

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: P621518

Luminaire Tested: VLT-F-100U-100D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621518
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-100U-100D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

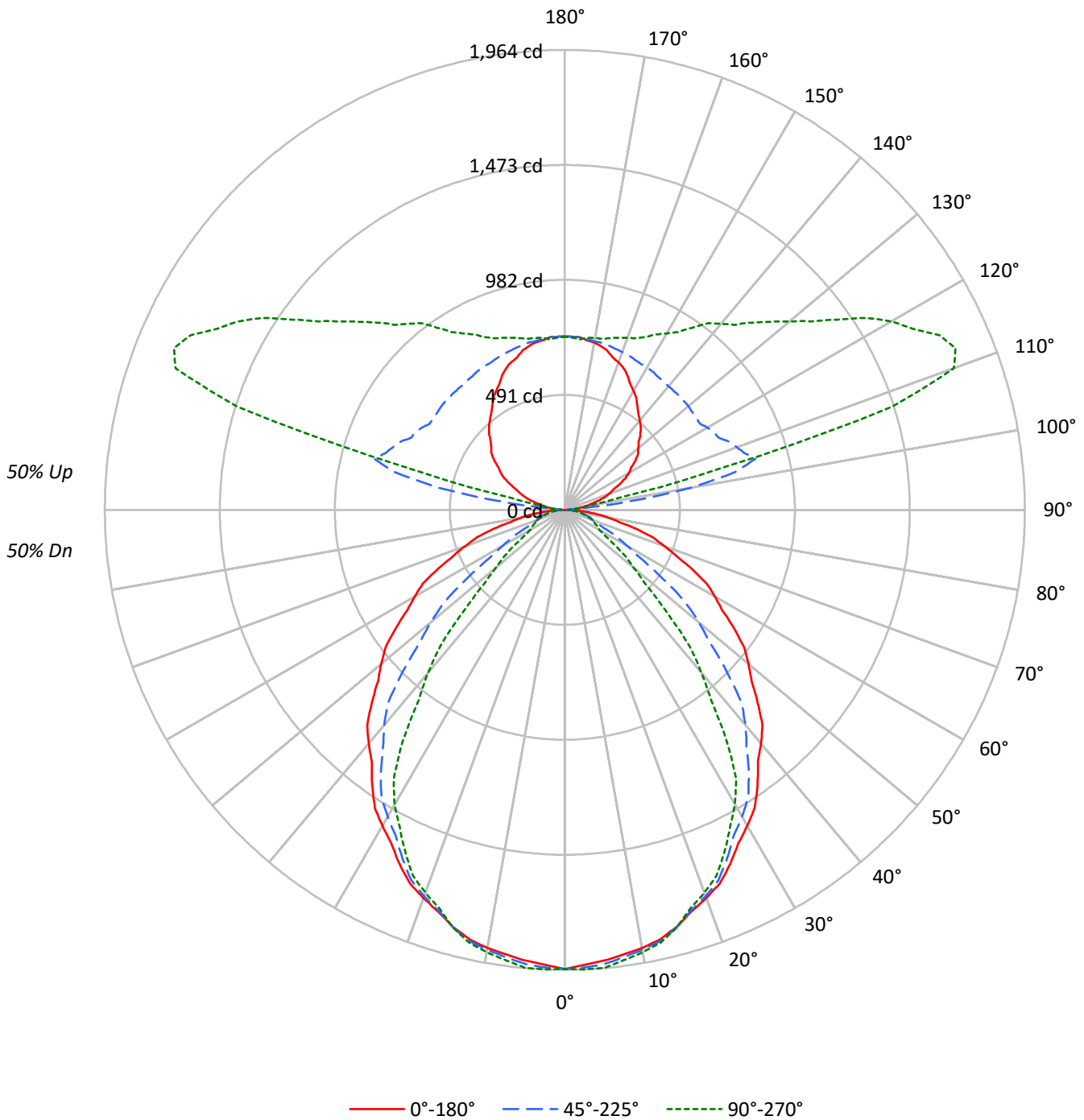
Lumens per Lamp: N/A
Luminaire Lumens: 7975.2 lumens
Efficiency: N/A
Efficacy: 137.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.2
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					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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	99	94	91	88	91	87	84	81	74	72	70	62	60	59	51	50	49	44				
2	90	83	78	73	83	77	72	68	66	62	59	55	53	50	46	44	42	38				
3	83	74	67	61	76	69	63	58	59	54	51	50	46	44	41	39	37	33				
4	76	66	58	53	70	61	55	50	53	48	44	45	41	38	37	35	32	29				
5	70	59	51	46	65	55	48	43	47	42	38	40	36	33	34	31	29	25				
6	65	53	45	40	60	50	43	38	43	38	34	37	33	30	31	28	26	23				
7	60	48	41	35	56	45	38	33	39	34	30	34	29	26	28	25	23	20				
8	56	44	36	31	52	41	34	30	36	31	27	31	27	24	26	23	21	18				
9	52	40	33	28	48	38	31	27	33	28	24	29	24	21	24	21	19	17				
10	49	37	30	25	45	35	28	24	30	25	22	26	22	20	23	20	17	15				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14071	14071	14071
5°	13920	14023	14139
10°	13845	13904	13978
15°	13695	13710	13710
20°	13474	13412	13288
25°	13216	12991	12767
30°	12908	12538	12035
35°	12564	11996	10559
40°	12201	11234	8501
45°	11821	9949	6167
50°	11421	8323	4275
55°	11025	6336	3193
60°	10612	4390	2413
65°	10147	3129	2476
70°	9477	2635	2549
75°	8761	2695	2584
80°	7616	2847	2678
85°	6175	3170	2668

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11821 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.8	2.3
10°-20°	519.6	6.5
20°-30°	755.8	9.5
30°-40°	836.2	10.5
40°-50°	717.9	9.0
50°-60°	497.1	6.2
60°-70°	296.2	3.7
70°-80°	145.9	1.8
80°-90°	46.7	0.6
90°-100°	91.0	1.1
100°-110°	648.3	8.1
110°-120°	880.2	11.0
120°-130°	716.4	9.0
130°-140°	576.2	7.2
140°-150°	454.2	5.7
150°-160°	332.1	4.2
160°-170°	206.3	2.6
170°-180°	70.3	0.9
0°-30°	1460.2	18.3
0°-40°	2296.3	28.8
0°-60°	3511.3	44.0
0°-90°	4000.1	50.2
90°-120°	1619.5	20.3
90°-150°	3366.3	42.2
90°-180°	3975.0	49.8
0°-180°	7975.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1961	1961	1961	1961	1961	
5°	1932	1962	1947	1945	1963	183
15°	1843	1867	1845	1836	1845	519
25°	1669	1681	1641	1612	1612	768
35°	1434	1430	1369	1259	1205	896
45°	1165	1145	980	709	608	899
55°	881	844	506	291	255	788
65°	598	481	184	148	146	592
75°	316	138	97	95	93	334
85°	75	37	38	34	32	87
90°	0	5	9	14	14	5
95°	37	69	37	42	51	42
105°	144	222	842	1076	712	152
115°	256	311	726	1509	1764	254
125°	368	418	684	1196	1415	327
135°	456	506	689	985	1131	351
145°	540	585	693	858	949	339
155°	633	656	707	778	814	291
165°	703	712	726	745	759	197
175°	740	744	740	735	731	70
180°	740	740	740	740	740	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1960.9	1960.9	1960.9	1960.9	1960.9
2.5°	1944.7	1966.8	1956.0	1956.2	1964.1
5°	1932.5	1962.2	1946.7	1945.1	1962.9
7.5°	1914.7	1942.0	1926.0	1923.9	1939.4
10°	1900.1	1925.8	1908.2	1904.5	1918.3
12.5°	1879.0	1904.8	1885.5	1878.5	1892.4
15°	1843.4	1867.1	1845.4	1835.5	1845.4
17.5°	1798.4	1818.2	1793.5	1777.9	1783.8
20°	1764.4	1784.2	1756.3	1734.1	1740.1
22.5°	1727.1	1743.7	1712.5	1687.1	1691.4
25°	1669.2	1681.0	1640.8	1612.4	1612.4
27.5°	1604.7	1611.9	1565.0	1535.3	1527.0
30°	1557.8	1561.7	1513.2	1478.2	1452.4
32.5°	1509.1	1511.5	1456.5	1400.1	1360.0
35°	1434.2	1430.2	1369.4	1258.8	1205.3
37.5°	1354.4	1345.7	1273.8	1105.4	1025.8
40°	1302.5	1290.6	1199.2	996.6	907.5
42.5°	1249.0	1232.4	1116.6	884.6	786.0
45°	1164.8	1145.0	980.4	708.7	607.7
47.5°	1081.3	1055.2	841.1	549.0	462.3
50°	1023.0	995.2	745.5	452.2	382.9
52.5°	964.6	936.9	648.2	379.6	324.5
55°	881.2	843.5	506.4	290.9	255.2
57.5°	796.1	742.2	377.2	226.7	198.9
60°	739.4	668.1	305.9	187.9	168.1
62.5°	684.3	594.0	250.8	164.0	160.0
65°	597.6	480.7	184.3	147.8	145.8
67.5°	514.9	366.8	136.9	133.2	131.3
70°	451.7	289.3	125.6	123.5	121.5
72.5°	395.0	221.5	114.2	112.2	110.2
75°	316.0	137.7	97.2	95.2	93.2
77.5°	236.2	86.9	80.2	78.1	76.2
80°	184.3	71.4	68.9	66.8	64.8
82.5°	139.0	57.8	55.9	53.8	51.9
85°	75.0	37.3	38.5	34.4	32.4
87.5°	25.9	18.9	19.7	17.3	15.8
90°	0.0	4.6	9.3	14.0	14.0
92.5°	11.2	15.7	20.5	28.9	32.6
95°	37.2	69.1	37.2	42.1	51.2
97.5°	66.1	132.5	273.7	80.7	69.8
100°	88.4	165.8	549.2	161.6	107.0
102.5°	110.8	191.8	742.8	426.6	233.6
105°	144.3	221.6	842.4	1076.1	712.1
107.5°	177.8	236.0	804.2	1566.2	1466.9
110°	200.1	254.7	781.9	1645.7	1768.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	222.5	277.1	759.5	1599.2	1805.8
115°	256.0	310.6	726.0	1509.0	1763.9
117.5°	290.4	344.1	717.7	1411.5	1673.6
120°	316.5	366.5	702.8	1337.3	1610.3
122.5°	335.1	388.8	684.1	1273.5	1524.7
125°	367.7	417.7	684.1	1196.4	1414.8
127.5°	394.7	445.6	685.1	1107.0	1322.7
130°	409.6	464.2	688.8	1047.2	1251.9
132.5°	428.2	482.8	688.8	1020.3	1188.6
135°	456.1	506.2	688.8	985.3	1130.9
137.5°	479.4	533.1	688.8	946.7	1071.4
140°	498.0	548.0	688.8	924.1	1037.8
142.5°	516.6	563.0	692.5	897.9	1004.3
145°	539.9	585.4	693.4	858.4	949.4
147.5°	567.8	607.8	699.0	830.0	900.1
150°	586.4	622.8	702.8	811.1	870.3
152.5°	605.0	637.8	702.8	796.0	844.2
155°	632.9	655.7	707.4	778.0	814.5
157.5°	655.3	677.1	713.0	766.7	793.0
160°	670.2	688.4	716.7	759.1	781.9
162.5°	681.3	699.6	720.4	755.2	770.7
165°	702.8	711.9	726.0	745.0	758.6
167.5°	714.9	723.0	730.7	740.2	748.4
170°	726.0	730.6	730.7	740.1	744.6
172.5°	729.8	737.9	734.4	736.4	740.9
175°	740.0	744.5	740.0	735.2	730.7
177.5°	740.0	743.6	740.0	739.9	736.3
180°	740.0	740.0	740.0	740.0	740.0



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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	16.82	17.64	17.79	18.61	19.88	9.06	9.87	10.02	10.84	12.12
	3H	18.31	19.04	19.29	20.02	21.32	10.41	11.13	11.38	12.11	13.41
	4H	18.82	19.51	19.82	20.50	21.80	11.06	11.74	12.05	12.73	14.03
	6H	19.22	19.85	20.22	20.84	22.16	11.64	12.28	12.65	13.27	14.58
	8H	19.35	19.95	20.36	20.96	22.27	11.87	12.47	12.88	13.48	14.79
	12H	19.43	20.00	20.44	21.00	22.34	12.03	12.60	13.04	13.60	14.94
4H	2H	16.65	17.33	17.64	18.32	19.62	9.67	10.35	10.66	11.34	12.64
	3H	18.28	18.85	19.29	19.86	21.18	11.21	11.78	12.22	12.80	14.12
	4H	18.87	19.39	19.88	20.40	21.74	12.01	12.53	13.02	13.54	14.88
	6H	19.36	19.80	20.38	20.84	22.18	12.75	13.19	13.77	14.22	15.56
	8H	19.54	19.96	20.57	20.99	22.34	13.04	13.45	14.06	14.48	15.83
	12H	19.67	20.05	20.71	21.09	22.44	13.25	13.63	14.29	14.67	16.02
8H	4H	18.78	19.20	19.81	20.22	21.58	12.46	12.88	13.49	13.90	15.25
	6H	19.32	19.66	20.36	20.73	22.08	13.34	13.68	14.39	14.75	16.10
	8H	19.55	19.85	20.61	20.90	22.27	13.74	14.04	14.79	15.09	16.46
	12H	19.74	20.00	20.80	21.05	22.46	14.05	14.32	15.11	15.37	16.78
12H	4H	18.73	19.11	19.77	20.15	21.50	12.51	12.88	13.55	13.92	15.28
	6H	19.29	19.59	20.34	20.64	22.01	13.46	13.76	14.51	14.81	16.18
	8H	19.53	19.79	20.59	20.84	22.25	13.90	14.16	14.96	15.21	16.62