

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: P621560

Luminaire Tested: VLT-F-150U-075D-835-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621560  
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-075D-835-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

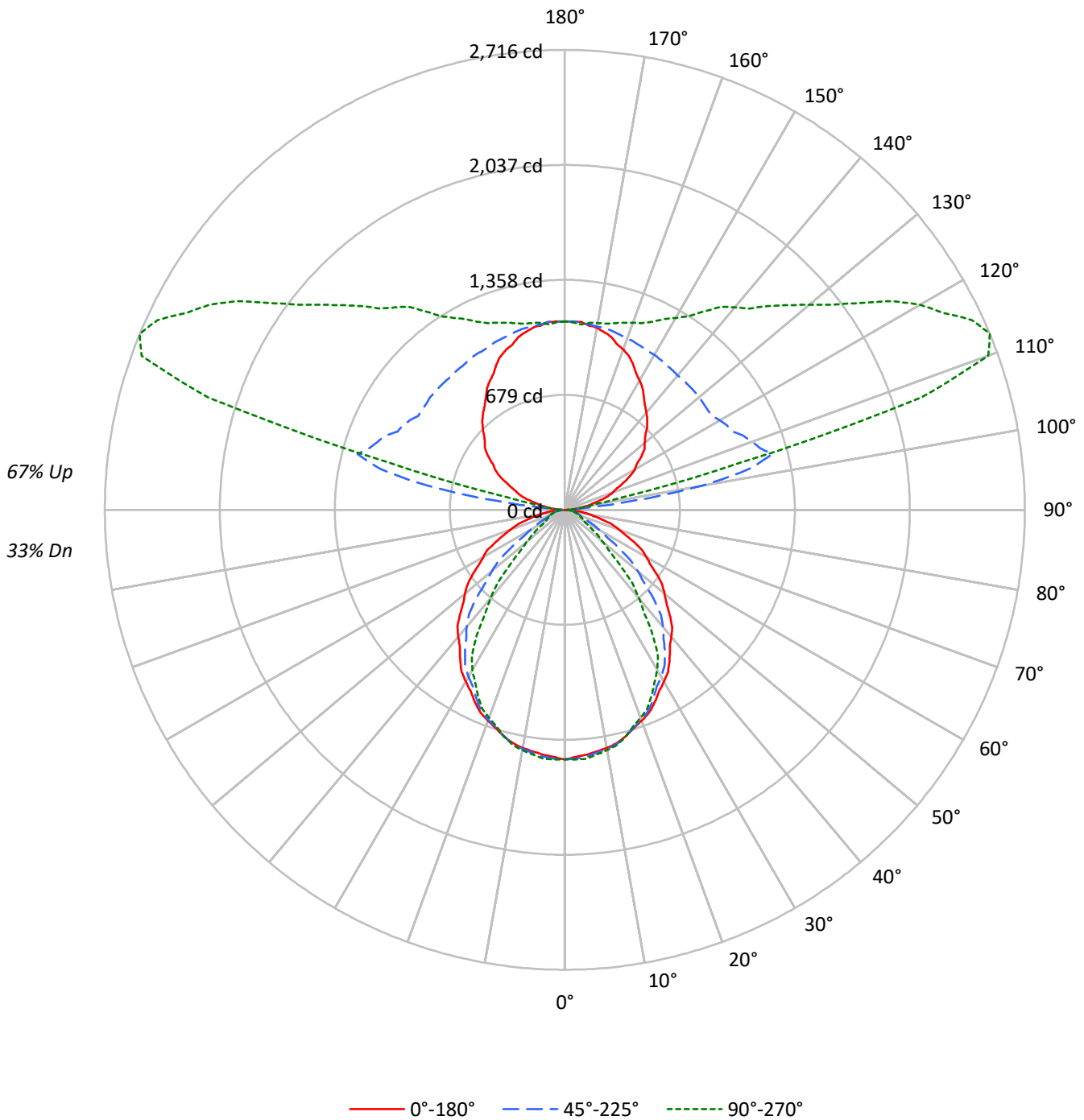
Lumens per Lamp: N/A  
Luminaire Lumens: 8986.5 lumens  
Efficiency: N/A  
Efficacy: 128.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 70.2  
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	50	30	10	0	
RCR																						
0	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33				
1	95	91	87	84	85	82	79	76	66	64	62	51	49	48	37	36	35	29				
2	86	80	74	69	78	72	67	63	58	55	52	45	43	41	33	32	31	25				
3	79	70	63	58	71	64	58	53	52	47	44	40	37	35	30	28	27	22				
4	73	62	55	49	65	57	50	45	46	41	38	36	33	30	27	25	23	19				
5	67	56	48	42	60	51	44	39	41	37	33	33	29	27	24	22	21	17				
6	61	50	42	37	55	46	39	34	37	32	29	30	26	23	22	20	18	15				
7	57	45	38	32	51	41	35	30	34	29	25	27	23	21	20	18	16	14				
8	53	41	34	29	48	38	31	27	31	26	23	25	21	19	19	17	15	12				
9	49	37	30	26	44	34	28	24	28	24	20	23	19	17	17	15	13	11				
10	46	34	27	23	41	32	25	21	26	21	18	21	18	15	16	14	12	10				

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

	0°	45°	90°
0°	10574	10574	10574
5°	10461	10538	10625
10°	10404	10448	10504
15°	10291	10302	10302
20°	10125	10079	9985
25°	9931	9763	9594
30°	9700	9422	9043
35°	9441	9014	7934
40°	9169	8442	6389
45°	8883	7477	4635
50°	8582	6254	3212
55°	8285	4762	2400
60°	7974	3299	1813
65°	7626	2352	1861
70°	7123	1981	1916
75°	6585	2027	1941
80°	5723	2141	2013
85°	4635	2379	2009

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8883 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.8	1.5
10°-20°	390.5	4.3
20°-30°	568.0	6.3
30°-40°	628.3	7.0
40°-50°	539.5	6.0
50°-60°	373.5	4.2
60°-70°	222.6	2.5
70°-80°	109.7	1.2
80°-90°	36.4	0.4
90°-100°	136.8	1.5
100°-110°	975.2	10.9
110°-120°	1324.0	14.7
120°-130°	1077.6	12.0
130°-140°	866.7	9.6
140°-150°	683.3	7.6
150°-160°	499.6	5.6
160°-170°	310.3	3.5
170°-180°	105.8	1.2
0°-30°	1097.3	12.2
0°-40°	1725.6	19.2
0°-60°	2638.6	29.4
0°-90°	3007.2	33.5
90°-120°	2436.0	27.1
90°-150°	5063.5	56.3
90°-180°	5979.0	66.5
0°-180°	8986.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1474	1474	1474	1474	1474	
5°	1452	1474	1463	1462	1475	138
15°	1385	1403	1387	1379	1387	390
25°	1254	1263	1233	1212	1212	577
35°	1078	1075	1029	946	906	673
45°	875	860	737	533	457	675
55°	662	634	381	219	192	592
65°	449	361	138	111	110	445
75°	238	104	73	72	70	251
85°	56	28	29	26	24	65
90°	0	7	14	21	21	5
95°	56	104	56	63	77	63
105°	217	333	1267	1619	1071	229
115°	385	467	1092	2270	2653	382
125°	553	628	1029	1800	2128	491
135°	686	761	1036	1482	1701	528
145°	812	880	1043	1291	1428	510
155°	952	986	1064	1170	1225	437
165°	1057	1071	1092	1121	1141	297
175°	1113	1120	1113	1106	1099	105
180°	1113	1113	1113	1113	1113	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1473.5	1473.5	1473.5	1473.5	1473.5
2.5°	1461.3	1478.0	1469.9	1470.0	1476.0
5°	1452.2	1474.5	1462.9	1461.6	1475.0
7.5°	1438.8	1459.3	1447.3	1445.8	1457.4
10°	1427.8	1447.2	1433.9	1431.1	1441.5
12.5°	1412.0	1431.4	1416.9	1411.6	1422.1
15°	1385.2	1403.1	1386.7	1379.3	1386.7
17.5°	1351.4	1366.3	1347.8	1336.0	1340.5
20°	1325.9	1340.7	1319.8	1303.1	1307.6
22.5°	1297.8	1310.4	1286.9	1267.8	1271.1
25°	1254.3	1263.2	1233.0	1211.7	1211.7
27.5°	1205.9	1211.3	1176.1	1153.7	1147.5
30°	1170.6	1173.6	1137.1	1110.8	1091.4
32.5°	1134.1	1135.8	1094.5	1052.1	1022.0
35°	1077.7	1074.8	1029.0	945.9	905.7
37.5°	1017.8	1011.2	957.2	830.7	770.9
40°	978.8	969.9	901.2	748.9	682.0
42.5°	938.6	926.1	839.1	664.7	590.6
45°	875.3	860.4	736.8	532.6	456.7
47.5°	812.6	792.9	632.0	412.6	347.4
50°	768.7	747.9	560.2	339.8	287.7
52.5°	724.9	704.0	487.1	285.2	243.9
55°	662.2	633.9	380.6	218.6	191.8
57.5°	598.2	557.8	283.4	170.3	149.5
60°	555.6	502.0	229.9	141.2	126.3
62.5°	514.2	446.3	188.5	123.2	120.3
65°	449.1	361.2	138.5	111.1	109.6
67.5°	386.9	275.6	102.9	100.1	98.6
70°	339.5	217.4	94.4	92.8	91.3
72.5°	296.8	166.5	85.9	84.3	82.8
75°	237.5	103.5	73.1	71.5	70.0
77.5°	177.5	65.3	60.3	58.7	57.2
80°	138.5	53.7	51.8	50.2	48.7
82.5°	104.4	43.4	42.0	40.5	39.0
85°	56.3	28.0	28.9	25.8	24.4
87.5°	19.5	14.9	16.2	15.1	13.9
90°	0.0	6.8	14.0	21.0	21.0
92.5°	16.8	23.6	30.8	43.5	49.0
95°	56.0	103.9	56.0	63.3	77.0
97.5°	99.4	199.3	411.6	121.4	105.0
100°	133.0	249.4	826.1	243.2	161.0
102.5°	166.6	288.5	1117.3	641.7	351.4
105°	217.0	333.4	1267.1	1618.7	1071.1
107.5°	267.4	355.0	1209.7	2355.8	2206.6
110°	301.0	383.2	1176.1	2475.4	2660.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	334.6	416.8	1142.5	2405.5	2716.2
115°	385.0	467.2	1092.1	2269.9	2653.2
117.5°	436.8	517.6	1079.5	2123.1	2517.4
120°	476.0	551.3	1057.1	2011.5	2422.2
122.5°	504.0	584.8	1029.1	1915.6	2293.4
125°	553.0	628.3	1029.1	1799.6	2128.2
127.5°	593.7	670.3	1030.5	1665.1	1989.6
130°	616.1	698.2	1036.1	1575.1	1883.2
132.5°	644.1	726.2	1036.1	1534.7	1788.0
135°	686.1	761.4	1036.1	1482.1	1701.2
137.5°	721.1	801.8	1036.1	1424.0	1611.5
140°	749.1	824.4	1036.1	1390.0	1561.1
142.5°	777.1	846.9	1041.7	1350.6	1510.7
145°	812.1	880.5	1043.1	1291.2	1428.1
147.5°	854.1	914.3	1051.5	1248.5	1353.9
150°	882.1	936.8	1057.1	1220.1	1309.1
152.5°	910.1	959.4	1057.1	1197.4	1269.9
155°	952.1	986.3	1064.1	1170.3	1225.1
157.5°	985.7	1018.5	1072.5	1153.2	1192.9
160°	1008.1	1035.5	1078.1	1141.9	1176.1
162.5°	1024.9	1052.3	1083.7	1136.0	1159.3
165°	1057.1	1070.8	1092.1	1120.6	1141.1
167.5°	1075.3	1087.6	1099.1	1113.4	1125.7
170°	1092.1	1098.9	1099.1	1113.3	1120.1
172.5°	1097.7	1110.0	1104.7	1107.7	1114.5
175°	1113.1	1119.9	1113.1	1105.9	1099.1
177.5°	1113.1	1118.6	1113.1	1113.0	1107.5
180°	1113.1	1113.1	1113.1	1113.1	1113.1

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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	14.03	14.73	15.13	15.82	17.31	6.26	6.96	7.36	8.05	9.54
	3H	15.51	16.14	16.62	17.23	18.74	7.60	8.23	8.71	9.33	10.84
	4H	16.02	16.61	17.13	17.71	19.22	8.25	8.84	9.37	9.94	11.46
	6H	16.41	16.95	17.53	18.05	19.58	8.83	9.38	9.95	10.48	12.00
	8H	16.53	17.05	17.66	18.17	19.69	9.05	9.57	10.18	10.69	12.21
	12H	16.61	17.10	17.74	18.21	19.75	9.21	9.71	10.34	10.82	12.36
4H	2H	13.84	14.43	14.96	15.53	17.05	6.86	7.45	7.98	8.55	10.07
	3H	15.46	15.96	16.59	17.08	18.61	8.40	8.89	9.53	10.01	11.54
	4H	16.05	16.50	17.18	17.61	19.16	9.19	9.64	10.32	10.75	12.30
	6H	16.53	16.92	17.67	18.06	19.60	9.92	10.30	11.06	11.44	12.98
	8H	16.72	17.08	17.85	18.21	19.76	10.21	10.57	11.34	11.70	13.25
	12H	16.84	17.17	17.99	18.31	19.87	10.42	10.75	11.57	11.89	13.45
8H	4H	15.95	16.31	17.09	17.44	19.00	9.63	9.99	10.77	11.12	12.68
	6H	16.48	16.78	17.64	17.95	19.50	10.51	10.81	11.67	11.98	13.53
	8H	16.72	16.98	17.88	18.13	19.70	10.90	11.16	12.07	12.31	13.89
	12H	16.90	17.13	18.07	18.28	19.88	11.22	11.45	12.38	12.59	14.20
12H	4H	15.90	16.22	17.05	17.36	18.92	9.67	10.00	10.83	11.14	12.70
	6H	16.46	16.72	17.62	17.87	19.44	10.62	10.88	11.79	12.03	13.61
	8H	16.69	16.92	17.86	18.07	19.67	11.06	11.29	12.23	12.43	14.04