

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: P621452

Luminaire Tested: VLT-F-050U-125D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621452
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-050U-125D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

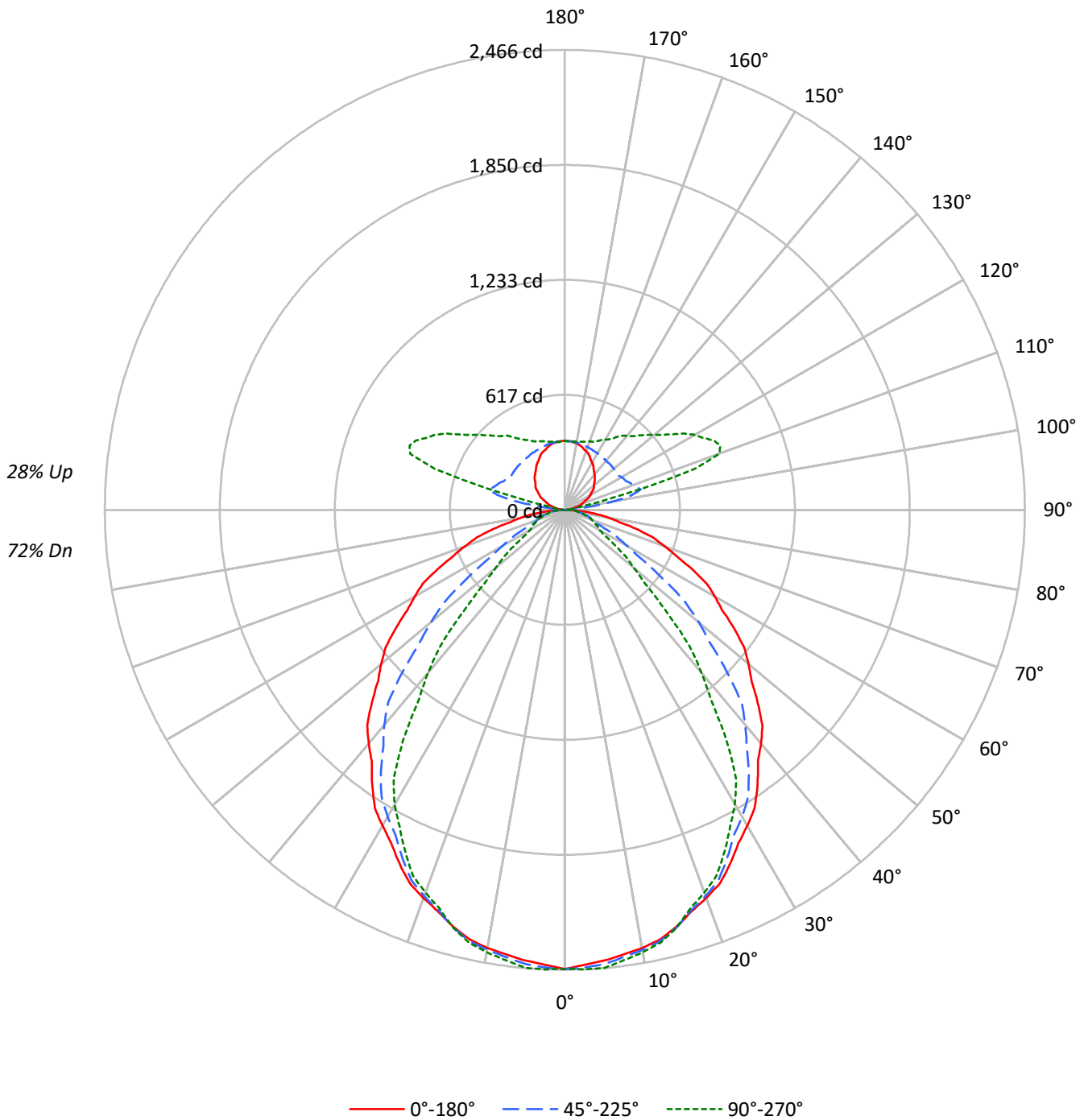
Lumens per Lamp: N/A
Luminaire Lumens: 7004.2 lumens
Efficiency: N/A
Efficacy: 131.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 53.3
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	50	30	10	0	
RCR																						
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	76	76	72	
1	104	100	96	93	98	95	91	88	85	83	81	77	75	73	69	67	66	66	66	66	62	
2	95	88	82	77	90	84	79	74	76	72	68	69	66	63	62	59	57	57	57	57	54	
3	88	79	71	66	83	75	69	63	68	63	59	62	58	54	56	53	50	50	50	50	47	
4	81	70	63	57	76	67	60	55	61	56	51	56	51	48	51	47	44	44	44	44	41	
5	75	63	55	49	71	61	53	48	55	49	45	51	46	42	46	42	39	39	39	39	36	
6	69	57	49	44	65	55	48	42	50	44	40	46	41	37	42	38	35	35	35	35	32	
7	64	52	44	39	61	50	43	38	46	40	36	42	37	33	39	35	31	31	31	31	29	
8	60	48	40	35	57	46	39	34	42	36	32	39	34	30	36	32	28	28	28	28	26	
9	56	44	36	31	53	42	35	31	39	33	29	36	31	27	33	29	26	26	26	26	24	
10	53	40	33	29	50	39	32	28	36	30	26	33	29	25	31	27	24	24	24	24	22	

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	3.3
10°-20°	652.4	9.3
20°-30°	948.9	13.5
30°-40°	1049.8	15.0
40°-50°	901.3	12.9
50°-60°	624.1	8.9
60°-70°	371.9	5.3
70°-80°	183.2	2.6
80°-90°	57.4	0.8
90°-100°	45.4	0.6
100°-110°	323.5	4.6
110°-120°	439.1	6.3
120°-130°	357.4	5.1
130°-140°	287.5	4.1
140°-150°	226.6	3.2
150°-160°	165.7	2.4
160°-170°	102.9	1.5
170°-180°	35.1	0.5
0°-30°	1833.3	26.2
0°-40°	2883.1	41.2
0°-60°	4408.4	62.9
0°-90°	5020.9	71.7
90°-120°	808.0	11.5
90°-150°	1679.5	24.0
90°-180°	1983.0	28.3
0°-180°	7004.2	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	2	5	7	7	5
95°	19	34	19	21	26	21
105°	72	111	420	537	355	76
115°	128	155	362	753	880	127
125°	183	208	341	597	706	163
135°	228	252	344	492	564	175
145°	269	292	346	428	474	169
155°	316	327	353	388	406	145
165°	351	355	362	372	378	98
175°	369	372	369	367	365	35
180°	369	369	369	369	369	



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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	23.1	23.3	19.7	17.7
90°	0.0	2.3	4.6	7.0	7.0
92.5°	5.6	7.8	10.2	14.4	16.3
95°	18.6	34.5	18.6	21.0	25.5
97.5°	33.0	66.1	136.5	40.3	34.8
100°	44.1	82.7	274.0	80.7	53.4
102.5°	55.3	95.7	370.6	212.8	116.6
105°	72.0	110.6	420.3	536.9	355.3
107.5°	88.7	117.8	401.2	781.4	731.9
110°	99.8	127.1	390.1	821.1	882.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	111.0	138.2	378.9	797.9	900.9
115°	127.7	155.0	362.2	752.9	880.0
117.5°	144.9	171.7	358.0	704.2	835.0
120°	157.9	182.9	350.6	667.2	803.4
122.5°	167.2	194.0	341.3	635.4	760.7
125°	183.4	208.4	341.3	596.9	705.9
127.5°	196.9	222.3	341.8	552.3	659.9
130°	204.3	231.6	343.7	522.4	624.6
132.5°	213.6	240.9	343.7	509.0	593.0
135°	227.6	252.5	343.7	491.6	564.2
137.5°	239.2	266.0	343.7	472.3	534.5
140°	248.5	273.4	343.7	461.0	517.8
142.5°	257.7	280.9	345.5	448.0	501.1
145°	269.4	292.1	346.0	428.3	473.7
147.5°	283.3	303.3	348.8	414.1	449.1
150°	292.6	310.7	350.6	404.7	434.2
152.5°	301.9	318.2	350.6	397.1	421.2
155°	315.8	327.1	352.9	388.2	406.3
157.5°	326.9	337.8	355.7	382.5	395.7
160°	334.4	343.4	357.6	378.7	390.1
162.5°	339.9	349.0	359.4	376.8	384.5
165°	350.6	355.2	362.2	371.7	378.5
167.5°	356.7	360.7	364.6	369.3	373.4
170°	362.2	364.5	364.6	369.2	371.5
172.5°	364.1	368.2	366.4	367.4	369.7
175°	369.2	371.5	369.2	366.8	364.6
177.5°	369.2	371.0	369.2	369.2	367.3
180°	369.2	369.2	369.2	369.2	369.2



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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	19.44	20.45	20.19	21.22	22.15	11.67	12.69	12.43	13.46	14.38
	3H	20.94	21.85	21.71	22.63	23.59	13.04	13.94	13.81	14.72	15.68
	4H	21.46	22.32	22.25	23.10	24.08	13.70	14.55	14.49	15.34	16.31
	6H	21.87	22.65	22.67	23.45	24.43	14.29	15.08	15.09	15.88	16.86
	8H	22.00	22.75	22.81	23.57	24.55	14.52	15.27	15.33	16.09	17.07
	12H	22.09	22.80	22.90	23.61	24.62	14.69	15.41	15.51	16.21	17.23
4H	2H	19.28	20.14	20.08	20.93	21.90	12.31	13.16	13.10	13.95	14.92
	3H	20.94	21.64	21.74	22.47	23.45	13.87	14.58	14.68	15.40	16.39
	4H	21.53	22.17	22.35	22.99	24.01	14.67	15.31	15.49	16.14	17.15
	6H	22.03	22.58	22.87	23.43	24.45	15.42	15.97	16.25	16.82	17.84
	8H	22.22	22.74	23.06	23.58	24.61	15.71	16.23	16.55	17.07	18.11
	12H	22.36	22.82	23.21	23.68	24.72	15.94	16.40	16.80	17.27	18.30
8H	4H	21.46	21.97	22.30	22.82	23.85	15.14	15.65	15.98	16.50	17.53
	6H	22.00	22.42	22.86	23.31	24.34	16.03	16.45	16.89	17.34	18.37
	8H	22.23	22.61	23.11	23.49	24.54	16.42	16.80	17.30	17.68	18.73
	12H	22.43	22.76	23.31	23.63	24.74	16.75	17.08	17.62	17.95	19.06
12H	4H	21.42	21.88	22.27	22.74	23.78	15.19	15.66	16.05	16.52	17.56
	6H	21.97	22.35	22.85	23.23	24.28	16.14	16.52	17.02	17.40	18.45
	8H	22.22	22.55	23.10	23.42	24.53	16.59	16.92	17.47	17.79	18.90