

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: P621511

Luminaire Tested: VLT-F-100U-075D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621511
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-075D-830-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

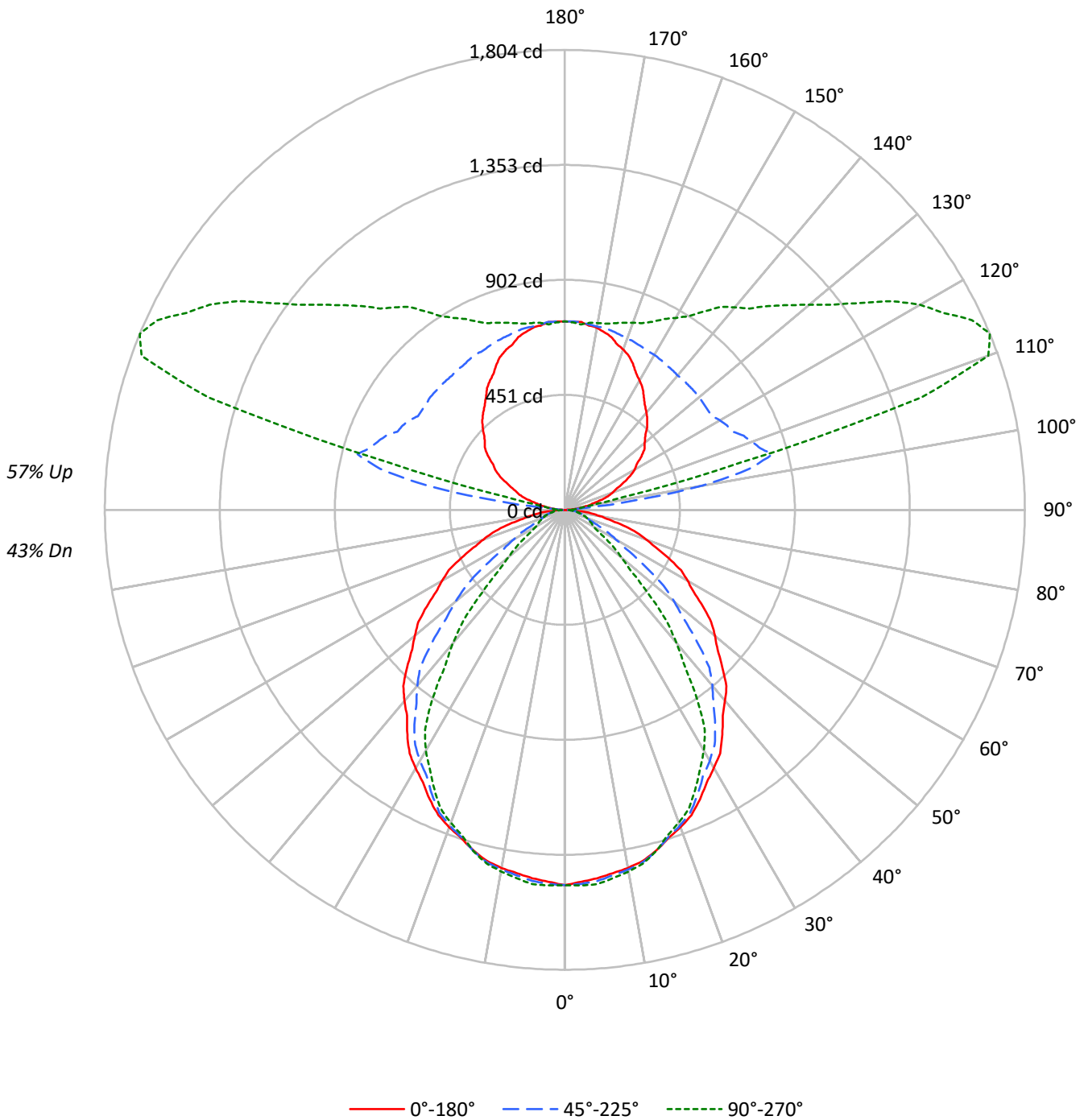
Lumens per Lamp: N/A
Luminaire Lumens: 6975.0 lumens
Efficiency: N/A
Efficacy: 137.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50.6
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				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50	43		
1	97	93	89	86	88	85	82	79	71	68	66	57	56	54	45	44	43	37		
2	89	82	76	71	81	75	70	66	63	59	56	51	49	46	40	39	37	32		
3	81	72	65	60	74	67	61	56	56	51	48	46	43	40	36	34	32	28		
4	75	64	57	51	68	59	53	48	50	45	41	41	38	35	33	30	28	25		
5	69	58	50	44	63	53	46	41	45	40	36	37	33	30	30	27	25	22		
6	63	52	44	39	58	48	41	36	41	35	32	34	30	27	27	25	22	19		
7	59	47	39	34	54	44	37	32	37	32	28	31	27	24	25	22	20	18		
8	55	43	35	30	50	40	33	28	34	29	25	28	24	22	23	20	18	16		
9	51	39	32	27	47	36	30	25	31	26	22	26	22	19	21	19	17	14		
10	48	36	29	24	44	33	27	23	29	24	20	24	20	18	20	17	15	13		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10564	10564	10564
5°	10451	10528	10616
10°	10395	10439	10494
15°	10282	10293	10293
20°	10116	10069	9976
25°	9923	9754	9585
30°	9691	9414	9036
35°	9433	9006	7927
40°	9161	8434	6382
45°	8875	7470	4631
50°	8574	6248	3208
55°	8277	4757	2397
60°	7967	3295	1811
65°	7619	2350	1859
70°	7117	1979	1916
75°	6579	2024	1941
80°	5719	2136	2013
85°	4635	2379	2001

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8875 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.7	2.0
10°-20°	390.1	5.6
20°-30°	567.5	8.1
30°-40°	627.8	9.0
40°-50°	539.0	7.7
50°-60°	373.2	5.4
60°-70°	222.4	3.2
70°-80°	109.6	1.6
80°-90°	35.5	0.5
90°-100°	90.9	1.3
100°-110°	647.7	9.3
110°-120°	879.4	12.6
120°-130°	715.7	10.3
130°-140°	575.6	8.3
140°-150°	453.8	6.5
150°-160°	331.8	4.8
160°-170°	206.1	3.0
170°-180°	70.3	1.0
0°-30°	1096.3	15.7
0°-40°	1724.1	24.7
0°-60°	2636.2	37.8
0°-90°	3003.6	43.1
90°-120°	1618.0	23.2
90°-150°	3363.2	48.2
90°-180°	3971.0	56.9
0°-180°	6975.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1472	1472	1472	1472	1472	
5°	1451	1473	1462	1460	1474	138
15°	1384	1402	1386	1378	1386	390
25°	1253	1262	1232	1211	1211	577
35°	1077	1074	1028	945	905	673
45°	874	860	736	532	456	675
55°	662	633	380	218	192	591
65°	449	361	138	111	110	444
75°	237	103	73	71	70	250
85°	56	28	29	26	24	65
90°	0	4	9	14	14	4
95°	37	69	37	42	51	42
105°	144	221	842	1075	711	152
115°	256	310	725	1508	1762	254
125°	367	417	684	1195	1414	326
135°	456	506	688	984	1130	351
145°	539	585	693	858	949	339
155°	632	655	707	777	814	290
165°	702	711	725	744	758	197
175°	739	744	739	735	730	70
180°	739	739	739	739	739	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1472.2	1472.2	1472.2	1472.2	1472.2
2.5°	1460.0	1476.7	1468.5	1468.7	1474.6
5°	1450.9	1473.2	1461.5	1460.3	1473.7
7.5°	1437.5	1458.0	1446.0	1444.5	1456.1
10°	1426.6	1445.9	1432.6	1429.8	1440.2
12.5°	1410.7	1430.1	1415.6	1410.4	1420.8
15°	1384.0	1401.8	1385.5	1378.1	1385.5
17.5°	1350.2	1365.1	1346.6	1334.8	1339.3
20°	1324.7	1339.5	1318.6	1302.0	1306.4
22.5°	1296.7	1309.2	1285.7	1266.6	1269.9
25°	1253.2	1262.1	1231.9	1210.6	1210.6
27.5°	1204.8	1210.2	1175.0	1152.7	1146.4
30°	1169.5	1172.5	1136.1	1109.8	1090.5
32.5°	1133.0	1134.8	1093.5	1051.1	1021.1
35°	1076.8	1073.8	1028.1	945.1	904.9
37.5°	1016.8	1010.3	956.3	829.9	770.2
40°	977.9	969.0	900.3	748.3	681.3
42.5°	937.8	925.3	838.3	664.1	590.1
45°	874.5	859.6	736.1	532.1	456.3
47.5°	811.8	792.2	631.5	412.2	347.1
50°	768.0	747.2	559.7	339.5	287.4
52.5°	724.2	703.4	486.7	285.0	243.6
55°	661.6	633.3	380.2	218.4	191.6
57.5°	597.7	557.2	283.2	170.2	149.3
60°	555.1	501.6	229.6	141.1	126.2
62.5°	513.7	445.9	188.3	123.1	120.1
65°	448.7	360.9	138.4	111.0	109.5
67.5°	386.6	275.4	102.8	100.0	98.6
70°	339.2	217.2	94.3	92.7	91.3
72.5°	296.6	166.3	85.8	84.2	82.7
75°	237.3	103.4	73.0	71.4	70.0
77.5°	177.3	65.2	60.2	58.7	57.2
80°	138.4	53.6	51.7	50.2	48.7
82.5°	104.3	43.4	42.0	40.4	38.9
85°	56.3	28.0	28.9	25.8	24.3
87.5°	19.5	14.4	15.2	13.7	12.5
90°	0.0	4.5	9.3	13.9	13.9
92.5°	11.2	15.7	20.5	28.9	32.5
95°	37.2	69.0	37.2	42.1	51.1
97.5°	66.0	132.4	273.4	80.7	69.7
100°	88.3	165.6	548.7	161.5	106.9
102.5°	110.7	191.6	742.1	426.2	233.4
105°	144.1	221.4	841.6	1075.1	711.4
107.5°	177.6	235.8	803.5	1564.7	1465.6
110°	199.9	254.5	781.2	1644.2	1766.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	222.3	276.8	758.9	1597.7	1804.1
115°	255.7	310.3	725.4	1507.7	1762.3
117.5°	290.1	343.8	717.0	1410.2	1672.1
120°	316.2	366.2	702.1	1336.0	1608.8
122.5°	334.8	388.4	683.5	1272.3	1523.3
125°	367.3	417.3	683.5	1195.3	1413.5
127.5°	394.3	445.2	684.5	1106.0	1321.5
130°	409.2	463.7	688.2	1046.2	1250.8
132.5°	427.8	482.3	688.2	1019.3	1187.6
135°	455.7	505.7	688.2	984.4	1129.9
137.5°	478.9	532.6	688.2	945.8	1070.4
140°	497.5	547.5	688.2	923.2	1036.9
142.5°	516.1	562.5	691.9	897.0	1003.4
145°	539.4	584.8	692.8	857.6	948.6
147.5°	567.3	607.3	698.4	829.3	899.3
150°	585.9	622.3	702.1	810.4	869.5
152.5°	604.5	637.2	702.1	795.3	843.5
155°	632.4	655.1	706.8	777.3	813.7
157.5°	654.7	676.5	712.4	766.0	792.3
160°	669.6	687.8	716.1	758.4	781.2
162.5°	680.7	698.9	719.8	754.6	770.0
165°	702.1	711.2	725.4	744.3	757.9
167.5°	714.2	722.4	730.0	739.5	747.7
170°	725.4	729.9	730.0	739.4	744.0
172.5°	729.1	737.3	733.7	735.7	740.3
175°	739.3	743.9	739.3	734.6	730.0
177.5°	739.3	743.0	739.3	739.2	735.6
180°	739.3	739.3	739.3	739.3	739.3



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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	15.12	15.89	16.15	16.91	18.28	7.36	8.12	8.38	9.15	10.52
	3H	16.61	17.29	17.65	18.33	19.72	8.70	9.38	9.74	10.42	11.81
	4H	17.12	17.76	18.17	18.80	20.20	9.35	10.00	10.40	11.03	12.43
	6H	17.51	18.10	18.57	19.15	20.56	9.94	10.53	10.99	11.57	12.98
	8H	17.64	18.20	18.70	19.26	20.67	10.16	10.72	11.22	11.78	13.19
	12H	17.72	18.25	18.78	19.30	20.73	10.32	10.86	11.39	11.91	13.34
4H	2H	14.94	15.59	16.00	16.62	18.02	7.96	8.61	9.02	9.64	11.04
	3H	16.57	17.10	17.63	18.17	19.58	9.51	10.04	10.57	11.11	12.52
	4H	17.16	17.65	18.22	18.70	20.14	10.30	10.79	11.36	11.84	13.28
	6H	17.65	18.06	18.72	19.14	20.57	11.03	11.45	12.11	12.53	13.96
	8H	17.83	18.22	18.91	19.29	20.74	11.32	11.71	12.40	12.79	14.23
	12H	17.96	18.31	19.05	19.39	20.84	11.54	11.89	12.63	12.97	14.42
8H	4H	17.07	17.46	18.14	18.53	19.97	10.75	11.14	11.82	12.21	13.65
	6H	17.60	17.92	18.70	19.04	20.48	11.63	11.95	12.72	13.06	14.50
	8H	17.83	18.12	18.94	19.21	20.67	12.02	12.30	13.12	13.40	14.86
	12H	18.02	18.27	19.13	19.36	20.86	12.34	12.59	13.44	13.68	15.18
12H	4H	17.01	17.37	18.11	18.45	19.90	10.79	11.14	11.88	12.23	13.68
	6H	17.57	17.85	18.68	18.95	20.41	11.74	12.02	12.84	13.12	14.58
	8H	17.81	18.06	18.92	19.15	20.65	12.18	12.43	13.29	13.52	15.02