

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: P621444

Luminaire Tested: VLT-F-050U-075D-940-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621444  
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-940-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

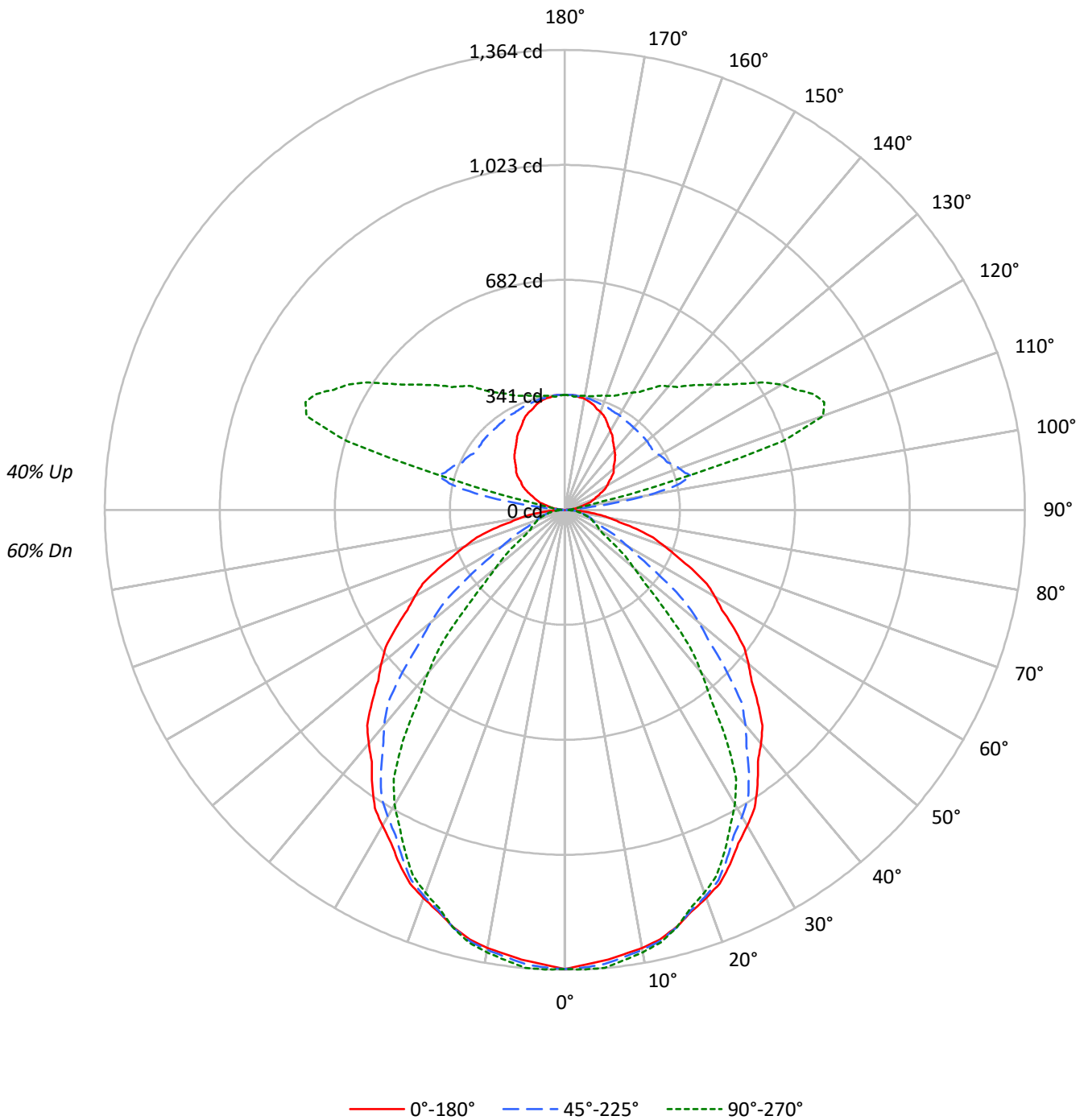
Lumens per Lamp: N/A  
Luminaire Lumens: 4610.4 lumens  
Efficiency: N/A  
Efficacy: 127.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	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	66	66	60
1	101	97	93	90	94	91	88	85	79	77	75	69	67	66	59	58	57	57	57	52
2	93	86	80	75	86	80	75	71	71	67	63	62	59	56	53	51	49	49	49	45
3	85	76	69	64	79	72	65	60	63	58	54	55	52	49	48	45	43	43	43	39
4	78	68	60	55	73	64	57	52	57	51	47	50	46	42	43	40	38	38	38	35
5	72	61	53	47	67	58	51	45	51	46	41	45	41	37	40	36	34	34	34	31
6	67	55	47	42	62	52	45	40	46	41	37	41	37	33	36	33	30	30	30	27
7	62	50	42	37	58	47	40	35	42	37	33	38	33	30	33	30	27	27	27	24
8	58	46	38	33	54	43	36	32	39	33	29	35	30	27	31	27	24	24	24	22
9	54	42	35	30	51	40	33	29	36	30	26	32	28	24	28	25	22	22	22	20
10	51	39	32	27	47	37	30	26	33	28	24	30	25	22	27	23	20	20	20	18

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

	0°	45°	90°
0°	9772	9772	9772
5°	9668	9738	9820
10°	9615	9656	9707
15°	9511	9521	9521
20°	9357	9314	9228
25°	9178	9022	8866
30°	8964	8708	8358
35°	8725	8331	7332
40°	8474	7801	5903
45°	8209	6910	4283
50°	7931	5779	2968
55°	7657	4400	2218
60°	7370	3048	1676
65°	7047	2173	1720
70°	6582	1830	1771
75°	6086	1871	1794
80°	5290	1975	1860
85°	4290	2198	1853

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8209 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.3	2.8
10°-20°	360.8	7.8
20°-30°	524.9	11.4
30°-40°	580.7	12.6
40°-50°	498.5	10.8
50°-60°	345.2	7.5
60°-70°	205.7	4.5
70°-80°	101.3	2.2
80°-90°	32.1	0.7
90°-100°	41.9	0.9
100°-110°	298.9	6.5
110°-120°	405.8	8.8
120°-130°	330.3	7.2
130°-140°	265.7	5.8
140°-150°	209.4	4.5
150°-160°	153.1	3.3
160°-170°	95.1	2.1
170°-180°	32.4	0.7
0°-30°	1014.1	22.0
0°-40°	1594.8	34.6
0°-60°	2438.5	52.9
0°-90°	2777.6	60.2
90°-120°	746.7	16.2
90°-150°	1552.1	33.7
90°-180°	1833.0	39.8
0°-180°	4610.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1362	1362	1362	1362	1362	
5°	1342	1363	1352	1351	1363	127
15°	1280	1297	1282	1275	1282	360
25°	1159	1168	1140	1120	1120	533
35°	996	993	951	874	837	622
45°	809	795	681	492	422	624
55°	612	586	352	202	177	547
65°	415	334	128	103	101	411
75°	220	96	68	66	65	232
85°	52	26	27	24	22	60
90°	0	2	4	6	6	3
95°	17	32	17	19	24	19
105°	66	102	388	496	328	70
115°	118	143	335	696	813	117
125°	170	193	315	552	652	151
135°	210	233	318	454	522	162
145°	249	270	320	396	438	156
155°	292	302	326	359	376	134
165°	324	328	335	344	350	91
175°	341	343	341	339	337	32
180°	341	341	341	341	341	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1361.8	1361.8	1361.8	1361.8	1361.8
2.5°	1350.5	1365.9	1358.4	1358.5	1364.0
5°	1342.1	1362.7	1351.9	1350.8	1363.2
7.5°	1329.7	1348.7	1337.6	1336.1	1346.9
10°	1319.6	1337.5	1325.2	1322.6	1332.2
12.5°	1304.9	1322.8	1309.4	1304.6	1314.2
15°	1280.2	1296.7	1281.6	1274.7	1281.6
17.5°	1249.0	1262.7	1245.6	1234.7	1238.8
20°	1225.3	1239.1	1219.7	1204.3	1208.4
22.5°	1199.4	1211.0	1189.3	1171.6	1174.7
25°	1159.2	1167.5	1139.5	1119.8	1119.8
27.5°	1114.5	1119.4	1086.9	1066.2	1060.4
30°	1081.8	1084.6	1050.9	1026.6	1008.7
32.5°	1048.1	1049.7	1011.5	972.3	944.5
35°	996.0	993.3	951.0	874.2	837.0
37.5°	940.6	934.5	884.6	767.7	712.4
40°	904.6	896.3	832.8	692.1	630.2
42.5°	867.4	855.9	775.4	614.3	545.8
45°	808.9	795.2	680.9	492.2	422.0
47.5°	750.9	732.8	584.1	381.3	321.0
50°	710.4	691.2	517.7	314.0	265.9
52.5°	669.9	650.7	450.2	263.6	225.4
55°	612.0	585.8	351.7	202.0	177.3
57.5°	552.9	515.5	261.9	157.4	138.1
60°	513.5	464.0	212.4	130.5	116.8
62.5°	475.2	412.5	174.2	113.9	111.1
65°	415.0	333.8	128.0	102.7	101.3
67.5°	357.6	254.7	95.1	92.5	91.2
70°	313.7	200.9	87.2	85.8	84.4
72.5°	274.3	153.8	79.3	77.9	76.5
75°	219.5	95.7	67.5	66.1	64.7
77.5°	164.0	60.3	55.7	54.3	52.9
80°	128.0	49.6	47.8	46.4	45.0
82.5°	96.5	40.1	38.8	37.4	36.0
85°	52.1	25.9	26.7	23.9	22.5
87.5°	18.0	12.9	13.2	11.4	10.3
90°	0.0	2.1	4.3	6.4	6.4
92.5°	5.2	7.2	9.4	13.3	15.0
95°	17.2	31.9	17.2	19.4	23.6
97.5°	30.5	61.1	126.2	37.2	32.2
100°	40.8	76.4	253.2	74.5	49.4
102.5°	51.1	88.4	342.5	196.7	107.7
105°	66.5	102.2	388.4	496.2	328.3
107.5°	82.0	108.8	370.8	722.1	676.4
110°	92.3	117.5	360.5	758.8	815.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	102.6	127.8	350.2	737.4	832.6
115°	118.0	143.2	334.8	695.8	813.3
117.5°	133.9	158.7	330.9	650.8	771.7
120°	145.9	169.0	324.0	616.6	742.5
122.5°	154.5	179.3	315.4	587.2	703.0
125°	169.5	192.6	315.4	551.6	652.4
127.5°	182.0	205.5	315.9	510.4	609.9
130°	188.8	214.0	317.6	482.8	577.2
132.5°	197.4	222.6	317.6	470.4	548.1
135°	210.3	233.4	317.6	454.3	521.5
137.5°	221.0	245.8	317.6	436.5	494.0
140°	229.6	252.7	317.6	426.1	478.5
142.5°	238.2	259.6	319.3	414.0	463.1
145°	248.9	269.9	319.7	395.8	437.8
147.5°	261.8	280.3	322.3	382.7	415.0
150°	270.4	287.2	324.0	374.0	401.3
152.5°	279.0	294.1	324.0	367.0	389.3
155°	291.8	302.3	326.2	358.7	375.5
157.5°	302.1	312.2	328.8	353.5	365.7
160°	309.0	317.4	330.5	350.0	360.5
162.5°	314.2	322.6	332.2	348.2	355.4
165°	324.0	328.2	334.8	343.5	349.8
167.5°	329.6	333.4	336.9	341.3	345.1
170°	334.8	336.9	336.9	341.2	343.3
172.5°	336.5	340.3	338.6	339.5	341.6
175°	341.2	343.3	341.2	339.0	336.9
177.5°	341.2	342.9	341.2	341.2	339.5
180°	341.2	341.2	341.2	341.2	341.2

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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	16.45	17.35	17.33	18.24	19.36	8.69	9.59	9.56	10.47	11.60
	3H	17.95	18.75	18.84	19.65	20.80	10.04	10.85	10.93	11.74	12.89
	4H	18.47	19.22	19.37	20.13	21.28	10.70	11.46	11.60	12.36	13.52
	6H	18.86	19.56	19.78	20.47	21.64	11.29	11.99	12.21	12.90	14.07
	8H	19.00	19.66	19.92	20.59	21.76	11.52	12.18	12.44	13.11	14.27
	12H	19.08	19.71	20.01	20.63	21.82	11.68	12.31	12.61	13.23	14.43
4H	2H	16.29	17.04	17.20	17.95	19.11	9.31	10.07	10.22	10.97	12.13
	3H	17.93	18.56	18.85	19.49	20.66	10.86	11.49	11.78	12.43	13.60
	4H	18.52	19.09	19.45	20.02	21.22	11.66	12.23	12.59	13.16	14.36
	6H	19.02	19.51	19.96	20.46	21.66	12.40	12.89	13.35	13.85	15.05
	8H	19.20	19.66	20.15	20.61	21.82	12.70	13.15	13.64	14.10	15.31
	12H	19.33	19.75	20.30	20.71	21.93	12.91	13.33	13.88	14.29	15.51
8H	4H	18.44	18.90	19.38	19.85	21.06	12.12	12.58	13.06	13.52	14.74
	6H	18.98	19.35	19.95	20.34	21.55	13.00	13.38	13.97	14.37	15.58
	8H	19.21	19.54	20.19	20.52	21.75	13.40	13.73	14.38	14.71	15.94
	12H	19.40	19.70	20.38	20.67	21.95	13.72	14.01	14.70	14.98	16.26
12H	4H	18.39	18.80	19.35	19.77	20.99	12.17	12.58	13.13	13.55	14.76
	6H	18.95	19.28	19.93	20.26	21.49	13.12	13.45	14.10	14.43	15.66
	8H	19.19	19.49	20.17	20.46	21.74	13.56	13.85	14.54	14.83	16.10