

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: P621463

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

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621463  
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-075U-075D-830-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

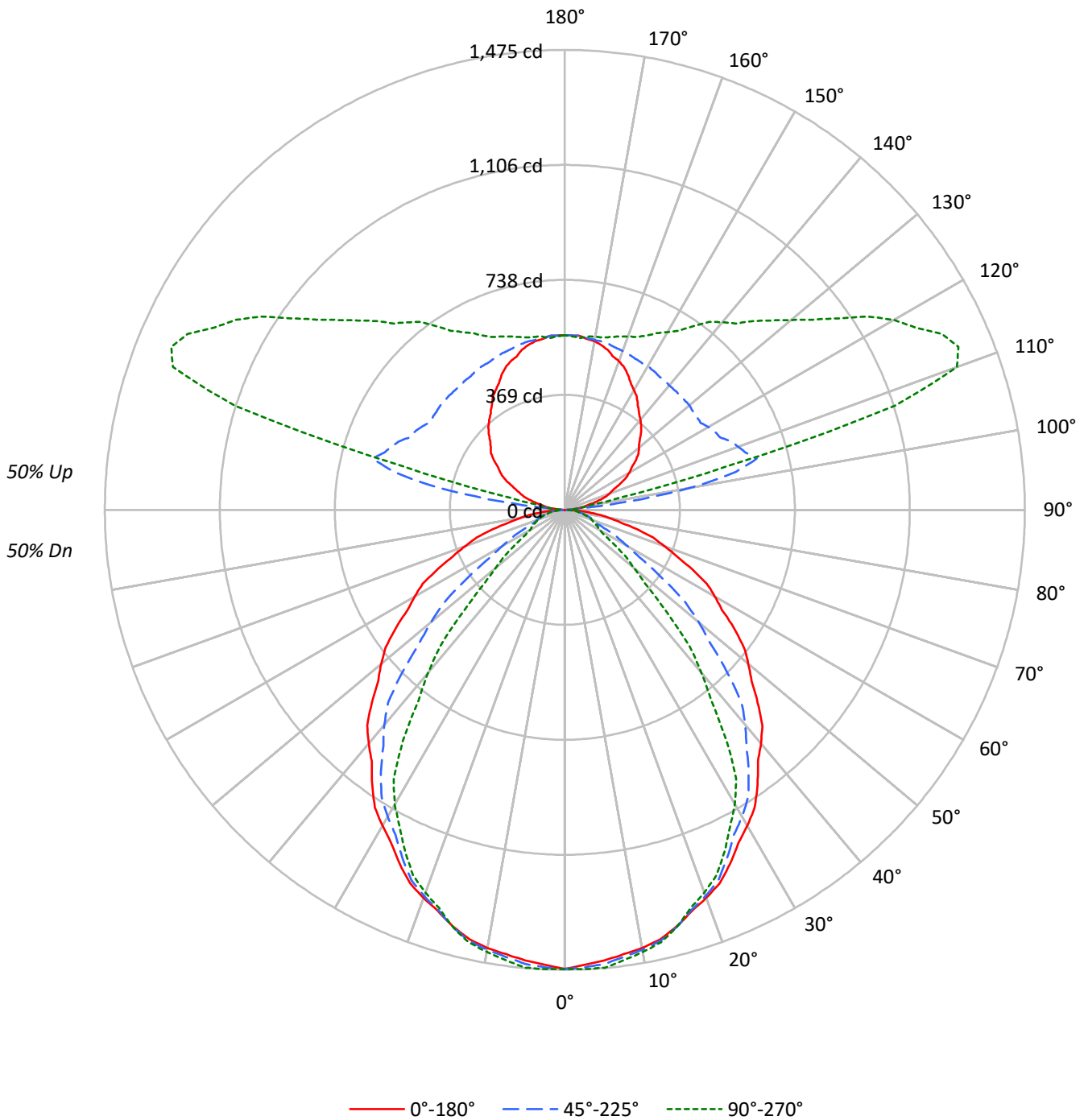
Lumens per Lamp: N/A  
Luminaire Lumens: 6010.2 lumens  
Efficiency: N/A  
Efficacy: 141.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 42.4  
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	98	94	91	88	91	87	84	81	74	72	70	62	60	59	51	50	49	43				
2	90	83	78	73	83	77	72	68	66	62	59	55	53	50	45	44	42	38				
3	83	74	67	61	76	69	63	58	59	54	50	49	46	43	41	39	37	33				
4	76	66	58	53	70	61	55	50	53	48	44	45	41	38	37	34	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	29	31	28	25	23				
7	60	48	41	35	55	45	38	33	39	34	30	34	29	26	28	25	23	20				
8	56	44	36	31	52	41	34	30	36	30	27	31	27	24	26	23	21	18				
9	52	40	33	28	48	38	31	27	33	28	24	28	24	21	24	21	19	17				
10	49	37	30	25	45	35	28	24	30	25	22	26	22	19	23	19	17	15				

**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	2.3
10°-20°	390.1	6.5
20°-30°	567.5	9.4
30°-40°	627.8	10.4
40°-50°	539.0	9.0
50°-60°	373.2	6.2
60°-70°	222.4	3.7
70°-80°	109.6	1.8
80°-90°	35.1	0.6
90°-100°	68.8	1.1
100°-110°	490.4	8.2
110°-120°	665.8	11.1
120°-130°	541.9	9.0
130°-140°	435.8	7.3
140°-150°	343.6	5.7
150°-160°	251.2	4.2
160°-170°	156.1	2.6
170°-180°	53.2	0.9
0°-30°	1096.3	18.2
0°-40°	1724.1	28.7
0°-60°	2636.2	43.9
0°-90°	3003.2	50.0
90°-120°	1225.1	20.4
90°-150°	2546.4	42.4
90°-180°	3007.0	50.0
0°-180°	6010.2	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	3	7	11	11	4
95°	28	52	28	32	39	31
105°	109	168	637	814	539	115
115°	194	235	549	1142	1334	192
125°	278	316	518	905	1070	247
135°	345	383	521	745	856	265
145°	408	443	525	649	718	257
155°	479	496	535	589	616	220
165°	532	538	549	564	574	149
175°	560	563	560	556	553	53
180°	560	560	560	560	560	

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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	14.2	14.8	13.0	11.8
90°	0.0	3.4	7.0	10.6	10.6
92.5°	8.4	11.9	15.5	21.9	24.6
95°	28.2	52.3	28.2	31.8	38.7
97.5°	50.0	100.3	207.0	61.1	52.8
100°	66.9	125.4	415.4	122.3	81.0
102.5°	83.8	145.1	561.9	322.7	176.7
105°	109.1	167.7	637.2	814.0	538.6
107.5°	134.5	178.5	608.4	1184.7	1109.7
110°	151.4	192.7	591.5	1244.9	1337.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	168.3	209.6	574.6	1209.7	1366.0
115°	193.6	234.9	549.2	1141.5	1334.3
117.5°	219.7	260.3	542.9	1067.7	1266.0
120°	239.4	277.3	531.6	1011.6	1218.1
122.5°	253.5	294.1	517.5	963.3	1153.3
125°	278.1	316.0	517.5	905.0	1070.3
127.5°	298.5	337.1	518.2	837.4	1000.5
130°	309.8	351.1	521.0	792.1	947.0
132.5°	323.9	365.2	521.0	771.8	899.2
135°	345.0	382.9	521.0	745.3	855.5
137.5°	362.6	403.2	521.0	716.1	810.4
140°	376.7	414.6	521.0	699.0	785.1
142.5°	390.8	425.9	523.9	679.2	759.7
145°	408.4	442.8	524.6	649.4	718.2
147.5°	429.5	459.8	528.8	627.9	680.9
150°	443.6	471.1	531.6	613.6	658.3
152.5°	457.7	482.5	531.6	602.1	638.6
155°	478.8	496.0	535.1	588.6	616.1
157.5°	495.7	512.2	539.4	579.9	599.9
160°	507.0	520.7	542.2	574.2	591.5
162.5°	515.4	529.2	545.0	571.3	583.0
165°	531.6	538.5	549.2	563.5	573.9
167.5°	540.8	547.0	552.7	559.9	566.1
170°	549.2	552.7	552.7	559.9	563.3
172.5°	552.0	558.2	555.5	557.0	560.5
175°	559.8	563.2	559.8	556.2	552.7
177.5°	559.8	562.5	559.8	559.7	557.0
180°	559.8	559.8	559.8	559.8	559.8

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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	15.81	16.62	16.78	17.60	18.87	8.04	8.85	9.01	9.83	11.11
	3H	17.30	18.02	18.28	19.01	20.31	9.39	10.12	10.37	11.10	12.40
	4H	17.81	18.50	18.80	19.48	20.79	10.04	10.73	11.04	11.72	13.02
	6H	18.21	18.84	19.21	19.83	21.15	10.63	11.26	11.64	12.26	13.57
	8H	18.34	18.94	19.35	19.94	21.26	10.86	11.46	11.87	12.46	13.78
	12H	18.42	18.98	19.43	19.99	21.33	11.02	11.59	12.03	12.59	13.93
4H	2H	15.63	16.32	16.63	17.31	18.61	8.65	9.34	9.65	10.33	11.63
	3H	17.27	17.83	18.27	18.85	20.17	10.20	10.77	11.21	11.79	13.11
	4H	17.85	18.37	18.87	19.38	20.73	11.00	11.51	12.01	12.52	13.87
	6H	18.34	18.79	19.37	19.82	21.16	11.73	12.18	12.76	13.21	14.55
	8H	18.53	18.95	19.56	19.97	21.33	12.02	12.44	13.05	13.47	14.82
	12H	18.66	19.03	19.70	20.07	21.43	12.24	12.61	13.28	13.66	15.01
8H	4H	17.77	18.18	18.79	19.21	20.56	11.45	11.86	12.47	12.89	14.24
	6H	18.30	18.64	19.35	19.71	21.07	12.33	12.67	13.38	13.74	15.09
	8H	18.54	18.84	19.59	19.89	21.26	12.72	13.02	13.78	14.08	15.45
	12H	18.72	18.99	19.78	20.04	21.45	13.04	13.31	14.10	14.35	15.77
12H	4H	17.72	18.09	18.76	19.13	20.49	11.49	11.87	12.54	12.91	14.27
	6H	18.27	18.58	19.33	19.63	21.00	12.44	12.74	13.50	13.80	15.17
	8H	18.51	18.78	19.57	19.83	21.24	12.88	13.15	13.94	14.20	15.61