

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: P621524

Luminaire Tested: VLT-F-100U-125D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621524
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-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

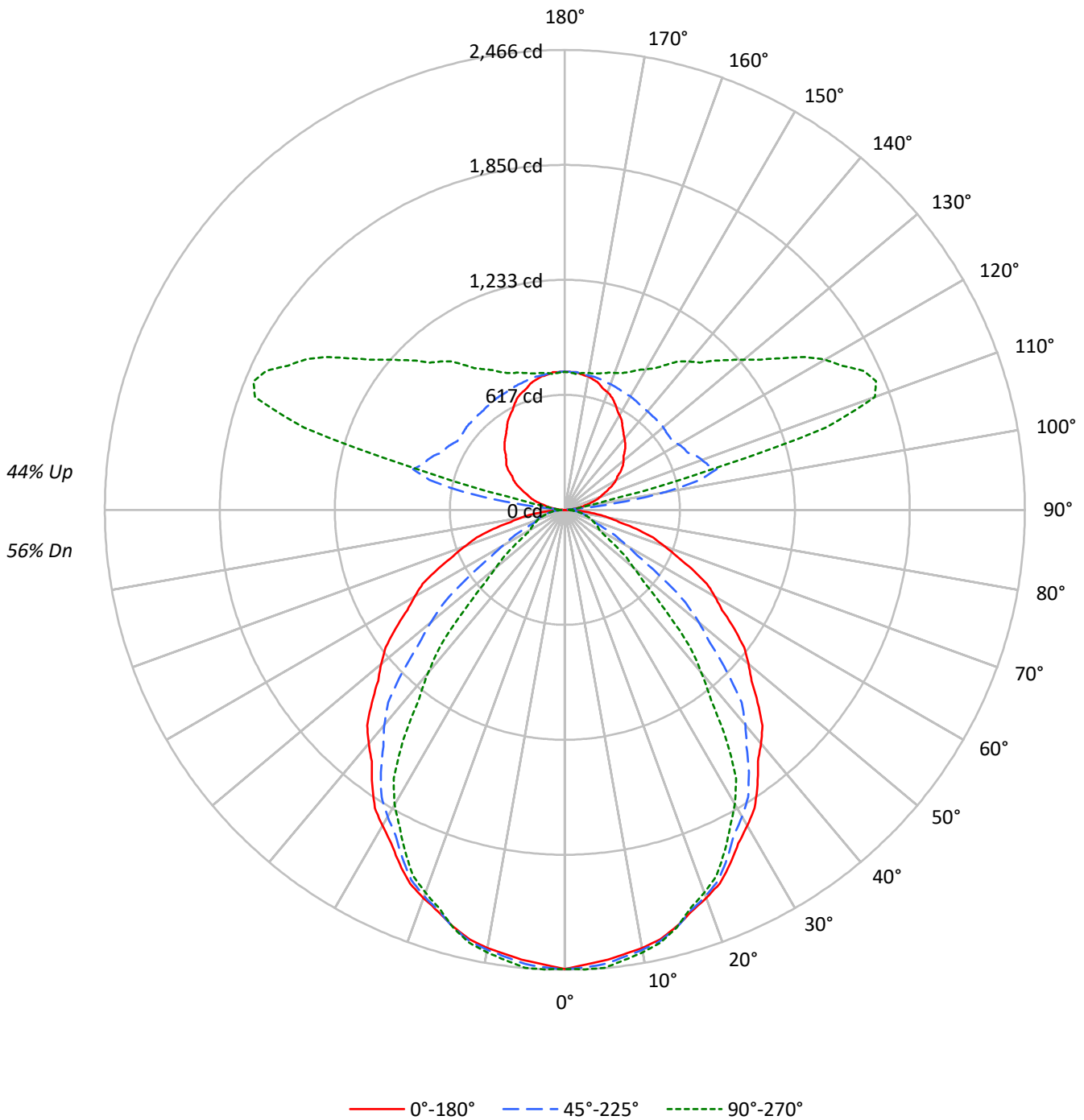
Lumens per Lamp: N/A
Luminaire Lumens: 8996.8 lumens
Efficiency: N/A
Efficacy: 132.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

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°	17666	17666	17666
5°	17477	17606	17752
10°	17383	17457	17550
15°	17194	17212	17212
20°	16916	16838	16683
25°	16592	16311	16029
30°	16206	15742	15110
35°	15774	15061	13256
40°	15319	14104	10673
45°	14841	12492	7743
50°	14338	10448	5366
55°	13841	7954	4010
60°	13323	5511	3030
65°	12740	3929	3109
70°	11898	3309	3202
75°	10999	3385	3244
80°	9563	3575	3364
85°	7748	3977	3351

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14841 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.0	2.6
10°-20°	652.4	7.3
20°-30°	948.9	10.5
30°-40°	1049.8	11.7
40°-50°	901.3	10.0
50°-60°	624.1	6.9
60°-70°	371.9	4.1
70°-80°	183.2	2.0
80°-90°	58.3	0.6
90°-100°	91.0	1.0
100°-110°	648.3	7.2
110°-120°	880.2	9.8
120°-130°	716.4	8.0
130°-140°	576.2	6.4
140°-150°	454.2	5.0
150°-160°	332.1	3.7
160°-170°	206.3	2.3
170°-180°	70.3	0.8
0°-30°	1833.3	20.4
0°-40°	2883.1	32.0
0°-60°	4408.4	49.0
0°-90°	5021.8	55.8
90°-120°	1619.5	18.0
90°-150°	3366.3	37.4
90°-180°	3975.0	44.2
0°-180°	8996.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2462	2462	2462	2462	2462	
5°	2426	2464	2444	2442	2464	230
15°	2314	2344	2317	2304	2317	652
25°	2096	2111	2060	2024	2024	964
35°	1801	1796	1719	1580	1513	1125
45°	1462	1438	1231	890	763	1128
55°	1106	1059	636	365	320	989
65°	750	604	231	186	183	743
75°	397	173	122	120	117	419
85°	94	47	48	43	41	109
90°	0	5	9	14	14	6
95°	37	69	37	42	51	42
105°	144	222	842	1076	712	152
115°	256	311	726	1509	1764	254
125°	368	418	684	1196	1415	327
135°	456	506	689	985	1131	351
145°	540	585	693	858	949	339
155°	633	656	707	778	814	291
165°	703	712	726	745	759	197
175°	740	744	740	735	731	70
180°	740	740	740	740	740	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2461.9	2461.9	2461.9	2461.9	2461.9
2.5°	2441.5	2469.4	2455.8	2456.0	2465.9
5°	2426.3	2463.6	2444.1	2442.0	2464.4
7.5°	2403.9	2438.2	2418.1	2415.5	2434.9
10°	2385.6	2417.9	2395.7	2391.1	2408.5
12.5°	2359.1	2391.5	2367.3	2358.5	2375.9
15°	2314.4	2344.2	2316.9	2304.5	2316.9
17.5°	2257.9	2282.8	2251.8	2232.1	2239.6
20°	2215.2	2240.0	2205.0	2177.2	2184.7
22.5°	2168.4	2189.3	2150.1	2118.1	2123.6
25°	2095.6	2110.6	2060.0	2024.4	2024.4
27.5°	2014.8	2023.7	1964.9	1927.6	1917.1
30°	1955.8	1960.7	1899.8	1855.8	1823.5
32.5°	1894.7	1897.7	1828.6	1757.8	1707.5
35°	1800.6	1795.7	1719.2	1580.4	1513.2
37.5°	1700.4	1689.5	1599.2	1387.9	1287.9
40°	1635.3	1620.4	1505.6	1251.3	1139.4
42.5°	1568.2	1547.3	1401.8	1110.6	986.8
45°	1462.4	1437.5	1230.9	889.8	763.0
47.5°	1357.6	1324.8	1056.0	689.3	580.4
50°	1284.3	1249.5	935.9	567.7	480.7
52.5°	1211.1	1176.3	813.8	476.6	407.4
55°	1106.3	1059.1	635.8	365.2	320.5
57.5°	999.5	931.9	473.6	284.6	249.7
60°	928.3	838.8	384.0	236.0	211.1
62.5°	859.1	745.7	314.9	205.9	200.9
65°	750.3	603.5	231.4	185.6	183.1
67.5°	646.5	460.5	171.9	167.3	164.8
70°	567.1	363.2	157.7	155.1	152.6
72.5°	495.9	278.1	143.4	140.8	138.4
75°	396.7	172.9	122.1	119.5	117.0
77.5°	296.5	109.0	100.7	98.1	95.6
80°	231.4	89.7	86.5	83.9	81.4
82.5°	174.5	72.5	70.2	67.6	65.1
85°	94.1	46.9	48.3	43.2	40.7
87.5°	32.6	23.5	24.2	21.1	19.1
90°	0.0	4.6	9.3	14.0	14.0
92.5°	11.2	15.7	20.5	28.9	32.6
95°	37.2	69.1	37.2	42.1	51.2
97.5°	66.1	132.5	273.7	80.7	69.8
100°	88.4	165.8	549.2	161.6	107.0
102.5°	110.8	191.8	742.8	426.6	233.6
105°	144.3	221.6	842.4	1076.1	712.1
107.5°	177.8	236.0	804.2	1566.2	1466.9
110°	200.1	254.7	781.9	1645.7	1768.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	222.5	277.1	759.5	1599.2	1805.8
115°	256.0	310.6	726.0	1509.0	1763.9
117.5°	290.4	344.1	717.7	1411.5	1673.6
120°	316.5	366.5	702.8	1337.3	1610.3
122.5°	335.1	388.8	684.1	1273.5	1524.7
125°	367.7	417.7	684.1	1196.4	1414.8
127.5°	394.7	445.6	685.1	1107.0	1322.7
130°	409.6	464.2	688.8	1047.2	1251.9
132.5°	428.2	482.8	688.8	1020.3	1188.6
135°	456.1	506.2	688.8	985.3	1130.9
137.5°	479.4	533.1	688.8	946.7	1071.4
140°	498.0	548.0	688.8	924.1	1037.8
142.5°	516.6	563.0	692.5	897.9	1004.3
145°	539.9	585.4	693.4	858.4	949.4
147.5°	567.8	607.8	699.0	830.0	900.1
150°	586.4	622.8	702.8	811.1	870.3
152.5°	605.0	637.8	702.8	796.0	844.2
155°	632.9	655.7	707.4	778.0	814.5
157.5°	655.3	677.1	713.0	766.7	793.0
160°	670.2	688.4	716.7	759.1	781.9
162.5°	681.3	699.6	720.4	755.2	770.7
165°	702.8	711.9	726.0	745.0	758.6
167.5°	714.9	723.0	730.7	740.2	748.4
170°	726.0	730.6	730.7	740.1	744.6
172.5°	729.8	737.9	734.4	736.4	740.9
175°	740.0	744.5	740.0	735.2	730.7
177.5°	740.0	743.6	740.0	739.9	736.3
180°	740.0	740.0	740.0	740.0	740.0



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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	18.13	18.99	19.05	19.92	21.11	10.36	11.22	11.28	12.15	13.34
	3H	19.62	20.39	20.55	21.33	22.54	11.72	12.48	12.65	13.42	14.64
	4H	20.14	20.86	21.08	21.80	23.03	12.37	13.09	13.31	14.04	15.26
	6H	20.53	21.20	21.49	22.15	23.38	12.96	13.63	13.91	14.57	15.81
	8H	20.66	21.30	21.63	22.26	23.50	13.19	13.82	14.15	14.78	16.02
	12H	20.74	21.35	21.71	22.30	23.56	13.35	13.95	14.32	14.91	16.17
4H	2H	17.96	18.68	18.91	19.62	20.85	10.98	11.70	11.93	12.65	13.87
	3H	19.60	20.20	20.55	21.17	22.41	12.53	13.13	13.49	14.10	15.34
	4H	20.18	20.73	21.15	21.70	22.96	13.33	13.87	14.29	14.84	16.10
	6H	20.68	21.15	21.66	22.14	23.40	14.07	14.54	15.05	15.53	16.79
	8H	20.87	21.30	21.85	22.29	23.56	14.36	14.80	15.34	15.78	17.06
	12H	20.99	21.39	21.99	22.39	23.67	14.58	14.97	15.58	15.97	17.25
8H	4H	20.10	20.54	21.08	21.52	22.80	13.78	14.22	14.76	15.20	16.48
	6H	20.64	21.00	21.64	22.02	23.30	14.66	15.03	15.67	16.05	17.33
	8H	20.87	21.19	21.89	22.20	23.50	15.06	15.38	16.07	16.39	17.68
	12H	21.06	21.34	22.08	22.35	23.69	15.38	15.66	16.40	16.67	18.01
12H	4H	20.05	20.45	21.05	21.45	22.73	13.83	14.23	14.83	15.23	16.51
	6H	20.61	20.93	21.62	21.94	23.23	14.78	15.10	15.79	16.11	17.40
	8H	20.85	21.13	21.87	22.14	23.48	15.22	15.50	16.24	16.51	17.85