

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: P621515

Luminaire Tested: VLT-F-100U-075D-935-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621515  
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-075D-935-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

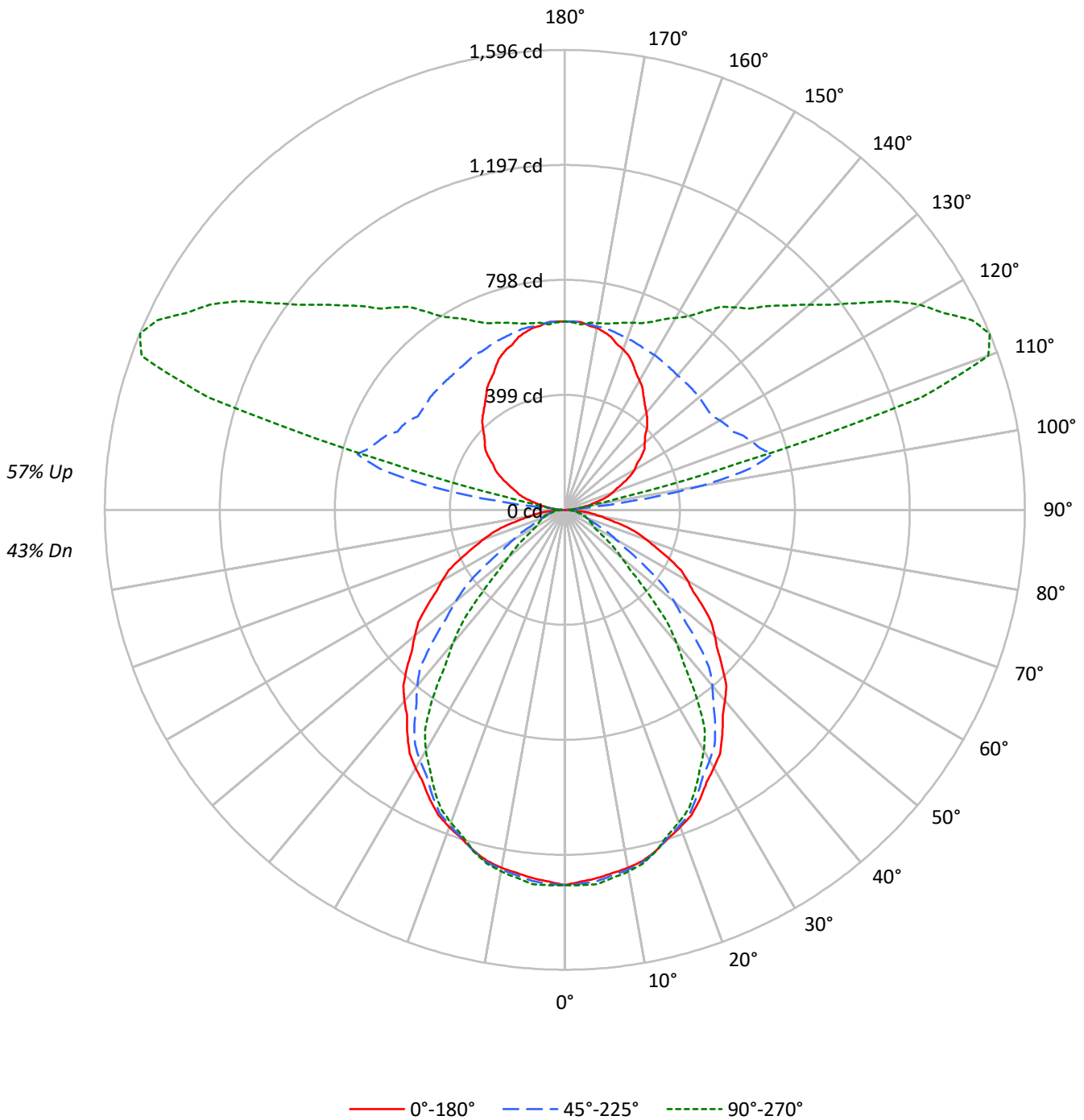
Lumens per Lamp: N/A  
Luminaire Lumens: 6169.2 lumens  
Efficiency: N/A  
Efficacy: 121.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 50.6  
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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50	43		
1	97	93	89	86	88	85	82	79	71	68	66	57	56	54	45	44	43	37		
2	89	82	76	71	81	75	70	66	63	59	56	51	49	46	40	39	37	32		
3	81	72	65	60	74	67	61	56	56	51	48	46	43	40	36	34	32	28		
4	75	64	57	51	68	59	53	48	50	45	41	41	38	35	33	30	28	25		
5	69	58	50	44	63	53	46	41	45	40	36	37	33	30	30	27	25	22		
6	63	52	44	39	58	48	41	36	41	35	32	34	30	27	27	25	22	19		
7	59	47	39	34	54	44	37	32	37	32	28	31	27	24	25	22	20	18		
8	55	43	35	30	50	40	33	28	34	29	25	28	24	22	23	20	18	16		
9	51	39	32	27	47	36	30	25	31	26	22	26	22	19	21	19	17	14		
10	48	36	29	24	44	33	27	23	29	24	20	24	20	18	20	17	15	13		

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

	0°	45°	90°
0°	9344	9344	9344
5°	9243	9312	9389
10°	9194	9233	9282
15°	9094	9104	9104
20°	8947	8906	8824
25°	8776	8626	8478
30°	8571	8326	7992
35°	8342	7966	7011
40°	8102	7459	5645
45°	7849	6607	4095
50°	7584	5526	2838
55°	7320	4207	2121
60°	7047	2915	1602
65°	6738	2078	1644
70°	6294	1750	1693
75°	5817	1791	1716
80°	5058	1889	1777
85°	4100	2108	1770

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7849 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.7	2.0
10°-20°	345.0	5.6
20°-30°	501.9	8.1
30°-40°	555.2	9.0
40°-50°	476.7	7.7
50°-60°	330.1	5.4
60°-70°	196.7	3.2
70°-80°	96.9	1.6
80°-90°	31.4	0.5
90°-100°	80.4	1.3
100°-110°	572.9	9.3
110°-120°	777.8	12.6
120°-130°	633.0	10.3
130°-140°	509.1	8.3
140°-150°	401.4	6.5
150°-160°	293.5	4.8
160°-170°	182.3	3.0
170°-180°	62.2	1.0
0°-30°	969.6	15.7
0°-40°	1524.8	24.7
0°-60°	2331.6	37.8
0°-90°	2656.6	43.1
90°-120°	1431.1	23.2
90°-150°	2974.6	48.2
90°-180°	3513.0	56.9
0°-180°	6169.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1302	1302	1302	1302	1302	
5°	1283	1303	1293	1292	1303	122
15°	1224	1240	1225	1219	1225	345
25°	1108	1116	1090	1071	1071	510
35°	952	950	909	836	800	595
45°	773	760	651	471	404	597
55°	585	560	336	193	170	523
65°	397	319	122	98	97	393
75°	210	92	65	63	62	221
85°	50	25	26	23	22	58
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°	1302.1	1302.1	1302.1	1302.1	1302.1
2.5°	1291.3	1306.0	1298.8	1299.0	1304.2
5°	1283.2	1303.0	1292.7	1291.6	1303.4
7.5°	1271.4	1289.6	1278.9	1277.6	1287.8
10°	1261.7	1278.8	1267.1	1264.6	1273.8
12.5°	1247.7	1264.8	1252.0	1247.4	1256.6
15°	1224.1	1239.8	1225.4	1218.8	1225.4
17.5°	1194.2	1207.4	1191.0	1180.6	1184.5
20°	1171.6	1184.8	1166.2	1151.5	1155.5
22.5°	1146.9	1157.9	1137.2	1120.3	1123.2
25°	1108.4	1116.3	1089.5	1070.7	1070.7
27.5°	1065.6	1070.3	1039.2	1019.5	1014.0
30°	1034.4	1037.0	1004.8	981.6	964.5
32.5°	1002.1	1003.7	967.1	929.7	903.1
35°	952.3	949.7	909.3	835.9	800.3
37.5°	899.3	893.6	845.8	734.0	681.2
40°	864.9	857.0	796.3	661.8	602.6
42.5°	829.4	818.4	741.4	587.4	521.9
45°	773.4	760.3	651.0	470.6	403.5
47.5°	718.0	700.7	558.5	364.6	307.0
50°	679.3	660.9	495.0	300.3	254.2
52.5°	640.5	622.1	430.4	252.1	215.5
55°	585.1	560.1	336.3	193.2	169.5
57.5°	528.6	492.9	250.5	150.5	132.1
60°	491.0	443.6	203.1	124.8	111.6
62.5°	454.4	394.4	166.5	108.9	106.3
65°	396.8	319.2	122.4	98.2	96.8
67.5°	341.9	243.6	90.9	88.5	87.2
70°	300.0	192.1	83.4	82.0	80.7
72.5°	262.3	147.1	75.9	74.5	73.2
75°	209.8	91.5	64.6	63.2	61.9
77.5°	156.8	57.7	53.3	51.9	50.6
80°	122.4	47.4	45.7	44.4	43.0
82.5°	92.3	38.4	37.1	35.8	34.4
85°	49.8	24.8	25.6	22.8	21.5
87.5°	17.2	12.8	13.5	12.1	11.1
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	14.70	15.46	15.72	16.48	17.86	6.93	7.69	7.96	8.72	10.09
	3H	16.18	16.86	17.22	17.90	19.29	8.28	8.96	9.31	9.99	11.38
	4H	16.69	17.34	17.74	18.37	19.77	8.93	9.57	9.97	10.61	12.01
	6H	17.08	17.68	18.14	18.72	20.13	9.51	10.10	10.57	11.14	12.55
	8H	17.21	17.78	18.28	18.83	20.24	9.73	10.30	10.79	11.35	12.76
	12H	17.29	17.83	18.36	18.88	20.31	9.90	10.43	10.96	11.48	12.91
4H	2H	14.51	15.16	15.57	16.20	17.59	7.54	8.18	8.59	9.22	10.62
	3H	16.14	16.68	17.20	17.74	19.15	9.08	9.61	10.14	10.68	12.09
	4H	16.73	17.22	17.80	18.27	19.71	9.87	10.36	10.94	11.42	12.85
	6H	17.22	17.64	18.29	18.72	20.14	10.61	11.02	11.68	12.10	13.53
	8H	17.40	17.79	18.48	18.87	20.31	10.90	11.29	11.97	12.36	13.80
	12H	17.53	17.88	18.62	18.97	20.42	11.11	11.46	12.20	12.55	13.99
8H	4H	16.64	17.03	17.72	18.10	19.55	10.32	10.71	11.39	11.78	13.23
	6H	17.17	17.49	18.27	18.61	20.05	11.20	11.52	12.30	12.64	14.08
	8H	17.41	17.69	18.51	18.79	20.25	11.59	11.88	12.70	12.97	14.43
	12H	17.59	17.84	18.70	18.93	20.43	11.91	12.16	13.02	13.25	14.75
12H	4H	16.59	16.94	17.68	18.03	19.47	10.36	10.72	11.46	11.80	13.25
	6H	17.14	17.43	18.25	18.52	19.98	11.31	11.60	12.42	12.69	14.15
	8H	17.38	17.63	18.49	18.72	20.22	11.75	12.00	12.86	13.09	14.59