

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: P621459

Luminaire Tested: VLT-F-075U-050D-840-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621459  
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-050D-840-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

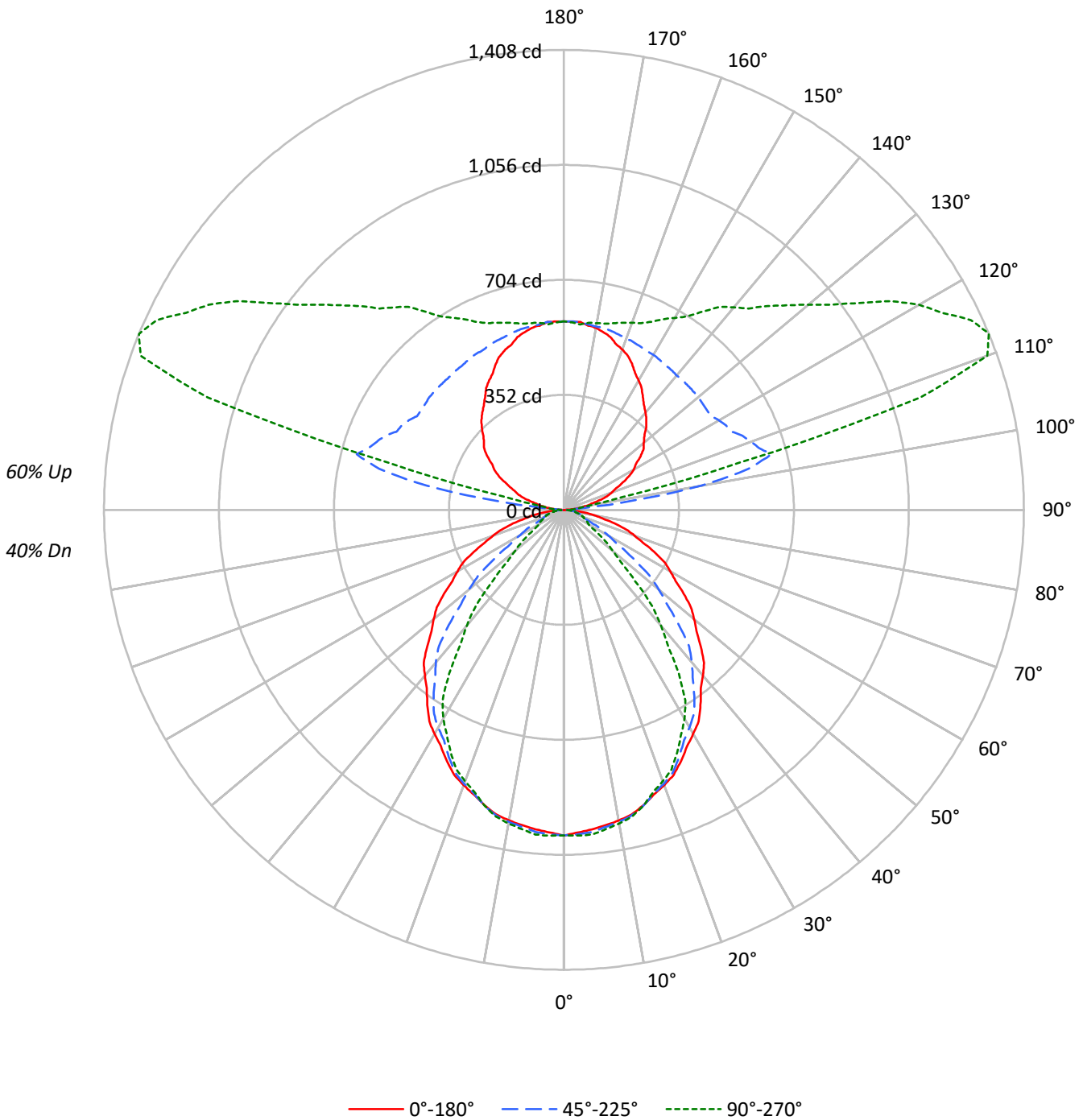
Lumens per Lamp: N/A  
Luminaire Lumens: 5133.4 lumens  
Efficiency: N/A  
Efficacy: 145.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 35.2  
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				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	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	96	92	88	85	87	84	81	78	69	67	65	55	53	52	42	41	40	34
2	88	81	75	70	80	74	69	65	61	57	54	49	47	44	38	36	35	30
3	81	72	65	59	73	66	60	55	54	50	46	44	41	38	34	32	30	26
4	74	64	56	51	67	58	52	47	48	44	40	39	36	33	31	28	27	23
5	68	57	49	44	62	52	46	41	44	39	35	35	32	29	28	25	24	20
6	63	51	44	38	57	47	40	36	39	34	31	32	29	26	25	23	21	18
7	58	46	39	33	53	43	36	31	36	31	27	29	26	23	23	21	19	16
8	54	42	35	30	49	39	32	28	33	28	24	27	23	21	22	19	17	15
9	50	39	31	26	46	36	29	25	30	25	22	25	21	19	20	17	15	13
10	47	35	28	24	43	33	27	22	28	23	20	23	19	17	19	16	14	12

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

	0°	45°	90°
0°	7154	7154	7154
5°	7077	7129	7188
10°	7039	7069	7106
15°	6962	6970	6970
20°	6850	6818	6755
25°	6719	6604	6490
30°	6562	6374	6118
35°	6387	6099	5367
40°	6203	5710	4322
45°	6009	5058	3135
50°	5806	4231	2172
55°	5605	3222	1624
60°	5395	2232	1227
65°	5158	1591	1258
70°	4817	1339	1297
75°	4456	1370	1314
80°	3872	1446	1364
85°	3137	1614	1359

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6009 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.9	1.8
10°-20°	264.2	5.1
20°-30°	384.2	7.5
30°-40°	425.1	8.3
40°-50°	365.0	7.1
50°-60°	252.7	4.9
60°-70°	150.6	2.9
70°-80°	74.2	1.4
80°-90°	24.2	0.5
90°-100°	70.9	1.4
100°-110°	505.5	9.8
110°-120°	686.3	13.4
120°-130°	558.6	10.9
130°-140°	449.3	8.8
140°-150°	354.2	6.9
150°-160°	259.0	5.0
160°-170°	160.9	3.1
170°-180°	54.9	1.1
0°-30°	742.3	14.5
0°-40°	1167.4	22.7
0°-60°	1785.1	34.8
0°-90°	2034.0	39.6
90°-120°	1262.7	24.6
90°-150°	2624.7	51.1
90°-180°	3099.0	60.4
0°-180°	5133.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	997	997	997	997	997	
5°	982	998	990	989	998	93
15°	937	949	938	933	938	264
25°	849	855	834	820	820	390
35°	729	727	696	640	613	456
45°	592	582	498	360	309	457
55°	448	429	258	148	130	400
65°	304	244	94	75	74	301
75°	161	70	49	48	47	170
85°	38	19	20	18	16	44
90°	0	4	7	11	11	3
95°	29	54	29	33	40	32
105°	112	173	657	839	555	119
115°	200	242	566	1177	1375	198
125°	287	326	533	933	1103	255
135°	356	395	537	768	882	274
145°	421	456	541	669	740	264
155°	494	511	552	607	635	227
165°	548	555	566	581	592	154
175°	577	580	577	573	570	55
180°	577	577	577	577	577	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	996.9	996.9	996.9	996.9	996.9
2.5°	988.6	999.9	994.4	994.5	998.5
5°	982.4	997.5	989.7	988.8	997.9
7.5°	973.4	987.3	979.1	978.1	985.9
10°	966.0	979.1	970.1	968.2	975.2
12.5°	955.3	968.3	958.6	955.0	962.1
15°	937.1	949.2	938.2	933.1	938.2
17.5°	914.3	924.3	911.8	903.8	906.9
20°	897.0	907.0	892.8	881.6	884.6
22.5°	878.0	886.5	870.6	857.7	859.9
25°	848.6	854.6	834.1	819.7	819.7
27.5°	815.8	819.4	795.6	780.5	776.3
30°	791.9	793.9	769.3	751.5	738.4
32.5°	767.2	768.4	740.4	711.8	691.4
35°	729.1	727.1	696.2	639.9	612.7
37.5°	688.5	684.1	647.5	562.0	521.5
40°	662.2	656.1	609.6	506.7	461.4
42.5°	635.0	626.5	567.6	449.7	399.6
45°	592.1	582.1	498.4	360.3	308.9
47.5°	549.7	536.4	427.6	279.1	235.0
50°	520.1	506.0	379.0	229.9	194.6
52.5°	490.4	476.3	329.5	193.0	165.0
55°	448.0	428.8	257.5	147.9	129.8
57.5°	404.7	377.3	191.8	115.2	101.1
60°	375.9	339.6	155.5	95.5	85.5
62.5°	347.9	302.0	127.5	83.4	81.4
65°	303.8	244.4	93.7	75.2	74.1
67.5°	261.8	186.5	69.6	67.7	66.7
70°	229.6	147.1	63.8	62.8	61.8
72.5°	200.8	112.6	58.1	57.0	56.0
75°	160.7	70.0	49.4	48.4	47.4
77.5°	120.1	44.2	40.8	39.7	38.7
80°	93.7	36.3	35.0	34.0	33.0
82.5°	70.6	29.4	28.4	27.4	26.4
85°	38.1	19.0	19.6	17.5	16.5
87.5°	13.2	9.9	10.5	9.6	8.8
90°	0.0	3.5	7.3	10.9	10.9
92.5°	8.7	12.3	16.0	22.6	25.4
95°	29.0	53.9	29.0	32.8	39.9
97.5°	51.5	103.3	213.4	62.9	54.4
100°	68.9	129.3	428.2	126.0	83.5
102.5°	86.4	149.5	579.2	332.6	182.2
105°	112.5	172.8	656.8	839.1	555.2
107.5°	138.6	184.0	627.1	1221.2	1143.8
110°	156.0	198.6	609.6	1283.1	1378.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	173.5	216.0	592.2	1246.9	1408.0
115°	199.6	242.2	566.1	1176.6	1375.3
117.5°	226.4	268.3	559.6	1100.5	1304.9
120°	246.8	285.8	548.0	1042.7	1255.6
122.5°	261.3	303.1	533.4	992.9	1188.8
125°	286.7	325.7	533.4	932.8	1103.2
127.5°	307.7	347.5	534.2	863.1	1031.3
130°	319.3	361.9	537.1	816.5	976.2
132.5°	333.9	376.4	537.1	795.5	926.8
135°	355.6	394.7	537.1	768.3	881.8
137.5°	373.8	415.6	537.1	738.1	835.4
140°	388.3	427.3	537.1	720.5	809.2
142.5°	402.8	439.0	540.0	700.1	783.1
145°	420.9	456.4	540.7	669.3	740.3
147.5°	442.7	473.9	545.0	647.2	701.8
150°	457.2	485.6	548.0	632.5	678.6
152.5°	471.7	497.3	548.0	620.7	658.3
155°	493.5	511.3	551.6	606.7	635.0
157.5°	510.9	528.0	555.9	597.8	618.3
160°	522.5	536.7	558.8	591.9	609.6
162.5°	531.3	545.5	561.7	588.9	600.9
165°	548.0	555.0	566.1	580.9	591.5
167.5°	557.4	563.8	569.7	577.1	583.5
170°	566.1	569.6	569.7	577.1	580.6
172.5°	569.0	575.4	572.6	574.2	577.7
175°	577.0	580.5	577.0	573.3	569.7
177.5°	577.0	579.8	577.0	576.9	574.1
180°	577.0	577.0	577.0	577.0	577.0



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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	13.40	14.14	14.45	15.19	16.60	5.63	6.37	6.68	7.42	8.84
	3H	14.88	15.54	15.94	16.60	18.04	6.98	7.64	8.04	8.70	10.13
	4H	15.39	16.02	16.46	17.08	18.52	7.63	8.25	8.70	9.31	10.75
	6H	15.78	16.36	16.86	17.42	18.87	8.21	8.79	9.29	9.85	11.30
	8H	15.91	16.46	17.00	17.54	18.98	8.43	8.98	9.52	10.06	11.51
	12H	15.99	16.51	17.08	17.58	19.05	8.60	9.11	9.69	10.19	11.66
4H	2H	13.21	13.84	14.29	14.90	16.34	6.24	6.86	7.31	7.92	9.36
	3H	14.84	15.36	15.93	16.45	17.90	7.78	8.30	8.86	9.38	10.84
	4H	15.43	15.90	16.52	16.98	18.45	8.57	9.04	9.66	10.12	11.60
	6H	15.91	16.32	17.01	17.42	18.89	9.30	9.71	10.40	10.81	12.28
	8H	16.10	16.48	17.20	17.57	19.06	9.59	9.97	10.69	11.07	12.55
	12H	16.22	16.57	17.34	17.67	19.16	9.81	10.15	10.92	11.26	12.74
8H	4H	15.33	15.71	16.43	16.81	18.29	9.01	9.39	10.11	10.49	11.97
	6H	15.87	16.18	16.99	17.31	18.80	9.89	10.21	11.01	11.34	12.82
	8H	16.10	16.38	17.23	17.49	18.99	10.29	10.56	11.42	11.68	13.18
	12H	16.28	16.53	17.41	17.64	19.18	10.61	10.85	11.73	11.96	13.50
12H	4H	15.28	15.62	16.39	16.73	18.22	9.06	9.40	10.17	10.51	12.00
	6H	15.84	16.11	16.96	17.23	18.73	10.01	10.28	11.13	11.40	12.90
	8H	16.08	16.32	17.20	17.43	18.97	10.45	10.69	11.58	11.80	13.34