

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: P621417

Luminaire Tested: VLT-F-025U-075D-840-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621417  
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-025U-075D-840-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

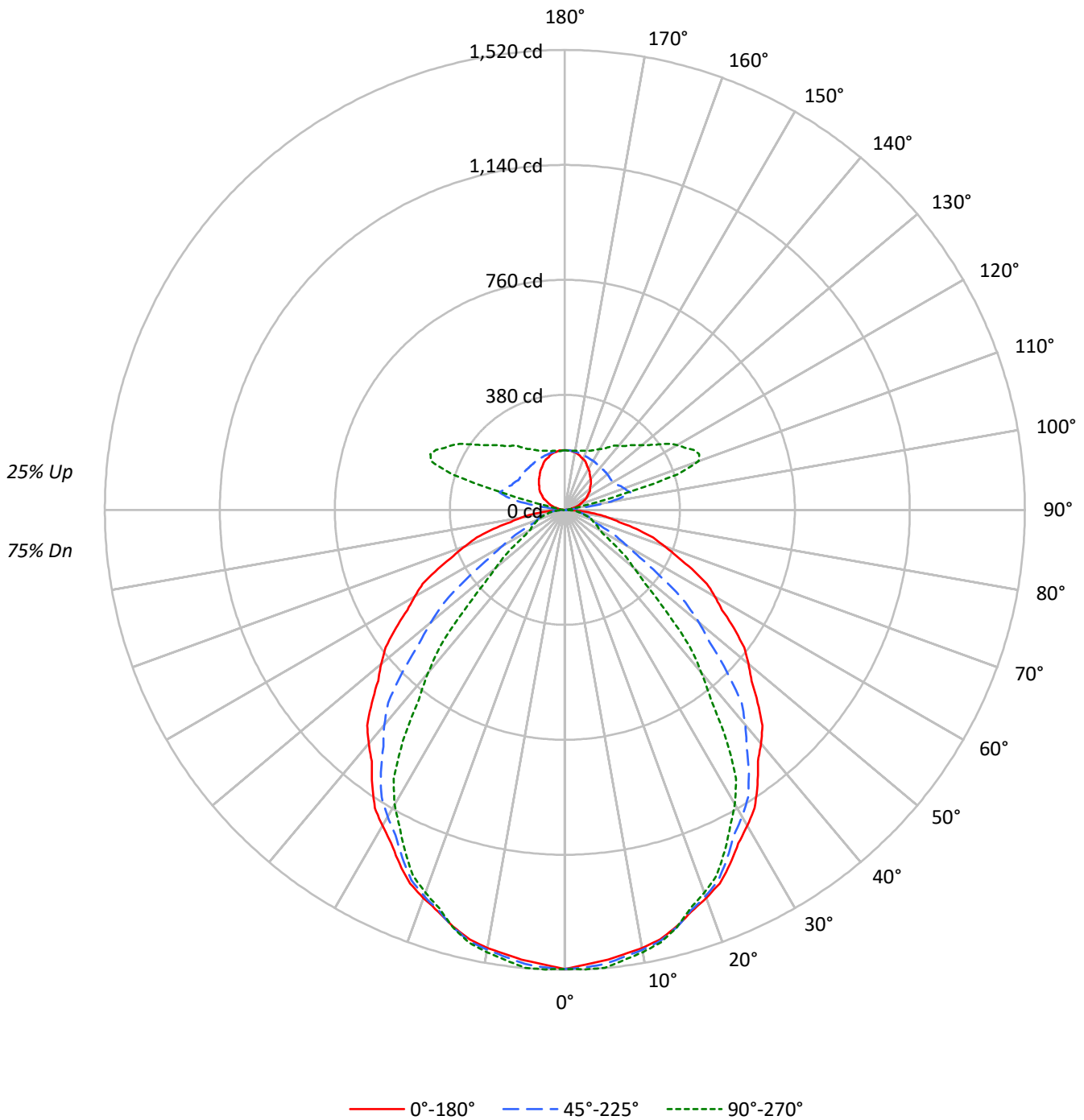
Lumens per Lamp: N/A  
Luminaire Lumens: 4153.0 lumens  
Efficiency: N/A  
Efficacy: 138.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 29.9  
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	113	113	113	113	107	107	107	107	97	97	97	87	87	87	79	79	79	75							
1	104	100	97	93	99	96	92	89	87	84	82	79	77	75	71	70	69	65							
2	96	89	83	78	91	85	80	75	77	73	70	70	67	64	64	62	59	56							
3	88	79	72	66	84	76	69	64	69	64	60	63	59	56	58	55	52	49							
4	81	71	63	57	77	68	61	56	62	57	52	57	53	49	52	49	46	43							
5	75	64	56	50	71	61	54	49	56	50	46	52	47	43	48	44	40	38							
6	70	58	50	44	66	56	48	43	51	45	41	47	42	38	44	39	36	34							
7	65	53	45	39	62	51	43	38	47	41	36	43	38	34	40	36	33	30							
8	60	48	41	35	58	46	39	34	43	37	33	40	35	31	37	33	29	27							
9	57	44	37	32	54	43	36	31	40	34	30	37	32	28	34	30	27	25							
10	53	41	34	29	51	40	33	28	37	31	27	34	29	26	32	28	25	23							

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10889	10889	10889
5°	10773	10852	10942
10°	10714	10760	10817
15°	10598	10609	10609
20°	10427	10379	10283
25°	10227	10054	9880
30°	9989	9703	9314
35°	9723	9283	8171
40°	9442	8693	6579
45°	9148	7700	4773
50°	8837	6440	3308
55°	8531	4903	2471
60°	8212	3397	1867
65°	7851	2423	1917
70°	7335	2039	1974
75°	6779	2085	1999
80°	5897	2203	2074
85°	4775	2454	2067

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9148 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.0	3.4
10°-20°	402.1	9.7
20°-30°	584.9	14.1
30°-40°	647.1	15.6
40°-50°	555.6	13.4
50°-60°	384.7	9.3
60°-70°	229.2	5.5
70°-80°	112.9	2.7
80°-90°	35.3	0.9
90°-100°	24.2	0.6
100°-110°	172.6	4.2
110°-120°	234.3	5.6
120°-130°	190.7	4.6
130°-140°	153.4	3.7
140°-150°	120.9	2.9
150°-160°	88.4	2.1
160°-170°	54.9	1.3
170°-180°	18.7	0.5
0°-30°	1130.0	27.2
0°-40°	1777.1	42.8
0°-60°	2717.3	65.4
0°-90°	3094.7	74.5
90°-120°	431.2	10.4
90°-150°	896.2	21.6
90°-180°	1058.0	25.5
0°-180°	4153.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1517	1517	1517	1517	1517	
5°	1496	1518	1506	1505	1519	142
15°	1426	1445	1428	1420	1428	402
25°	1292	1301	1270	1248	1248	594
35°	1110	1107	1060	974	933	694
45°	901	886	759	548	470	695
55°	682	653	392	225	198	609
65°	462	372	143	114	113	458
75°	244	107	75	74	72	258
85°	58	29	30	27	25	67
90°	0	1	2	4	4	3
95°	10	18	10	11	14	11
105°	38	59	224	286	190	40
115°	68	83	193	402	470	68
125°	98	111	182	318	377	87
135°	121	135	183	262	301	93
145°	144	156	185	228	253	90
155°	168	175	188	207	217	77
165°	187	190	193	198	202	53
175°	197	198	197	196	194	19
180°	197	197	197	197	197	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1517.4	1517.4	1517.4	1517.4	1517.4
2.5°	1504.9	1522.1	1513.7	1513.8	1520.0
5°	1495.5	1518.5	1506.5	1505.2	1519.0
7.5°	1481.7	1502.9	1490.5	1488.9	1500.8
10°	1470.4	1490.3	1476.7	1473.8	1484.5
12.5°	1454.1	1474.0	1459.1	1453.7	1464.5
15°	1426.5	1444.9	1428.1	1420.4	1428.1
17.5°	1391.7	1407.0	1388.0	1375.8	1380.4
20°	1365.4	1380.7	1359.1	1342.0	1346.6
22.5°	1336.5	1349.4	1325.3	1305.6	1309.0
25°	1291.7	1300.9	1269.8	1247.8	1247.8
27.5°	1241.9	1247.4	1211.1	1188.1	1181.7
30°	1205.5	1208.6	1171.0	1143.9	1124.0
32.5°	1167.9	1169.7	1127.1	1083.5	1052.5
35°	1109.9	1106.8	1059.7	974.1	932.7
37.5°	1048.1	1041.4	985.7	855.5	793.8
40°	1008.0	998.8	928.0	771.3	702.3
42.5°	966.6	953.7	864.1	684.6	608.2
45°	901.4	886.0	758.7	548.5	470.3
47.5°	836.8	816.6	650.9	424.9	357.7
50°	791.6	770.2	576.9	349.9	296.3
52.5°	746.5	725.0	501.6	293.7	251.1
55°	681.9	652.8	391.9	225.1	197.5
57.5°	616.1	574.4	291.9	175.4	153.9
60°	572.2	517.0	236.7	145.4	130.1
62.5°	529.5	459.6	194.1	126.9	123.8
65°	462.4	372.0	142.7	114.4	112.9
67.5°	398.5	283.8	106.0	103.1	101.6
70°	349.6	223.9	97.2	95.6	94.1
72.5°	305.7	171.4	88.4	86.8	85.3
75°	244.5	106.6	75.2	73.6	72.1
77.5°	182.8	67.2	62.1	60.5	58.9
80°	142.7	55.3	53.3	51.7	50.2
82.5°	107.5	44.7	43.3	41.7	40.1
85°	58.0	28.9	29.8	26.6	25.1
87.5°	20.1	14.2	14.3	12.0	10.8
90°	0.0	1.2	2.5	3.7	3.7
92.5°	3.0	4.2	5.5	7.7	8.7
95°	9.9	18.4	9.9	11.2	13.6
97.5°	17.6	35.3	72.9	21.5	18.6
100°	23.5	44.1	146.2	43.0	28.5
102.5°	29.5	51.1	197.8	113.6	62.2
105°	38.4	59.0	224.3	286.5	189.6
107.5°	47.3	62.8	214.1	417.0	390.5
110°	53.3	67.8	208.2	438.1	470.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	59.2	73.8	202.2	425.7	480.7
115°	68.1	82.7	193.3	401.8	469.6
117.5°	77.3	91.6	191.1	375.8	445.6
120°	84.3	97.6	187.1	356.0	428.7
122.5°	89.2	103.5	182.1	339.0	405.9
125°	97.9	111.2	182.1	318.5	376.7
127.5°	105.1	118.6	182.4	294.7	352.1
130°	109.0	123.6	183.4	278.8	333.3
132.5°	114.0	128.5	183.4	271.6	316.4
135°	121.4	134.8	183.4	262.3	301.1
137.5°	127.6	141.9	183.4	252.0	285.2
140°	132.6	145.9	183.4	246.0	276.3
142.5°	137.5	149.9	184.4	239.0	267.4
145°	143.7	155.8	184.6	228.5	252.8
147.5°	151.2	161.8	186.1	221.0	239.6
150°	156.1	165.8	187.1	216.0	231.7
152.5°	161.1	169.8	187.1	211.9	224.8
155°	168.5	174.6	188.3	207.1	216.8
157.5°	174.5	180.3	189.8	204.1	211.1
160°	178.4	183.3	190.8	202.1	208.2
162.5°	181.4	186.2	191.8	201.1	205.2
165°	187.1	189.5	193.3	198.3	202.0
167.5°	190.3	192.5	194.5	197.1	199.2
170°	193.3	194.5	194.5	197.0	198.2
172.5°	194.3	196.5	195.5	196.0	197.3
175°	197.0	198.2	197.0	195.7	194.5
177.5°	197.0	198.0	197.0	197.0	196.0
180°	197.0	197.0	197.0	197.0	197.0

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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	17.97	19.02	18.70	19.76	20.64	10.21	11.26	10.93	11.99	12.87
	3H	19.48	20.42	20.22	21.17	22.07	11.58	12.51	12.31	13.26	14.17
	4H	20.00	20.88	20.76	21.64	22.56	12.24	13.12	13.00	13.88	14.80
	6H	20.41	21.22	21.18	21.99	22.92	12.84	13.65	13.61	14.41	15.35
	8H	20.55	21.32	21.33	22.10	23.04	13.07	13.84	13.85	14.62	15.56
	12H	20.63	21.37	21.42	22.15	23.11	13.24	13.97	14.02	14.75	15.71
4H	2H	17.83	18.71	18.59	19.46	20.39	10.85	11.73	11.61	12.48	13.41
	3H	19.48	20.21	20.25	21.00	21.94	12.42	13.15	13.19	13.94	14.88
	4H	20.08	20.74	20.86	21.53	22.50	13.22	13.88	14.01	14.67	15.64
	6H	20.58	21.15	21.38	21.97	22.94	13.97	14.54	14.77	15.35	16.33
	8H	20.77	21.30	21.58	22.11	23.10	14.26	14.79	15.07	15.61	16.59
	12H	20.91	21.38	21.74	22.22	23.21	14.49	14.96	15.32	15.80	16.79
8H	4H	20.01	20.54	20.81	21.35	22.34	13.68	14.22	14.49	15.03	16.01
	6H	20.55	20.99	21.38	21.84	22.83	14.57	15.01	15.41	15.87	16.85
	8H	20.78	21.17	21.63	22.03	23.03	14.97	15.36	15.82	16.21	17.21
	12H	20.98	21.32	21.83	22.17	23.23	15.30	15.64	16.14	16.48	17.54
12H	4H	19.96	20.44	20.79	21.28	22.27	13.74	14.22	14.57	15.05	16.04
	6H	20.52	20.91	21.37	21.76	22.77	14.69	15.08	15.54	15.93	16.93
	8H	20.77	21.12	21.62	21.96	23.02	15.14	15.48	15.99	16.33	17.39