

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: P621423

Luminaire Tested: VLT-F-025U-100D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621423
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-025U-100D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

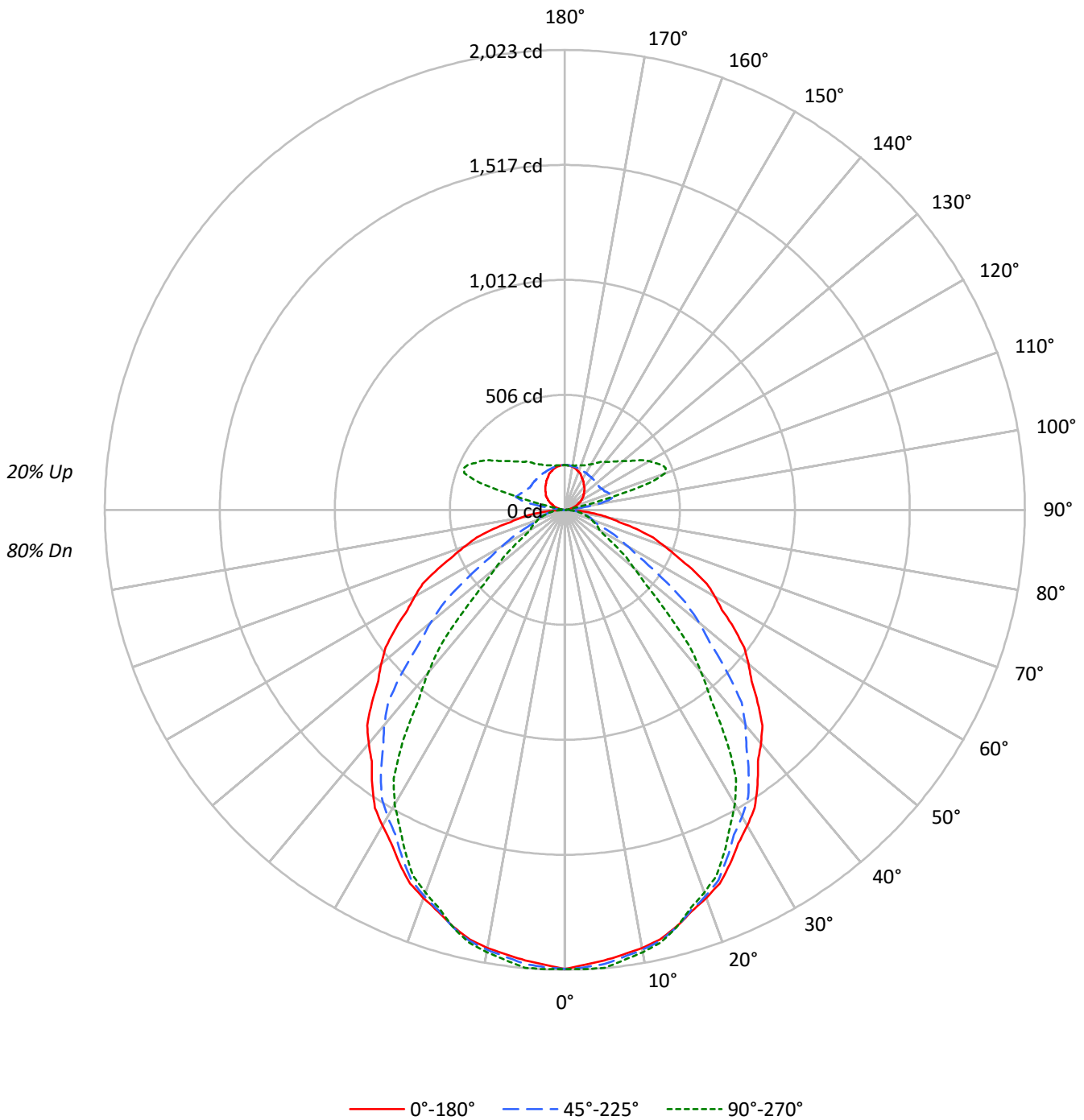
Lumens per Lamp: N/A
Luminaire Lumens: 5176.4 lumens
Efficiency: N/A
Efficacy: 138.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 37.5
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: P621423
CATALOG NUMBER: VLT-F-025U-100D-840-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P621423

CATALOG NUMBER: VLT-F-025U-100D-840-UNV-STD-W-4

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	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83	80				
1	106	101	98	94	101	97	94	91	89	87	84	82	80	78	75	74	73	69				
2	97	90	84	79	93	86	81	77	80	76	72	73	70	67	68	65	63	60				
3	89	80	73	67	85	77	71	66	71	66	62	66	62	58	61	58	55	52				
4	82	72	64	58	79	69	62	57	64	58	54	60	55	51	55	52	48	46				
5	76	65	57	51	73	63	55	50	58	52	47	54	49	45	50	46	43	40				
6	71	59	51	45	68	57	49	44	53	47	42	49	44	40	46	42	38	36				
7	66	54	46	40	63	52	44	39	49	42	38	45	40	36	43	38	34	32				
8	61	49	41	36	59	48	40	35	45	38	34	42	37	33	39	35	31	29				
9	57	45	38	33	55	44	37	32	41	35	31	39	33	30	36	32	28	27				
10	54	42	35	30	52	41	34	29	38	32	28	36	31	27	34	29	26	24				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14490	14490	14490
5°	14335	14441	14561
10°	14258	14319	14395
15°	14103	14118	14118
20°	13875	13811	13684
25°	13610	13379	13147
30°	13293	12912	12393
35°	12938	12354	10873
40°	12565	11569	8755
45°	12173	10247	6351
50°	11761	8570	4402
55°	11352	6524	3288
60°	10928	4521	2484
65°	10449	3223	2550
70°	9760	2713	2627
75°	9022	2775	2662
80°	7843	2930	2760
85°	6356	3260	2750

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12173 cd/sqm



TEST NUMBER: P621423

CATALOG NUMBER: VLT-F-025U-100D-840-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.3	3.7
10°-20°	535.1	10.3
20°-30°	778.3	15.0
30°-40°	861.1	16.6
40°-50°	739.3	14.3
50°-60°	511.9	9.9
60°-70°	305.0	5.9
70°-80°	150.3	2.9
80°-90°	46.8	0.9
90°-100°	24.2	0.5
100°-110°	172.6	3.3
110°-120°	234.3	4.5
120°-130°	190.7	3.7
130°-140°	153.4	3.0
140°-150°	120.9	2.3
150°-160°	88.4	1.7
160°-170°	54.9	1.1
170°-180°	18.7	0.4
0°-30°	1503.7	29.0
0°-40°	2364.8	45.7
0°-60°	3616.0	69.9
0°-90°	4118.1	79.6
90°-120°	431.2	8.3
90°-150°	896.2	17.3
90°-180°	1058.0	20.4
0°-180°	5176.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2019	2019	2019	2019	2019	
5°	1990	2021	2005	2003	2021	189
15°	1898	1923	1900	1890	1900	534
25°	1719	1731	1690	1660	1660	791
35°	1477	1473	1410	1296	1241	923
45°	1200	1179	1010	730	626	925
55°	907	869	522	300	263	811
65°	615	495	190	152	150	609
75°	325	142	100	98	96	343
85°	77	38	40	35	33	89
90°	0	1	2	4	4	4
95°	10	18	10	11	14	11
105°	38	59	224	286	190	40
115°	68	83	193	402	470	68
125°	98	111	182	318	377	87
135°	121	135	183	262	301	93
145°	144	156	185	228	253	90
155°	168	175	188	207	217	77
165°	187	190	193	198	202	53
175°	197	198	197	196	194	19
180°	197	197	197	197	197	



TEST NUMBER: P621423

CATALOG NUMBER: VLT-F-025U-100D-840-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2019.3	2019.3	2019.3	2019.3	2019.3
2.5°	2002.6	2025.5	2014.3	2014.5	2022.7
5°	1990.1	2020.7	2004.7	2003.0	2021.4
7.5°	1971.8	1999.9	1983.4	1981.3	1997.2
10°	1956.7	1983.3	1965.1	1961.2	1975.5
12.5°	1935.0	1961.6	1941.7	1934.5	1948.8
15°	1898.3	1922.8	1900.4	1890.2	1900.4
17.5°	1852.0	1872.4	1847.0	1830.9	1837.0
20°	1817.0	1837.4	1808.6	1785.8	1791.9
22.5°	1778.6	1795.7	1763.6	1737.4	1741.9
25°	1718.9	1731.2	1689.7	1660.5	1660.5
27.5°	1652.6	1659.9	1611.7	1581.1	1572.5
30°	1604.2	1608.3	1558.3	1522.2	1495.7
32.5°	1554.1	1556.6	1499.9	1441.8	1400.6
35°	1476.9	1472.9	1410.2	1296.3	1241.2
37.5°	1394.8	1385.8	1311.7	1138.4	1056.4
40°	1341.3	1329.1	1235.0	1026.3	934.6
42.5°	1286.3	1269.1	1149.8	911.0	809.4
45°	1199.5	1179.1	1009.7	729.8	625.8
47.5°	1113.5	1086.6	866.1	565.4	476.0
50°	1053.5	1024.9	767.7	465.7	394.3
52.5°	993.4	964.8	667.5	390.9	334.2
55°	907.4	868.7	521.5	299.6	262.8
57.5°	819.8	764.3	388.4	233.4	204.9
60°	761.4	688.0	315.0	193.5	173.1
62.5°	704.7	611.7	258.3	168.9	164.8
65°	615.4	495.0	189.8	152.2	150.2
67.5°	530.3	377.7	141.0	137.2	135.2
70°	465.2	297.9	129.3	127.2	125.2
72.5°	406.8	228.1	117.7	115.5	113.5
75°	325.4	141.9	100.1	98.0	96.0
77.5°	243.2	89.4	82.6	80.5	78.4
80°	189.8	73.6	70.9	68.8	66.8
82.5°	143.1	59.5	57.6	55.4	53.4
85°	77.2	38.4	39.6	35.4	33.4
87.5°	26.7	18.8	18.9	15.7	14.1
90°	0.0	1.2	2.5	3.7	3.7
92.5°	3.0	4.2	5.5	7.7	8.7
95°	9.9	18.4	9.9	11.2	13.6
97.5°	17.6	35.3	72.9	21.5	18.6
100°	23.5	44.1	146.2	43.0	28.5
102.5°	29.5	51.1	197.8	113.6	62.2
105°	38.4	59.0	224.3	286.5	189.6
107.5°	47.3	62.8	214.1	417.0	390.5
110°	53.3	67.8	208.2	438.1	470.8



TEST NUMBER: P621423

CATALOG NUMBER: VLT-F-025U-100D-840-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	59.2	73.8	202.2	425.7	480.7
115°	68.1	82.7	193.3	401.8	469.6
117.5°	77.3	91.6	191.1	375.8	445.6
120°	84.3	97.6	187.1	356.0	428.7
122.5°	89.2	103.5	182.1	339.0	405.9
125°	97.9	111.2	182.1	318.5	376.7
127.5°	105.1	118.6	182.4	294.7	352.1
130°	109.0	123.6	183.4	278.8	333.3
132.5°	114.0	128.5	183.4	271.6	316.4
135°	121.4	134.8	183.4	262.3	301.1
137.5°	127.6	141.9	183.4	252.0	285.2
140°	132.6	145.9	183.4	246.0	276.3
142.5°	137.5	149.9	184.4	239.0	267.4
145°	143.7	155.8	184.6	228.5	252.8
147.5°	151.2	161.8	186.1	221.0	239.6
150°	156.1	165.8	187.1	216.0	231.7
152.5°	161.1	169.8	187.1	211.9	224.8
155°	168.5	174.6	188.3	207.1	216.8
157.5°	174.5	180.3	189.8	204.1	211.1
160°	178.4	183.3	190.8	202.1	208.2
162.5°	181.4	186.2	191.8	201.1	205.2
165°	187.1	189.5	193.3	198.3	202.0
167.5°	190.3	192.5	194.5	197.1	199.2
170°	193.3	194.5	194.5	197.0	198.2
172.5°	194.3	196.5	195.5	196.0	197.3
175°	197.0	198.2	197.0	195.7	194.5
177.5°	197.0	198.0	197.0	197.0	196.0
180°	197.0	197.0	197.0	197.0	197.0



TEST NUMBER: P621423

CATALOG NUMBER: VLT-F-025U-100D-840-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	19.35	20.46	20.01	21.13	21.91	11.58	12.70	12.25	13.37	14.15
	3H	20.86	21.86	21.54	22.54	23.35	12.95	13.95	13.63	14.63	15.45
	4H	21.39	22.32	22.08	23.02	23.84	13.62	14.56	14.32	15.25	16.08
	6H	21.80	22.66	22.51	23.36	24.20	14.22	15.08	14.93	15.79	16.63
	8H	21.93	22.75	22.66	23.48	24.32	14.46	15.27	15.18	16.00	16.84
	12H	22.02	22.80	22.75	23.52	24.39	14.63	15.41	15.36	16.13	17.00
4H	2H	19.21	20.14	19.91	20.84	21.67	12.23	13.16	12.93	13.86	14.69
	3H	20.87	21.64	21.58	22.37	23.22	13.80	14.58	14.52	15.31	16.15
	4H	21.47	22.17	22.20	22.90	23.78	14.61	15.31	15.34	16.04	16.92
	6H	21.97	22.58	22.72	23.34	24.22	15.36	15.96	16.11	16.72	17.61
	8H	22.16	22.73	22.92	23.48	24.38	15.66	16.22	16.41	16.98	17.87
	12H	22.30	22.81	23.08	23.59	24.49	15.89	16.39	16.66	17.17	18.07
8H	4H	21.40	21.97	22.15	22.72	23.62	15.08	15.64	15.83	16.40	17.29
	6H	21.94	22.41	22.73	23.21	24.11	15.97	16.44	16.75	17.24	18.13
	8H	22.18	22.59	22.97	23.39	24.31	16.36	16.78	17.16	17.58	18.49
	12H	22.38	22.74	23.17	23.53	24.51	16.69	17.06	17.49	17.85	18.82
12H	4H	21.36	21.87	22.13	22.65	23.55	15.14	15.64	15.91	16.42	17.33
	6H	21.92	22.33	22.71	23.13	24.04	16.08	16.50	16.88	17.30	18.21
	8H	22.17	22.54	22.96	23.32	24.30	16.54	16.90	17.33	17.69	18.67