

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: P621568

Luminaire Tested: VLT-F-150U-100D-930-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621568  
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-150U-100D-930-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

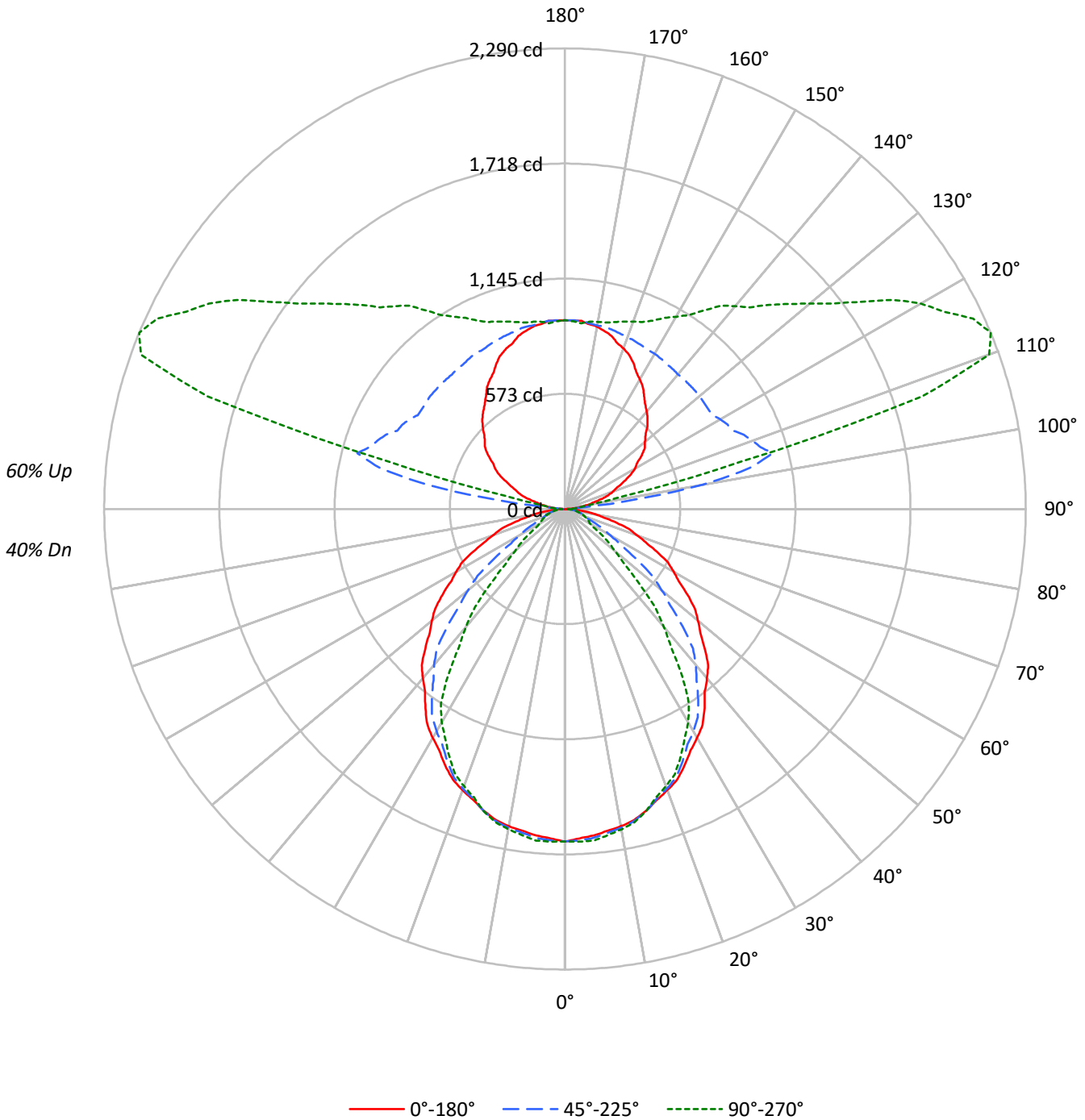
Lumens per Lamp: N/A  
Luminaire Lumens: 8415.2 lumens  
Efficiency: N/A  
Efficacy: 108.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 77.8  
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40				
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	42	42	41	35				
2	88	81	75	71	80	74	69	65	61	58	55	49	47	45	38	37	35	30				
3	81	72	65	59	73	66	60	55	54	50	47	44	41	38	34	32	31	26				
4	74	64	56	51	67	59	52	47	49	44	40	39	36	33	31	29	27	23				
5	68	57	49	44	62	52	46	41	44	39	35	36	32	29	28	26	24	20				
6	63	51	44	38	57	47	41	36	40	34	31	32	29	26	26	23	21	18				
7	58	46	39	34	53	43	36	31	36	31	27	30	26	23	24	21	19	16				
8	54	42	35	30	49	39	32	28	33	28	24	27	23	21	22	19	17	15				
9	50	39	31	27	46	36	29	25	30	25	22	25	21	19	20	18	16	13				
10	47	35	28	24	43	33	27	22	28	23	20	23	20	17	19	16	14	12				

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

	0°	45°	90°
0°	11865	11865	11865
5°	11738	11824	11922
10°	11674	11724	11786
15°	11547	11560	11560
20°	11361	11309	11204
25°	11143	10954	10765
30°	10884	10572	10148
35°	10594	10115	8903
40°	10288	9472	7168
45°	9967	8390	5200
50°	9630	7018	3604
55°	9296	5342	2692
60°	8947	3701	2035
65°	8556	2639	2089
70°	7992	2222	2151
75°	7389	2274	2179
80°	6422	2401	2260
85°	5204	2676	2248

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9967 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.8	1.9
10°-20°	438.1	5.2
20°-30°	637.3	7.6
30°-40°	705.0	8.4
40°-50°	605.3	7.2
50°-60°	419.1	5.0
60°-70°	249.7	3.0
70°-80°	123.0	1.5
80°-90°	40.1	0.5
90°-100°	115.4	1.4
100°-110°	822.3	9.8
110°-120°	1116.3	13.3
120°-130°	908.6	10.8
130°-140°	730.8	8.7
140°-150°	576.1	6.8
150°-160°	421.3	5.0
160°-170°	261.7	3.1
170°-180°	89.2	1.1
0°-30°	1231.2	14.6
0°-40°	1936.2	23.0
0°-60°	2960.7	35.2
0°-90°	3373.6	40.1
90°-120°	2054.0	24.4
90°-150°	4269.5	50.7
90°-180°	5042.0	59.9
0°-180°	8415.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1653	1653	1653	1653	1653	
5°	1630	1654	1641	1640	1655	155
15°	1554	1574	1556	1548	1556	438
25°	1407	1417	1384	1360	1360	647
35°	1209	1206	1155	1061	1016	756
45°	982	965	827	598	512	758
55°	743	711	427	245	215	664
65°	504	405	155	125	123	499
75°	266	116	82	80	79	281
85°	63	32	32	29	27	73
90°	0	6	12	18	18	5
95°	47	88	47	53	65	53
105°	183	281	1068	1365	903	193
115°	325	394	921	1914	2237	322
125°	466	530	868	1517	1794	414
135°	578	642	874	1250	1434	445
145°	685	742	880	1089	1204	430
155°	803	832	897	987	1033	369
165°	891	903	921	945	962	250
175°	939	944	939	932	927	89
180°	939	939	939	939	939	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1653.4	1653.4	1653.4	1653.4	1653.4
2.5°	1639.7	1658.4	1649.3	1649.4	1656.1
5°	1629.5	1654.5	1641.4	1640.1	1655.1
7.5°	1614.4	1637.5	1624.0	1622.2	1635.3
10°	1602.1	1623.9	1609.0	1605.8	1617.5
12.5°	1584.4	1606.1	1589.8	1584.0	1595.6
15°	1554.3	1574.4	1556.0	1547.7	1556.0
17.5°	1516.4	1533.1	1512.3	1499.1	1504.1
20°	1487.7	1504.4	1480.9	1462.2	1467.2
22.5°	1456.3	1470.3	1444.0	1422.5	1426.2
25°	1407.4	1417.4	1383.5	1359.6	1359.6
27.5°	1353.1	1359.1	1319.6	1294.5	1287.5
30°	1313.5	1316.8	1275.9	1246.4	1224.7
32.5°	1272.5	1274.5	1228.1	1180.5	1146.8
35°	1209.3	1206.0	1154.6	1061.4	1016.3
37.5°	1142.0	1134.6	1074.0	932.1	865.0
40°	1098.3	1088.2	1011.2	840.4	765.2
42.5°	1053.2	1039.1	941.5	745.9	662.7
45°	982.1	965.4	826.7	597.6	512.4
47.5°	911.8	889.7	709.2	462.9	389.8
50°	862.6	839.2	628.6	381.3	322.8
52.5°	813.4	790.0	546.6	320.1	273.6
55°	743.0	711.3	427.0	245.3	215.2
57.5°	671.3	625.8	318.0	191.1	167.7
60°	623.4	563.3	257.9	158.5	141.8
62.5°	577.0	500.8	211.5	138.3	134.9
65°	503.9	405.3	155.4	124.6	123.0
67.5°	434.2	309.3	115.5	112.4	110.7
70°	380.9	243.9	105.9	104.2	102.5
72.5°	333.1	186.8	96.3	94.6	92.9
75°	266.5	116.1	82.0	80.2	78.6
77.5°	199.2	73.2	67.6	65.9	64.2
80°	155.4	60.2	58.1	56.3	54.7
82.5°	117.2	48.7	47.1	45.4	43.7
85°	63.2	31.5	32.5	29.0	27.3
87.5°	21.9	16.3	17.4	15.8	14.5
90°	0.0	5.8	11.8	17.7	17.7
92.5°	14.2	19.9	26.0	36.7	41.3
95°	47.2	87.6	47.2	53.4	64.9
97.5°	83.8	168.1	347.1	102.4	88.5
100°	112.2	210.3	696.5	205.0	135.8
102.5°	140.5	243.2	942.1	541.0	296.3
105°	183.0	281.1	1068.4	1364.9	903.1
107.5°	225.5	299.4	1020.0	1986.4	1860.6
110°	253.8	323.1	991.7	2087.3	2243.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	282.2	351.4	963.3	2028.3	2290.3
115°	324.7	393.9	920.8	1914.0	2237.2
117.5°	368.3	436.4	910.2	1790.2	2122.7
120°	401.4	464.9	891.3	1696.1	2042.4
122.5°	425.0	493.1	867.7	1615.2	1933.8
125°	466.3	529.8	867.7	1517.4	1794.5
127.5°	500.6	565.2	868.9	1404.0	1677.6
130°	519.5	588.7	873.6	1328.1	1587.9
132.5°	543.1	612.3	873.6	1294.0	1507.6
135°	578.5	642.0	873.6	1249.7	1434.4
137.5°	608.0	676.1	873.6	1200.7	1358.8
140°	631.6	695.1	873.6	1172.0	1316.3
142.5°	655.2	714.1	878.3	1138.8	1273.8
145°	684.7	742.4	879.5	1088.8	1204.2
147.5°	720.1	770.9	886.6	1052.7	1141.6
150°	743.8	789.9	891.3	1028.8	1103.8
152.5°	767.4	808.9	891.3	1009.6	1070.8
155°	802.8	831.6	897.2	986.8	1033.0
157.5°	831.1	858.8	904.3	972.4	1005.8
160°	850.0	873.1	909.0	962.8	991.7
162.5°	864.2	887.3	913.8	957.9	977.5
165°	891.3	902.9	920.8	944.9	962.2
167.5°	906.7	917.1	926.7	938.8	949.2
170°	920.8	926.6	926.7	938.7	944.5
172.5°	925.6	936.0	931.5	934.0	939.7
175°	938.6	944.3	938.6	932.5	926.7
177.5°	938.6	943.2	938.6	938.5	933.8
180°	938.6	938.6	938.6	938.6	938.6



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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	15.21	15.95	16.26	17.00	18.41	7.44	8.19	8.49	9.23	10.64
	3H	16.69	17.36	17.75	18.41	19.84	8.79	9.45	9.85	10.51	11.93
	4H	17.20	17.83	18.27	18.89	20.32	9.44	10.06	10.51	11.12	12.56
	6H	17.59	18.17	18.67	19.23	20.68	10.02	10.60	11.10	11.66	13.11
	8H	17.72	18.27	18.80	19.35	20.79	10.24	10.79	11.32	11.87	13.31
	12H	17.80	18.32	18.88	19.39	20.85	10.40	10.92	11.49	11.99	13.46
4H	2H	15.02	15.65	16.10	16.71	18.14	8.05	8.67	9.12	9.73	11.17
	3H	16.65	17.17	17.73	18.26	19.70	9.59	10.11	10.67	11.19	12.64
	4H	17.24	17.71	18.32	18.79	20.26	10.38	10.86	11.47	11.93	13.40
	6H	17.72	18.13	18.82	19.23	20.69	11.11	11.52	12.21	12.62	14.08
	8H	17.91	18.29	19.00	19.38	20.86	11.40	11.78	12.50	12.87	14.35
	12H	18.03	18.38	19.14	19.48	20.96	11.61	11.96	12.73	13.06	14.55
8H	4H	17.15	17.53	18.24	18.62	20.10	10.82	11.21	11.92	12.30	13.77
	6H	17.68	17.99	18.79	19.12	20.60	11.70	12.02	12.82	13.15	14.63
	8H	17.91	18.19	19.03	19.30	20.80	12.10	12.37	13.22	13.49	14.98
	12H	18.10	18.34	19.22	19.45	20.98	12.41	12.66	13.54	13.77	15.30
12H	4H	17.09	17.43	18.20	18.54	20.02	10.87	11.21	11.98	12.32	13.80
	6H	17.65	17.92	18.77	19.04	20.53	11.82	12.09	12.94	13.21	14.70
	8H	17.89	18.13	19.01	19.24	20.77	12.26	12.50	13.38	13.61	15.14