

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: P621546

Luminaire Tested: VLT-F-125U-100D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621546
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-125U-100D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

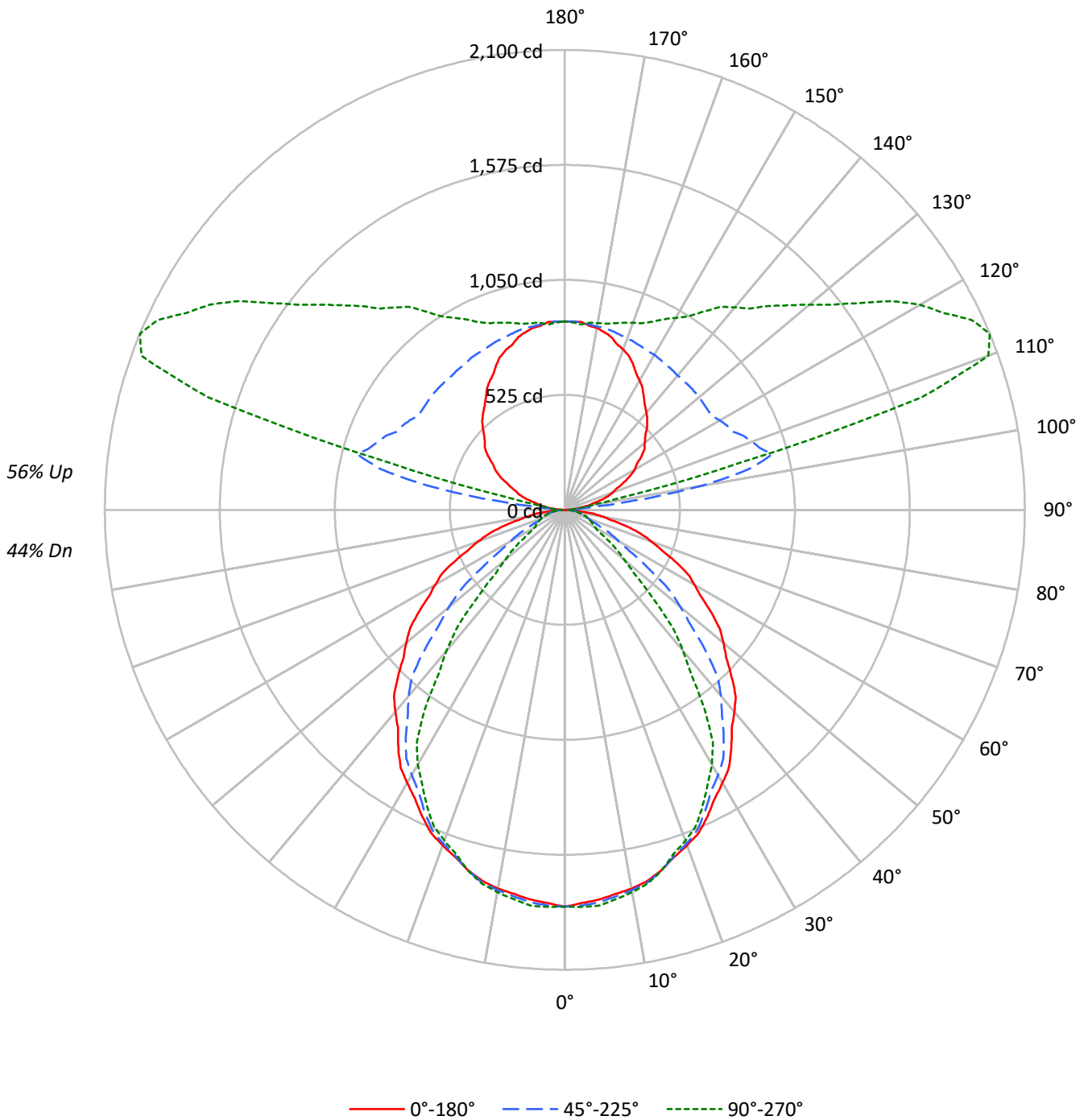
Lumens per Lamp: N/A
Luminaire Lumens: 8319.4 lumens
Efficiency: N/A
Efficacy: 123.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 67.4
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: P621546
CATALOG NUMBER: VLT-F-125U-100D-940-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P621546

CATALOG NUMBER: VLT-F-125U-100D-940-UNV-STD-W-4

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	80	80	80	65	65	65	51	51	51	44		
1	97	93	89	86	89	85	82	80	71	69	67	58	57	55	46	45	44	39		
2	89	82	76	71	81	75	71	66	63	60	57	52	49	47	41	40	38	33		
3	82	73	66	60	75	67	61	56	56	52	48	46	43	41	37	35	33	29		
4	75	65	57	52	69	60	53	48	50	46	42	42	38	35	34	31	29	26		
5	69	58	50	44	63	54	47	42	45	40	36	38	34	31	31	28	26	23		
6	64	52	44	39	58	48	41	37	41	36	32	34	30	27	28	25	23	20		
7	59	47	40	34	54	44	37	32	37	32	28	31	27	24	26	23	21	18		
8	55	43	36	30	50	40	33	29	34	29	25	29	25	22	24	21	19	16		
9	51	39	32	27	47	37	30	26	31	26	23	27	23	20	22	19	17	15		
10	48	36	29	24	44	34	27	23	29	24	21	25	21	18	20	18	16	14		

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: P621546

CATALOG NUMBER: VLT-F-125U-100D-940-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.8	2.1
10°-20°	480.2	5.8
20°-30°	698.5	8.4
30°-40°	772.8	9.3
40°-50°	663.4	8.0
50°-60°	459.4	5.5
60°-70°	273.7	3.3
70°-80°	134.9	1.6
80°-90°	43.6	0.5
90°-100°	105.8	1.3
100°-110°	753.9	9.1
110°-120°	1023.4	12.3
120°-130°	833.0	10.0
130°-140°	670.0	8.1
140°-150°	528.2	6.3
150°-160°	386.2	4.6
160°-170°	239.9	2.9
170°-180°	81.8	1.0
0°-30°	1349.5	16.2
0°-40°	2122.2	25.5
0°-60°	3245.0	39.0
0°-90°	3697.2	44.4
90°-120°	1883.1	22.6
90°-150°	3914.2	47.0
90°-180°	4622.0	55.6
0°-180°	8319.4	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	5	11	16	16	5
95°	43	80	43	49	60	48
105°	168	258	980	1251	828	177
115°	298	361	844	1755	2051	295
125°	428	486	796	1391	1645	380
135°	530	588	801	1146	1315	408
145°	628	681	806	998	1104	394
155°	736	762	823	905	947	338
165°	817	828	844	866	882	229
175°	860	866	860	855	850	81
180°	860	860	860	860	860	

TEST NUMBER: P621546

CATALOG NUMBER: VLT-F-125U-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	17.7	18.6	16.7	15.2
90°	0.0	5.3	10.8	16.2	16.2
92.5°	13.0	18.3	23.8	33.6	37.9
95°	43.3	80.3	43.3	48.9	59.5
97.5°	76.8	154.1	318.2	93.9	81.2
100°	102.8	192.8	638.6	188.0	124.5
102.5°	128.8	223.0	863.7	496.0	271.7
105°	167.8	257.7	979.5	1251.3	828.0
107.5°	206.7	274.5	935.1	1821.1	1705.8
110°	232.7	296.2	909.2	1913.6	2056.4



TEST NUMBER: P621546

CATALOG NUMBER: VLT-F-125U-100D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	258.7	322.2	883.2	1859.5	2099.7
115°	297.6	361.1	844.2	1754.7	2051.0
117.5°	337.7	400.1	834.5	1641.2	1946.0
120°	368.0	426.2	817.2	1554.9	1872.4
122.5°	389.6	452.1	795.5	1480.8	1772.9
125°	427.5	485.7	795.5	1391.2	1645.1
127.5°	458.9	518.2	796.6	1287.2	1538.0
130°	476.2	539.7	800.9	1217.6	1455.7
132.5°	497.9	561.4	800.9	1186.4	1382.1
135°	530.3	588.5	800.9	1145.7	1315.0
137.5°	557.4	619.8	800.9	1100.8	1245.8
140°	579.0	637.3	800.9	1074.5	1206.8
142.5°	600.7	654.7	805.3	1044.0	1167.8
145°	627.8	680.7	806.3	998.1	1104.0
147.5°	660.2	706.8	812.8	965.1	1046.6
150°	681.9	724.2	817.2	943.2	1012.0
152.5°	703.5	741.6	817.2	925.6	981.7
155°	736.0	762.4	822.6	904.7	947.0
157.5°	762.0	787.4	829.1	891.5	922.1
160°	779.3	800.4	833.4	882.7	909.2
162.5°	792.3	813.4	837.7	878.2	896.2
165°	817.2	827.7	844.2	866.2	882.1
167.5°	831.2	840.8	849.6	860.7	870.2
170°	844.2	849.5	849.6	860.6	865.9
172.5°	848.5	858.1	854.0	856.2	861.5
175°	860.5	865.7	860.5	854.9	849.6
177.5°	860.5	864.7	860.5	860.4	856.1
180°	860.5	860.5	860.5	860.5	860.5



TEST NUMBER: P621546

CATALOG NUMBER: VLT-F-125U-100D-940-UNV-STD-W-4

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	15.99	16.76	17.00	17.78	19.13	8.22	8.99	9.24	10.01	11.36
	3H	17.48	18.16	18.50	19.19	20.56	9.57	10.26	10.59	11.28	12.66
	4H	17.99	18.64	19.02	19.66	21.05	10.22	10.87	11.26	11.90	13.28
	6H	18.38	18.98	19.42	20.01	21.40	10.80	11.40	11.85	12.43	13.83
	8H	18.51	19.08	19.56	20.12	21.51	11.03	11.60	12.08	12.64	14.03
	12H	18.59	19.13	19.64	20.17	21.58	11.19	11.73	12.24	12.77	14.18
4H	2H	15.81	16.46	16.85	17.49	18.87	8.83	9.48	9.87	10.51	11.89
	3H	17.44	17.98	18.49	19.03	20.43	10.37	10.91	11.42	11.97	13.36
	4H	18.02	18.52	19.08	19.57	20.98	11.16	11.66	12.22	12.71	14.12
	6H	18.51	18.94	19.58	20.01	21.42	11.90	12.32	12.96	13.39	14.80
	8H	18.70	19.09	19.76	20.16	21.58	12.19	12.59	13.26	13.65	15.07
	12H	18.82	19.18	19.91	20.26	21.69	12.40	12.76	13.49	13.84	15.27
8H	4H	17.93	18.33	19.00	19.39	20.82	11.61	12.01	12.68	13.07	14.50
	6H	18.47	18.79	19.56	19.90	21.32	12.49	12.82	13.58	13.92	15.35
	8H	18.70	18.99	19.80	20.08	21.52	12.89	13.17	13.98	14.26	15.70
	12H	18.89	19.14	19.99	20.22	21.71	13.20	13.46	14.30	14.54	16.02
12H	4H	17.88	18.24	18.96	19.32	20.75	11.66	12.02	12.74	13.09	14.52
	6H	18.44	18.73	19.53	19.81	21.26	12.61	12.89	13.70	13.98	15.42
	8H	18.68	18.93	19.78	20.01	21.50	13.05	13.30	14.14	14.38	15.86