

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: P621422

Luminaire Tested: VLT-F-025U-100D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621422
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-025U-100D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

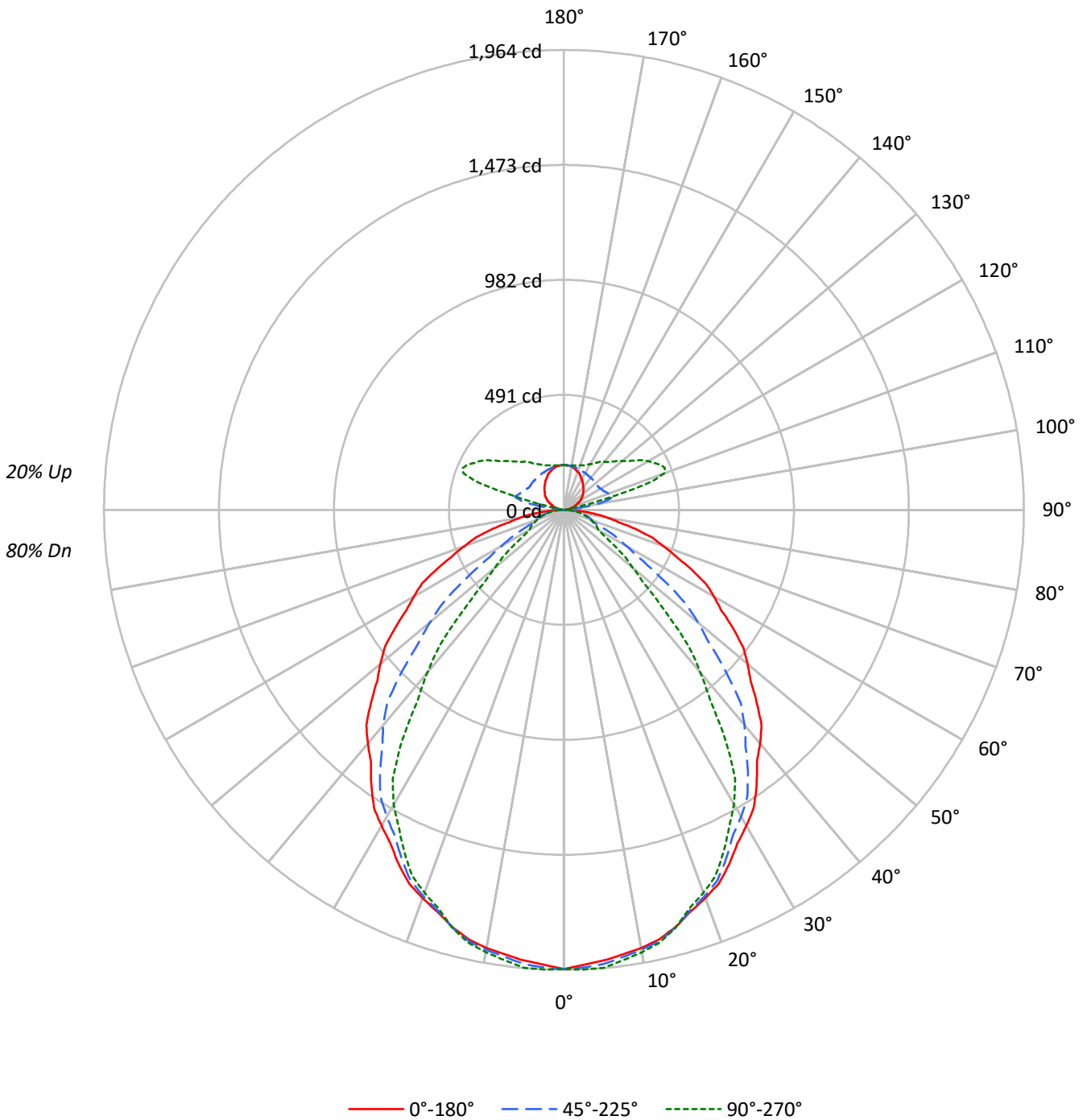
Lumens per Lamp: N/A
Luminaire Lumens: 5026.6 lumens
Efficiency: N/A
Efficacy: 134.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 37.5
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	50	30	10	50	30	10	50	30	10	50	30	10	0				
RCR																																		
0	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83	80																
1	106	101	98	94	101	97	94	91	89	87	84	82	80	78	75	74	73	69																
2	97	90	84	79	93	86	81	77	80	76	72	73	70	67	68	65	63	60																
3	89	80	73	67	85	77	71	66	71	66	62	66	62	58	61	58	55	52																
4	82	72	64	58	79	69	62	57	64	58	54	60	55	51	55	52	48	46																
5	76	65	57	51	73	63	55	50	58	52	47	54	49	45	50	46	43	40																
6	71	59	51	45	68	57	49	44	53	47	42	49	44	40	46	42	38	36																
7	66	54	46	40	63	52	44	39	49	42	38	45	40	36	43	38	34	32																
8	61	49	41	36	59	48	40	35	45	38	34	42	37	33	39	35	31	29																
9	57	45	38	33	55	44	37	32	41	35	31	39	33	30	36	32	28	27																
10	54	42	35	30	52	41	34	29	38	32	28	36	31	27	34	29	26	24																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14071	14071	14071
5°	13920	14023	14139
10°	13845	13904	13978
15°	13695	13710	13710
20°	13474	13412	13288
25°	13216	12991	12767
30°	12908	12538	12035
35°	12564	11996	10559
40°	12201	11234	8501
45°	11821	9949	6167
50°	11421	8323	4275
55°	11025	6336	3193
60°	10612	4390	2413
65°	10147	3129	2476
70°	9477	2635	2549
75°	8761	2695	2584
80°	7616	2847	2678
85°	6175	3170	2668

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11821 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.8	3.7
10°-20°	519.6	10.3
20°-30°	755.8	15.0
30°-40°	836.2	16.6
40°-50°	717.9	14.3
50°-60°	497.1	9.9
60°-70°	296.2	5.9
70°-80°	145.9	2.9
80°-90°	45.5	0.9
90°-100°	23.5	0.5
100°-110°	167.6	3.3
110°-120°	227.5	4.5
120°-130°	185.2	3.7
130°-140°	149.0	3.0
140°-150°	117.4	2.3
150°-160°	85.9	1.7
160°-170°	53.3	1.1
170°-180°	18.2	0.4
0°-30°	1460.2	29.0
0°-40°	2296.3	45.7
0°-60°	3511.3	69.9
0°-90°	3998.9	79.6
90°-120°	418.7	8.3
90°-150°	870.3	17.3
90°-180°	1028.0	20.5
0°-180°	5026.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1961	1961	1961	1961	1961	
5°	1932	1962	1947	1945	1963	183
15°	1843	1867	1845	1836	1845	519
25°	1669	1681	1641	1612	1612	768
35°	1434	1430	1369	1259	1205	896
45°	1165	1145	980	709	608	899
55°	881	844	506	291	255	788
65°	598	481	184	148	146	592
75°	316	138	97	95	93	334
85°	75	37	38	34	32	87
90°	0	1	2	4	4	4
95°	10	18	10	11	13	11
105°	37	57	218	278	184	39
115°	66	80	188	390	456	66
125°	95	108	177	309	366	84
135°	118	131	178	255	292	91
145°	140	151	179	222	245	88
155°	164	170	183	201	211	75
165°	182	184	188	193	196	51
175°	191	192	191	190	189	18
180°	191	191	191	191	191	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1960.9	1960.9	1960.9	1960.9	1960.9
2.5°	1944.7	1966.8	1956.0	1956.2	1964.1
5°	1932.5	1962.2	1946.7	1945.1	1962.9
7.5°	1914.7	1942.0	1926.0	1923.9	1939.4
10°	1900.1	1925.8	1908.2	1904.5	1918.3
12.5°	1879.0	1904.8	1885.5	1878.5	1892.4
15°	1843.4	1867.1	1845.4	1835.5	1845.4
17.5°	1798.4	1818.2	1793.5	1777.9	1783.8
20°	1764.4	1784.2	1756.3	1734.1	1740.1
22.5°	1727.1	1743.7	1712.5	1687.1	1691.4
25°	1669.2	1681.0	1640.8	1612.4	1612.4
27.5°	1604.7	1611.9	1565.0	1535.3	1527.0
30°	1557.8	1561.7	1513.2	1478.2	1452.4
32.5°	1509.1	1511.5	1456.5	1400.1	1360.0
35°	1434.2	1430.2	1369.4	1258.8	1205.3
37.5°	1354.4	1345.7	1273.8	1105.4	1025.8
40°	1302.5	1290.6	1199.2	996.6	907.5
42.5°	1249.0	1232.4	1116.6	884.6	786.0
45°	1164.8	1145.0	980.4	708.7	607.7
47.5°	1081.3	1055.2	841.1	549.0	462.3
50°	1023.0	995.2	745.5	452.2	382.9
52.5°	964.6	936.9	648.2	379.6	324.5
55°	881.2	843.5	506.4	290.9	255.2
57.5°	796.1	742.2	377.2	226.7	198.9
60°	739.4	668.1	305.9	187.9	168.1
62.5°	684.3	594.0	250.8	164.0	160.0
65°	597.6	480.7	184.3	147.8	145.8
67.5°	514.9	366.8	136.9	133.2	131.3
70°	451.7	289.3	125.6	123.5	121.5
72.5°	395.0	221.5	114.2	112.2	110.2
75°	316.0	137.7	97.2	95.2	93.2
77.5°	236.2	86.9	80.2	78.1	76.2
80°	184.3	71.4	68.9	66.8	64.8
82.5°	139.0	57.8	55.9	53.8	51.9
85°	75.0	37.3	38.5	34.4	32.4
87.5°	25.9	18.2	18.3	15.3	13.7
90°	0.0	1.2	2.4	3.6	3.6
92.5°	2.9	4.1	5.3	7.5	8.4
95°	9.6	17.9	9.6	10.9	13.2
97.5°	17.1	34.3	70.7	20.9	18.0
100°	22.9	42.9	142.0	41.8	27.7
102.5°	28.6	49.6	192.0	110.3	60.4
105°	37.3	57.3	217.8	278.2	184.1
107.5°	46.0	61.0	207.9	404.9	379.2
110°	51.7	65.9	202.1	425.4	457.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	57.5	71.6	196.4	413.4	466.8
115°	66.2	80.3	187.7	390.1	456.0
117.5°	75.1	89.0	185.5	364.9	432.7
120°	81.8	94.8	181.7	345.7	416.3
122.5°	86.6	100.5	176.9	329.2	394.2
125°	95.1	108.0	176.9	309.3	365.8
127.5°	102.0	115.2	177.1	286.2	341.9
130°	105.9	120.0	178.1	270.7	323.7
132.5°	110.7	124.8	178.1	263.8	307.3
135°	117.9	130.9	178.1	254.7	292.4
137.5°	123.9	137.8	178.1	244.7	277.0
140°	128.7	141.7	178.1	238.9	268.3
142.5°	133.6	145.6	179.0	232.1	259.6
145°	139.6	151.3	179.3	221.9	245.4
147.5°	146.8	157.1	180.7	214.6	232.7
150°	151.6	161.0	181.7	209.7	225.0
152.5°	156.4	164.9	181.7	205.8	218.3
155°	163.6	169.5	182.9	201.1	210.6
157.5°	169.4	175.1	184.3	198.2	205.0
160°	173.3	178.0	185.3	196.2	202.1
162.5°	176.1	180.8	186.3	195.2	199.2
165°	181.7	184.0	187.7	192.6	196.1
167.5°	184.8	186.9	188.9	191.4	193.5
170°	187.7	188.9	188.9	191.3	192.5
172.5°	188.7	190.8	189.9	190.4	191.5
175°	191.3	192.5	191.3	190.1	188.9
177.5°	191.3	192.2	191.3	191.3	190.3
180°	191.3	191.3	191.3	191.3	191.3



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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	19.25	20.36	19.91	21.03	21.81	11.48	12.59	12.14	13.27	14.04
	3H	20.76	21.75	21.44	22.44	23.25	12.85	13.85	13.53	14.53	15.34
	4H	21.28	22.22	21.98	22.91	23.74	13.52	14.45	14.22	15.15	15.97
	6H	21.69	22.55	22.40	23.26	24.10	14.12	14.98	14.83	15.68	16.53
	8H	21.83	22.65	22.55	23.37	24.22	14.35	15.17	15.07	15.89	16.74
	12H	21.92	22.70	22.65	23.42	24.29	14.52	15.30	15.25	16.02	16.89
4H	2H	19.11	20.04	19.81	20.74	21.56	12.13	13.06	12.83	13.76	14.58
	3H	20.77	21.54	21.48	22.27	23.12	13.70	14.47	14.41	15.21	16.05
	4H	21.36	22.06	22.09	22.80	23.67	14.51	15.21	15.24	15.94	16.82
	6H	21.87	22.47	22.62	23.23	24.12	15.26	15.86	16.01	16.62	17.51
	8H	22.06	22.63	22.81	23.38	24.28	15.55	16.12	16.31	16.87	17.77
	12H	22.20	22.71	22.97	23.49	24.39	15.78	16.29	16.55	17.07	17.97
8H	4H	21.30	21.86	22.05	22.62	23.51	14.98	15.54	15.73	16.30	17.19
	6H	21.84	22.31	22.62	23.11	24.00	15.87	16.33	16.65	17.13	18.03
	8H	22.08	22.49	22.87	23.29	24.20	16.26	16.68	17.06	17.48	18.39
	12H	22.28	22.64	23.07	23.43	24.40	16.59	16.96	17.39	17.75	18.72
12H	4H	21.26	21.77	22.03	22.55	23.45	15.04	15.54	15.81	16.32	17.22
	6H	21.81	22.23	22.61	23.03	23.94	15.98	16.40	16.78	17.20	18.11
	8H	22.07	22.43	22.86	23.22	24.20	16.44	16.80	17.23	17.59	18.56