

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: P621525

Luminaire Tested: VLT-F-100U-125D-840-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621525  
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-100U-125D-840-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

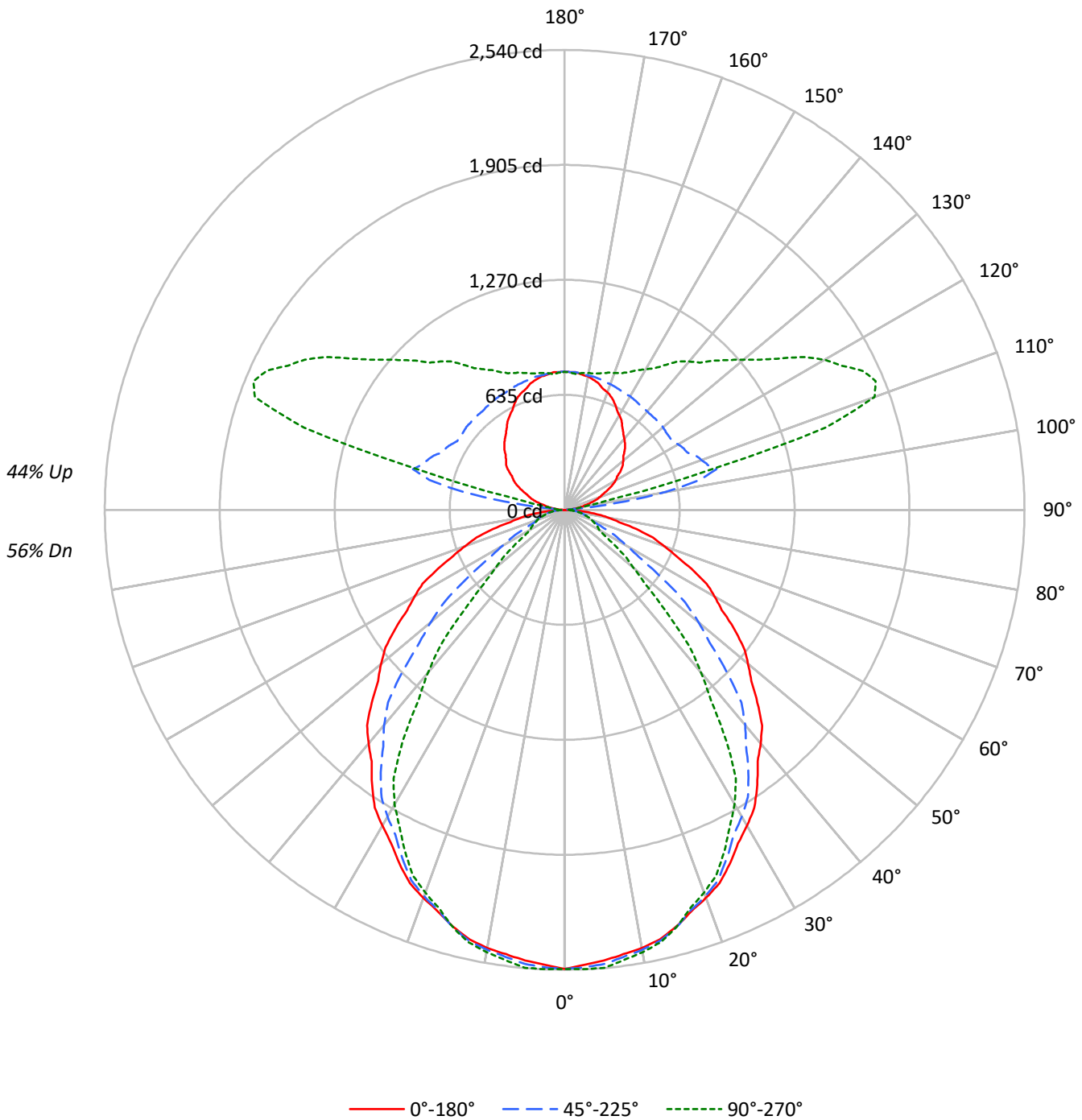
Lumens per Lamp: N/A  
Luminaire Lumens: 9265.0 lumens  
Efficiency: N/A  
Efficacy: 136.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 67.7  
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				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	109	109	109	109	101	101	101	101	87	87	87	73	73	73	61	61	61	56		
1	100	96	92	89	93	89	86	83	77	75	73	66	64	63	56	54	53	49		
2	92	85	79	74	85	79	74	70	69	65	62	59	56	54	50	48	46	42		
3	84	75	68	63	78	70	64	59	61	57	53	53	49	46	45	42	40	37		
4	77	67	59	54	72	63	56	51	55	50	46	48	44	40	41	38	35	32		
5	71	60	52	47	66	56	50	44	50	44	40	43	39	36	37	34	31	28		
6	66	54	46	41	61	51	44	39	45	39	35	39	35	32	34	31	28	25		
7	61	49	42	36	57	46	39	35	41	35	31	36	32	28	31	28	25	23		
8	57	45	37	32	53	42	36	31	38	32	28	33	29	25	29	25	23	21		
9	53	41	34	29	50	39	32	28	35	29	25	30	26	23	27	23	21	19		
10	50	38	31	26	46	36	29	25	32	27	23	28	24	21	25	21	19	17		

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

	0°	45°	90°
0°	18193	18193	18193
5°	17998	18130	18281
10°	17901	17978	18073
15°	17706	17726	17726
20°	17420	17340	17181
25°	17087	16798	16507
30°	16689	16212	15560
35°	16244	15510	13652
40°	15776	14524	10991
45°	15283	12864	7974
50°	14765	10760	5526
55°	14254	8192	4129
60°	13720	5676	3120
65°	13119	4046	3202
70°	12255	3407	3296
75°	11329	3485	3341
80°	9848	3678	3463
85°	7978	4100	3450

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15283 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	238.9	2.6
10°-20°	671.8	7.3
20°-30°	977.2	10.5
30°-40°	1081.1	11.7
40°-50°	928.2	10.0
50°-60°	642.7	6.9
60°-70°	382.9	4.1
70°-80°	188.7	2.0
80°-90°	60.0	0.6
90°-100°	93.7	1.0
100°-110°	667.6	7.2
110°-120°	906.4	9.8
120°-130°	737.7	8.0
130°-140°	593.3	6.4
140°-150°	467.8	5.0
150°-160°	342.0	3.7
160°-170°	212.4	2.3
170°-180°	72.4	0.8
0°-30°	1887.9	20.4
0°-40°	2969.0	32.0
0°-60°	4539.9	49.0
0°-90°	5171.5	55.8
90°-120°	1667.7	18.0
90°-150°	3466.6	37.4
90°-180°	4094.0	44.2
0°-180°	9265.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2535	2535	2535	2535	2535	
5°	2499	2537	2517	2515	2538	237
15°	2383	2414	2386	2373	2386	671
25°	2158	2174	2122	2085	2085	993
35°	1854	1849	1770	1628	1558	1159
45°	1506	1480	1268	916	786	1162
55°	1139	1091	655	376	330	1018
65°	773	622	238	191	189	765
75°	409	178	126	123	120	431
85°	97	48	50	44	42	112
90°	0	5	10	14	14	6
95°	38	71	38	43	53	43
105°	149	228	868	1108	733	157
115°	264	320	748	1554	1816	262
125°	379	430	704	1232	1457	336
135°	470	521	709	1015	1165	361
145°	556	603	714	884	978	349
155°	652	675	728	801	839	299
165°	724	733	748	767	781	203
175°	762	767	762	757	752	72
180°	762	762	762	762	762	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2535.3	2535.3	2535.3	2535.3	2535.3
2.5°	2514.3	2543.0	2529.0	2529.2	2539.5
5°	2498.6	2537.0	2516.9	2514.8	2537.9
7.5°	2475.6	2510.9	2490.2	2487.5	2507.5
10°	2456.7	2490.0	2467.2	2462.3	2480.3
12.5°	2429.5	2462.7	2437.8	2428.8	2446.7
15°	2383.4	2414.1	2386.0	2373.2	2386.0
17.5°	2325.2	2350.8	2318.9	2298.7	2306.4
20°	2281.2	2306.8	2270.7	2242.1	2249.8
22.5°	2233.0	2254.5	2214.2	2181.3	2186.9
25°	2158.1	2173.5	2121.5	2084.8	2084.8
27.5°	2074.8	2084.1	2023.5	1985.0	1974.3
30°	2014.1	2019.2	1956.5	1911.2	1877.9
32.5°	1951.2	1954.3	1883.1	1810.2	1758.4
35°	1854.3	1849.2	1770.5	1627.5	1558.4
37.5°	1751.1	1739.8	1646.9	1429.2	1326.3
40°	1684.1	1668.7	1550.5	1288.6	1173.3
42.5°	1614.9	1593.4	1443.6	1143.7	1016.2
45°	1506.0	1480.4	1267.6	916.3	785.7
47.5°	1398.1	1364.3	1087.4	709.8	597.7
50°	1322.6	1286.8	963.8	584.6	495.0
52.5°	1247.2	1211.4	838.1	490.8	419.6
55°	1139.3	1090.6	654.8	376.1	330.0
57.5°	1029.3	959.6	487.7	293.0	257.2
60°	956.0	863.8	395.5	243.0	217.4
62.5°	884.7	767.9	324.2	212.0	206.9
65°	772.6	621.5	238.3	191.1	188.6
67.5°	665.8	474.2	177.0	172.3	169.7
70°	584.1	374.1	162.4	159.7	157.1
72.5°	510.7	286.4	147.7	145.0	142.5
75°	408.6	178.1	125.7	123.0	120.5
77.5°	305.4	112.3	103.7	101.0	98.5
80°	238.3	92.4	89.0	86.4	83.8
82.5°	179.7	74.7	72.3	69.6	67.0
85°	96.9	48.2	49.8	44.5	41.9
87.5°	33.5	24.2	25.0	21.7	19.6
90°	0.0	4.7	9.6	14.4	14.4
92.5°	11.5	16.2	21.1	29.8	33.5
95°	38.3	71.1	38.3	43.3	52.7
97.5°	68.1	136.5	281.8	83.1	71.9
100°	91.1	170.7	565.5	166.5	110.2
102.5°	114.1	197.5	764.9	439.3	240.6
105°	148.6	228.2	867.5	1108.2	733.3
107.5°	183.1	243.1	828.2	1612.8	1510.7
110°	206.1	262.3	805.2	1694.7	1821.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	229.1	285.3	782.2	1646.8	1859.6
115°	263.6	319.8	747.7	1554.0	1816.5
117.5°	299.1	354.4	739.0	1453.6	1723.5
120°	325.9	377.5	723.7	1377.1	1658.3
122.5°	345.1	400.4	704.5	1311.4	1570.1
125°	378.6	430.2	704.5	1232.1	1457.0
127.5°	406.4	458.9	705.5	1140.0	1362.1
130°	421.8	478.0	709.3	1078.4	1289.3
132.5°	440.9	497.2	709.3	1050.7	1224.1
135°	469.7	521.2	709.3	1014.7	1164.6
137.5°	493.7	549.0	709.3	974.9	1103.3
140°	512.8	564.4	709.3	951.6	1068.8
142.5°	532.0	579.8	713.2	924.6	1034.3
145°	556.0	602.8	714.1	884.0	977.7
147.5°	584.7	626.0	719.9	854.8	926.9
150°	603.9	641.4	723.7	835.3	896.2
152.5°	623.1	656.8	723.7	819.7	869.4
155°	651.8	675.2	728.5	801.2	838.7
157.5°	674.8	697.3	734.3	789.5	816.7
160°	690.2	708.9	738.1	781.8	805.2
162.5°	701.7	720.4	741.9	777.7	793.7
165°	723.7	733.1	747.7	767.2	781.2
167.5°	736.2	744.6	752.5	762.2	770.7
170°	747.7	752.4	752.5	762.2	766.8
172.5°	751.5	759.9	756.3	758.3	763.0
175°	762.1	766.7	762.1	757.2	752.5
177.5°	762.1	765.8	762.1	762.0	758.2
180°	762.1	762.1	762.1	762.1	762.1

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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	18.23	19.09	19.15	20.02	21.21	10.46	11.32	11.38	12.25	13.44
	3H	19.72	20.49	20.65	21.43	22.64	11.82	12.59	12.75	13.52	14.74
	4H	20.24	20.96	21.18	21.90	23.13	12.47	13.20	13.42	14.14	15.36
	6H	20.64	21.30	21.59	22.25	23.49	13.06	13.73	14.02	14.67	15.91
	8H	20.77	21.40	21.73	22.36	23.60	13.29	13.92	14.25	14.88	16.12
	12H	20.85	21.45	21.81	22.41	23.67	13.45	14.05	14.42	15.01	16.27
4H	2H	18.06	18.78	19.01	19.73	20.95	11.08	11.81	12.03	12.75	13.97
	3H	19.70	20.30	20.66	21.27	22.51	12.63	13.23	13.59	14.21	15.44
	4H	20.29	20.83	21.25	21.80	23.06	13.43	13.98	14.40	14.94	16.20
	6H	20.78	21.25	21.76	22.24	23.50	14.17	14.64	15.15	15.63	16.89
	8H	20.97	21.41	21.95	22.39	23.67	14.46	14.90	15.44	15.88	17.16
	12H	21.10	21.49	22.10	22.49	23.77	14.68	15.07	15.68	16.07	17.35
8H	4H	20.20	20.64	21.19	21.63	22.90	13.88	14.32	14.86	15.30	16.58
	6H	20.74	21.10	21.75	22.13	23.40	14.77	15.13	15.77	16.15	17.43
	8H	20.97	21.29	21.99	22.31	23.60	15.16	15.48	16.17	16.49	17.78
	12H	21.16	21.44	22.18	22.45	23.79	15.48	15.76	16.50	16.77	18.11
12H	4H	20.15	20.55	21.15	21.55	22.83	13.93	14.33	14.93	15.33	16.61
	6H	20.71	21.03	21.73	22.04	23.34	14.88	15.20	15.89	16.21	17.50
	8H	20.95	21.24	21.97	22.24	23.58	15.32	15.60	16.34	16.61	17.95