

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: P621576

Luminaire Tested: VLT-F-150U-125D-940-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621576  
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-125D-940-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

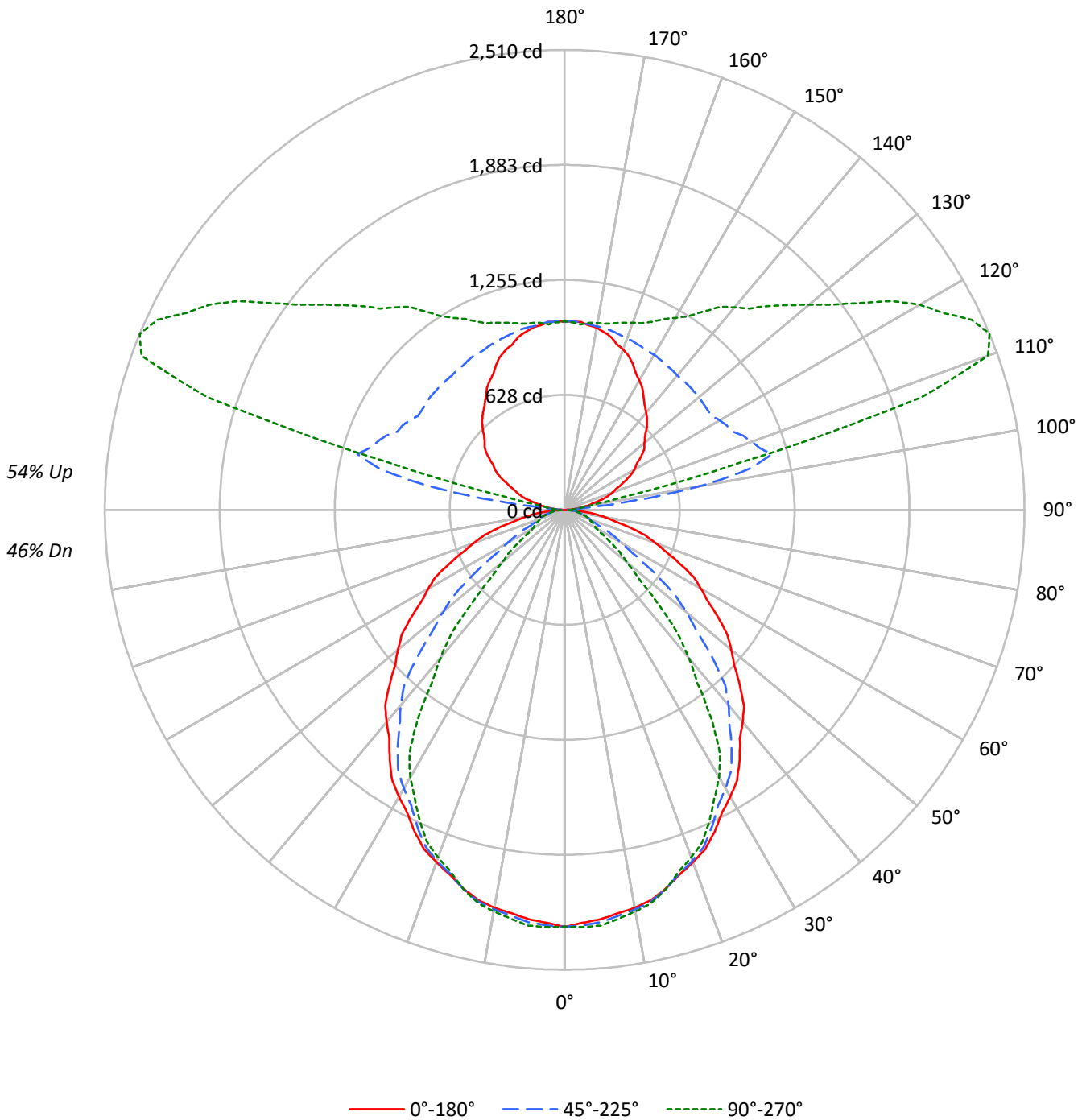
Lumens per Lamp: N/A  
Luminaire Lumens: 10167.6 lumens  
Efficiency: N/A  
Efficacy: 116.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 87.3  
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46		
1	97	93	90	86	89	86	83	80	72	70	68	59	57	56	47	46	45	40		
2	89	82	77	72	82	76	71	67	64	60	57	53	50	48	42	41	39	34		
3	82	73	66	61	75	67	61	57	57	52	49	47	44	41	38	36	34	30		
4	75	65	57	52	69	60	54	48	51	46	42	42	39	36	34	32	30	26		
5	69	58	50	45	63	54	47	42	46	41	37	38	34	32	31	29	26	23		
6	64	52	45	39	59	49	42	37	41	36	32	35	31	28	29	26	24	21		
7	59	47	40	34	54	44	37	33	38	33	29	32	28	25	26	23	21	19		
8	55	43	36	31	51	40	34	29	35	29	26	29	25	22	24	21	19	17		
9	51	40	32	27	47	37	30	26	32	27	23	27	23	20	22	20	17	15		
10	48	36	29	25	44	34	28	23	29	24	21	25	21	18	21	18	16	14		

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

	0°	45°	90°
0°	16327	16327	16327
5°	16152	16270	16406
10°	16065	16133	16219
15°	15890	15907	15907
20°	15633	15562	15418
25°	15334	15074	14813
30°	14977	14548	13964
35°	14578	13919	12251
40°	14157	13034	9864
45°	13715	11545	7156
50°	13251	9656	4959
55°	12791	7351	3706
60°	12312	5093	2800
65°	11774	3632	2873
70°	10996	3057	2958
75°	10167	3127	2997
80°	8839	3302	3108
85°	7163	3680	3096

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13715 cd/sqm



TEST NUMBER: P621576

CATALOG NUMBER: VLT-F-150U-125D-940-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.4	2.1
10°-20°	602.9	5.9
20°-30°	877.0	8.6
30°-40°	970.2	9.5
40°-50°	833.0	8.2
50°-60°	576.8	5.7
60°-70°	343.7	3.4
70°-80°	169.3	1.7
80°-90°	54.6	0.5
90°-100°	126.5	1.2
100°-110°	901.3	8.9
110°-120°	1223.6	12.0
120°-130°	995.9	9.8
130°-140°	800.9	7.9
140°-150°	631.5	6.2
150°-160°	461.7	4.5
160°-170°	286.8	2.8
170°-180°	97.8	1.0
0°-30°	1694.2	16.7
0°-40°	2664.4	26.2
0°-60°	4074.1	40.1
0°-90°	4641.8	45.7
90°-120°	2251.3	22.1
90°-150°	4679.6	46.0
90°-180°	5526.0	54.3
0°-180°	10167.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2275	2275	2275	2275	2275	
5°	2242	2277	2259	2257	2278	213
15°	2139	2166	2141	2130	2141	602
25°	1937	1950	1904	1871	1871	891
35°	1664	1660	1589	1460	1398	1040
45°	1352	1328	1138	822	705	1043
55°	1022	979	588	338	296	914
65°	693	558	214	172	169	687
75°	367	160	113	110	108	387
85°	87	43	45	40	38	101
90°	0	6	13	19	19	6
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	

TEST NUMBER: P621576

CATALOG NUMBER: VLT-F-150U-125D-940-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2275.2	2275.2	2275.2	2275.2	2275.2
2.5°	2256.4	2282.1	2269.5	2269.8	2278.9
5°	2242.3	2276.8	2258.7	2256.9	2277.5
7.5°	2221.6	2253.3	2234.8	2232.3	2250.3
10°	2204.7	2234.6	2214.1	2209.7	2225.8
12.5°	2180.2	2210.1	2187.8	2179.7	2195.7
15°	2138.9	2166.4	2141.2	2129.7	2141.2
17.5°	2086.7	2109.7	2081.0	2062.9	2069.8
20°	2047.2	2070.2	2037.8	2012.1	2019.0
22.5°	2004.0	2023.3	1987.0	1957.5	1962.6
25°	1936.7	1950.5	1903.8	1870.9	1870.9
27.5°	1862.0	1870.3	1815.9	1781.4	1771.7
30°	1807.5	1812.1	1755.7	1715.1	1685.2
32.5°	1751.0	1753.8	1689.9	1624.5	1578.1
35°	1664.1	1659.5	1588.9	1460.5	1398.5
37.5°	1571.5	1561.4	1477.9	1282.6	1190.2
40°	1511.3	1497.5	1391.4	1156.4	1053.0
42.5°	1449.3	1430.0	1295.5	1026.4	912.0
45°	1351.5	1328.5	1137.6	822.3	705.1
47.5°	1254.6	1224.3	975.9	637.0	536.4
50°	1187.0	1154.8	864.9	524.7	444.2
52.5°	1119.3	1087.1	752.1	440.4	376.5
55°	1022.4	978.8	587.6	337.5	296.2
57.5°	923.7	861.2	437.6	263.0	230.8
60°	857.9	775.2	354.9	218.1	195.1
62.5°	794.0	689.2	291.0	190.3	185.7
65°	693.4	557.8	213.9	171.5	169.2
67.5°	597.5	425.6	158.9	154.6	152.3
70°	524.1	335.7	145.7	143.3	141.0
72.5°	458.3	257.0	132.6	130.2	127.9
75°	366.7	159.8	112.8	110.4	108.1
77.5°	274.1	100.8	93.1	90.7	88.4
80°	213.9	82.9	79.9	77.5	75.2
82.5°	161.2	67.0	64.9	62.5	60.2
85°	87.0	43.3	44.7	39.9	37.6
87.5°	30.1	22.2	23.3	20.8	18.9
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



TEST NUMBER: P621576

CATALOG NUMBER: VLT-F-150U-125D-940-UNV-STD-W-4

**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	16.90	17.68	17.91	18.69	20.03	9.14	9.92	10.14	10.92	12.26
	3H	18.39	19.09	19.40	20.10	21.46	10.48	11.18	11.50	12.20	13.55
	4H	18.90	19.56	19.93	20.58	21.94	11.13	11.79	12.16	12.81	14.18
	6H	19.29	19.90	20.33	20.92	22.30	11.72	12.32	12.75	13.35	14.72
	8H	19.42	20.00	20.46	21.04	22.41	11.94	12.52	12.98	13.56	14.93
	12H	19.50	20.05	20.55	21.08	22.48	12.10	12.65	13.15	13.68	15.08
4H	2H	16.72	17.38	17.75	18.40	19.76	9.74	10.40	10.78	11.42	12.79
	3H	18.35	18.90	19.39	19.95	21.32	11.29	11.83	12.33	12.88	14.26
	4H	18.94	19.44	19.99	20.48	21.88	12.08	12.58	13.13	13.62	15.02
	6H	19.43	19.86	20.49	20.92	22.32	12.81	13.24	13.87	14.31	15.70
	8H	19.61	20.01	20.67	21.07	22.48	13.11	13.51	14.16	14.56	15.97
	12H	19.74	20.10	20.81	21.17	22.59	13.32	13.68	14.39	14.75	16.17
8H	4H	18.85	19.25	19.91	20.31	21.72	12.53	12.93	13.59	13.98	15.39
	6H	19.38	19.71	20.46	20.81	22.22	13.41	13.74	14.49	14.84	16.24
	8H	19.62	19.91	20.71	20.99	22.42	13.80	14.09	14.89	15.17	16.60
	12H	19.80	20.06	20.89	21.13	22.60	14.12	14.37	15.21	15.45	16.92
12H	4H	18.80	19.16	19.87	20.23	21.64	12.57	12.94	13.65	14.00	15.42
	6H	19.36	19.65	20.44	20.73	22.15	13.52	13.81	14.61	14.89	16.32
	8H	19.59	19.85	20.68	20.93	22.39	13.96	14.22	15.05	15.29	16.76