

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: P621509

Luminaire Tested: VLT-F-100U-050D-935-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621509
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-050D-935-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

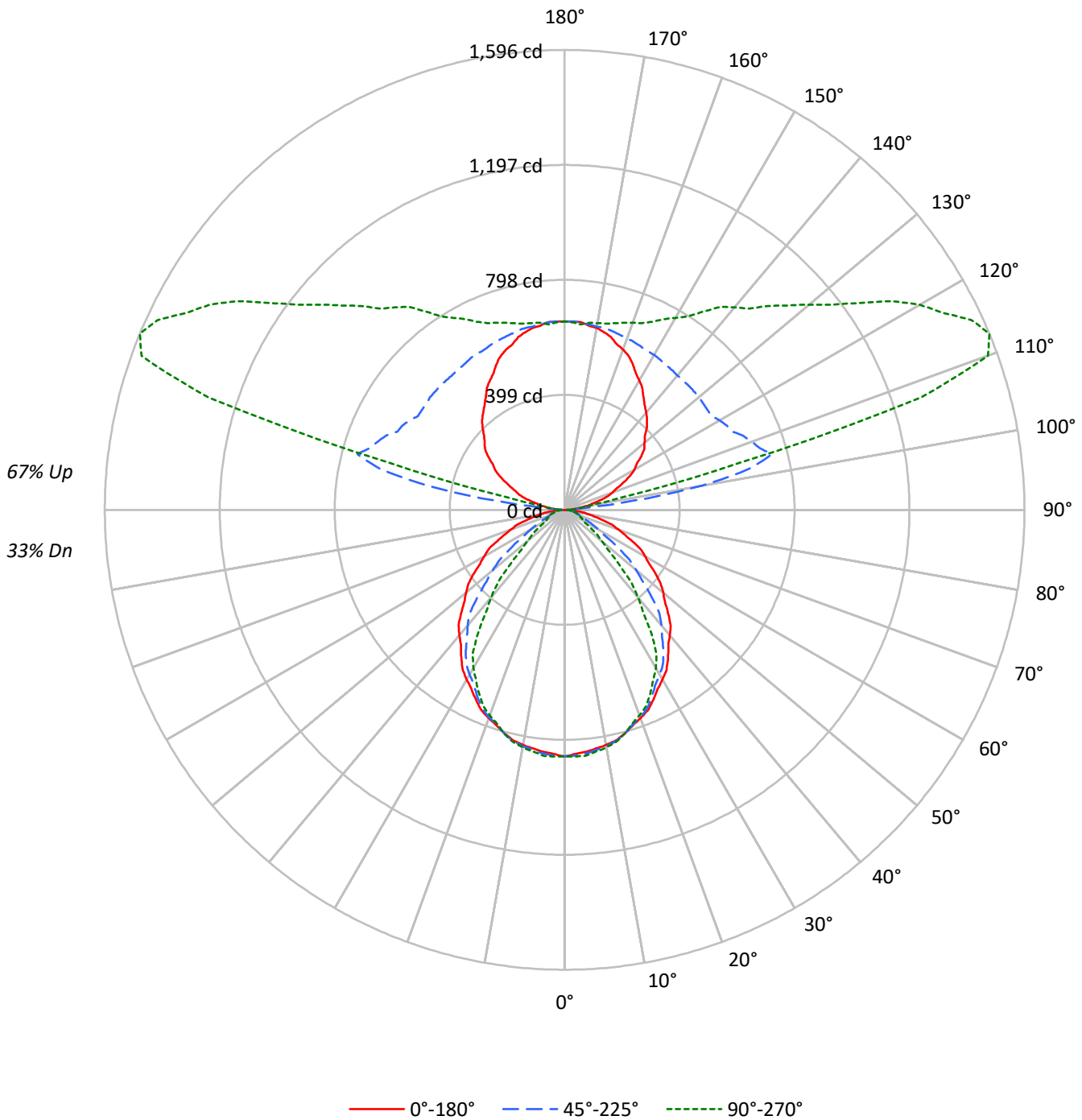
Lumens per Lamp: N/A
Luminaire Lumens: 5258.3 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 43.4
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33		
1	94	90	87	84	85	82	79	76	65	63	62	50	49	48	37	36	35	29		
2	86	79	74	69	78	72	67	63	58	55	52	45	43	41	33	32	30	25		
3	79	70	63	58	71	64	58	53	51	47	44	40	37	35	30	28	26	22		
4	73	62	55	49	65	57	50	45	46	41	38	36	33	30	27	25	23	19		
5	67	56	48	42	60	51	44	39	41	36	33	32	29	27	24	22	20	17		
6	61	50	42	37	55	46	39	34	37	32	29	29	26	23	22	20	18	15		
7	57	45	38	32	51	41	35	30	34	29	25	27	23	21	20	18	16	13		
8	53	41	34	29	48	38	31	27	31	26	23	25	21	19	19	16	15	12		
9	49	37	30	26	44	34	28	24	28	24	20	23	19	17	17	15	13	11		
10	46	34	27	23	41	31	25	21	26	21	18	21	18	15	16	14	12	10		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6138	6138	6138
5°	6072	6117	6168
10°	6040	6065	6097
15°	5974	5980	5980
20°	5878	5850	5797
25°	5765	5668	5569
30°	5630	5470	5250
35°	5480	5233	4606
40°	5323	4900	3709
45°	5156	4340	2690
50°	4981	3630	1864
55°	4809	2764	1392
60°	4628	1915	1052
65°	4427	1365	1080
70°	4135	1150	1112
75°	3823	1176	1126
80°	3322	1240	1169
85°	2692	1383	1161

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5156 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.6	1.5
10°-20°	226.7	4.3
20°-30°	329.7	6.3
30°-40°	364.8	6.9
40°-50°	313.2	6.0
50°-60°	216.8	4.1
60°-70°	129.2	2.5
70°-80°	63.7	1.2
80°-90°	21.1	0.4
90°-100°	80.4	1.5
100°-110°	572.9	10.9
110°-120°	777.8	14.8
120°-130°	633.0	12.0
130°-140°	509.1	9.7
140°-150°	401.4	7.6
150°-160°	293.5	5.6
160°-170°	182.3	3.5
170°-180°	62.2	1.2
0°-30°	637.0	12.1
0°-40°	1001.7	19.1
0°-60°	1531.7	29.1
0°-90°	1745.7	33.2
90°-120°	1431.1	27.2
90°-150°	2974.6	56.6
90°-180°	3513.0	66.8
0°-180°	5258.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	855	855	855	855	855	
5°	843	856	849	848	856	80
15°	804	814	805	801	805	226
25°	728	733	716	703	703	335
35°	626	624	597	549	526	391
45°	508	500	428	309	265	392
55°	384	368	221	127	111	344
65°	261	210	80	64	64	258
75°	138	60	42	42	41	145
85°	33	16	17	15	14	38
90°	0	4	8	12	12	3
95°	33	61	33	37	45	37
105°	128	196	744	951	629	134
115°	226	274	642	1334	1559	225
125°	325	369	604	1057	1250	289
135°	403	447	609	871	999	310
145°	477	517	613	758	839	300
155°	559	579	625	688	720	257
165°	621	629	642	658	670	174
175°	654	658	654	650	646	62
180°	654	654	654	654	654	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	855.4	855.4	855.4	855.4	855.4
2.5°	848.3	858.0	853.3	853.3	856.8
5°	843.0	856.0	849.2	848.5	856.3
7.5°	835.2	847.2	840.2	839.3	846.0
10°	828.9	840.1	832.4	830.8	836.8
12.5°	819.7	830.9	822.5	819.5	825.5
15°	804.1	814.5	805.0	800.7	805.0
17.5°	784.5	793.2	782.4	775.6	778.1
20°	769.7	778.3	766.1	756.5	759.1
22.5°	753.4	760.7	747.0	736.0	737.9
25°	728.1	733.3	715.8	703.4	703.4
27.5°	700.0	703.1	682.7	669.7	666.1
30°	679.5	681.3	660.1	644.8	633.6
32.5°	658.3	659.4	635.3	610.7	593.3
35°	625.6	623.9	597.4	549.1	525.8
37.5°	590.8	587.0	555.6	482.2	447.5
40°	568.2	563.0	523.1	434.8	395.9
42.5°	544.9	537.6	487.1	385.9	342.9
45°	508.1	499.5	427.7	309.2	265.1
47.5°	471.7	460.3	366.9	239.5	201.7
50°	446.2	434.2	325.2	197.3	167.0
52.5°	420.8	408.7	282.8	165.6	141.6
55°	384.4	368.0	220.9	126.9	111.3
57.5°	347.3	323.8	164.5	98.9	86.8
60°	322.5	291.4	133.4	82.0	73.3
62.5°	298.5	259.1	109.4	71.5	69.8
65°	260.7	209.7	80.4	64.5	63.6
67.5°	224.6	160.0	59.7	58.1	57.3
70°	197.1	126.2	54.8	53.9	53.0
72.5°	172.3	96.6	49.8	48.9	48.1
75°	137.9	60.1	42.4	41.5	40.6
77.5°	103.0	37.9	35.0	34.1	33.2
80°	80.4	31.2	30.0	29.1	28.3
82.5°	60.6	25.2	24.4	23.5	22.6
85°	32.7	16.3	16.8	15.0	14.1
87.5°	11.3	8.7	9.4	8.8	8.1
90°	0.0	4.0	8.2	12.3	12.3
92.5°	9.9	13.9	18.1	25.6	28.8
95°	32.9	61.0	32.9	37.2	45.2
97.5°	58.4	117.1	241.8	71.3	61.7
100°	78.1	146.5	485.3	142.8	94.6
102.5°	97.9	169.5	656.4	376.9	206.5
105°	127.5	195.8	744.4	950.9	629.2
107.5°	157.1	208.6	710.6	1383.9	1296.3
110°	176.8	225.1	690.9	1454.2	1562.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	196.6	244.8	671.2	1413.1	1595.7
115°	226.2	274.4	641.6	1333.5	1558.7
117.5°	256.6	304.1	634.2	1247.3	1478.9
120°	279.7	323.9	621.0	1181.7	1422.9
122.5°	296.1	343.6	604.5	1125.3	1347.3
125°	324.9	369.1	604.5	1057.2	1250.2
127.5°	348.7	393.8	605.4	978.2	1168.8
130°	361.9	410.2	608.7	925.3	1106.3
132.5°	378.4	426.6	608.7	901.6	1050.3
135°	403.0	447.3	608.7	870.7	999.3
137.5°	423.6	471.0	608.7	836.5	946.7
140°	440.0	484.3	608.7	816.6	917.1
142.5°	456.5	497.5	611.9	793.4	887.5
145°	477.1	517.3	612.8	758.5	839.0
147.5°	501.7	537.1	617.7	733.4	795.4
150°	518.2	550.4	621.0	716.8	769.0
152.5°	534.6	563.6	621.0	703.4	746.0
155°	559.3	579.4	625.1	687.5	719.7
157.5°	579.0	598.3	630.0	677.5	700.8
160°	592.2	608.3	633.3	670.8	690.9
162.5°	602.1	618.2	636.6	667.4	681.0
165°	621.0	629.0	641.6	658.3	670.3
167.5°	631.7	638.9	645.7	654.1	661.3
170°	641.6	645.6	645.7	654.0	658.0
172.5°	644.8	652.1	649.0	650.7	654.7
175°	653.9	657.9	653.9	649.7	645.7
177.5°	653.9	657.1	653.9	653.8	650.6
180°	653.9	653.9	653.9	653.9	653.9



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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	12.11	12.81	13.20	13.89	15.39	4.34	5.04	5.44	6.13	7.62
	3H	13.59	14.21	14.69	15.31	16.82	5.68	6.31	6.79	7.40	8.92
	4H	14.09	14.69	15.21	15.79	17.30	6.33	6.92	7.44	8.02	9.54
	6H	14.48	15.03	15.61	16.13	17.66	6.91	7.45	8.03	8.55	10.08
	8H	14.61	15.13	15.74	16.25	17.77	7.13	7.65	8.26	8.76	10.29
	12H	14.69	15.18	15.82	16.29	17.83	7.29	7.78	8.42	8.89	10.44
4H	2H	11.92	12.51	13.04	13.61	15.13	4.94	5.53	6.06	6.63	8.15
	3H	13.54	14.03	14.67	15.16	16.69	6.48	6.97	7.60	8.09	9.62
	4H	14.12	14.57	15.26	15.69	17.24	7.26	7.72	8.40	8.83	10.38
	6H	14.61	15.00	15.75	16.13	17.68	7.99	8.38	9.13	9.52	11.06
	8H	14.79	15.15	15.93	16.28	17.84	8.28	8.64	9.42	9.77	11.33
	12H	14.92	15.24	16.07	16.38	17.95	8.49	8.82	9.65	9.96	11.52
8H	4H	14.03	14.39	15.17	15.52	17.08	7.71	8.07	8.84	9.20	10.76
	6H	14.56	14.86	15.72	16.03	17.58	8.58	8.88	9.74	10.05	11.61
	8H	14.80	15.05	15.96	16.21	17.78	8.98	9.24	10.14	10.39	11.96
	12H	14.98	15.21	16.14	16.35	17.96	9.29	9.52	10.46	10.67	12.28
12H	4H	13.97	14.30	15.13	15.44	17.00	7.75	8.08	8.90	9.22	10.78
	6H	14.53	14.79	15.70	15.94	17.52	8.70	8.96	9.86	10.11	11.68
	8H	14.77	15.00	15.94	16.14	17.75	9.13	9.36	10.30	10.51	12.12