

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: P621521

Luminaire Tested: VLT-F-100U-100D-935-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621521  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/2/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: VLT-F-100U-100D-935-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

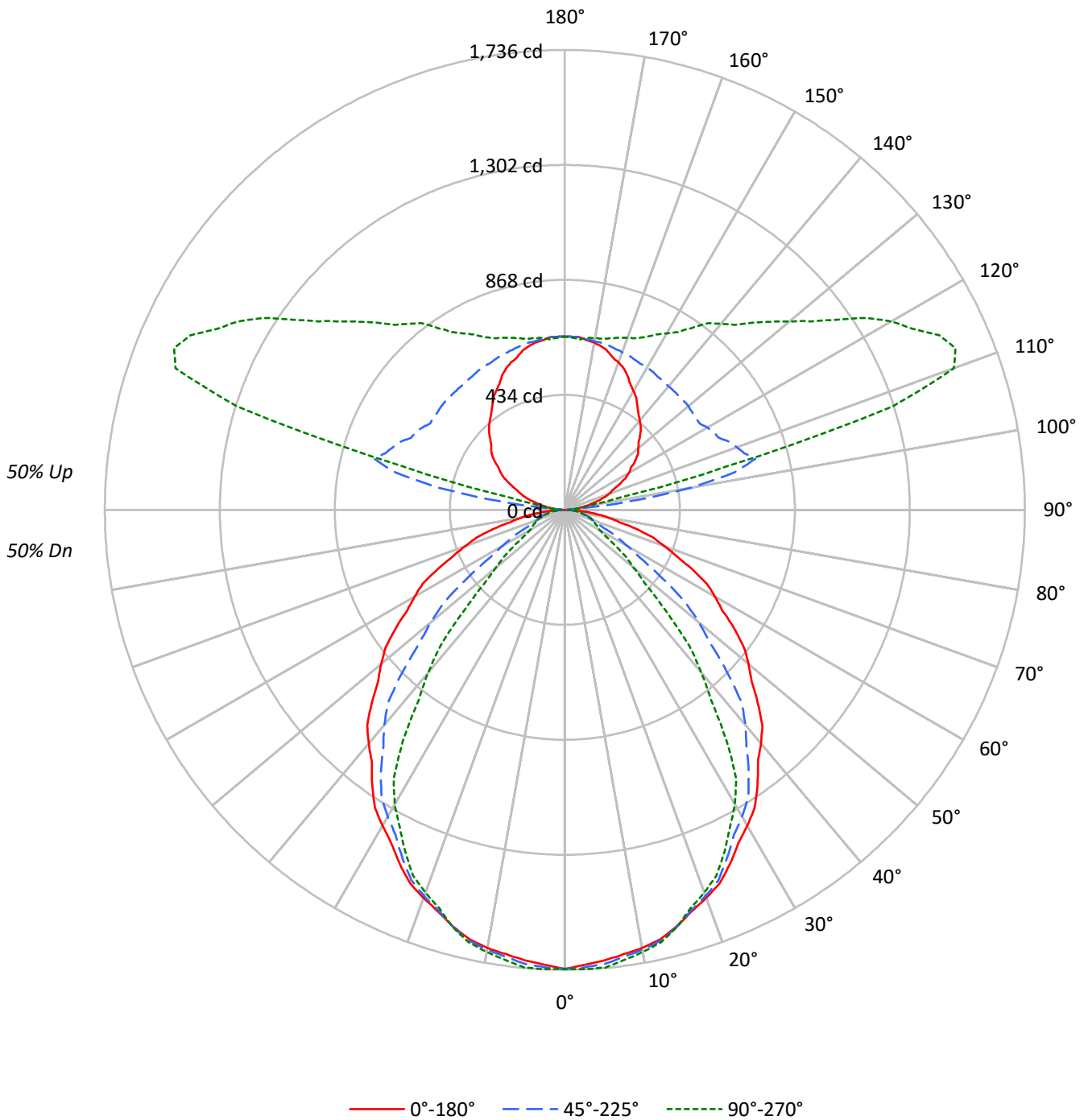
Lumens per Lamp: N/A  
Luminaire Lumens: 7047.3 lumens  
Efficiency: N/A  
Efficacy: 121.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 58.2  
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	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	99	94	91	88	91	87	84	81	74	72	70	62	60	59	51	50	49	44
2	90	83	78	73	83	77	72	68	66	62	59	55	53	50	46	44	42	38
3	83	74	67	61	76	69	63	58	59	54	51	50	46	44	41	39	37	33
4	76	66	58	53	70	61	55	50	53	48	44	45	41	38	37	35	32	29
5	70	59	51	46	65	55	48	43	47	42	38	40	36	33	34	31	29	25
6	65	53	45	40	60	50	43	38	43	38	34	37	33	30	31	28	26	23
7	60	48	41	35	56	45	38	33	39	34	30	34	29	26	28	25	23	20
8	56	44	36	31	52	41	34	30	36	31	27	31	27	24	26	23	21	18
9	52	40	33	28	48	38	31	27	33	28	24	29	24	21	24	21	19	17
10	49	37	30	25	45	35	28	24	30	25	22	26	22	20	23	20	17	15

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	12434	12434	12434
5°	12301	12391	12494
10°	12234	12287	12352
15°	12101	12115	12115
20°	11906	11851	11742
25°	11679	11480	11281
30°	11406	11079	10634
35°	11102	10600	9330
40°	10782	9927	7512
45°	10446	8793	5450
50°	10092	7354	3777
55°	9742	5599	2821
60°	9378	3879	2133
65°	8967	2766	2189
70°	8376	2329	2253
75°	7741	2382	2282
80°	6732	2517	2368
85°	5451	2799	2355

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10446 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.3	2.3
10°-20°	459.1	6.5
20°-30°	667.9	9.5
30°-40°	738.9	10.5
40°-50°	634.4	9.0
50°-60°	439.2	6.2
60°-70°	261.7	3.7
70°-80°	129.0	1.8
80°-90°	41.3	0.6
90°-100°	80.4	1.1
100°-110°	572.9	8.1
110°-120°	777.8	11.0
120°-130°	633.0	9.0
130°-140°	509.1	7.2
140°-150°	401.4	5.7
150°-160°	293.5	4.2
160°-170°	182.3	2.6
170°-180°	62.2	0.9
0°-30°	1290.3	18.3
0°-40°	2029.2	28.8
0°-60°	3102.8	44.0
0°-90°	3534.8	50.2
90°-120°	1431.1	20.3
90°-150°	2974.6	42.2
90°-180°	3513.0	49.8
0°-180°	7047.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1733	1733	1733	1733	1733	
5°	1708	1734	1720	1719	1734	162
15°	1629	1650	1631	1622	1631	459
25°	1475	1486	1450	1425	1425	679
35°	1267	1264	1210	1112	1065	792
45°	1029	1012	866	626	537	794
55°	779	745	448	257	226	696
65°	528	425	163	131	129	523
75°	279	122	86	84	82	295
85°	66	33	34	30	29	77
90°	0	4	8	12	12	4
95°	33	61	33	37	45	37
105°	128	196	744	951	629	134
115°	226	274	642	1334	1559	225
125°	325	369	604	1057	1250	289
135°	403	447	609	871	999	310
145°	477	517	613	758	839	300
155°	559	579	625	688	720	257
165°	621	629	642	658	670	174
175°	654	658	654	650	646	62
180°	654	654	654	654	654	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1718.4	1738.0	1728.4	1728.6	1735.6
5°	1707.7	1733.9	1720.2	1718.8	1734.5
7.5°	1691.9	1716.1	1701.9	1700.1	1713.8
10°	1679.0	1701.8	1686.2	1682.9	1695.1
12.5°	1660.4	1683.2	1666.1	1660.0	1672.2
15°	1628.9	1649.9	1630.7	1621.9	1630.7
17.5°	1589.2	1606.7	1584.9	1571.0	1576.3
20°	1559.1	1576.6	1551.9	1532.4	1537.6
22.5°	1526.2	1540.9	1513.3	1490.8	1494.7
25°	1475.0	1485.5	1449.9	1424.8	1424.8
27.5°	1418.0	1424.3	1383.0	1356.7	1349.3
30°	1376.5	1380.0	1337.1	1306.2	1283.4
32.5°	1333.6	1335.7	1287.0	1237.2	1201.8
35°	1267.3	1263.8	1210.0	1112.3	1065.1
37.5°	1196.8	1189.1	1125.6	976.8	906.5
40°	1151.0	1140.5	1059.7	880.7	801.9
42.5°	1103.7	1089.0	986.7	781.7	694.5
45°	1029.3	1011.8	866.4	626.3	537.0
47.5°	955.5	932.4	743.2	485.1	408.5
50°	904.0	879.5	658.7	399.6	338.3
52.5°	852.4	827.9	572.8	335.4	286.8
55°	778.7	745.4	447.5	257.0	225.5
57.5°	703.5	655.9	333.3	200.3	175.8
60°	653.4	590.3	270.3	166.1	148.6
62.5°	604.7	524.9	221.6	144.9	141.4
65°	528.1	424.8	162.9	130.6	128.9
67.5°	455.0	324.1	121.0	117.7	116.0
70°	399.2	255.7	111.0	109.2	107.4
72.5°	349.1	195.7	101.0	99.1	97.4
75°	279.2	121.7	85.9	84.1	82.3
77.5°	208.7	76.7	70.9	69.1	67.3
80°	162.9	63.1	60.9	59.0	57.3
82.5°	122.8	51.0	49.4	47.6	45.8
85°	66.2	33.0	34.0	30.4	28.6
87.5°	22.9	16.7	17.4	15.3	13.9
90°	0.0	4.0	8.2	12.3	12.3
92.5°	9.9	13.9	18.1	25.6	28.8
95°	32.9	61.0	32.9	37.2	45.2
97.5°	58.4	117.1	241.8	71.3	61.7
100°	78.1	146.5	485.3	142.8	94.6
102.5°	97.9	169.5	656.4	376.9	206.5
105°	127.5	195.8	744.4	950.9	629.2
107.5°	157.1	208.6	710.6	1383.9	1296.3
110°	176.8	225.1	690.9	1454.2	1562.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	196.6	244.8	671.2	1413.1	1595.7
115°	226.2	274.4	641.6	1333.5	1558.7
117.5°	256.6	304.1	634.2	1247.3	1478.9
120°	279.7	323.9	621.0	1181.7	1422.9
122.5°	296.1	343.6	604.5	1125.3	1347.3
125°	324.9	369.1	604.5	1057.2	1250.2
127.5°	348.7	393.8	605.4	978.2	1168.8
130°	361.9	410.2	608.7	925.3	1106.3
132.5°	378.4	426.6	608.7	901.6	1050.3
135°	403.0	447.3	608.7	870.7	999.3
137.5°	423.6	471.0	608.7	836.5	946.7
140°	440.0	484.3	608.7	816.6	917.1
142.5°	456.5	497.5	611.9	793.4	887.5
145°	477.1	517.3	612.8	758.5	839.0
147.5°	501.7	537.1	617.7	733.4	795.4
150°	518.2	550.4	621.0	716.8	769.0
152.5°	534.6	563.6	621.0	703.4	746.0
155°	559.3	579.4	625.1	687.5	719.7
157.5°	579.0	598.3	630.0	677.5	700.8
160°	592.2	608.3	633.3	670.8	690.9
162.5°	602.1	618.2	636.6	667.4	681.0
165°	621.0	629.0	641.6	658.3	670.3
167.5°	631.7	638.9	645.7	654.1	661.3
170°	641.6	645.6	645.7	654.0	658.0
172.5°	644.8	652.1	649.0	650.7	654.7
175°	653.9	657.9	653.9	649.7	645.7
177.5°	653.9	657.1	653.9	653.8	650.6
180°	653.9	653.9	653.9	653.9	653.9

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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	16.39	17.21	17.36	18.18	19.45	8.63	9.44	9.59	10.41	11.69
	3H	17.88	18.61	18.86	19.59	20.89	9.98	10.70	10.95	11.69	12.98
	4H	18.39	19.08	19.39	20.07	21.37	10.63	11.31	11.62	12.30	13.61
	6H	18.79	19.42	19.79	20.41	21.73	11.22	11.85	12.22	12.84	14.15
	8H	18.92	19.52	19.93	20.53	21.84	11.44	12.04	12.45	13.05	14.36
	12H	19.00	19.57	20.01	20.57	21.91	11.60	12.17	12.62	13.18	14.51
4H	2H	16.22	16.90	17.21	17.89	19.19	9.24	9.92	10.24	10.91	12.22
	3H	17.85	18.42	18.86	19.44	20.75	10.79	11.36	11.79	12.37	13.69
	4H	18.44	18.96	19.45	19.97	21.31	11.58	12.10	12.59	13.11	14.45
	6H	18.93	19.38	19.95	20.41	21.75	12.32	12.76	13.34	13.79	15.13
	8H	19.12	19.53	20.14	20.56	21.91	12.61	13.02	13.63	14.05	15.40
	12H	19.24	19.62	20.29	20.66	22.02	12.82	13.20	13.87	14.24	15.60
8H	4H	18.35	18.77	19.38	19.79	21.15	12.03	12.45	13.06	13.47	14.82
	6H	18.89	19.23	19.93	20.30	21.65	12.91	13.26	13.96	14.32	15.67
	8H	19.12	19.42	20.18	20.48	21.84	13.31	13.61	14.36	14.66	16.03
	12H	19.31	19.57	20.37	20.62	22.03	13.62	13.89	14.68	14.94	16.35
12H	4H	18.30	18.68	19.34	19.72	21.07	12.08	12.45	13.12	13.49	14.85
	6H	18.86	19.16	19.91	20.21	21.58	13.03	13.33	14.08	14.38	15.75
	8H	19.10	19.36	20.16	20.41	21.82	13.47	13.73	14.53	14.78	16.19