

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: P621851

Luminaire Tested: VLT-FB-100U-075D-935-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621851  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/2/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: VLT-FB-100U-075D-935-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - BATWING  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

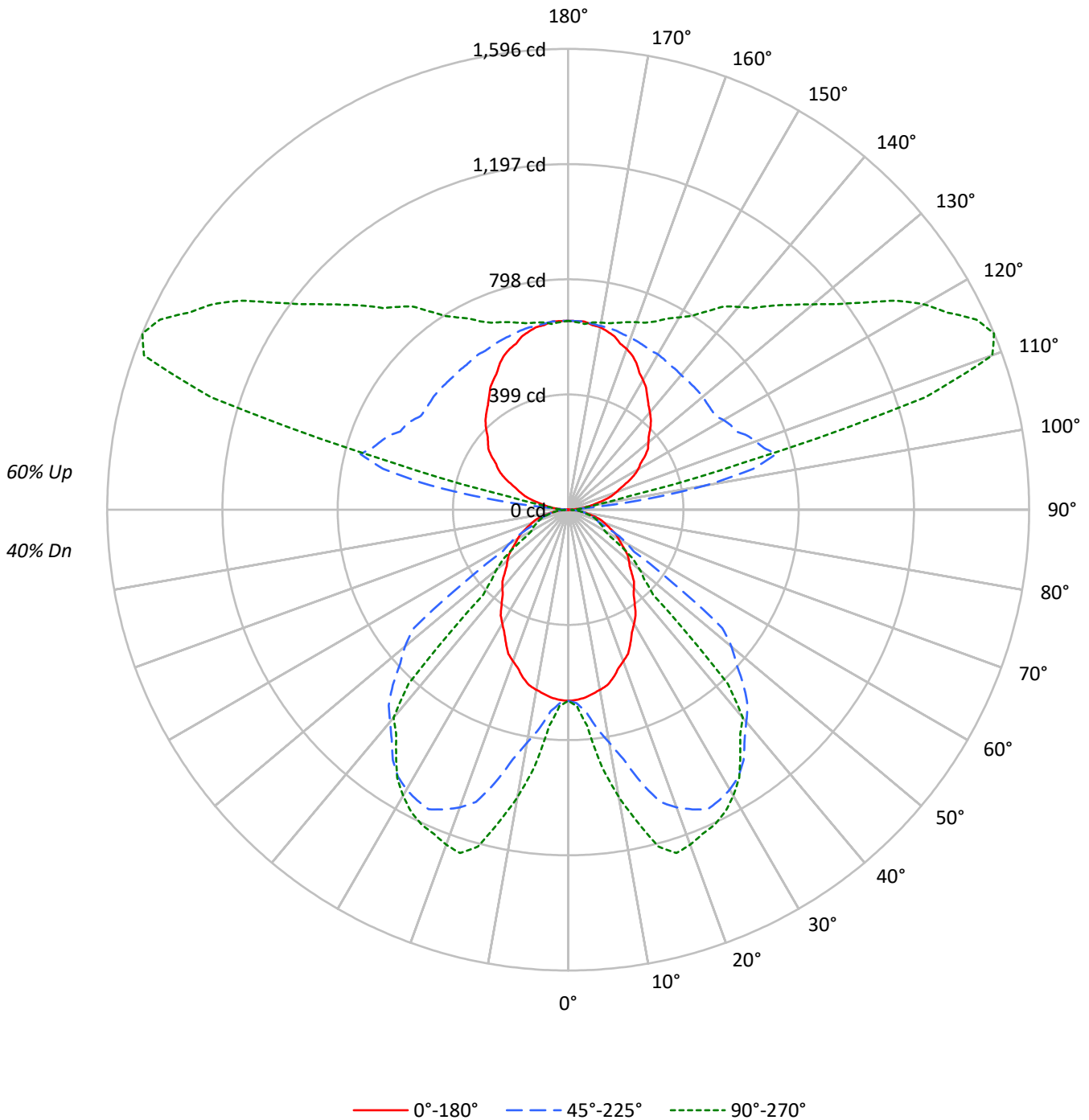
Lumens per Lamp: N/A  
Luminaire Lumens: 5885.7 lumens  
Efficiency: N/A  
Efficacy: 116.3 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 50.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40				
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	42	42	41	35				
2	88	81	75	70	80	74	69	65	61	58	55	49	47	45	38	36	35	30				
3	80	71	65	59	73	66	60	55	54	50	46	44	41	38	34	32	30	26				
4	74	63	56	50	67	58	52	47	48	44	40	39	36	33	31	28	27	23				
5	68	57	49	43	62	52	45	40	43	38	34	35	32	29	28	25	23	20				
6	62	51	43	37	57	47	40	35	39	34	30	32	28	25	25	23	21	18				
7	58	46	38	33	53	42	36	31	35	30	27	29	25	22	23	20	18	16				
8	54	42	34	29	49	38	32	27	32	27	24	27	23	20	21	18	16	14				
9	50	38	31	26	45	35	29	24	30	25	21	24	21	18	20	17	15	13				
10	46	35	28	23	42	32	26	22	27	22	19	22	19	16	18	15	13	11				

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

	0°	45°	90°
0°	4749	4749	4749
5°	4709	5048	5407
10°	4617	5969	7370
15°	4477	7275	8974
20°	4263	8382	9430
25°	4036	9063	9521
30°	3778	9273	9474
35°	3523	9274	9097
40°	3314	8984	8807
45°	3153	8709	4218
50°	3063	8244	3634
55°	2979	5520	2878
60°	2896	3360	2085
65°	2832	2559	2170
70°	2795	2230	2230
75°	2723	2312	2237
80°	2389	2335	2223
85°	1770	2437	2108

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 8709 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.4	1.2
10°-20°	263.1	4.5
20°-30°	445.7	7.6
30°-40°	540.7	9.2
40°-50°	475.9	8.1
50°-60°	294.5	5.0
60°-70°	159.7	2.7
70°-80°	91.0	1.5
80°-90°	31.2	0.5
90°-100°	80.4	1.4
100°-110°	572.9	9.7
110°-120°	777.8	13.2
120°-130°	633.0	10.8
130°-140°	509.1	8.7
140°-150°	401.4	6.8
150°-160°	293.5	5.0
160°-170°	182.3	3.1
170°-180°	62.2	1.1
0°-30°	780.2	13.3
0°-40°	1320.9	22.4
0°-60°	2091.3	35.5
0°-90°	2373.1	40.3
90°-120°	1431.1	24.3
90°-150°	2974.6	50.5
90°-180°	3513.0	59.7
0°-180°	5885.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	662	662	662	662	662	
5°	654	675	701	731	751	62
15°	603	695	979	1158	1208	169
25°	510	698	1145	1179	1202	234
35°	402	647	1059	1044	1038	252
45°	311	532	858	727	416	241
55°	238	371	441	255	230	213
65°	167	209	151	129	128	166
75°	98	86	83	82	81	103
85°	22	29	30	27	26	26
90°	0	4	8	12	12	2
95°	33	61	33	37	45	37
105°	128	196	744	951	629	134
115°	226	274	642	1334	1559	225
125°	325	369	604	1057	1250	289
135°	403	447	609	871	999	310
145°	477	517	613	758	839	300
155°	559	579	625	688	720	257
165°	621	629	642	658	670	174
175°	654	658	654	650	646	62
180°	654	654	654	654	654	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	661.8	661.8	661.8	661.8	661.8
2.5°	659.6	667.0	670.4	676.9	680.1
5°	653.7	674.8	700.8	730.8	750.6
7.5°	643.2	680.9	763.2	858.0	898.5
10°	633.6	684.8	819.2	956.3	1011.5
12.5°	622.8	688.8	884.8	1051.0	1107.3
15°	602.6	694.7	979.2	1157.9	1207.9
17.5°	576.5	698.3	1061.0	1214.6	1246.7
20°	558.2	699.0	1097.6	1221.7	1234.8
22.5°	541.0	699.6	1123.4	1204.4	1215.4
25°	509.8	697.9	1144.7	1178.9	1202.5
27.5°	478.6	690.1	1134.2	1161.8	1178.9
30°	456.0	682.2	1119.1	1142.0	1143.4
32.5°	434.5	669.1	1096.5	1103.2	1101.4
35°	402.2	646.8	1058.6	1043.7	1038.4
37.5°	372.1	617.2	1003.2	979.2	977.9
40°	353.8	595.8	959.1	936.3	940.2
42.5°	336.5	571.2	919.3	892.6	818.6
45°	310.7	531.7	858.2	727.4	415.6
47.5°	288.4	486.7	789.0	389.6	357.8
50°	274.4	455.9	738.5	342.6	325.5
52.5°	260.4	427.2	672.8	308.1	285.7
55°	238.1	370.9	441.2	255.0	230.0
57.5°	216.8	311.8	269.6	198.2	171.1
60°	201.8	276.7	234.1	159.7	145.3
62.5°	187.8	248.0	199.6	141.7	138.8
65°	166.8	208.9	150.7	129.1	127.8
67.5°	147.2	171.6	114.9	116.2	114.9
70°	133.2	145.0	106.3	107.6	106.3
72.5°	120.3	119.5	97.7	96.8	95.5
75°	98.2	86.4	83.4	82.0	80.7
77.5°	75.1	63.7	67.3	65.9	64.6
80°	57.8	53.9	56.5	55.1	53.8
82.5°	42.8	44.1	45.7	43.3	42.0
85°	21.5	29.4	29.6	26.9	25.6
87.5°	6.5	13.6	13.5	12.1	11.1
90°	0.0	4.0	8.2	12.3	12.3
92.5°	9.9	13.9	18.1	25.6	28.8
95°	32.9	61.0	32.9	37.2	45.2
97.5°	58.4	117.1	241.8	71.3	61.7
100°	78.1	146.5	485.3	142.8	94.6
102.5°	97.9	169.5	656.4	376.9	206.5
105°	127.5	195.8	744.4	950.9	629.2
107.5°	157.1	208.6	710.6	1383.9	1296.3
110°	176.8	225.1	690.9	1454.2	1562.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	196.6	244.8	671.2	1413.1	1595.7
115°	226.2	274.4	641.6	1333.5	1558.7
117.5°	256.6	304.1	634.2	1247.3	1478.9
120°	279.7	323.9	621.0	1181.7	1422.9
122.5°	296.1	343.6	604.5	1125.3	1347.3
125°	324.9	369.1	604.5	1057.2	1250.2
127.5°	348.7	393.8	605.4	978.2	1168.8
130°	361.9	410.2	608.7	925.3	1106.3
132.5°	378.4	426.6	608.7	901.6	1050.3
135°	403.0	447.3	608.7	870.7	999.3
137.5°	423.6	471.0	608.7	836.5	946.7
140°	440.0	484.3	608.7	816.6	917.1
142.5°	456.5	497.5	611.9	793.4	887.5
145°	477.1	517.3	612.8	758.5	839.0
147.5°	501.7	537.1	617.7	733.4	795.4
150°	518.2	550.4	621.0	716.8	769.0
152.5°	534.6	563.6	621.0	703.4	746.0
155°	559.3	579.4	625.1	687.5	719.7
157.5°	579.0	598.3	630.0	677.5	700.8
160°	592.2	608.3	633.3	670.8	690.9
162.5°	602.1	618.2	636.6	667.4	681.0
165°	621.0	629.0	641.6	658.3	670.3
167.5°	631.7	638.9	645.7	654.1	661.3
170°	641.6	645.6	645.7	654.0	658.0
172.5°	644.8	652.1	649.0	650.7	654.7
175°	653.9	657.9	653.9	649.7	645.7
177.5°	653.9	657.1	653.9	653.8	650.6
180°	653.9	653.9	653.9	653.9	653.9

(END OF REPORT)