

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: P621555

Luminaire Tested: VLT-F-150U-050D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621555
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-150U-050D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

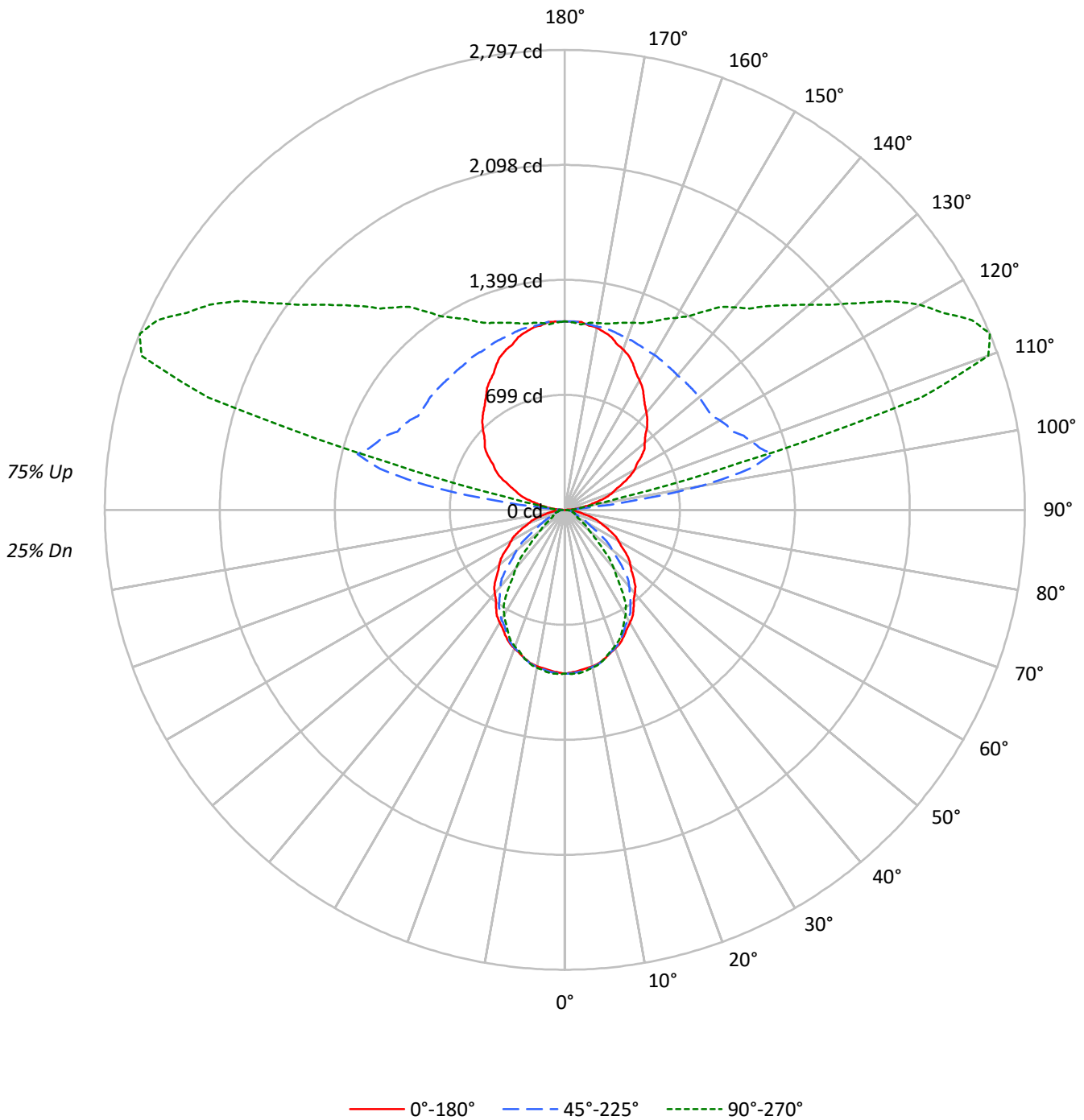
Lumens per Lamp: N/A
Luminaire Lumens: 8192.9 lumens
Efficiency: N/A
Efficacy: 130.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 63
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	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	25
1	92	88	85	82	82	79	76	73	61	59	57	45	44	42	30	29	28	22
2	84	78	72	67	75	69	65	61	54	51	48	40	38	36	27	25	25	19
3	77	68	62	56	69	61	56	51	48	44	41	35	33	31	24	22	21	16
4	71	61	53	48	63	54	48	43	43	38	35	32	29	27	21	20	19	14
5	65	54	46	41	58	49	42	37	38	34	30	29	26	23	19	18	16	13
6	60	48	41	35	53	44	37	32	34	30	26	26	23	20	18	16	15	11
7	55	44	36	31	49	39	33	28	31	27	23	23	20	18	16	14	13	10
8	51	40	32	27	46	36	29	25	28	24	21	21	18	16	15	13	12	9
9	48	36	29	24	42	33	26	22	26	21	18	20	17	14	14	12	11	8
10	44	33	26	22	40	30	24	20	24	19	16	18	15	13	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7154	7154	7154
5°	7077	7129	7188
10°	7039	7069	7106
15°	6962	6970	6970
20°	6850	6818	6755
25°	6719	6604	6490
30°	6562	6374	6118
35°	6387	6099	5367
40°	6203	5710	4322
45°	6009	5058	3135
50°	5806	4231	2172
55°	5605	3222	1624
60°	5395	2232	1227
65°	5158	1591	1258
70°	4817	1339	1297
75°	4456	1370	1314
80°	3872	1446	1364
85°	3137	1614	1359

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6009 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.9	1.1
10°-20°	264.2	3.2
20°-30°	384.2	4.7
30°-40°	425.1	5.2
40°-50°	365.0	4.5
50°-60°	252.7	3.1
60°-70°	150.6	1.8
70°-80°	74.2	0.9
80°-90°	25.5	0.3
90°-100°	140.9	1.7
100°-110°	1004.3	12.3
110°-120°	1363.4	16.6
120°-130°	1109.7	13.5
130°-140°	892.5	10.9
140°-150°	703.6	8.6
150°-160°	514.5	6.3
160°-170°	319.6	3.9
170°-180°	109.0	1.3
0°-30°	742.3	9.1
0°-40°	1167.4	14.2
0°-60°	1785.1	21.8
0°-90°	2035.3	24.8
90°-120°	2508.7	30.6
90°-150°	5214.5	63.6
90°-180°	6158.0	75.2
0°-180°	8192.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	997	997	997	997	997	
5°	982	998	990	989	998	93
15°	937	949	938	933	938	264
25°	849	855	834	820	820	390
35°	729	727	696	640	613	456
45°	592	582	498	360	309	457
55°	448	429	258	148	130	400
65°	304	244	94	75	74	301
75°	161	70	49	48	47	170
85°	38	19	20	18	16	44
90°	0	7	14	22	22	4
95°	58	107	58	65	79	65
105°	224	343	1305	1667	1103	236
115°	396	481	1125	2338	2732	394
125°	570	647	1060	1853	2192	506
135°	706	784	1067	1526	1752	544
145°	836	907	1074	1330	1471	525
155°	980	1016	1096	1205	1262	450
165°	1089	1103	1125	1154	1175	306
175°	1146	1153	1146	1139	1132	108
180°	1146	1146	1146	1146	1146	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	996.9	996.9	996.9	996.9	996.9
2.5°	988.6	999.9	994.4	994.5	998.5
5°	982.4	997.5	989.7	988.8	997.9
7.5°	973.4	987.3	979.1	978.1	985.9
10°	966.0	979.1	970.1	968.2	975.2
12.5°	955.3	968.3	958.6	955.0	962.1
15°	937.1	949.2	938.2	933.1	938.2
17.5°	914.3	924.3	911.8	903.8	906.9
20°	897.0	907.0	892.8	881.6	884.6
22.5°	878.0	886.5	870.6	857.7	859.9
25°	848.6	854.6	834.1	819.7	819.7
27.5°	815.8	819.4	795.6	780.5	776.3
30°	791.9	793.9	769.3	751.5	738.4
32.5°	767.2	768.4	740.4	711.8	691.4
35°	729.1	727.1	696.2	639.9	612.7
37.5°	688.5	684.1	647.5	562.0	521.5
40°	662.2	656.1	609.6	506.7	461.4
42.5°	635.0	626.5	567.6	449.7	399.6
45°	592.1	582.1	498.4	360.3	308.9
47.5°	549.7	536.4	427.6	279.1	235.0
50°	520.1	506.0	379.0	229.9	194.6
52.5°	490.4	476.3	329.5	193.0	165.0
55°	448.0	428.8	257.5	147.9	129.8
57.5°	404.7	377.3	191.8	115.2	101.1
60°	375.9	339.6	155.5	95.5	85.5
62.5°	347.9	302.0	127.5	83.4	81.4
65°	303.8	244.4	93.7	75.2	74.1
67.5°	261.8	186.5	69.6	67.7	66.7
70°	229.6	147.1	63.8	62.8	61.8
72.5°	200.8	112.6	58.1	57.0	56.0
75°	160.7	70.0	49.4	48.4	47.4
77.5°	120.1	44.2	40.8	39.7	38.7
80°	93.7	36.3	35.0	34.0	33.0
82.5°	70.6	29.4	28.4	27.4	26.4
85°	38.1	19.0	19.6	17.5	16.5
87.5°	13.2	10.6	11.9	11.7	10.9
90°	0.0	7.0	14.4	21.6	21.6
92.5°	17.3	24.4	31.7	44.8	50.5
95°	57.7	107.0	57.7	65.2	79.3
97.5°	102.4	205.3	423.9	125.1	108.1
100°	137.0	256.8	850.7	250.4	165.8
102.5°	171.6	297.1	1150.6	660.8	361.9
105°	223.5	343.3	1304.9	1667.0	1103.0
107.5°	275.4	365.6	1245.8	2426.1	2272.4
110°	310.0	394.6	1211.2	2549.2	2739.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	344.6	429.2	1176.6	2477.2	2797.2
115°	396.5	481.1	1124.7	2337.6	2732.3
117.5°	449.9	533.0	1111.7	2186.4	2592.5
120°	490.2	567.8	1088.6	2071.5	2494.4
122.5°	519.1	602.3	1059.8	1972.7	2361.8
125°	569.5	647.1	1059.8	1853.3	2191.6
127.5°	611.4	690.3	1061.2	1714.8	2048.9
130°	634.4	719.0	1067.0	1622.1	1939.3
132.5°	663.3	747.8	1067.0	1580.4	1841.3
135°	706.5	784.1	1067.0	1526.3	1751.9
137.5°	742.6	825.7	1067.0	1466.4	1659.6
140°	771.4	848.9	1067.0	1431.5	1607.7
142.5°	800.2	872.1	1072.7	1390.8	1555.8
145°	836.3	906.8	1074.2	1329.7	1470.7
147.5°	879.5	941.6	1082.8	1285.7	1394.3
150°	908.4	964.8	1088.6	1256.5	1348.1
152.5°	937.2	988.0	1088.6	1233.1	1307.8
155°	980.5	1015.7	1095.8	1205.2	1261.6
157.5°	1015.1	1048.9	1104.5	1187.6	1228.5
160°	1038.1	1066.3	1110.2	1175.9	1211.2
162.5°	1055.4	1083.6	1116.0	1169.9	1193.9
165°	1088.6	1102.7	1124.7	1154.0	1175.1
167.5°	1107.4	1120.0	1131.9	1146.6	1159.3
170°	1124.7	1131.7	1131.9	1146.4	1153.5
172.5°	1130.4	1143.1	1137.6	1140.7	1147.7
175°	1146.3	1153.3	1146.3	1138.9	1131.9
177.5°	1146.3	1151.9	1146.3	1146.2	1140.5
180°	1146.3	1146.3	1146.3	1146.3	1146.3



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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	11.45	12.10	12.60	13.24	14.83	3.68	4.34	4.84	5.47	7.06
	3H	12.93	13.51	14.09	14.65	16.26	5.02	5.60	6.18	6.75	8.36
	4H	13.43	13.98	14.60	15.13	16.74	5.67	6.22	6.83	7.36	8.98
	6H	13.82	14.33	14.99	15.47	17.10	6.25	6.75	7.42	7.90	9.52
	8H	13.94	14.43	15.12	15.59	17.20	6.47	6.95	7.64	8.11	9.73
	12H	14.02	14.48	15.20	15.63	17.27	6.63	7.08	7.81	8.24	9.88
4H	2H	11.25	11.81	12.43	12.95	14.56	4.27	4.83	5.45	5.97	7.58
	3H	12.87	13.33	14.05	14.50	16.13	5.81	6.27	6.99	7.44	9.06
	4H	13.45	13.88	14.64	15.04	16.68	6.60	7.02	7.78	8.18	9.82
	6H	13.94	14.30	15.12	15.48	17.11	7.33	7.69	8.51	8.87	10.50
	8H	14.12	14.46	15.30	15.63	17.28	7.61	7.95	8.80	9.12	10.77
	12H	14.24	14.55	15.44	15.73	17.38	7.82	8.13	9.02	9.31	10.97
8H	4H	13.36	13.69	14.54	14.87	16.52	7.04	7.37	8.22	8.55	10.19
	6H	13.88	14.16	15.09	15.38	17.02	7.91	8.19	9.12	9.41	11.05
	8H	14.12	14.36	15.33	15.55	17.22	8.31	8.55	9.52	9.74	11.41
	12H	14.30	14.51	15.51	15.70	17.40	8.62	8.84	9.83	10.02	11.72
12H	4H	13.30	13.60	14.50	14.79	16.44	7.08	7.38	8.28	8.56	10.22
	6H	13.86	14.10	15.07	15.29	16.96	8.03	8.27	9.24	9.46	11.13
	8H	14.09	14.30	15.30	15.49	17.19	8.46	8.67	9.67	9.86	11.56