

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: P621570

Luminaire Tested: VLT-F-150U-100D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621570
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-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

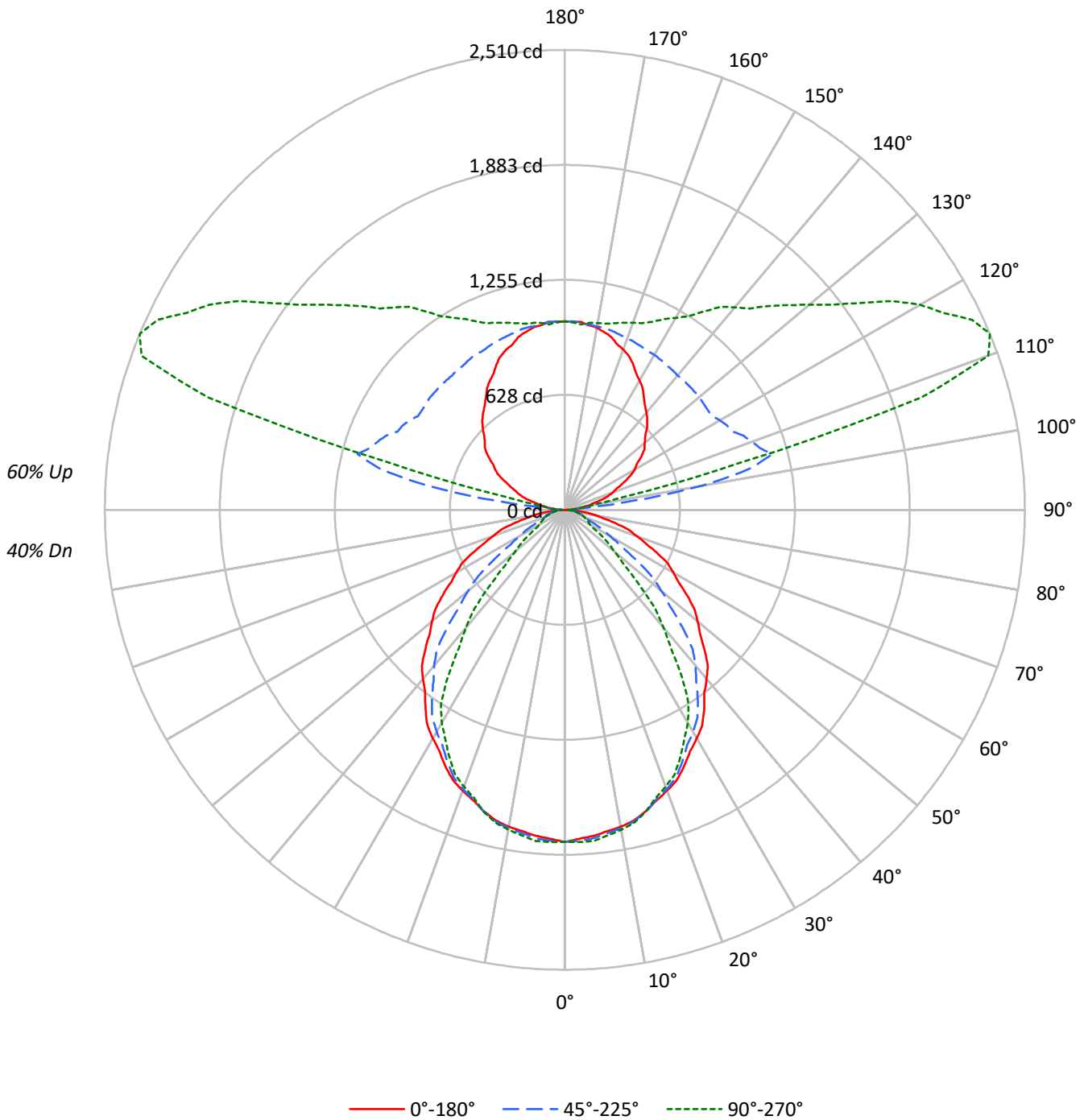
Lumens per Lamp: N/A
Luminaire Lumens: 9223.5 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

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



TEST NUMBER: P621570
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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	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°	13004	13004	13004
5°	12865	12960	13067
10°	12795	12850	12918
15°	12656	12670	12670
20°	12452	12395	12280
25°	12214	12007	11799
30°	11929	11587	11122
35°	11611	11086	9758
40°	11276	10382	7857
45°	10924	9195	5699
50°	10554	7691	3950
55°	10189	5855	2951
60°	9807	4057	2230
65°	9378	2893	2289
70°	8760	2436	2356
75°	8096	2493	2387
80°	7042	2632	2475
85°	5706	2931	2470

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10924 cd/sqm



TEST NUMBER: P621570

CATALOG NUMBER: VLT-F-150U-100D-940-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.8	1.9
10°-20°	480.2	5.2
20°-30°	698.5	7.6
30°-40°	772.8	8.4
40°-50°	663.4	7.2
50°-60°	459.4	5.0
60°-70°	273.7	3.0
70°-80°	134.9	1.5
80°-90°	44.0	0.5
90°-100°	126.5	1.4
100°-110°	901.3	9.8
110°-120°	1223.6	13.3
120°-130°	995.9	10.8
130°-140°	800.9	8.7
140°-150°	631.5	6.8
150°-160°	461.7	5.0
160°-170°	286.8	3.1
170°-180°	97.8	1.1
0°-30°	1349.5	14.6
0°-40°	2122.2	23.0
0°-60°	3245.0	35.2
0°-90°	3697.6	40.1
90°-120°	2251.3	24.4
90°-150°	4679.6	50.7
90°-180°	5526.0	59.9
0°-180°	9223.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1812	1812	1812	1812	1812	
5°	1786	1813	1799	1798	1814	169
15°	1704	1726	1706	1696	1706	480
25°	1543	1554	1516	1490	1490	710
35°	1325	1322	1266	1163	1114	828
45°	1076	1058	906	655	562	830
55°	814	780	468	269	236	728
65°	552	444	170	137	135	547
75°	292	127	90	88	86	308
85°	69	34	36	32	30	80
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	

TEST NUMBER: P621570

CATALOG NUMBER: VLT-F-150U-100D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1812.2	1812.2	1812.2	1812.2	1812.2
2.5°	1797.2	1817.7	1807.7	1807.8	1815.2
5°	1786.0	1813.4	1799.1	1797.6	1814.0
7.5°	1769.5	1794.7	1780.0	1778.0	1792.3
10°	1756.0	1779.8	1763.5	1760.0	1772.9
12.5°	1736.5	1760.3	1742.5	1736.1	1748.9
15°	1703.6	1725.6	1705.5	1696.3	1705.5
17.5°	1662.0	1680.3	1657.5	1643.1	1648.6
20°	1630.6	1648.9	1623.1	1602.6	1608.1
22.5°	1596.1	1611.5	1582.7	1559.2	1563.2
25°	1542.6	1553.6	1516.4	1490.2	1490.2
27.5°	1483.1	1489.6	1446.4	1418.9	1411.2
30°	1439.6	1443.3	1398.4	1366.1	1342.3
32.5°	1394.7	1396.9	1346.0	1293.9	1256.9
35°	1325.4	1321.8	1265.5	1163.3	1113.9
37.5°	1251.7	1243.6	1177.2	1021.6	948.0
40°	1203.7	1192.8	1108.3	921.1	838.7
42.5°	1154.3	1138.9	1031.9	817.5	726.4
45°	1076.4	1058.1	906.1	655.0	561.6
47.5°	999.3	975.2	777.3	507.4	427.2
50°	945.4	919.8	688.9	417.9	353.8
52.5°	891.5	865.9	599.1	350.8	299.9
55°	814.4	779.6	468.0	268.8	235.9
57.5°	735.7	685.9	348.6	209.5	183.8
60°	683.3	617.4	282.7	173.7	155.4
62.5°	632.4	548.9	231.8	151.6	147.9
65°	552.3	444.3	170.4	136.6	134.8
67.5°	475.9	339.0	126.6	123.1	121.3
70°	417.5	267.4	116.1	114.2	112.3
72.5°	365.1	204.7	105.6	103.7	101.8
75°	292.0	127.3	89.9	87.9	86.1
77.5°	218.3	80.3	74.1	72.2	70.4
80°	170.4	66.0	63.7	61.7	59.9
82.5°	128.4	53.4	51.7	49.8	47.9
85°	69.3	34.5	35.6	31.8	30.0
87.5°	24.0	17.9	19.1	17.3	15.9
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: P621570

CATALOG NUMBER: VLT-F-150U-100D-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	15.53	16.27	16.57	17.32	18.73	7.76	8.50	8.81	9.55	10.96
	3H	17.01	17.68	18.07	18.73	20.16	9.11	9.77	10.16	10.82	12.25
	4H	17.52	18.15	18.59	19.20	20.64	9.75	10.38	10.82	11.44	12.87
	6H	17.91	18.49	18.99	19.55	21.00	10.34	10.91	11.41	11.97	13.42
	8H	18.04	18.59	19.12	19.66	21.11	10.56	11.11	11.64	12.18	13.63
	12H	18.12	18.64	19.20	19.71	21.17	10.72	11.24	11.81	12.31	13.78
4H	2H	15.34	15.97	16.42	17.03	18.46	8.36	8.99	9.44	10.05	11.48
	3H	16.97	17.49	18.05	18.57	20.02	9.91	10.43	10.99	11.51	12.96
	4H	17.55	18.03	18.64	19.11	20.58	10.70	11.17	11.78	12.25	13.72
	6H	18.04	18.45	19.14	19.55	21.01	11.43	11.84	12.52	12.94	14.40
	8H	18.23	18.61	19.32	19.70	21.18	11.72	12.10	12.81	13.19	14.67
	12H	18.35	18.70	19.46	19.80	21.28	11.93	12.28	13.04	13.38	14.86
8H	4H	17.46	17.85	18.56	18.94	20.41	11.14	11.52	12.24	12.61	14.09
	6H	18.00	18.31	19.11	19.44	20.92	12.02	12.34	13.14	13.47	14.94
	8H	18.23	18.51	19.35	19.62	21.12	12.42	12.69	13.54	13.81	15.30
	12H	18.41	18.66	19.54	19.77	21.30	12.73	12.97	13.86	14.08	15.62
12H	4H	17.41	17.75	18.52	18.86	20.34	11.19	11.53	12.30	12.63	14.12
	6H	17.97	18.24	19.09	19.36	20.85	12.14	12.41	13.26	13.53	15.02
	8H	18.21	18.45	19.33	19.56	21.09	12.57	12.82	13.70	13.93	15.46