

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: P621440

Luminaire Tested: VLT-F-050U-075D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621440
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-075D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 750 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: 4988.8 lumens
Efficiency: N/A
Efficacy: 137.8 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

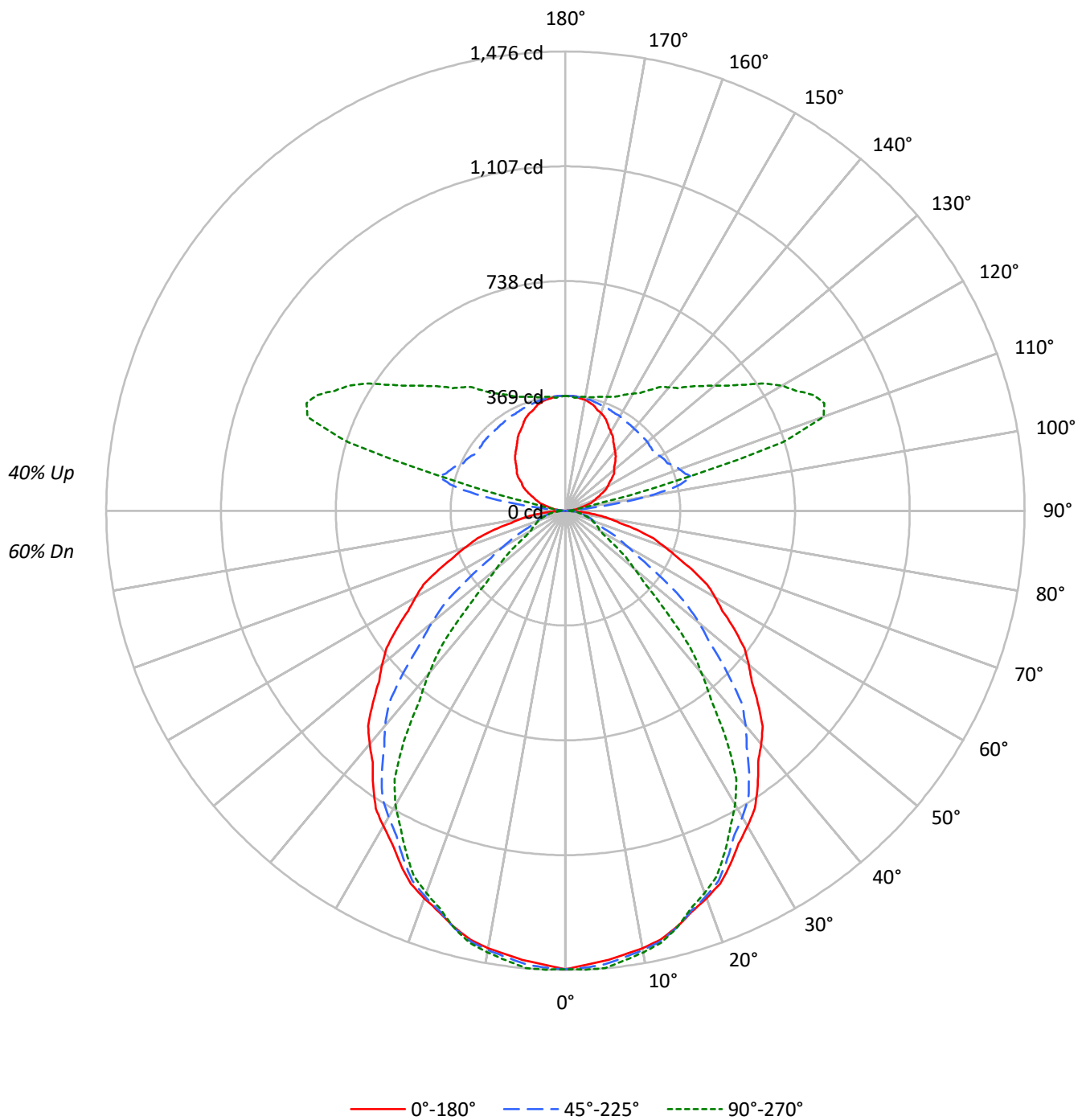
Input Watts (W): 36.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66
1	101	97	93	90	94	91	88	85	79	77	75	69	67	66	59	58	57
2	93	86	80	75	86	80	75	71	71	67	63	62	59	56	53	51	49
3	85	76	69	64	79	72	65	60	63	58	54	55	52	49	48	45	43
4	78	68	60	55	73	64	57	52	57	51	47	50	46	42	43	40	38
5	72	61	53	47	67	58	51	45	51	46	41	45	41	37	40	36	34
6	67	55	47	42	62	52	45	40	46	41	37	41	37	33	36	33	30
7	62	50	42	37	58	47	40	35	42	37	33	38	33	30	33	30	27
8	58	46	38	33	54	43	36	32	39	33	29	35	30	27	31	27	24
9	54	42	35	30	51	40	33	29	36	30	26	32	28	24	28	25	22
10	51	39	32	27	47	37	30	26	33	28	24	30	25	22	27	23	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10574	10574	10574
5°	10461	10538	10625
10°	10404	10448	10504
15°	10291	10302	10302
20°	10125	10079	9985
25°	9931	9763	9594
30°	9700	9422	9043
35°	9441	9014	7934
40°	9169	8442	6389
45°	8883	7477	4635
50°	8582	6254	3212
55°	8285	4762	2400
60°	7974	3299	1813
65°	7626	2352	1861
70°	7123	1981	1916
75°	6585	2027	1941
80°	5723	2141	2013
85°	4635	2379	2009

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8883 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.8	2.8
10°-20°	390.5	7.8
20°-30°	568.0	11.4
30°-40°	628.3	12.6
40°-50°	539.5	10.8
50°-60°	373.5	7.5
60°-70°	222.6	4.5
70°-80°	109.7	2.2
80°-90°	34.7	0.7
90°-100°	45.4	0.9
100°-110°	323.5	6.5
110°-120°	439.1	8.8
120°-130°	357.4	7.2
130°-140°	287.5	5.8
140°-150°	226.6	4.5
150°-160°	165.7	3.3
160°-170°	102.9	2.1
170°-180°	35.1	0.7
0°-30°	1097.3	22.0
0°-40°	1725.6	34.6
0°-60°	2638.6	52.9
0°-90°	3005.5	60.2
90°-120°	808.0	16.2
90°-150°	1679.5	33.7
90°-180°	1983.0	39.7
0°-180°	4988.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1474	1474	1474	1474	1474	
5°	1452	1474	1463	1462	1475	138
15°	1385	1403	1387	1379	1387	390
25°	1254	1263	1233	1212	1212	577
35°	1078	1075	1029	946	906	673
45°	875	860	737	533	457	675
55°	662	634	381	219	192	592
65°	449	361	138	111	110	445
75°	238	104	73	72	70	251
85°	56	28	29	26	24	65
90°	0	2	5	7	7	3
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°	1473.5	1473.5	1473.5	1473.5	1473.5
2.5°	1461.3	1478.0	1469.9	1470.0	1476.0
5°	1452.2	1474.5	1462.9	1461.6	1475.0
7.5°	1438.8	1459.3	1447.3	1445.8	1457.4
10°	1427.8	1447.2	1433.9	1431.1	1441.5
12.5°	1412.0	1431.4	1416.9	1411.6	1422.1
15°	1385.2	1403.1	1386.7	1379.3	1386.7
17.5°	1351.4	1366.3	1347.8	1336.0	1340.5
20°	1325.9	1340.7	1319.8	1303.1	1307.6
22.5°	1297.8	1310.4	1286.9	1267.8	1271.1
25°	1254.3	1263.2	1233.0	1211.7	1211.7
27.5°	1205.9	1211.3	1176.1	1153.7	1147.5
30°	1170.6	1173.6	1137.1	1110.8	1091.4
32.5°	1134.1	1135.8	1094.5	1052.1	1022.0
35°	1077.7	1074.8	1029.0	945.9	905.7
37.5°	1017.8	1011.2	957.2	830.7	770.9
40°	978.8	969.9	901.2	748.9	682.0
42.5°	938.6	926.1	839.1	664.7	590.6
45°	875.3	860.4	736.8	532.6	456.7
47.5°	812.6	792.9	632.0	412.6	347.4
50°	768.7	747.9	560.2	339.8	287.7
52.5°	724.9	704.0	487.1	285.2	243.9
55°	662.2	633.9	380.6	218.6	191.8
57.5°	598.2	557.8	283.4	170.3	149.5
60°	555.6	502.0	229.9	141.2	126.3
62.5°	514.2	446.3	188.5	123.2	120.3
65°	449.1	361.2	138.5	111.1	109.6
67.5°	386.9	275.6	102.9	100.1	98.6
70°	339.5	217.4	94.4	92.8	91.3
72.5°	296.8	166.5	85.9	84.3	82.8
75°	237.5	103.5	73.1	71.5	70.0
77.5°	177.5	65.3	60.3	58.7	57.2
80°	138.5	53.7	51.8	50.2	48.7
82.5°	104.4	43.4	42.0	40.5	39.0
85°	56.3	28.0	28.9	25.8	24.4
87.5°	19.5	14.0	14.3	12.3	11.1
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	16.73	17.63	17.60	18.51	19.64	8.96	9.86	9.84	10.75	11.87
	3H	18.22	19.03	19.11	19.92	21.07	10.32	11.12	11.21	12.02	13.16
	4H	18.74	19.50	19.64	20.40	21.56	10.97	11.73	11.88	12.63	13.79
	6H	19.14	19.83	20.05	20.74	21.92	11.56	12.26	12.48	13.17	14.34
	8H	19.27	19.93	20.19	20.86	22.03	11.79	12.45	12.71	13.38	14.55
	12H	19.35	19.98	20.28	20.90	22.10	11.96	12.59	12.88	13.51	14.70
4H	2H	16.56	17.32	17.47	18.22	19.38	9.58	10.34	10.49	11.24	12.40
	3H	18.20	18.83	19.12	19.76	20.94	11.14	11.76	12.06	12.70	13.87
	4H	18.79	19.36	19.72	20.29	21.49	11.93	12.50	12.86	13.44	14.63
	6H	19.29	19.78	20.23	20.73	21.93	12.68	13.17	13.62	14.12	15.32
	8H	19.48	19.93	20.42	20.88	22.09	12.97	13.43	13.91	14.37	15.59
	12H	19.61	20.02	20.57	20.99	22.20	13.19	13.60	14.15	14.57	15.78
8H	4H	18.71	19.17	19.66	20.12	21.33	12.39	12.85	13.34	13.80	15.01
	6H	19.25	19.63	20.22	20.62	21.83	13.28	13.65	14.25	14.64	15.85
	8H	19.48	19.82	20.46	20.80	22.03	13.67	14.00	14.65	14.98	16.21
	12H	19.67	19.97	20.66	20.94	22.22	13.99	14.29	14.97	15.26	16.54
12H	4H	18.67	19.08	19.63	20.04	21.26	12.44	12.85	13.41	13.82	15.04
	6H	19.22	19.56	20.20	20.54	21.77	13.39	13.72	14.37	14.70	15.93
	8H	19.47	19.76	20.45	20.73	22.01	13.83	14.13	14.82	15.10	16.38

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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