

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: P621520

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

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621520
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-930-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

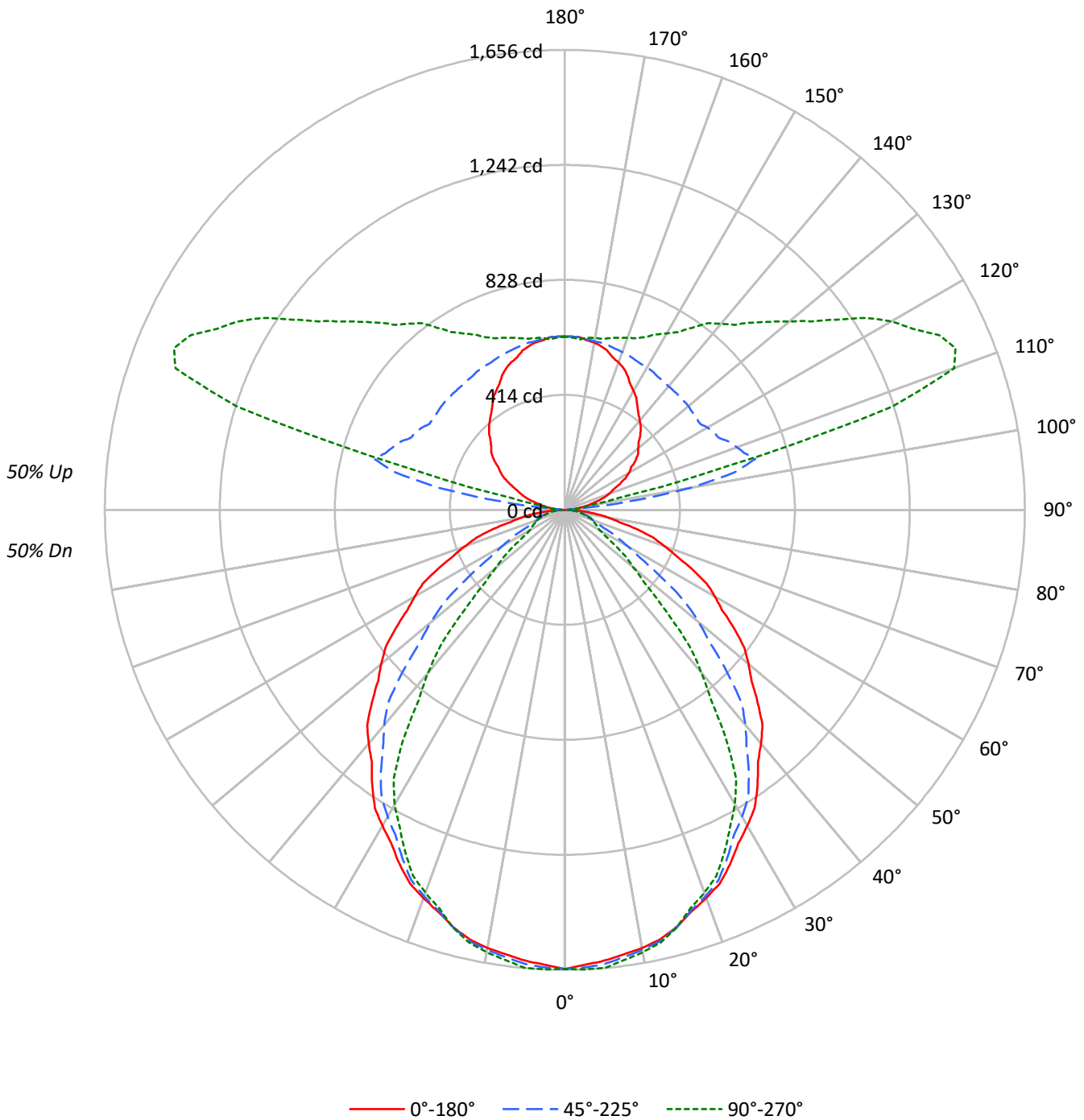
Lumens per Lamp: N/A
Luminaire Lumens: 6724.6 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

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									
RC	80					70					50					30					10				
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°	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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.8	2.3
10°-20°	438.1	6.5
20°-30°	637.3	9.5
30°-40°	705.0	10.5
40°-50°	605.3	9.0
50°-60°	419.1	6.2
60°-70°	249.7	3.7
70°-80°	123.0	1.8
80°-90°	39.4	0.6
90°-100°	76.7	1.1
100°-110°	546.7	8.1
110°-120°	742.1	11.0
120°-130°	604.0	9.0
130°-140°	485.8	7.2
140°-150°	383.0	5.7
150°-160°	280.1	4.2
160°-170°	173.9	2.6
170°-180°	59.3	0.9
0°-30°	1231.2	18.3
0°-40°	1936.2	28.8
0°-60°	2960.7	44.0
0°-90°	3372.9	50.2
90°-120°	1365.5	20.3
90°-150°	2838.4	42.2
90°-180°	3352.0	49.8
0°-180°	6724.6	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	4	8	12	12	4
95°	31	58	31	36	43	35
105°	122	187	710	907	600	128
115°	216	262	612	1272	1487	214
125°	310	352	577	1009	1193	275
135°	385	427	581	831	954	296
145°	455	494	585	724	800	286
155°	534	553	596	656	687	245
165°	593	600	612	628	640	166
175°	624	628	624	620	616	59
180°	624	624	624	624	624	



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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	15.9	16.6	14.6	13.3
90°	0.0	3.8	7.8	11.8	11.8
92.5°	9.4	13.3	17.3	24.4	27.5
95°	31.4	58.3	31.4	35.5	43.2
97.5°	55.7	111.7	230.7	68.1	58.9
100°	74.6	139.8	463.1	136.3	90.3
102.5°	93.4	161.7	626.3	359.7	197.0
105°	121.7	186.9	710.3	907.4	600.4
107.5°	149.9	199.0	678.1	1320.6	1236.9
110°	168.7	214.8	659.3	1387.6	1491.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	187.6	233.6	640.4	1348.4	1522.6
115°	215.8	261.9	612.2	1272.4	1487.3
117.5°	244.9	290.1	605.1	1190.1	1411.2
120°	266.8	309.1	592.6	1127.6	1357.8
122.5°	282.5	327.8	576.9	1073.8	1285.6
125°	310.0	352.2	576.9	1008.8	1193.0
127.5°	332.8	375.7	577.6	933.4	1115.3
130°	345.3	391.4	580.8	883.0	1055.6
132.5°	361.0	407.1	580.8	860.3	1002.2
135°	384.6	426.8	580.8	830.8	953.6
137.5°	404.2	449.5	580.8	798.2	903.4
140°	419.9	462.1	580.8	779.2	875.1
142.5°	435.6	474.7	583.9	757.1	846.8
145°	455.2	493.6	584.7	723.8	800.5
147.5°	478.8	512.5	589.4	699.9	758.9
150°	494.5	525.1	592.6	683.9	733.8
152.5°	510.1	537.8	592.6	671.2	711.9
155°	533.7	552.9	596.5	656.0	686.7
157.5°	552.5	570.9	601.2	646.4	668.7
160°	565.1	580.4	604.3	640.1	659.3
162.5°	574.5	589.9	607.5	636.8	649.9
165°	592.6	600.2	612.2	628.1	639.6
167.5°	602.8	609.7	616.1	624.1	631.0
170°	612.2	616.0	616.1	624.0	627.9
172.5°	615.3	622.2	619.2	620.9	624.7
175°	624.0	627.8	624.0	619.9	616.1
177.5°	624.0	627.0	624.0	623.9	620.8
180°	624.0	624.0	624.0	624.0	624.0



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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	16.23	17.04	17.20	18.02	19.29	8.46	9.28	9.43	10.25	11.52
	3H	17.72	18.45	18.70	19.43	20.73	9.81	10.54	10.79	11.52	12.82
	4H	18.23	18.92	19.22	19.90	21.21	10.47	11.15	11.46	12.14	13.44
	6H	18.63	19.26	19.63	20.25	21.57	11.05	11.69	12.06	12.68	13.99
	8H	18.76	19.36	19.76	20.36	21.68	11.28	11.88	12.29	12.89	14.20
	12H	18.84	19.41	19.85	20.41	21.74	11.44	12.01	12.45	13.01	14.35
4H	2H	16.05	16.74	17.05	17.73	19.03	9.08	9.76	10.07	10.75	12.05
	3H	17.69	18.26	18.69	19.27	20.59	10.62	11.19	11.63	12.21	13.53
	4H	18.27	18.79	19.29	19.80	21.14	11.42	11.94	12.43	12.95	14.29
	6H	18.77	19.21	19.79	20.24	21.58	12.15	12.60	13.18	13.63	14.97
	8H	18.95	19.37	19.98	20.39	21.75	12.45	12.86	13.47	13.89	15.24
	12H	19.08	19.45	20.12	20.50	21.85	12.66	13.04	13.70	14.08	15.43
8H	4H	18.19	18.61	19.21	19.63	20.98	11.87	12.28	12.89	13.31	14.66
	6H	18.72	19.07	19.77	20.13	21.48	12.75	13.09	13.80	14.16	15.51
	8H	18.96	19.26	20.01	20.31	21.68	13.14	13.45	14.20	14.50	15.87
	12H	19.14	19.41	20.20	20.46	21.87	13.46	13.73	14.52	14.77	16.19
12H	4H	18.14	18.51	19.18	19.55	20.91	11.92	12.29	12.96	13.33	14.69
	6H	18.70	19.00	19.75	20.05	21.42	12.86	13.17	13.92	14.22	15.59
	8H	18.94	19.20	19.99	20.25	21.66	13.30	13.57	14.36	14.62	16.03