

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: P621514

Luminaire Tested: VLT-F-100U-075D-930-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621514  
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-930-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

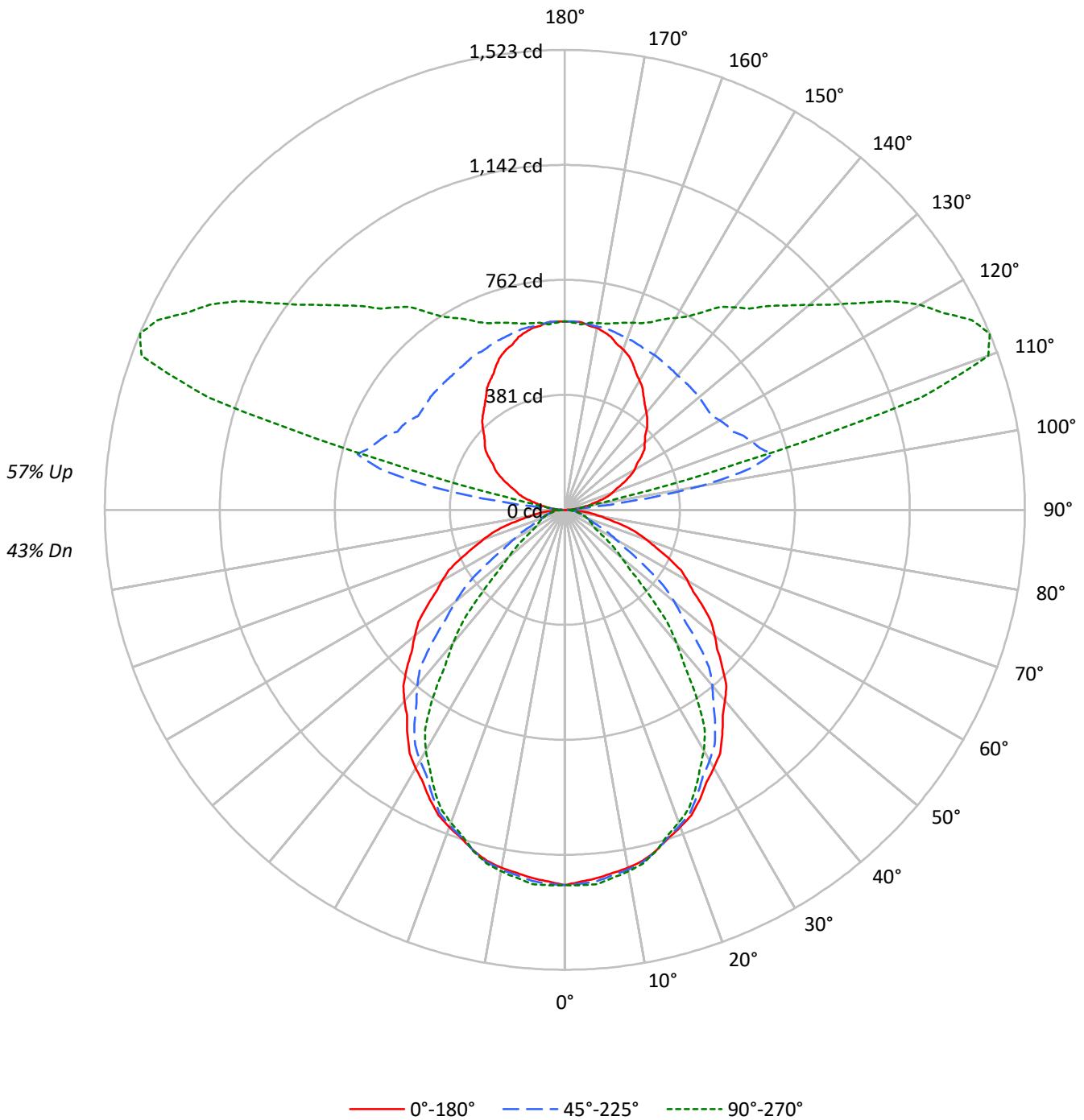
Lumens per Lamp: N/A  
Luminaire Lumens: 5886.7 lumens  
Efficiency: N/A  
Efficacy: 116.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

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				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	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°	8916	8916	8916
5°	8821	8885	8959
10°	8772	8810	8857
15°	8677	8687	8687
20°	8538	8498	8419
25°	8374	8232	8090
30°	8178	7945	7626
35°	7960	7601	6690
40°	7731	7117	5386
45°	7489	6304	3908
50°	7236	5273	2708
55°	6985	4015	2023
60°	6724	2781	1528
65°	6429	1983	1569
70°	6005	1670	1616
75°	5551	1708	1636
80°	4827	1802	1698
85°	3911	2009	1688

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7489 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.1	2.0
10°-20°	329.2	5.6
20°-30°	478.9	8.1
30°-40°	529.8	9.0
40°-50°	454.9	7.7
50°-60°	314.9	5.4
60°-70°	187.7	3.2
70°-80°	92.5	1.6
80°-90°	30.0	0.5
90°-100°	76.7	1.3
100°-110°	546.7	9.3
110°-120°	742.1	12.6
120°-130°	604.0	10.3
130°-140°	485.8	8.3
140°-150°	383.0	6.5
150°-160°	280.1	4.8
160°-170°	173.9	3.0
170°-180°	59.3	1.0
0°-30°	925.2	15.7
0°-40°	1455.0	24.7
0°-60°	2224.8	37.8
0°-90°	2534.9	43.1
90°-120°	1365.5	23.2
90°-150°	2838.4	48.2
90°-180°	3352.0	56.9
0°-180°	5886.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1242	1242	1242	1242	1242	
5°	1224	1243	1234	1232	1244	116
15°	1168	1183	1169	1163	1169	329
25°	1058	1065	1040	1022	1022	487
35°	909	906	868	798	764	568
45°	738	726	621	449	385	569
55°	558	534	321	184	162	499
65°	379	305	117	94	92	375
75°	200	87	62	60	59	211
85°	48	24	24	22	20	55
90°	0	4	8	12	12	4
95°	31	58	31	36	43	35
105°	122	187	710	907	600	128
115°	216	262	612	1272	1487	214
125°	310	352	577	1009	1193	275
135°	385	427	581	831	954	296
145°	455	494	585	724	800	286
155°	534	553	596	656	687	245
165°	593	600	612	628	640	166
175°	624	628	624	620	616	59
180°	624	624	624	624	624	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1242.5	1242.5	1242.5	1242.5	1242.5
2.5°	1232.2	1246.2	1239.4	1239.5	1244.5
5°	1224.5	1243.3	1233.5	1232.4	1243.7
7.5°	1213.2	1230.5	1220.4	1219.1	1228.8
10°	1203.9	1220.3	1209.1	1206.7	1215.5
12.5°	1190.6	1206.9	1194.7	1190.3	1199.1
15°	1168.0	1183.1	1169.3	1163.0	1169.3
17.5°	1139.5	1152.1	1136.4	1126.5	1130.3
20°	1118.0	1130.5	1112.8	1098.8	1102.5
22.5°	1094.3	1104.9	1085.1	1069.0	1071.7
25°	1057.6	1065.2	1039.7	1021.7	1021.7
27.5°	1016.8	1021.3	991.7	972.8	967.5
30°	987.0	989.5	958.8	936.6	920.3
32.5°	956.2	957.7	922.9	887.1	861.8
35°	908.7	906.2	867.7	797.6	763.7
37.5°	858.2	852.6	807.1	700.4	650.0
40°	825.3	817.8	759.8	631.5	575.0
42.5°	791.4	780.9	707.5	560.5	498.0
45°	738.0	725.5	621.2	449.1	385.1
47.5°	685.1	668.6	532.9	347.9	292.9
50°	648.2	630.6	472.3	286.5	242.6
52.5°	611.2	593.6	410.7	240.5	205.6
55°	558.3	534.5	320.9	184.3	161.7
57.5°	504.4	470.3	239.0	143.6	126.0
60°	468.5	423.3	193.8	119.1	106.5
62.5°	433.6	376.3	158.9	103.9	101.4
65°	378.6	304.6	116.8	93.7	92.4
67.5°	326.3	232.4	86.8	84.4	83.2
70°	286.2	183.3	79.6	78.3	77.0
72.5°	250.3	140.3	72.4	71.1	69.8
75°	200.2	87.3	61.6	60.3	59.0
77.5°	149.7	55.0	50.8	49.5	48.3
80°	116.8	45.3	43.6	42.3	41.1
82.5°	88.0	36.6	35.4	34.1	32.9
85°	47.5	23.6	24.4	21.8	20.5
87.5°	16.4	12.2	12.9	11.6	10.6
90°	0.0	3.8	7.8	11.8	11.8
92.5°	9.4	13.3	17.3	24.4	27.5
95°	31.4	58.3	31.4	35.5	43.2
97.5°	55.7	111.7	230.7	68.1	58.9
100°	74.6	139.8	463.1	136.3	90.3
102.5°	93.4	161.7	626.3	359.7	197.0
105°	121.7	186.9	710.3	907.4	600.4
107.5°	149.9	199.0	678.1	1320.6	1236.9
110°	168.7	214.8	659.3	1387.6	1491.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	187.6	233.6	640.4	1348.4	1522.6
115°	215.8	261.9	612.2	1272.4	1487.3
117.5°	244.9	290.1	605.1	1190.1	1411.2
120°	266.8	309.1	592.6	1127.6	1357.8
122.5°	282.5	327.8	576.9	1073.8	1285.6
125°	310.0	352.2	576.9	1008.8	1193.0
127.5°	332.8	375.7	577.6	933.4	1115.3
130°	345.3	391.4	580.8	883.0	1055.6
132.5°	361.0	407.1	580.8	860.3	1002.2
135°	384.6	426.8	580.8	830.8	953.6
137.5°	404.2	449.5	580.8	798.2	903.4
140°	419.9	462.1	580.8	779.2	875.1
142.5°	435.6	474.7	583.9	757.1	846.8
145°	455.2	493.6	584.7	723.8	800.5
147.5°	478.8	512.5	589.4	699.9	758.9
150°	494.5	525.1	592.6	683.9	733.8
152.5°	510.1	537.8	592.6	671.2	711.9
155°	533.7	552.9	596.5	656.0	686.7
157.5°	552.5	570.9	601.2	646.4	668.7
160°	565.1	580.4	604.3	640.1	659.3
162.5°	574.5	589.9	607.5	636.8	649.9
165°	592.6	600.2	612.2	628.1	639.6
167.5°	602.8	609.7	616.1	624.1	631.0
170°	612.2	616.0	616.1	624.0	627.9
172.5°	615.3	622.2	619.2	620.9	624.7
175°	624.0	627.8	624.0	619.9	616.1
177.5°	624.0	627.0	624.0	623.9	620.8
180°	624.0	624.0	624.0	624.0	624.0



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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	14.53	15.30	15.56	16.32	17.69	6.77	7.53	7.79	8.56	9.93
	3H	16.02	16.70	17.06	17.74	19.13	8.11	8.80	9.15	9.83	11.22
	4H	16.53	17.17	17.58	18.21	19.61	8.76	9.41	9.81	10.44	11.84
	6H	16.92	17.51	17.98	18.56	19.97	9.35	9.94	10.40	10.98	12.39
	8H	17.05	17.61	18.11	18.67	20.08	9.57	10.13	10.63	11.19	12.60
	12H	17.13	17.66	18.19	18.71	20.14	9.73	10.27	10.80	11.32	12.75
4H	2H	14.35	15.00	15.41	16.03	17.43	7.37	8.02	8.43	9.05	10.45
	3H	15.98	16.51	17.04	17.58	18.99	8.92	9.45	9.98	10.52	11.93
	4H	16.57	17.06	17.63	18.11	19.55	9.71	10.20	10.77	11.25	12.69
	6H	17.06	17.47	18.13	18.55	19.98	10.44	10.86	11.52	11.94	13.37
	8H	17.24	17.63	18.32	18.70	20.15	10.73	11.12	11.81	12.20	13.64
	12H	17.37	17.72	18.46	18.80	20.25	10.95	11.30	12.04	12.38	13.83
8H	4H	16.48	16.87	17.55	17.94	19.38	10.16	10.55	11.23	11.62	13.06
	6H	17.01	17.33	18.11	18.45	19.89	11.04	11.36	12.13	12.47	13.91
	8H	17.24	17.53	18.35	18.62	20.08	11.43	11.71	12.53	12.81	14.27
	12H	17.43	17.68	18.54	18.77	20.27	11.75	11.99	12.85	13.09	14.59
12H	4H	16.42	16.78	17.52	17.86	19.31	10.20	10.55	11.29	11.64	13.09
	6H	16.98	17.26	18.09	18.36	19.82	11.15	11.43	12.25	12.53	13.99
	8H	17.22	17.47	18.33	18.56	20.06	11.59	11.84	12.70	12.93	14.43