

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: P621448

Luminaire Tested: VLT-F-050U-100D-930-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621448
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-050U-100D-930-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

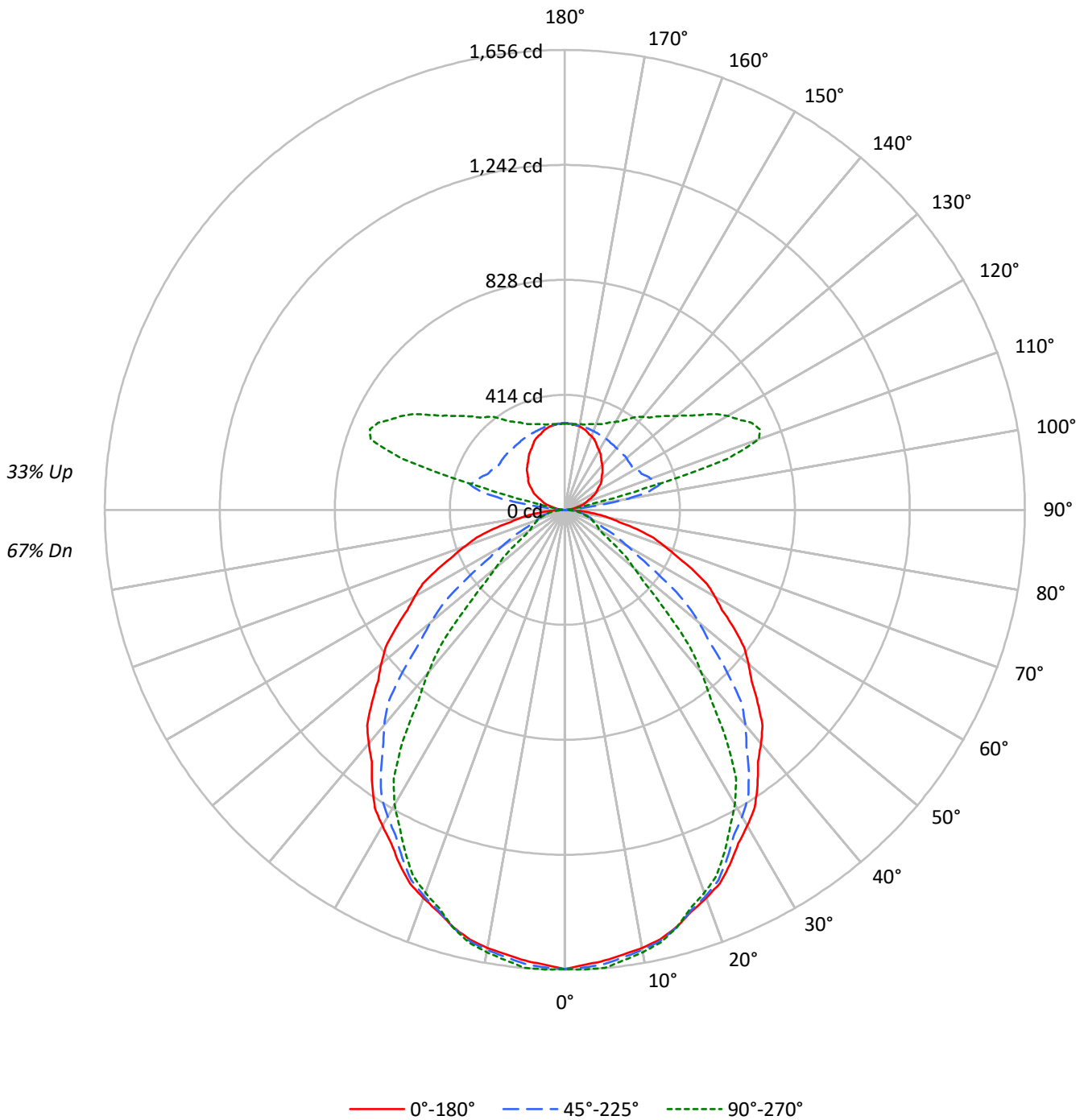
Lumens per Lamp: N/A
Luminaire Lumens: 5044.4 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 43.8
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: P621448
CATALOG NUMBER: VLT-F-050U-100D-930-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P621448

CATALOG NUMBER: VLT-F-050U-100D-930-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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67		
1	102	98	95	91	96	93	90	87	83	80	78	73	72	70	65	64	62	58		
2	94	87	81	76	89	82	77	73	74	70	66	66	63	60	58	56	54	50		
3	87	77	70	65	81	73	67	62	66	61	57	59	55	52	52	50	47	44		
4	80	69	62	56	75	66	59	54	59	54	49	53	49	45	48	44	41	38		
5	74	62	54	49	69	59	52	47	54	48	43	48	44	40	43	40	37	34		
6	68	56	48	43	64	54	47	41	49	43	38	44	39	36	40	36	33	30		
7	63	51	43	38	60	49	42	37	44	39	34	40	35	32	36	32	29	27		
8	59	47	39	34	56	45	38	33	41	35	31	37	32	29	34	30	27	25		
9	55	43	36	31	52	41	34	30	38	32	28	34	30	26	31	27	24	22		
10	52	40	33	28	49	38	31	27	35	29	25	32	27	24	29	25	22	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11865	11865	11865
5°	11738	11824	11922
10°	11674	11724	11786
15°	11547	11560	11560
20°	11361	11309	11204
25°	11143	10954	10765
30°	10884	10572	10148
35°	10594	10115	8903
40°	10288	9472	7168
45°	9967	8390	5200
50°	9630	7018	3604
55°	9296	5342	2692
60°	8947	3701	2035
65°	8556	2639	2089
70°	7992	2222	2151
75°	7389	2274	2179
80°	6422	2401	2260
85°	5204	2676	2248

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9967 cd/sqm



TEST NUMBER: P621448

CATALOG NUMBER: VLT-F-050U-100D-930-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.8	3.1
10°-20°	438.1	8.7
20°-30°	637.3	12.6
30°-40°	705.0	14.0
40°-50°	605.3	12.0
50°-60°	419.1	8.3
60°-70°	249.7	5.0
70°-80°	123.0	2.4
80°-90°	38.7	0.8
90°-100°	38.3	0.8
100°-110°	272.7	5.4
110°-120°	370.3	7.3
120°-130°	301.4	6.0
130°-140°	242.4	4.8
140°-150°	191.1	3.8
150°-160°	139.7	2.8
160°-170°	86.8	1.7
170°-180°	29.6	0.6
0°-30°	1231.2	24.4
0°-40°	1936.2	38.4
0°-60°	2960.7	58.7
0°-90°	3372.2	66.8
90°-120°	681.3	13.5
90°-150°	1416.2	28.1
90°-180°	1672.0	33.1
0°-180°	5044.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1653	1653	1653	1653	1653	
5°	1630	1654	1641	1640	1655	155
15°	1554	1574	1556	1548	1556	438
25°	1407	1417	1384	1360	1360	647
35°	1209	1206	1155	1061	1016	756
45°	982	965	827	598	512	758
55°	743	711	427	245	215	664
65°	504	405	155	125	123	499
75°	266	116	82	80	79	281
85°	63	32	32	29	27	73
90°	0	2	4	6	6	4
95°	16	29	16	18	22	18
105°	61	93	354	453	300	64
115°	108	131	305	635	742	107
125°	155	176	288	503	595	137
135°	192	213	290	414	476	148
145°	227	246	292	361	399	143
155°	266	276	298	327	343	122
165°	296	300	305	313	319	83
175°	311	313	311	309	307	29
180°	311	311	311	311	311	

TEST NUMBER: P621448

CATALOG NUMBER: VLT-F-050U-100D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1653.4	1653.4	1653.4	1653.4	1653.4
2.5°	1639.7	1658.4	1649.3	1649.4	1656.1
5°	1629.5	1654.5	1641.4	1640.1	1655.1
7.5°	1614.4	1637.5	1624.0	1622.2	1635.3
10°	1602.1	1623.9	1609.0	1605.8	1617.5
12.5°	1584.4	1606.1	1589.8	1584.0	1595.6
15°	1554.3	1574.4	1556.0	1547.7	1556.0
17.5°	1516.4	1533.1	1512.3	1499.1	1504.1
20°	1487.7	1504.4	1480.9	1462.2	1467.2
22.5°	1456.3	1470.3	1444.0	1422.5	1426.2
25°	1407.4	1417.4	1383.5	1359.6	1359.6
27.5°	1353.1	1359.1	1319.6	1294.5	1287.5
30°	1313.5	1316.8	1275.9	1246.4	1224.7
32.5°	1272.5	1274.5	1228.1	1180.5	1146.8
35°	1209.3	1206.0	1154.6	1061.4	1016.3
37.5°	1142.0	1134.6	1074.0	932.1	865.0
40°	1098.3	1088.2	1011.2	840.4	765.2
42.5°	1053.2	1039.1	941.5	745.9	662.7
45°	982.1	965.4	826.7	597.6	512.4
47.5°	911.8	889.7	709.2	462.9	389.8
50°	862.6	839.2	628.6	381.3	322.8
52.5°	813.4	790.0	546.6	320.1	273.6
55°	743.0	711.3	427.0	245.3	215.2
57.5°	671.3	625.8	318.0	191.1	167.7
60°	623.4	563.3	257.9	158.5	141.8
62.5°	577.0	500.8	211.5	138.3	134.9
65°	503.9	405.3	155.4	124.6	123.0
67.5°	434.2	309.3	115.5	112.4	110.7
70°	380.9	243.9	105.9	104.2	102.5
72.5°	333.1	186.8	96.3	94.6	92.9
75°	266.5	116.1	82.0	80.2	78.6
77.5°	199.2	73.2	67.6	65.9	64.2
80°	155.4	60.2	58.1	56.3	54.7
82.5°	117.2	48.7	47.1	45.4	43.7
85°	63.2	31.5	32.5	29.0	27.3
87.5°	21.9	15.6	15.8	13.4	12.1
90°	0.0	1.9	3.9	5.9	5.9
92.5°	4.7	6.6	8.6	12.2	13.7
95°	15.7	29.1	15.7	17.7	21.5
97.5°	27.8	55.8	115.1	34.0	29.4
100°	37.2	69.7	231.0	68.0	45.0
102.5°	46.6	80.7	312.5	179.5	98.3
105°	60.7	93.2	354.4	452.7	299.6
107.5°	74.8	99.3	338.3	658.9	617.1
110°	84.2	107.2	328.9	692.3	744.0



TEST NUMBER: P621448

CATALOG NUMBER: VLT-F-050U-100D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	93.6	116.6	319.5	672.7	759.7
115°	107.7	130.7	305.4	634.8	742.0
117.5°	122.2	144.8	301.9	593.8	704.1
120°	133.1	154.2	295.6	562.6	677.4
122.5°	141.0	163.6	287.8	535.7	641.4
125°	154.7	175.7	287.8	503.3	595.2
127.5°	166.0	187.5	288.2	465.7	556.4
130°	172.3	195.3	289.8	440.5	526.7
132.5°	180.1	203.1	289.8	429.2	500.0
135°	191.9	212.9	289.8	414.5	475.8
137.5°	201.7	224.3	289.8	398.2	450.7
140°	209.5	230.6	289.8	388.7	436.6
142.5°	217.3	236.9	291.3	377.7	422.5
145°	227.1	246.3	291.7	361.1	399.4
147.5°	238.9	255.7	294.1	349.2	378.7
150°	246.7	262.0	295.6	341.2	366.1
152.5°	254.5	268.3	295.6	334.9	355.2
155°	266.3	275.8	297.6	327.3	342.6
157.5°	275.7	284.9	299.9	322.5	333.6
160°	281.9	289.6	301.5	319.4	328.9
162.5°	286.6	294.3	303.1	317.7	324.2
165°	295.6	299.5	305.4	313.4	319.1
167.5°	300.7	304.2	307.4	311.4	314.8
170°	305.4	307.3	307.4	311.3	313.3
172.5°	307.0	310.4	309.0	309.8	311.7
175°	311.3	313.2	311.3	309.3	307.4
177.5°	311.3	312.8	311.3	311.3	309.7
180°	311.3	311.3	311.3	311.3	311.3



TEST NUMBER: P621448

CATALOG NUMBER: VLT-F-050U-100D-930-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	17.67	18.63	18.48	19.46	20.47	9.90	10.87	10.71	11.69	12.70
	3H	19.17	20.03	20.00	20.87	21.91	11.27	12.13	12.09	12.96	14.00
	4H	19.69	20.50	20.53	21.34	22.39	11.93	12.74	12.77	13.58	14.63
	6H	20.09	20.84	20.94	21.69	22.75	12.52	13.27	13.37	14.11	15.18
	8H	20.23	20.94	21.09	21.80	22.87	12.75	13.46	13.61	14.32	15.39
	12H	20.31	20.99	21.18	21.84	22.94	12.92	13.59	13.78	14.45	15.54
4H	2H	17.51	18.32	18.36	19.16	20.22	10.53	11.34	11.38	12.18	13.24
	3H	19.16	19.83	20.01	20.70	21.77	12.10	12.77	12.95	13.64	14.71
	4H	19.75	20.36	20.62	21.23	22.33	12.90	13.50	13.76	14.38	15.47
	6H	20.25	20.78	21.13	21.67	22.77	13.64	14.16	14.52	15.06	16.16
	8H	20.44	20.93	21.33	21.82	22.93	13.93	14.42	14.82	15.31	16.42
	12H	20.57	21.01	21.48	21.92	23.04	14.15	14.59	15.06	15.50	16.62
8H	4H	19.68	20.17	20.56	21.06	22.17	13.36	13.85	14.24	14.74	15.85
	6H	20.22	20.62	21.13	21.55	22.66	14.24	14.65	15.15	15.58	16.69
	8H	20.45	20.81	21.37	21.73	22.86	14.64	14.99	15.56	15.92	17.05
	12H	20.64	20.96	21.57	21.88	23.06	14.96	15.28	15.88	16.19	17.37
12H	4H	19.63	20.07	20.54	20.98	22.10	13.41	13.85	14.31	14.76	15.88
	6H	20.19	20.55	21.11	21.47	22.60	14.36	14.71	15.28	15.64	16.77
	8H	20.43	20.75	21.36	21.67	22.85	14.80	15.12	15.73	16.04	17.22