

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: P621561

Luminaire Tested: VLT-F-150U-075D-840-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621561  
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-840-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

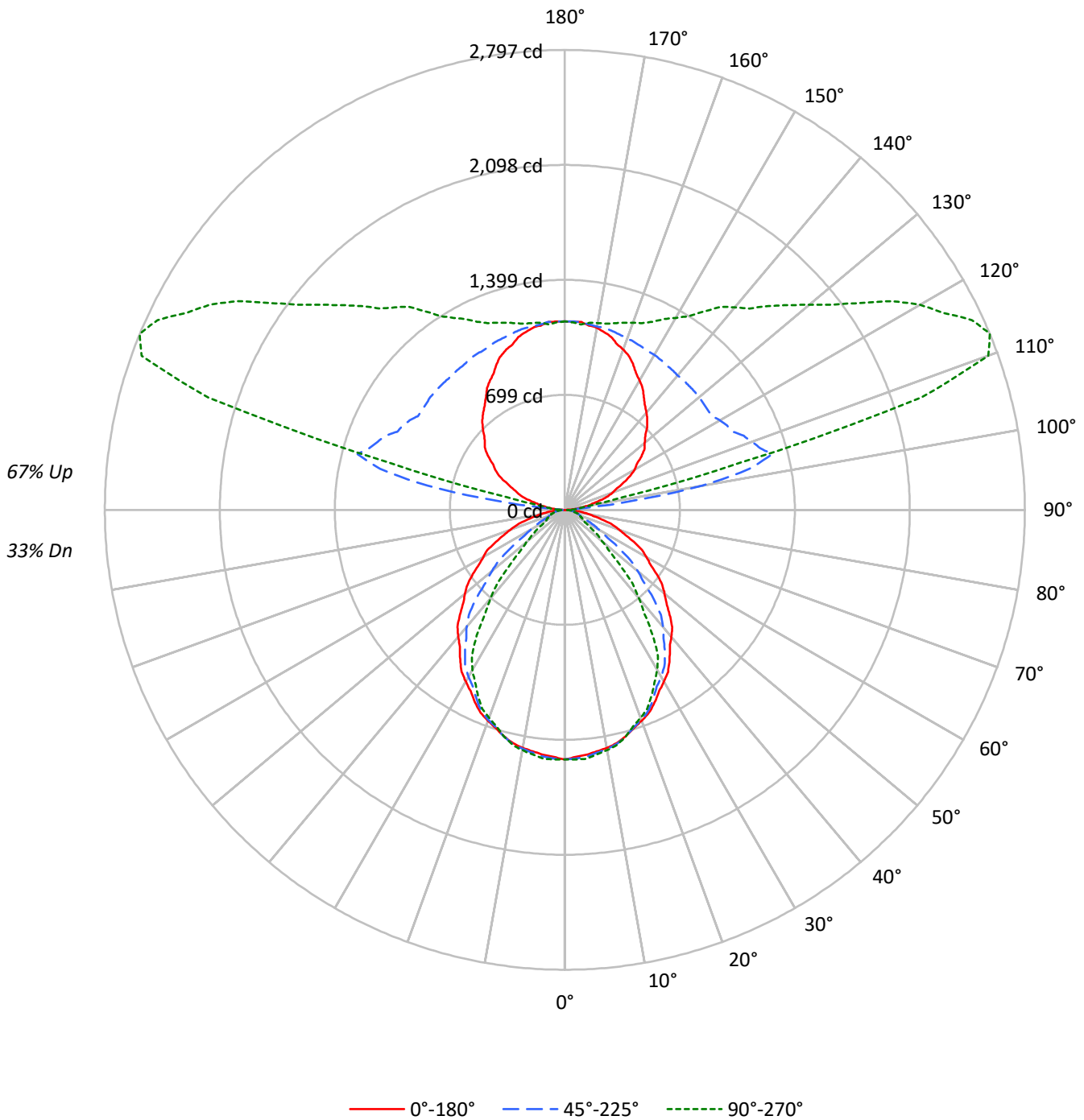
Lumens per Lamp: N/A  
Luminaire Lumens: 9254.4 lumens  
Efficiency: N/A  
Efficacy: 131.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

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				
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	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°	10889	10889	10889
5°	10773	10852	10942
10°	10714	10760	10817
15°	10598	10609	10609
20°	10427	10379	10283
25°	10227	10054	9880
30°	9989	9703	9314
35°	9723	9283	8171
40°	9442	8693	6579
45°	9148	7700	4773
50°	8837	6440	3308
55°	8531	4903	2471
60°	8212	3397	1867
65°	7851	2423	1917
70°	7335	2039	1974
75°	6779	2085	1999
80°	5897	2203	2074
85°	4775	2454	2067

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9148 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.0	1.5
10°-20°	402.1	4.3
20°-30°	584.9	6.3
30°-40°	647.1	7.0
40°-50°	555.6	6.0
50°-60°	384.7	4.2
60°-70°	229.2	2.5
70°-80°	112.9	1.2
80°-90°	37.5	0.4
90°-100°	140.9	1.5
100°-110°	1004.3	10.9
110°-120°	1363.4	14.7
120°-130°	1109.7	12.0
130°-140°	892.5	9.6
140°-150°	703.6	7.6
150°-160°	514.5	5.6
160°-170°	319.6	3.5
170°-180°	109.0	1.2
0°-30°	1130.0	12.2
0°-40°	1777.1	19.2
0°-60°	2717.3	29.4
0°-90°	3096.9	33.5
90°-120°	2508.7	27.1
90°-150°	5214.5	56.3
90°-180°	6158.0	66.5
0°-180°	9254.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1517	1517	1517	1517	1517	
5°	1496	1518	1506	1505	1519	142
15°	1426	1445	1428	1420	1428	402
25°	1292	1301	1270	1248	1248	594
35°	1110	1107	1060	974	933	694
45°	901	886	759	548	470	695
55°	682	653	392	225	198	609
65°	462	372	143	114	113	458
75°	244	107	75	74	72	258
85°	58	29	30	27	25	67
90°	0	7	14	22	22	5
95°	58	107	58	65	79	65
105°	224	343	1305	1667	1103	236
115°	396	481	1125	2338	2732	394
125°	570	647	1060	1853	2192	506
135°	706	784	1067	1526	1752	544
145°	836	907	1074	1330	1471	525
155°	980	1016	1096	1205	1262	450
165°	1089	1103	1125	1154	1175	306
175°	1146	1153	1146	1139	1132	108
180°	1146	1146	1146	1146	1146	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1517.4	1517.4	1517.4	1517.4	1517.4
2.5°	1504.9	1522.1	1513.7	1513.8	1520.0
5°	1495.5	1518.5	1506.5	1505.2	1519.0
7.5°	1481.7	1502.9	1490.5	1488.9	1500.8
10°	1470.4	1490.3	1476.7	1473.8	1484.5
12.5°	1454.1	1474.0	1459.1	1453.7	1464.5
15°	1426.5	1444.9	1428.1	1420.4	1428.1
17.5°	1391.7	1407.0	1388.0	1375.8	1380.4
20°	1365.4	1380.7	1359.1	1342.0	1346.6
22.5°	1336.5	1349.4	1325.3	1305.6	1309.0
25°	1291.7	1300.9	1269.8	1247.8	1247.8
27.5°	1241.9	1247.4	1211.1	1188.1	1181.7
30°	1205.5	1208.6	1171.0	1143.9	1124.0
32.5°	1167.9	1169.7	1127.1	1083.5	1052.5
35°	1109.9	1106.8	1059.7	974.1	932.7
37.5°	1048.1	1041.4	985.7	855.5	793.8
40°	1008.0	998.8	928.0	771.3	702.3
42.5°	966.6	953.7	864.1	684.6	608.2
45°	901.4	886.0	758.7	548.5	470.3
47.5°	836.8	816.6	650.9	424.9	357.7
50°	791.6	770.2	576.9	349.9	296.3
52.5°	746.5	725.0	501.6	293.7	251.1
55°	681.9	652.8	391.9	225.1	197.5
57.5°	616.1	574.4	291.9	175.4	153.9
60°	572.2	517.0	236.7	145.4	130.1
62.5°	529.5	459.6	194.1	126.9	123.8
65°	462.4	372.0	142.7	114.4	112.9
67.5°	398.5	283.8	106.0	103.1	101.6
70°	349.6	223.9	97.2	95.6	94.1
72.5°	305.7	171.4	88.4	86.8	85.3
75°	244.5	106.6	75.2	73.6	72.1
77.5°	182.8	67.2	62.1	60.5	58.9
80°	142.7	55.3	53.3	51.7	50.2
82.5°	107.5	44.7	43.3	41.7	40.1
85°	58.0	28.9	29.8	26.6	25.1
87.5°	20.1	15.3	16.7	15.6	14.4
90°	0.0	7.0	14.4	21.6	21.6
92.5°	17.3	24.4	31.7	44.8	50.5
95°	57.7	107.0	57.7	65.2	79.3
97.5°	102.4	205.3	423.9	125.1	108.1
100°	137.0	256.8	850.7	250.4	165.8
102.5°	171.6	297.1	1150.6	660.8	361.9
105°	223.5	343.3	1304.9	1667.0	1103.0
107.5°	275.4	365.6	1245.8	2426.1	2272.4
110°	310.0	394.6	1211.2	2549.2	2739.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	344.6	429.2	1176.6	2477.2	2797.2
115°	396.5	481.1	1124.7	2337.6	2732.3
117.5°	449.9	533.0	1111.7	2186.4	2592.5
120°	490.2	567.8	1088.6	2071.5	2494.4
122.5°	519.1	602.3	1059.8	1972.7	2361.8
125°	569.5	647.1	1059.8	1853.3	2191.6
127.5°	611.4	690.3	1061.2	1714.8	2048.9
130°	634.4	719.0	1067.0	1622.1	1939.3
132.5°	663.3	747.8	1067.0	1580.4	1841.3
135°	706.5	784.1	1067.0	1526.3	1751.9
137.5°	742.6	825.7	1067.0	1466.4	1659.6
140°	771.4	848.9	1067.0	1431.5	1607.7
142.5°	800.2	872.1	1072.7	1390.8	1555.8
145°	836.3	906.8	1074.2	1329.7	1470.7
147.5°	879.5	941.6	1082.8	1285.7	1394.3
150°	908.4	964.8	1088.6	1256.5	1348.1
152.5°	937.2	988.0	1088.6	1233.1	1307.8
155°	980.5	1015.7	1095.8	1205.2	1261.6
157.5°	1015.1	1048.9	1104.5	1187.6	1228.5
160°	1038.1	1066.3	1110.2	1175.9	1211.2
162.5°	1055.4	1083.6	1116.0	1169.9	1193.9
165°	1088.6	1102.7	1124.7	1154.0	1175.1
167.5°	1107.4	1120.0	1131.9	1146.6	1159.3
170°	1124.7	1131.7	1131.9	1146.4	1153.5
172.5°	1130.4	1143.1	1137.6	1140.7	1147.7
175°	1146.3	1153.3	1146.3	1138.9	1131.9
177.5°	1146.3	1151.9	1146.3	1146.2	1140.5
180°	1146.3	1146.3	1146.3	1146.3	1146.3



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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	14.13	14.83	15.23	15.92	17.41	6.36	7.07	7.46	8.15	9.65
	3H	15.61	16.24	16.72	17.34	18.85	7.71	8.33	8.81	9.43	10.94
	4H	16.12	16.71	17.23	17.81	19.33	8.35	8.95	9.47	10.04	11.56
	6H	16.51	17.05	17.63	18.15	19.68	8.94	9.48	10.06	10.58	12.11
	8H	16.64	17.15	17.76	18.27	19.79	9.16	9.67	10.28	10.79	12.31
	12H	16.71	17.20	17.84	18.31	19.86	9.32	9.81	10.45	10.92	12.46
4H	2H	13.94	14.54	15.06	15.63	17.15	6.96	7.56	8.08	8.65	10.17
	3H	15.56	16.06	16.69	17.18	18.71	8.50	8.99	9.63	10.12	11.65
	4H	16.15	16.60	17.28	17.71	19.26	9.29	9.74	10.42	10.86	12.40
	6H	16.63	17.02	17.77	18.16	19.70	10.02	10.41	11.16	11.54	13.08
	8H	16.82	17.18	17.95	18.31	19.86	10.31	10.67	11.45	11.80	13.36
	12H	16.94	17.27	18.09	18.41	19.97	10.52	10.85	11.67	11.99	13.55
8H	4H	16.05	16.42	17.19	17.54	19.10	9.73	10.09	10.87	11.22	12.78
	6H	16.59	16.88	17.74	18.05	19.61	10.61	10.91	11.77	12.08	13.63
	8H	16.82	17.08	17.98	18.23	19.80	11.01	11.27	12.17	12.42	13.99
	12H	17.00	17.23	18.17	18.38	19.99	11.32	11.55	12.49	12.70	14.30
12H	4H	16.00	16.33	17.15	17.47	19.03	9.78	10.10	10.93	11.24	12.80
	6H	16.56	16.82	17.72	17.97	19.54	10.73	10.99	11.89	12.14	13.71
	8H	16.79	17.02	17.96	18.17	19.78	11.16	11.39	12.33	12.54	14.15