

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: P621571

Luminaire Tested: VLT-F-150U-125D-830-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621571  
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-150U-125D-830-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

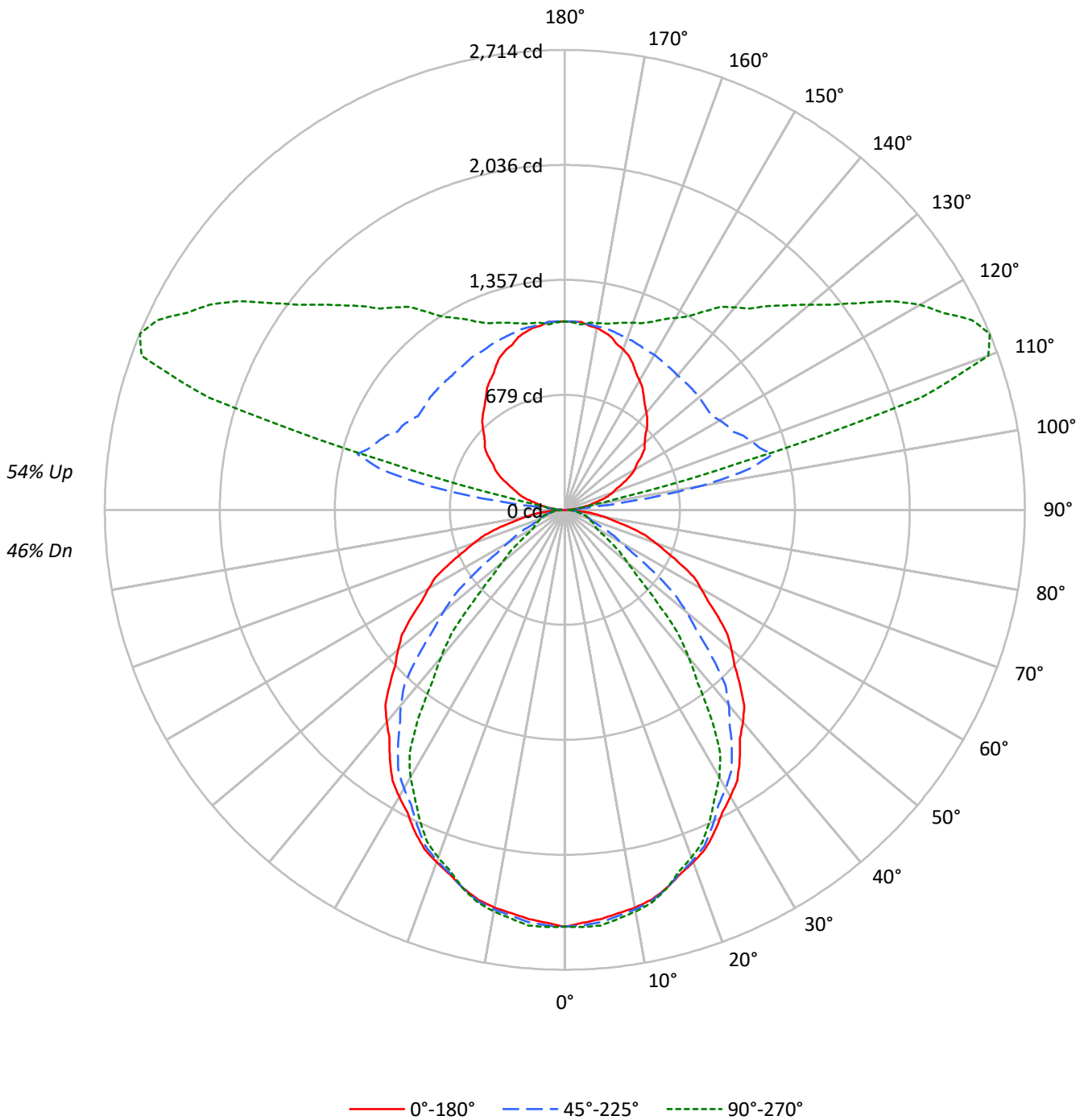
Lumens per Lamp: N/A  
Luminaire Lumens: 10991.9 lumens  
Efficiency: N/A  
Efficacy: 125.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 87.3  
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	97	93	90	86	89	86	83	80	72	70	68	59	57	56	47	46	45	40
2	89	82	77	72	82	76	71	67	64	60	57	53	50	48	42	41	39	34
3	82	73	66	61	75	67	61	57	57	52	49	47	44	41	38	36	34	30
4	75	65	57	52	69	60	54	48	51	46	42	42	39	36	34	32	30	26
5	69	58	50	45	63	54	47	42	46	41	37	38	34	32	31	29	26	23
6	64	52	45	39	59	49	42	37	41	36	32	35	31	28	29	26	24	21
7	59	47	40	34	54	44	37	33	38	33	29	32	28	25	26	23	21	19
8	55	43	36	31	51	40	34	29	35	29	26	29	25	22	24	21	19	17
9	51	40	32	27	47	37	30	26	32	27	23	27	23	20	22	20	17	15
10	48	36	29	25	44	34	28	23	29	24	21	25	21	18	21	18	16	14

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

	0°	45°	90°
0°	17651	17651	17651
5°	17462	17590	17736
10°	17367	17441	17534
15°	17178	17197	17197
20°	16901	16823	16668
25°	16578	16296	16014
30°	16191	15728	15096
35°	15760	15047	13245
40°	15305	14092	10664
45°	14828	12480	7736
50°	14325	10439	5361
55°	13828	7947	4006
60°	13311	5507	3027
65°	12728	3926	3106
70°	11888	3305	3200
75°	10990	3383	3241
80°	9554	3570	3360
85°	7739	3977	3351

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14828 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	231.8	2.1
10°-20°	651.8	5.9
20°-30°	948.1	8.6
30°-40°	1048.9	9.5
40°-50°	900.5	8.2
50°-60°	623.5	5.7
60°-70°	371.5	3.4
70°-80°	183.1	1.7
80°-90°	59.0	0.5
90°-100°	136.7	1.2
100°-110°	974.3	8.9
110°-120°	1322.8	12.0
120°-130°	1076.6	9.8
130°-140°	865.9	7.9
140°-150°	682.6	6.2
150°-160°	499.1	4.5
160°-170°	310.0	2.8
170°-180°	105.7	1.0
0°-30°	1831.6	16.7
0°-40°	2880.5	26.2
0°-60°	4404.5	40.1
0°-90°	5018.0	45.7
90°-120°	2433.8	22.1
90°-150°	5059.0	46.0
90°-180°	5974.0	54.3
0°-180°	10991.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2460	2460	2460	2460	2460	
5°	2424	2461	2442	2440	2462	230
15°	2312	2342	2315	2302	2315	651
25°	2094	2109	2058	2023	2023	963
35°	1799	1794	1718	1579	1512	1124
45°	1461	1436	1230	889	762	1127
55°	1105	1058	635	365	320	988
65°	750	603	231	185	183	742
75°	396	173	122	119	117	418
85°	94	47	48	43	41	109
90°	0	7	14	21	21	7
95°	56	104	56	63	77	63
105°	217	333	1266	1617	1070	229
115°	385	467	1091	2268	2651	382
125°	553	628	1028	1798	2126	491
135°	685	761	1035	1481	1700	527
145°	811	880	1042	1290	1427	510
155°	951	985	1063	1169	1224	437
165°	1056	1070	1091	1120	1140	297
175°	1112	1119	1112	1105	1098	105
180°	1112	1112	1112	1112	1112	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2459.7	2459.7	2459.7	2459.7	2459.7
2.5°	2439.3	2467.2	2453.6	2453.8	2463.7
5°	2424.1	2461.3	2441.9	2439.8	2462.2
7.5°	2401.7	2436.0	2415.9	2413.3	2432.7
10°	2383.4	2415.7	2393.6	2388.9	2406.3
12.5°	2357.0	2389.3	2365.1	2356.4	2373.8
15°	2312.3	2342.1	2314.8	2302.4	2314.8
17.5°	2255.9	2280.7	2249.8	2230.1	2237.6
20°	2213.2	2238.0	2203.0	2175.2	2182.7
22.5°	2166.4	2187.3	2148.1	2116.2	2121.7
25°	2093.8	2108.7	2058.2	2022.6	2022.6
27.5°	2013.0	2021.9	1963.1	1925.8	1915.4
30°	1954.0	1959.0	1898.1	1854.2	1821.9
32.5°	1893.0	1896.0	1827.0	1756.2	1706.0
35°	1799.0	1794.0	1717.7	1579.0	1511.9
37.5°	1698.9	1688.0	1597.8	1386.6	1286.7
40°	1633.8	1618.9	1504.3	1250.2	1138.4
42.5°	1566.8	1545.9	1400.6	1109.6	985.9
45°	1461.1	1436.2	1229.8	889.0	762.3
47.5°	1356.4	1323.6	1055.0	688.7	579.8
50°	1283.2	1248.4	935.1	567.2	480.2
52.5°	1210.0	1175.2	813.1	476.1	407.1
55°	1105.3	1058.1	635.2	364.9	320.2
57.5°	998.6	931.0	473.1	284.3	249.5
60°	927.5	838.0	383.7	235.7	210.9
62.5°	858.3	745.0	314.6	205.7	200.7
65°	749.6	603.0	231.2	185.4	182.9
67.5°	645.9	460.1	171.8	167.1	164.7
70°	566.6	362.9	157.5	154.9	152.5
72.5°	495.5	277.8	143.3	140.7	138.2
75°	396.4	172.8	122.0	119.4	116.9
77.5°	296.3	108.9	100.6	98.0	95.5
80°	231.2	89.6	86.4	83.8	81.3
82.5°	174.3	72.4	70.1	67.5	65.0
85°	94.0	46.8	48.3	43.1	40.7
87.5°	32.5	24.0	25.2	22.4	20.5
90°	0.0	6.8	14.0	21.0	21.0
92.5°	16.8	23.6	30.8	43.5	49.0
95°	56.0	103.8	56.0	63.3	76.9
97.5°	99.3	199.2	411.3	121.3	104.9
100°	132.9	249.2	825.3	242.9	160.9
102.5°	166.5	288.2	1116.3	641.1	351.1
105°	216.8	333.1	1266.0	1617.2	1070.1
107.5°	267.2	354.7	1208.6	2353.7	2204.6
110°	300.8	382.8	1175.0	2473.2	2657.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	334.3	416.4	1141.5	2403.3	2713.8
115°	384.7	466.8	1091.1	2267.9	2650.8
117.5°	436.4	517.1	1078.5	2121.2	2515.2
120°	475.6	550.8	1056.1	2009.7	2420.0
122.5°	503.6	584.3	1028.2	1913.8	2291.3
125°	552.6	627.8	1028.2	1798.0	2126.3
127.5°	593.1	669.7	1029.6	1663.6	1987.8
130°	615.5	697.6	1035.2	1573.7	1881.5
132.5°	643.5	725.5	1035.2	1533.3	1786.3
135°	685.4	760.7	1035.2	1480.8	1699.6
137.5°	720.4	801.1	1035.2	1422.7	1610.1
140°	748.4	823.6	1035.2	1388.8	1559.7
142.5°	776.4	846.1	1040.8	1349.3	1509.4
145°	811.3	879.7	1042.2	1290.1	1426.8
147.5°	853.3	913.5	1050.5	1247.4	1352.7
150°	881.3	936.0	1056.1	1219.0	1307.9
152.5°	909.3	958.5	1056.1	1196.3	1268.8
155°	951.2	985.4	1063.1	1169.3	1224.0
157.5°	984.8	1017.6	1071.5	1152.2	1191.8
160°	1007.2	1034.5	1077.1	1140.8	1175.0
162.5°	1024.0	1051.3	1082.7	1135.0	1158.3
165°	1056.1	1069.8	1091.1	1119.6	1140.1
167.5°	1074.3	1086.6	1098.1	1112.4	1124.7
170°	1091.1	1098.0	1098.1	1112.3	1119.1
172.5°	1096.7	1109.0	1103.7	1106.7	1113.5
175°	1112.1	1118.9	1112.1	1104.9	1098.1
177.5°	1112.1	1117.6	1112.1	1112.0	1106.5
180°	1112.1	1112.1	1112.1	1112.1	1112.1

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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	17.17	17.95	18.18	18.96	20.30	9.41	10.19	10.41	11.19	12.53
	3H	18.66	19.36	19.67	20.37	21.73	10.75	11.45	11.77	12.47	13.82
	4H	19.17	19.83	20.20	20.85	22.21	11.40	12.06	12.43	13.08	14.45
	6H	19.56	20.17	20.60	21.19	22.57	11.99	12.60	13.03	13.62	15.00
	8H	19.69	20.27	20.73	21.31	22.68	12.21	12.79	13.25	13.83	15.20
	12H	19.77	20.32	20.82	21.35	22.75	12.38	12.92	13.42	13.96	15.35
4H	2H	16.99	17.65	18.03	18.67	20.04	10.01	10.67	11.05	11.69	13.06
	3H	18.62	19.17	19.66	20.22	21.59	11.56	12.10	12.60	13.15	14.53
	4H	19.21	19.71	20.26	20.75	22.15	12.35	12.85	13.40	13.89	15.29
	6H	19.70	20.13	20.76	21.19	22.59	13.09	13.51	14.14	14.58	15.97
	8H	19.88	20.28	20.94	21.34	22.75	13.38	13.78	14.43	14.83	16.24
	12H	20.01	20.37	21.08	21.44	22.86	13.59	13.95	14.67	15.02	16.44
8H	4H	19.12	19.52	20.18	20.58	21.99	12.80	13.20	13.86	14.25	15.67
	6H	19.65	19.98	20.73	21.08	22.49	13.68	14.01	14.76	15.11	16.52
	8H	19.89	20.18	20.98	21.26	22.69	14.07	14.36	15.16	15.45	16.87
	12H	20.07	20.33	21.16	21.40	22.87	14.39	14.65	15.48	15.72	17.19
12H	4H	19.07	19.43	20.14	20.50	21.91	12.85	13.21	13.92	14.28	15.69
	6H	19.63	19.92	20.71	21.00	22.42	13.79	14.08	14.88	15.17	16.59
	8H	19.86	20.12	20.95	21.20	22.66	14.23	14.49	15.32	15.56	17.03