

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: P621516

Luminaire Tested: VLT-F-100U-075D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621516
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-075D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

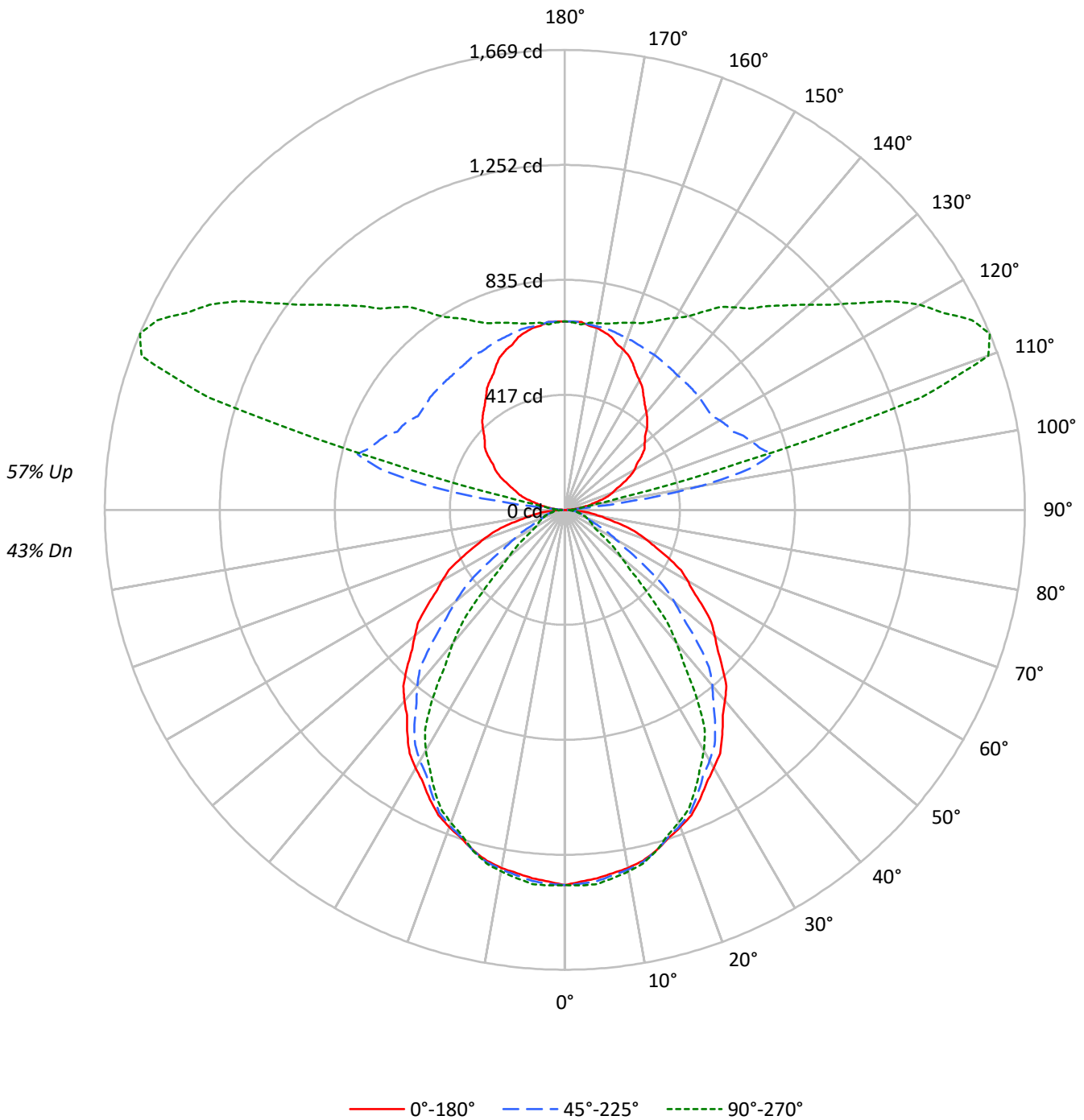
Lumens per Lamp: N/A
Luminaire Lumens: 6452.0 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50.6
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50	43		
1	97	93	89	86	88	85	82	79	71	68	66	57	56	54	45	44	43	37		
2	89	82	76	71	81	75	70	66	63	59	56	51	49	46	40	39	37	32		
3	81	72	65	60	74	67	61	56	56	51	48	46	43	40	36	34	32	28		
4	75	64	57	51	68	59	53	48	50	45	41	41	38	35	33	30	28	25		
5	69	58	50	44	63	53	46	41	45	40	36	37	33	30	30	27	25	22		
6	63	52	44	39	58	48	41	36	41	35	32	34	30	27	27	25	22	19		
7	59	47	39	34	54	44	37	32	37	32	28	31	27	24	25	22	20	18		
8	55	43	35	30	50	40	33	28	34	29	25	28	24	22	23	20	18	16		
9	51	39	32	27	47	36	30	25	31	26	22	26	22	19	21	19	17	14		
10	48	36	29	24	44	33	27	23	29	24	20	24	20	18	20	17	15	13		

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	2.0
10°-20°	360.8	5.6
20°-30°	524.9	8.1
30°-40°	580.7	9.0
40°-50°	498.5	7.7
50°-60°	345.2	5.4
60°-70°	205.7	3.2
70°-80°	101.3	1.6
80°-90°	32.8	0.5
90°-100°	84.1	1.3
100°-110°	599.2	9.3
110°-120°	813.4	12.6
120°-130°	662.0	10.3
130°-140°	532.5	8.3
140°-150°	419.8	6.5
150°-160°	306.9	4.8
160°-170°	190.7	3.0
170°-180°	65.0	1.0
0°-30°	1014.1	15.7
0°-40°	1594.8	24.7
0°-60°	2438.5	37.8
0°-90°	2778.4	43.1
90°-120°	1496.6	23.2
90°-150°	3111.0	48.2
90°-180°	3674.0	56.9
0°-180°	6452.0	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	4	9	13	13	4
95°	34	64	34	39	47	38
105°	133	205	778	994	658	141
115°	237	287	671	1395	1630	235
125°	340	386	632	1106	1308	302
135°	422	468	637	911	1045	324
145°	499	541	641	793	877	313
155°	585	606	654	719	753	269
165°	650	658	671	688	701	182
175°	684	688	684	680	675	65
180°	684	684	684	684	684	



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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	13.3	14.1	12.7	11.6
90°	0.0	4.2	8.6	12.9	12.9
92.5°	10.3	14.5	18.9	26.7	30.1
95°	34.4	63.8	34.4	38.9	47.3
97.5°	61.1	122.5	252.9	74.6	64.5
100°	81.7	153.2	507.5	149.4	98.9
102.5°	102.4	177.2	686.5	394.2	215.9
105°	133.3	204.8	778.5	994.5	658.1
107.5°	164.3	218.1	743.2	1447.4	1355.7
110°	184.9	235.4	722.6	1520.9	1634.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	205.6	256.1	701.9	1477.9	1668.8
115°	236.6	287.0	671.0	1394.6	1630.1
117.5°	268.4	318.0	663.2	1304.4	1546.7
120°	292.5	338.7	649.5	1235.9	1488.2
122.5°	309.7	359.3	632.3	1176.9	1409.0
125°	339.8	386.0	632.3	1105.7	1307.5
127.5°	364.7	411.8	633.1	1023.0	1222.4
130°	378.5	429.0	636.6	967.7	1157.0
132.5°	395.7	446.2	636.6	942.9	1098.5
135°	421.5	467.8	636.6	910.6	1045.2
137.5°	443.0	492.6	636.6	874.9	990.1
140°	460.2	506.5	636.6	854.0	959.1
142.5°	477.4	520.3	640.0	829.8	928.2
145°	498.9	541.0	640.9	793.3	877.4
147.5°	524.7	561.7	646.0	767.1	831.8
150°	541.9	575.6	649.5	749.6	804.3
152.5°	559.1	589.4	649.5	735.6	780.2
155°	585.0	606.0	653.8	719.0	752.7
157.5°	605.6	625.8	658.9	708.5	732.9
160°	619.4	636.2	662.4	701.6	722.6
162.5°	629.7	646.5	665.8	698.0	712.3
165°	649.5	657.9	671.0	688.5	701.1
167.5°	660.7	668.2	675.3	684.0	691.6
170°	671.0	675.2	675.3	684.0	688.2
172.5°	674.4	682.0	678.7	680.5	684.7
175°	683.9	688.1	683.9	679.5	675.3
177.5°	683.9	687.2	683.9	683.8	680.4
180°	683.9	683.9	683.9	683.9	683.9



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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	14.85	15.62	15.88	16.64	18.01	7.09	7.85	8.11	8.87	10.25
	3H	16.34	17.02	17.37	18.05	19.45	8.43	9.11	9.47	10.15	11.54
	4H	16.85	17.49	17.90	18.53	19.93	9.08	9.73	10.13	10.76	12.16
	6H	17.24	17.83	18.30	18.87	20.28	9.67	10.26	10.72	11.30	12.71
	8H	17.37	17.93	18.43	18.99	20.40	9.89	10.45	10.95	11.51	12.91
	12H	17.45	17.98	18.51	19.03	20.46	10.05	10.59	11.12	11.64	13.07
4H	2H	14.67	15.31	15.72	16.35	17.75	7.69	8.34	8.75	9.37	10.77
	3H	16.30	16.83	17.36	17.90	19.31	9.24	9.77	10.30	10.83	12.25
	4H	16.89	17.37	17.95	18.43	19.86	10.03	10.52	11.09	11.57	13.01
	6H	17.37	17.79	18.45	18.87	20.30	10.76	11.18	11.84	12.26	13.69
	8H	17.56	17.95	18.63	19.02	20.47	11.05	11.44	12.13	12.51	13.96
	12H	17.68	18.04	18.78	19.12	20.57	11.26	11.62	12.36	12.70	14.15
8H	4H	16.80	17.19	17.87	18.26	19.70	10.47	10.87	11.55	11.94	13.38
	6H	17.33	17.65	18.43	18.76	20.20	11.35	11.68	12.45	12.79	14.23
	8H	17.56	17.85	18.67	18.94	20.40	11.75	12.03	12.85	13.13	14.59
	12H	17.75	18.00	18.86	19.09	20.59	12.06	12.31	13.17	13.41	14.91
12H	4H	16.74	17.10	17.83	18.18	19.63	10.52	10.87	11.61	11.96	13.41
	6H	17.30	17.58	18.41	18.68	20.14	11.47	11.75	12.57	12.85	14.31
	8H	17.54	17.79	18.65	18.88	20.38	11.91	12.16	13.01	13.25	14.75