

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: P621439

Luminaire Tested: VLT-F-050U-075D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621439
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-075D-830-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

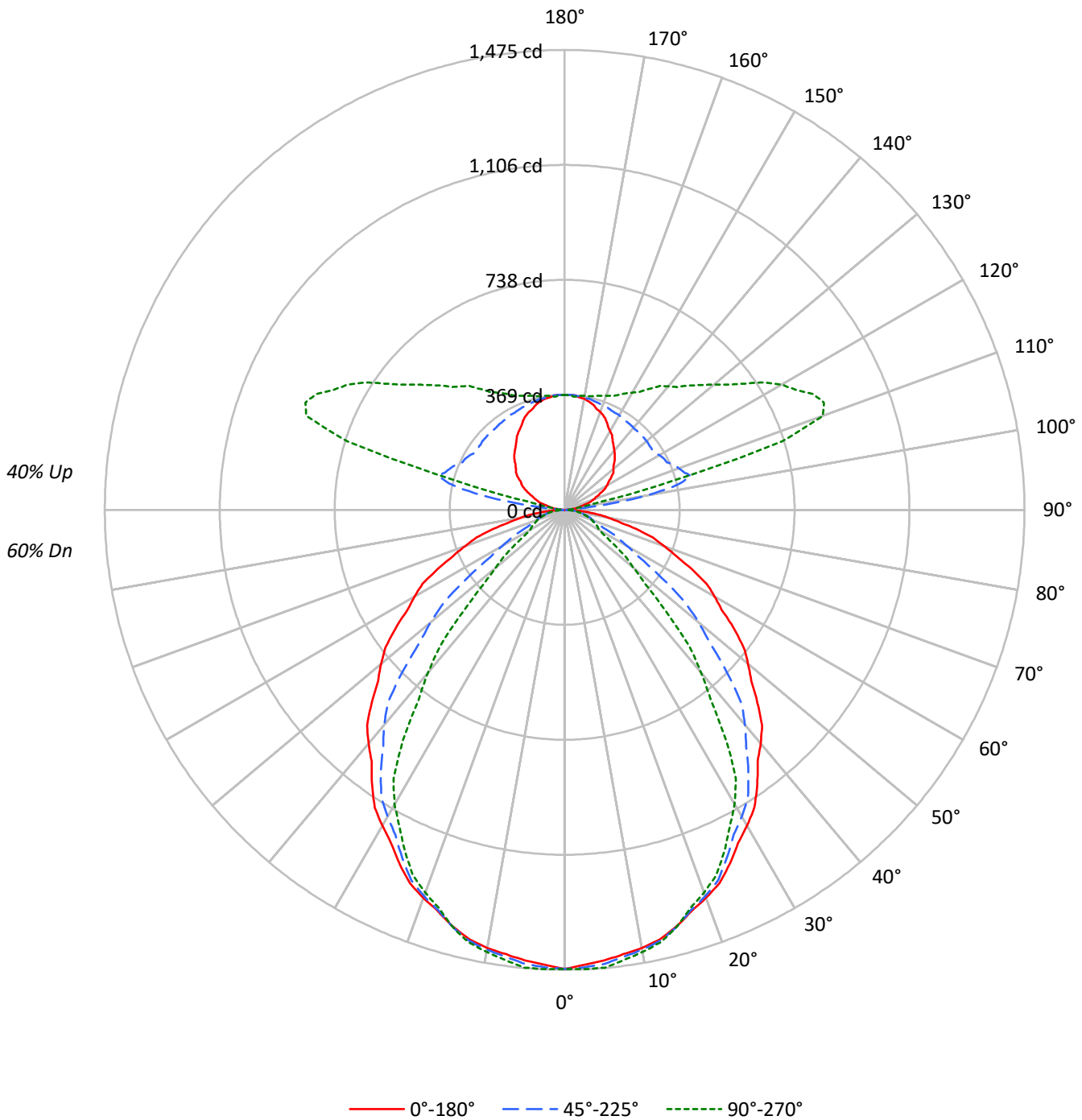
Lumens per Lamp: N/A
Luminaire Lumens: 4984.2 lumens
Efficiency: N/A
Efficacy: 137.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 36.2
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



TEST NUMBER: P621439
CATALOG NUMBER: VLT-F-050U-075D-830-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P621439

CATALOG NUMBER: VLT-F-050U-075D-830-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	0
RCR																		
0	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	60
1	101	97	93	90	94	91	88	85	79	77	75	69	67	66	59	58	57	52
2	93	86	80	75	86	80	75	71	71	67	63	62	59	56	53	51	49	45
3	85	76	69	64	79	72	65	60	63	58	54	55	52	49	48	45	43	39
4	78	68	60	55	73	64	57	52	57	51	47	50	46	42	43	40	38	35
5	72	61	53	47	67	58	51	45	51	46	41	45	41	37	40	36	34	31
6	67	55	47	42	62	52	45	40	46	41	37	41	37	33	36	33	30	27
7	62	50	42	37	58	47	40	35	42	37	33	38	33	30	33	30	27	24
8	58	46	38	33	54	43	36	32	39	33	29	35	30	27	31	27	24	22
9	54	42	35	30	51	40	33	29	36	30	26	32	28	24	28	25	22	20
10	51	39	32	27	47	37	30	26	33	28	24	30	25	22	27	23	20	18

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



TEST NUMBER: P621439

CATALOG NUMBER: VLT-F-050U-075D-830-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.7	2.8
10°-20°	390.1	7.8
20°-30°	567.5	11.4
30°-40°	627.8	12.6
40°-50°	539.0	10.8
50°-60°	373.2	7.5
60°-70°	222.4	4.5
70°-80°	109.6	2.2
80°-90°	34.7	0.7
90°-100°	45.4	0.9
100°-110°	323.2	6.5
110°-120°	438.7	8.8
120°-130°	357.1	7.2
130°-140°	287.2	5.8
140°-150°	226.4	4.5
150°-160°	165.6	3.3
160°-170°	102.8	2.1
170°-180°	35.1	0.7
0°-30°	1096.3	22.0
0°-40°	1724.1	34.6
0°-60°	2636.2	52.9
0°-90°	3002.8	60.2
90°-120°	807.3	16.2
90°-150°	1677.9	33.7
90°-180°	1981.0	39.7
0°-180°	4984.2	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	2	5	7	7	3
95°	19	34	19	21	26	21
105°	72	110	420	536	355	76
115°	128	155	362	752	879	127
125°	183	208	341	596	705	163
135°	227	252	343	491	564	175
145°	269	292	346	428	473	169
155°	316	327	353	388	406	145
165°	350	355	362	371	378	98
175°	369	371	369	366	364	35
180°	369	369	369	369	369	

TEST NUMBER: P621439

CATALOG NUMBER: VLT-F-050U-075D-830-UNV-STD-W-4

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	14.0	14.3	12.3	11.1
90°	0.0	2.3	4.6	7.0	7.0
92.5°	5.6	7.8	10.2	14.4	16.2
95°	18.6	34.4	18.6	21.0	25.5
97.5°	32.9	66.1	136.4	40.2	34.8
100°	44.1	82.6	273.7	80.6	53.4
102.5°	55.2	95.6	370.3	212.6	116.5
105°	71.9	110.5	419.9	536.4	354.9
107.5°	88.6	117.7	400.9	780.7	731.2
110°	99.8	127.0	389.7	820.3	881.6



TEST NUMBER: P621439

CATALOG NUMBER: VLT-F-050U-075D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	110.9	138.1	378.6	797.1	900.1
115°	127.6	154.8	361.9	752.2	879.2
117.5°	144.8	171.5	357.7	703.6	834.2
120°	157.8	182.7	350.3	666.6	802.7
122.5°	167.0	193.8	341.0	634.8	760.0
125°	183.3	208.2	341.0	596.4	705.2
127.5°	196.7	222.1	341.5	551.8	659.3
130°	204.2	231.4	343.3	522.0	624.1
132.5°	213.4	240.6	343.3	508.6	592.5
135°	227.3	252.3	343.3	491.1	563.7
137.5°	238.9	265.7	343.3	471.9	534.0
140°	248.2	273.2	343.3	460.6	517.3
142.5°	257.5	280.6	345.2	447.6	500.6
145°	269.1	291.8	345.7	427.9	473.3
147.5°	283.0	303.0	348.4	413.7	448.7
150°	292.3	310.5	350.3	404.3	433.8
152.5°	301.6	317.9	350.3	396.8	420.8
155°	315.5	326.8	352.6	387.8	406.0
157.5°	326.6	337.5	355.4	382.2	395.3
160°	334.1	343.1	357.3	378.4	389.7
162.5°	339.6	348.7	359.1	376.5	384.2
165°	350.3	354.8	361.9	371.3	378.1
167.5°	356.3	360.4	364.2	369.0	373.0
170°	361.9	364.2	364.2	368.9	371.2
172.5°	363.8	367.8	366.1	367.1	369.3
175°	368.9	371.1	368.9	366.5	364.2
177.5°	368.9	370.7	368.9	368.8	367.0
180°	368.9	368.9	368.9	368.9	368.9



TEST NUMBER: P621439

CATALOG NUMBER: VLT-F-050U-075D-830-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	16.72	17.62	17.60	18.51	19.63	8.96	9.86	9.83	10.74	11.87
	3H	18.22	19.02	19.11	19.92	21.07	10.31	11.12	11.20	12.01	13.16
	4H	18.74	19.49	19.64	20.40	21.55	10.97	11.73	11.87	12.63	13.79
	6H	19.14	19.83	20.05	20.74	21.91	11.56	12.26	12.48	13.17	14.34
	8H	19.27	19.93	20.19	20.86	22.03	11.79	12.45	12.71	13.38	14.55
	12H	19.35	19.98	20.28	20.90	22.09	11.96	12.58	12.88	13.51	14.70
4H	2H	16.56	17.32	17.47	18.22	19.38	9.58	10.34	10.49	11.24	12.40
	3H	18.20	18.83	19.12	19.76	20.93	11.14	11.76	12.05	12.70	13.87
	4H	18.79	19.36	19.72	20.29	21.49	11.93	12.50	12.86	13.43	14.63
	6H	19.29	19.78	20.23	20.73	21.93	12.67	13.16	13.62	14.12	15.32
	8H	19.47	19.93	20.42	20.88	22.09	12.97	13.43	13.91	14.37	15.58
	12H	19.60	20.02	20.57	20.98	22.20	13.19	13.60	14.15	14.56	15.78
8H	4H	18.71	19.17	19.66	20.12	21.33	12.39	12.85	13.33	13.79	15.01
	6H	19.25	19.62	20.22	20.61	21.83	13.27	13.65	14.24	14.64	15.85
	8H	19.48	19.82	20.46	20.80	22.02	13.67	14.00	14.65	14.98	16.21
	12H	19.67	19.97	20.65	20.94	22.22	13.99	14.28	14.97	15.26	16.53
12H	4H	18.66	19.07	19.63	20.04	21.26	12.44	12.85	13.40	13.82	15.03
	6H	19.22	19.55	20.20	20.53	21.76	13.39	13.72	14.37	14.70	15.93
	8H	19.46	19.76	20.44	20.73	22.01	13.83	14.13	14.81	15.10	16.38