

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: P621564

Luminaire Tested: VLT-F-150U-075D-940-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621564  
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-940-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, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

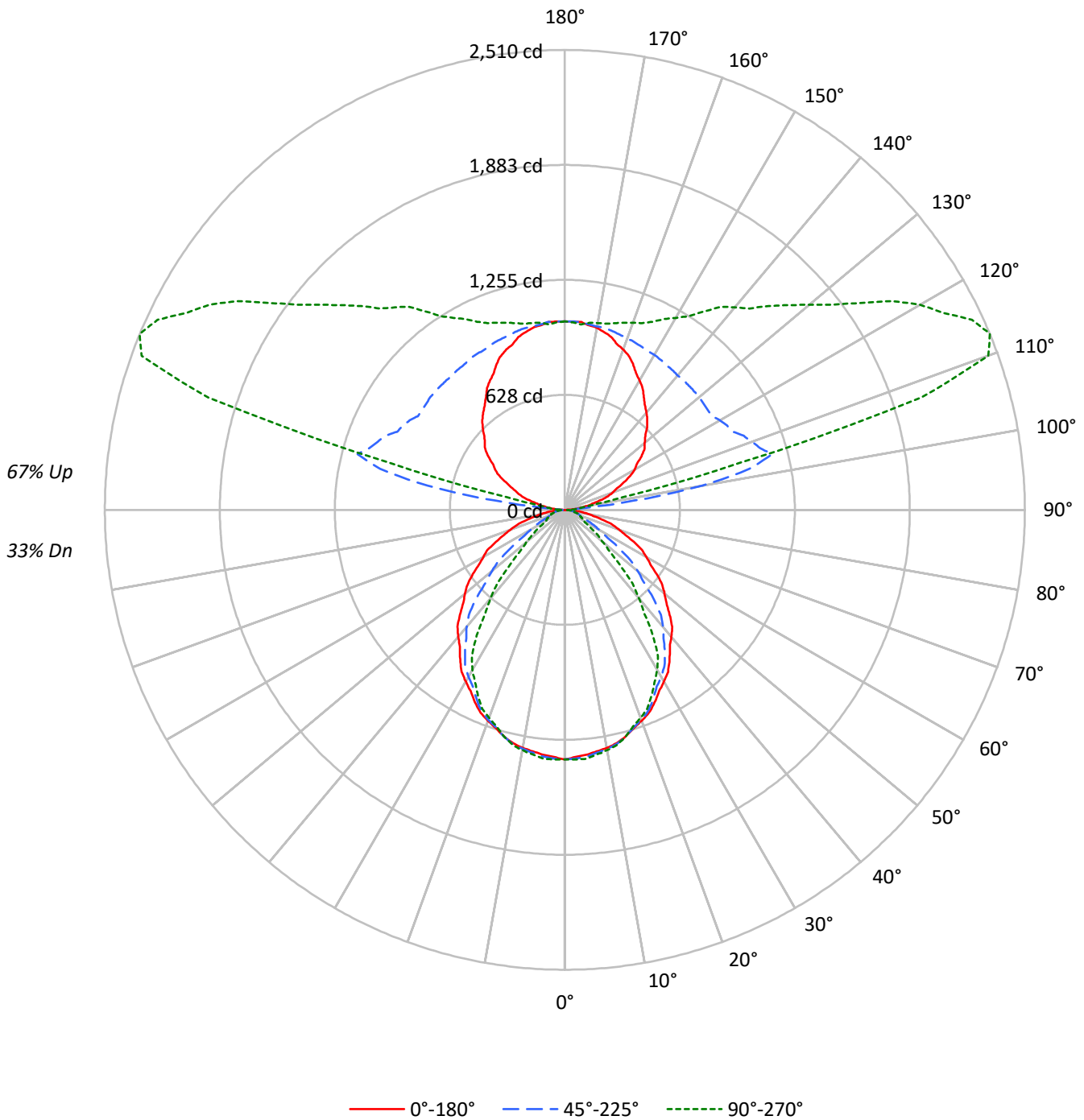
Lumens per Lamp: N/A  
Luminaire Lumens: 8305.0 lumens  
Efficiency: N/A  
Efficacy: 118.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

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°	9772	9772	9772
5°	9668	9738	9820
10°	9615	9656	9707
15°	9511	9521	9521
20°	9357	9314	9228
25°	9178	9022	8866
30°	8964	8708	8358
35°	8725	8331	7332
40°	8474	7801	5903
45°	8209	6910	4283
50°	7931	5779	2968
55°	7657	4400	2218
60°	7370	3048	1676
65°	7047	2173	1720
70°	6582	1830	1771
75°	6086	1871	1794
80°	5290	1975	1860
85°	4290	2198	1853

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8209 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.3	1.5
10°-20°	360.8	4.3
20°-30°	524.9	6.3
30°-40°	580.7	7.0
40°-50°	498.5	6.0
50°-60°	345.2	4.2
60°-70°	205.7	2.5
70°-80°	101.3	1.2
80°-90°	33.6	0.4
90°-100°	126.5	1.5
100°-110°	901.3	10.9
110°-120°	1223.6	14.7
120°-130°	995.9	12.0
130°-140°	800.9	9.6
140°-150°	631.5	7.6
150°-160°	461.7	5.6
160°-170°	286.8	3.5
170°-180°	97.8	1.2
0°-30°	1014.1	12.2
0°-40°	1594.8	19.2
0°-60°	2438.5	29.4
0°-90°	2779.2	33.5
90°-120°	2251.3	27.1
90°-150°	4679.6	56.3
90°-180°	5526.0	66.5
0°-180°	8305.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1362	1362	1362	1362	1362	
5°	1342	1363	1352	1351	1363	127
15°	1280	1297	1282	1275	1282	360
25°	1159	1168	1140	1120	1120	533
35°	996	993	951	874	837	622
45°	809	795	681	492	422	624
55°	612	586	352	202	177	547
65°	415	334	128	103	101	411
75°	220	96	68	66	65	232
85°	52	26	27	24	22	60
90°	0	6	13	19	19	5
95°	52	96	52	58	71	58
105°	201	308	1171	1496	990	212
115°	356	432	1009	2098	2452	353
125°	511	581	951	1663	1967	454
135°	634	704	958	1370	1572	488
145°	750	814	964	1193	1320	471
155°	880	912	983	1082	1132	404
165°	977	990	1009	1036	1055	274
175°	1029	1035	1029	1022	1016	97
180°	1029	1029	1029	1029	1029	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1361.8	1361.8	1361.8	1361.8	1361.8
2.5°	1350.5	1365.9	1358.4	1358.5	1364.0
5°	1342.1	1362.7	1351.9	1350.8	1363.2
7.5°	1329.7	1348.7	1337.6	1336.1	1346.9
10°	1319.6	1337.5	1325.2	1322.6	1332.2
12.5°	1304.9	1322.8	1309.4	1304.6	1314.2
15°	1280.2	1296.7	1281.6	1274.7	1281.6
17.5°	1249.0	1262.7	1245.6	1234.7	1238.8
20°	1225.3	1239.1	1219.7	1204.3	1208.4
22.5°	1199.4	1211.0	1189.3	1171.6	1174.7
25°	1159.2	1167.5	1139.5	1119.8	1119.8
27.5°	1114.5	1119.4	1086.9	1066.2	1060.4
30°	1081.8	1084.6	1050.9	1026.6	1008.7
32.5°	1048.1	1049.7	1011.5	972.3	944.5
35°	996.0	993.3	951.0	874.2	837.0
37.5°	940.6	934.5	884.6	767.7	712.4
40°	904.6	896.3	832.8	692.1	630.2
42.5°	867.4	855.9	775.4	614.3	545.8
45°	808.9	795.2	680.9	492.2	422.0
47.5°	750.9	732.8	584.1	381.3	321.0
50°	710.4	691.2	517.7	314.0	265.9
52.5°	669.9	650.7	450.2	263.6	225.4
55°	612.0	585.8	351.7	202.0	177.3
57.5°	552.9	515.5	261.9	157.4	138.1
60°	513.5	464.0	212.4	130.5	116.8
62.5°	475.2	412.5	174.2	113.9	111.1
65°	415.0	333.8	128.0	102.7	101.3
67.5°	357.6	254.7	95.1	92.5	91.2
70°	313.7	200.9	87.2	85.8	84.4
72.5°	274.3	153.8	79.3	77.9	76.5
75°	219.5	95.7	67.5	66.1	64.7
77.5°	164.0	60.3	55.7	54.3	52.9
80°	128.0	49.6	47.8	46.4	45.0
82.5°	96.5	40.1	38.8	37.4	36.0
85°	52.1	25.9	26.7	23.9	22.5
87.5°	18.0	13.8	15.0	14.0	12.9
90°	0.0	6.3	12.9	19.4	19.4
92.5°	15.5	21.9	28.5	40.2	45.3
95°	51.8	96.0	51.8	58.5	71.2
97.5°	91.9	184.2	380.4	112.2	97.0
100°	122.9	230.5	763.4	224.7	148.8
102.5°	154.0	266.6	1032.6	593.0	324.8
105°	200.6	308.1	1171.0	1496.0	989.9
107.5°	247.1	328.1	1118.0	2177.2	2039.3
110°	278.2	354.1	1086.9	2287.7	2458.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	309.3	385.2	1055.9	2223.1	2510.3
115°	355.8	431.7	1009.3	2097.8	2452.0
117.5°	403.7	478.4	997.6	1962.2	2326.5
120°	439.9	509.5	976.9	1859.0	2238.5
122.5°	465.8	540.5	951.1	1770.3	2119.5
125°	511.1	580.7	951.1	1663.2	1966.8
127.5°	548.6	619.5	952.3	1538.9	1838.7
130°	569.3	645.3	957.5	1455.7	1740.4
132.5°	595.2	671.1	957.5	1418.3	1652.4
135°	634.0	703.6	957.5	1369.7	1572.2
137.5°	666.4	741.0	957.5	1316.0	1489.3
140°	692.3	761.9	957.5	1284.6	1442.8
142.5°	718.1	782.7	962.7	1248.1	1396.2
145°	750.5	813.8	964.0	1193.3	1319.8
147.5°	789.3	845.0	971.8	1153.8	1251.3
150°	815.2	865.8	976.9	1127.6	1209.8
152.5°	841.1	886.6	976.9	1106.6	1173.6
155°	879.9	911.5	983.4	1081.6	1132.2
157.5°	910.9	941.3	991.2	1065.8	1102.4
160°	931.6	957.0	996.3	1055.3	1086.9
162.5°	947.2	972.5	1001.5	1049.9	1071.4
165°	976.9	989.6	1009.3	1035.6	1054.6
167.5°	993.8	1005.1	1015.8	1029.0	1040.3
170°	1009.3	1015.6	1015.8	1028.8	1035.2
172.5°	1014.5	1025.8	1020.9	1023.7	1030.0
175°	1028.7	1035.0	1028.7	1022.1	1015.8
177.5°	1028.7	1033.8	1028.7	1028.6	1023.5
180°	1028.7	1028.7	1028.7	1028.7	1028.7

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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	13.76	14.46	14.85	15.54	17.04	5.99	6.69	7.09	7.78	9.27
	3H	15.24	15.86	16.34	16.96	18.47	7.33	7.96	8.44	9.05	10.56
	4H	15.74	16.34	16.86	17.43	18.95	7.98	8.57	9.09	9.67	11.18
	6H	16.13	16.68	17.26	17.78	19.31	8.56	9.10	9.68	10.20	11.73
	8H	16.26	16.78	17.39	17.89	19.41	8.78	9.30	9.91	10.41	11.93
	12H	16.34	16.83	17.47	17.94	19.48	8.94	9.43	10.07	10.54	12.08
4H	2H	13.57	14.16	14.69	15.26	16.77	6.59	7.18	7.71	8.28	9.79
	3H	15.19	15.68	16.32	16.81	18.33	8.12	8.62	9.25	9.74	11.27
	4H	15.77	16.22	16.90	17.34	18.89	8.91	9.37	10.04	10.48	12.03
	6H	16.26	16.64	17.40	17.78	19.32	9.64	10.03	10.78	11.17	12.71
	8H	16.44	16.80	17.58	17.93	19.49	9.93	10.30	11.07	11.42	12.98
	12H	16.56	16.89	17.72	18.03	19.59	10.14	10.47	11.30	11.61	13.17
8H	4H	15.68	16.04	16.82	17.17	18.72	9.36	9.72	10.49	10.85	12.40
	6H	16.21	16.51	17.37	17.68	19.23	10.23	10.53	11.39	11.70	13.26
	8H	16.44	16.70	17.61	17.85	19.43	10.63	10.89	11.79	12.04	13.61
	12H	16.63	16.86	17.79	18.00	19.61	10.94	11.17	12.11	12.32	13.93
12H	4H	15.62	15.95	16.77	17.09	18.65	9.40	9.73	10.55	10.87	12.43
	6H	16.18	16.44	17.34	17.59	19.16	10.35	10.61	11.51	11.76	13.33
	8H	16.42	16.65	17.58	17.79	19.40	10.79	11.01	11.95	12.16	13.77