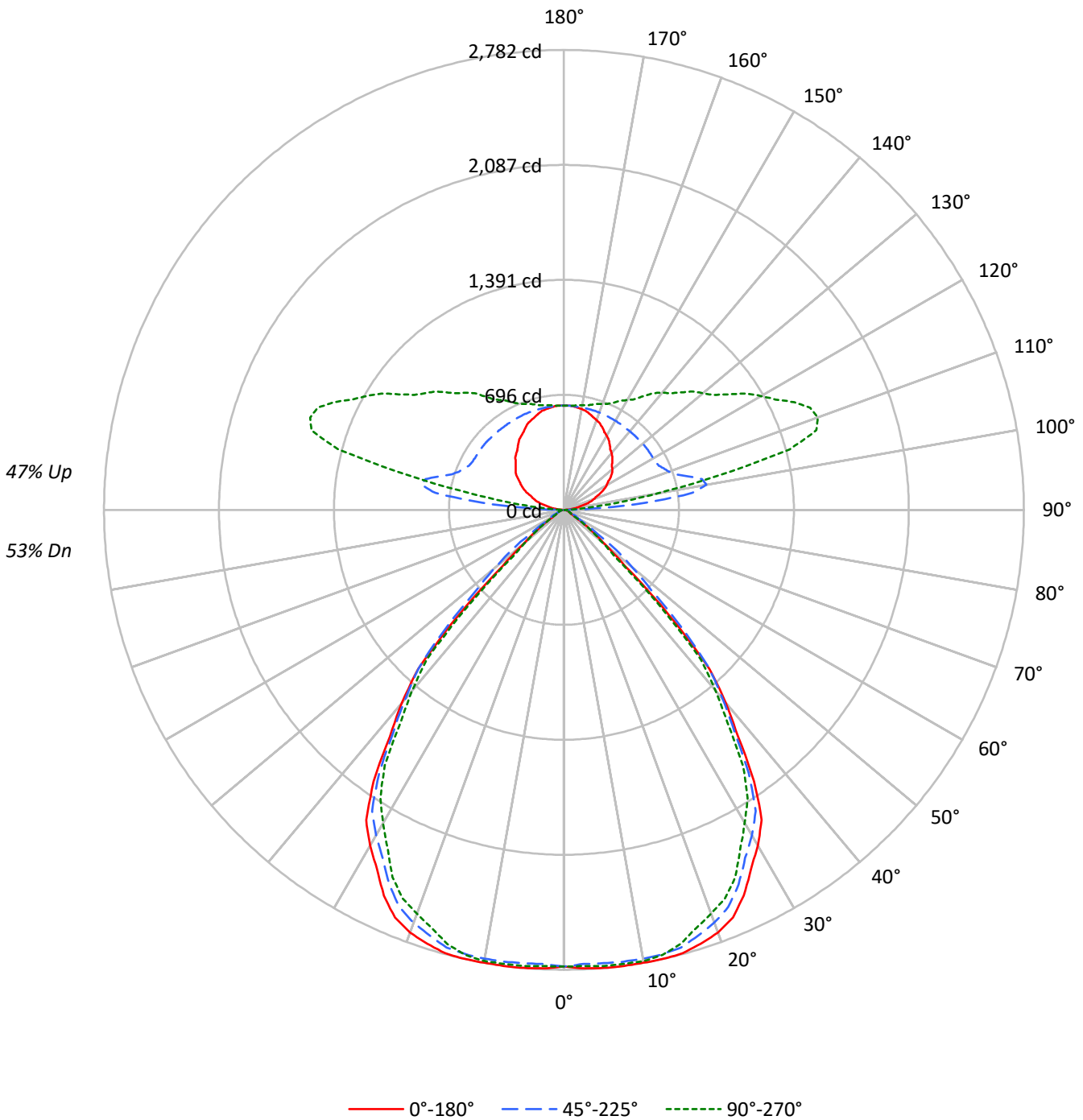
Lumens per Lamp: N/A
Luminaire Lumens: 8288.3 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.18 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 70.7
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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53				
1	100	97	93	91	93	90	87	85	77	75	73	65	64	63	55	54	53	48				
2	93	87	82	77	86	81	76	73	70	67	64	60	58	56	51	49	48	44				
3	86	78	72	67	80	73	68	63	64	60	56	55	52	50	47	45	43	39				
4	80	71	64	59	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	49	44	49	44	40	43	39	36	37	34	32	30				
7	64	53	46	41	60	50	44	39	45	40	36	39	35	33	34	32	29	27				
8	60	49	42	37	56	46	40	36	41	36	33	36	33	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	31	27	32	28	25	28	25	23	21				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	44603	44603	44603
5°	45081	44611	44903
10°	45602	45193	45439
15°	46410	45809	45458
20°	46761	45678	44665
25°	45865	44530	43675
30°	43712	42388	40766
35°	39551	38410	37207
40°	32115	31461	30070
45°	20569	22852	18493
50°	8061	13536	7257
55°	3800	6193	3800
60°	1808	3003	1647
65°	1643	1719	1528
70°	1558	1605	1463
75°	1560	1560	1435
80°	1488	1488	1395
85°	1297	1297	1297

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 23003 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.6	3.2
10°-20°	775.5	9.4
20°-30°	1150.9	13.9
30°-40°	1195.5	14.4
40°-50°	719.4	8.7
50°-60°	172.5	2.1
60°-70°	46.8	0.6
70°-80°	26.2	0.3
80°-90°	9.4	0.1
90°-100°	263.6	3.2
100°-110°	797.1	9.6
110°-120°	778.2	9.4
120°-130°	635.9	7.7
130°-140°	519.0	6.3
140°-150°	404.0	4.9
150°-160°	291.3	3.5
160°-170°	178.3	2.2
170°-180°	60.2	0.7
0°-30°	2191.0	26.4
0°-40°	3386.5	40.9
0°-60°	4278.4	51.6
0°-90°	4360.8	52.6
90°-120°	1838.8	22.2
90°-150°	3397.8	41.0
90°-180°	3928.0	47.4
0°-180°	8288.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2762	2762	2762	2762	2762	
5°	2782	2775	2752	2781	2770	265
15°	2776	2796	2740	2739	2720	783
25°	2574	2592	2500	2466	2452	1178
35°	2007	1988	1949	1909	1888	1229
45°	901	1007	1001	953	810	688
55°	135	153	220	147	135	139
65°	43	44	45	43	40	43
75°	25	26	25	24	23	26
85°	7	8	7	7	7	8
90°	0	2	12	7	6	2
95°	33	103	497	184	116	39
105°	139	195	783	1486	1413	146
115°	247	294	633	1310	1539	244
125°	345	382	624	1034	1218	306
135°	413	457	620	892	1004	320
145°	482	518	620	767	839	302
155°	550	568	624	688	714	253
165°	601	608	627	651	659	169
175°	629	629	630	635	633	60
180°	631	631	631	631	631	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2762.5	2762.5	2762.5	2762.5	2762.5
2.5°	2776.1	2769.8	2749.7	2771.9	2762.5
5°	2781.5	2774.7	2752.5	2781.3	2770.5
7.5°	2782.3	2782.7	2756.5	2781.8	2769.9
10°	2781.5	2787.4	2756.5	2780.3	2771.5
12.5°	2782.3	2792.1	2753.3	2770.6	2757.1
15°	2776.5	2796.1	2740.5	2739.1	2719.5
17.5°	2751.1	2775.4	2700.1	2677.0	2653.9
20°	2721.5	2745.0	2658.5	2625.0	2599.5
22.5°	2670.3	2694.6	2599.3	2563.5	2545.1
25°	2574.5	2592.1	2499.6	2466.2	2451.6
27.5°	2448.6	2454.2	2373.6	2334.8	2309.8
30°	2344.6	2349.5	2273.6	2229.6	2186.6
32.5°	2225.4	2217.0	2159.2	2111.2	2066.6
35°	2006.6	1988.1	1948.7	1909.2	1887.7
37.5°	1729.3	1724.6	1695.9	1648.5	1622.7
40°	1523.7	1539.4	1492.7	1458.0	1426.7
42.5°	1303.8	1342.1	1301.6	1252.6	1226.0
45°	900.8	1007.4	1000.8	952.6	809.9
47.5°	500.9	635.0	715.7	561.4	415.3
50°	320.9	412.8	538.9	338.8	288.9
52.5°	225.0	275.4	398.1	240.1	213.0
55°	135.0	152.6	220.0	146.7	135.0
57.5°	81.6	98.6	125.0	98.4	79.8
60°	56.0	70.7	93.0	65.7	51.0
62.5°	48.8	54.1	72.2	51.5	46.2
65°	43.0	44.0	45.0	42.9	40.0
67.5°	37.0	38.9	38.0	37.1	35.0
70°	33.0	34.9	34.0	33.9	31.0
72.5°	29.8	31.7	30.8	29.9	27.8
75°	25.0	26.0	25.0	24.0	23.0
77.5°	19.2	20.2	20.0	19.2	18.2
80°	16.0	17.0	16.0	16.0	15.0
82.5°	12.8	13.0	12.8	12.0	11.8
85°	7.0	8.0	7.0	7.0	7.0
87.5°	2.4	2.8	4.8	3.8	3.6
90°	0.0	1.9	11.9	6.9	5.9
92.5°	11.1	44.8	160.9	53.4	38.4
95°	32.7	103.4	497.3	183.7	115.9
97.5°	63.2	131.6	783.8	518.7	315.8
100°	82.2	149.1	875.8	846.7	568.7
102.5°	103.6	168.1	856.8	1187.5	946.7
105°	138.7	194.9	782.7	1486.4	1412.7
107.5°	172.0	225.6	711.3	1515.9	1601.2
110°	194.2	245.5	675.7	1478.7	1633.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	215.6	265.4	654.3	1416.2	1612.3
115°	246.7	294.1	633.1	1309.9	1538.6
117.5°	277.6	322.5	625.5	1210.4	1444.4
120°	298.2	340.8	623.1	1152.3	1377.1
122.5°	317.2	357.5	623.1	1101.2	1308.9
125°	344.8	382.5	624.1	1034.5	1217.6
127.5°	367.2	406.3	623.1	984.1	1140.3
130°	381.4	422.1	623.1	955.3	1096.7
132.5°	394.1	435.6	622.4	928.9	1059.5
135°	413.1	456.7	620.2	892.2	1003.6
137.5°	434.3	475.8	620.2	853.0	956.2
140°	447.8	488.5	620.2	827.5	925.3
142.5°	461.3	500.4	619.4	804.2	889.6
145°	482.5	518.3	620.2	767.4	839.1
147.5°	503.7	534.1	621.4	737.1	792.2
150°	517.1	545.2	622.2	720.3	766.8
152.5°	529.8	554.8	622.9	705.8	743.8
155°	549.8	568.2	624.1	688.1	714.3
157.5°	567.3	582.2	625.3	675.1	693.3
160°	577.6	590.2	626.1	667.0	680.6
162.5°	587.9	597.4	626.9	659.9	671.1
165°	601.4	608.1	627.1	651.1	658.8
167.5°	612.8	616.3	628.3	644.2	647.5
170°	619.2	621.1	629.1	641.0	642.0
172.5°	623.1	624.3	629.1	637.8	638.0
175°	629.1	629.1	630.1	635.0	633.1
177.5°	631.9	631.1	630.3	632.6	631.1
180°	631.1	631.1	631.1	631.1	631.1



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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	6.33	7.06	7.30	8.02	9.27	6.04	6.78	7.01	7.74	8.98
	3H	6.84	7.48	7.81	8.45	9.72	6.55	7.19	7.52	8.16	9.43
	4H	7.10	7.71	8.09	8.69	9.96	6.79	7.40	7.78	8.37	9.65
	6H	7.33	7.89	8.33	8.87	10.16	7.00	7.56	8.00	8.54	9.83
	8H	7.40	7.94	8.41	8.93	10.21	7.07	7.60	8.08	8.60	9.88
	12H	7.44	7.94	8.45	8.93	10.24	7.11	7.62	8.12	8.60	9.91
4H	2H	6.33	6.95	7.33	7.92	9.20	6.07	6.69	7.07	7.66	8.94
	3H	7.06	7.56	8.06	8.56	9.85	6.79	7.30	7.80	8.30	9.59
	4H	7.46	7.92	8.47	8.92	10.23	7.17	7.63	8.18	8.62	9.94
	6H	7.84	8.23	8.86	9.25	10.56	7.53	7.92	8.55	8.93	10.25
	8H	7.97	8.34	8.99	9.35	10.67	7.65	8.02	8.67	9.03	10.35
	12H	8.05	8.37	9.08	9.40	10.73	7.73	8.05	8.76	9.08	10.41
8H	4H	7.55	7.91	8.57	8.92	10.25	7.28	7.64	8.30	8.65	9.98
	6H	8.05	8.35	9.10	9.40	10.73	7.76	8.06	8.80	9.11	10.43
	8H	8.27	8.53	9.32	9.57	10.91	7.97	8.23	9.02	9.27	10.61
	12H	8.42	8.66	9.48	9.69	11.08	8.11	8.35	9.17	9.38	10.77
12H	4H	7.52	7.85	8.56	8.87	10.20	7.25	7.58	8.29	8.61	9.94
	6H	8.07	8.33	9.12	9.37	10.72	7.79	8.05	8.84	9.09	10.43
	8H	8.32	8.55	9.37	9.58	10.97	8.02	8.25	9.07	9.28	10.67

END OF REPORT