

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: P621567

Luminaire Tested: VLT-F-150U-100D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621567
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-100D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

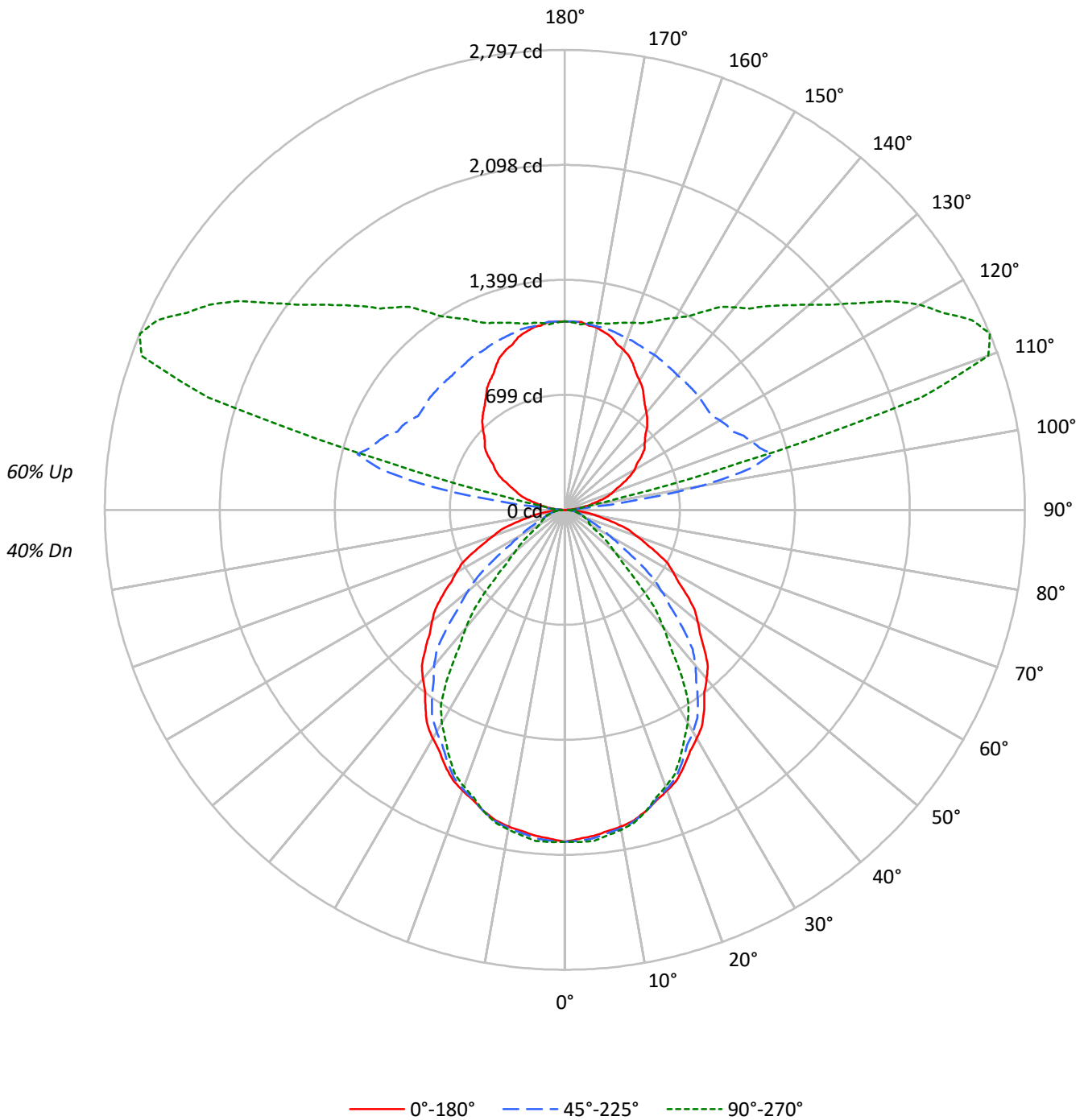
Lumens per Lamp: N/A
Luminaire Lumens: 10277.8 lumens
Efficiency: N/A
Efficacy: 132.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 77.8
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	42	42	41	35
2	88	81	75	71	80	74	69	65	61	58	55	49	47	45	38	37	35	30
3	81	72	65	59	73	66	60	55	54	50	47	44	41	38	34	32	31	26
4	74	64	56	51	67	59	52	47	49	44	40	39	36	33	31	29	27	23
5	68	57	49	44	62	52	46	41	44	39	35	36	32	29	28	26	24	20
6	63	51	44	38	57	47	41	36	40	34	31	32	29	26	26	23	21	18
7	58	46	39	34	53	43	36	31	36	31	27	30	26	23	24	21	19	16
8	54	42	35	30	49	39	32	28	33	28	24	27	23	21	22	19	17	15
9	50	39	31	27	46	36	29	25	30	25	22	25	21	19	20	18	16	13
10	47	35	28	24	43	33	27	22	28	23	20	23	20	17	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14490	14490	14490
5°	14335	14441	14561
10°	14258	14319	14395
15°	14103	14118	14118
20°	13875	13811	13684
25°	13610	13379	13147
30°	13293	12912	12393
35°	12938	12354	10873
40°	12565	11569	8755
45°	12173	10247	6351
50°	11761	8570	4402
55°	11352	6524	3288
60°	10928	4521	2484
65°	10449	3223	2550
70°	9760	2713	2627
75°	9022	2775	2662
80°	7843	2930	2760
85°	6356	3260	2750

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12173 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.3	1.9
10°-20°	535.1	5.2
20°-30°	778.3	7.6
30°-40°	861.1	8.4
40°-50°	739.3	7.2
50°-60°	511.9	5.0
60°-70°	305.0	3.0
70°-80°	150.3	1.5
80°-90°	49.0	0.5
90°-100°	140.9	1.4
100°-110°	1004.3	9.8
110°-120°	1363.4	13.3
120°-130°	1109.7	10.8
130°-140°	892.5	8.7
140°-150°	703.6	6.8
150°-160°	514.5	5.0
160°-170°	319.6	3.1
170°-180°	109.0	1.1
0°-30°	1503.7	14.6
0°-40°	2364.8	23.0
0°-60°	3616.0	35.2
0°-90°	4120.2	40.1
90°-120°	2508.7	24.4
90°-150°	5214.5	50.7
90°-180°	6158.0	59.9
0°-180°	10277.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2019	2019	2019	2019	2019	
5°	1990	2021	2005	2003	2021	189
15°	1898	1923	1900	1890	1900	534
25°	1719	1731	1690	1660	1660	791
35°	1477	1473	1410	1296	1241	923
45°	1200	1179	1010	730	626	925
55°	907	869	522	300	263	811
65°	615	495	190	152	150	609
75°	325	142	100	98	96	343
85°	77	38	40	35	33	89
90°	0	7	14	22	22	6
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°	2019.3	2019.3	2019.3	2019.3	2019.3
2.5°	2002.6	2025.5	2014.3	2014.5	2022.7
5°	1990.1	2020.7	2004.7	2003.0	2021.4
7.5°	1971.8	1999.9	1983.4	1981.3	1997.2
10°	1956.7	1983.3	1965.1	1961.2	1975.5
12.5°	1935.0	1961.6	1941.7	1934.5	1948.8
15°	1898.3	1922.8	1900.4	1890.2	1900.4
17.5°	1852.0	1872.4	1847.0	1830.9	1837.0
20°	1817.0	1837.4	1808.6	1785.8	1791.9
22.5°	1778.6	1795.7	1763.6	1737.4	1741.9
25°	1718.9	1731.2	1689.7	1660.5	1660.5
27.5°	1652.6	1659.9	1611.7	1581.1	1572.5
30°	1604.2	1608.3	1558.3	1522.2	1495.7
32.5°	1554.1	1556.6	1499.9	1441.8	1400.6
35°	1476.9	1472.9	1410.2	1296.3	1241.2
37.5°	1394.8	1385.8	1311.7	1138.4	1056.4
40°	1341.3	1329.1	1235.0	1026.3	934.6
42.5°	1286.3	1269.1	1149.8	911.0	809.4
45°	1199.5	1179.1	1009.7	729.8	625.8
47.5°	1113.5	1086.6	866.1	565.4	476.0
50°	1053.5	1024.9	767.7	465.7	394.3
52.5°	993.4	964.8	667.5	390.9	334.2
55°	907.4	868.7	521.5	299.6	262.8
57.5°	819.8	764.3	388.4	233.4	204.9
60°	761.4	688.0	315.0	193.5	173.1
62.5°	704.7	611.7	258.3	168.9	164.8
65°	615.4	495.0	189.8	152.2	150.2
67.5°	530.3	377.7	141.0	137.2	135.2
70°	465.2	297.9	129.3	127.2	125.2
72.5°	406.8	228.1	117.7	115.5	113.5
75°	325.4	141.9	100.1	98.0	96.0
77.5°	243.2	89.4	82.6	80.5	78.4
80°	189.8	73.6	70.9	68.8	66.8
82.5°	143.1	59.5	57.6	55.4	53.4
85°	77.2	38.4	39.6	35.4	33.4
87.5°	26.7	20.0	21.2	19.3	17.7
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	15.90	16.65	16.95	17.69	19.10	8.14	8.88	9.18	9.92	11.33
	3H	17.39	18.05	18.45	19.11	20.53	9.48	10.14	10.54	11.20	12.63
	4H	17.90	18.52	18.96	19.58	21.02	10.13	10.76	11.20	11.81	13.25
	6H	18.29	18.86	19.37	19.92	21.37	10.71	11.29	11.79	12.35	13.80
	8H	18.42	18.96	19.50	20.04	21.48	10.94	11.48	12.02	12.56	14.00
	12H	18.49	19.01	19.58	20.08	21.55	11.10	11.62	12.19	12.69	14.15
4H	2H	15.72	16.35	16.79	17.40	18.84	8.74	9.37	9.81	10.42	11.86
	3H	17.34	17.87	18.43	18.95	20.40	10.28	10.80	11.36	11.89	13.33
	4H	17.93	18.41	19.02	19.48	20.95	11.07	11.55	12.16	12.62	14.09
	6H	18.42	18.83	19.51	19.92	21.39	11.81	12.21	12.90	13.31	14.78
	8H	18.60	18.98	19.70	20.07	21.55	12.10	12.48	13.19	13.57	15.05
	12H	18.73	19.07	19.84	20.18	21.66	12.31	12.65	13.42	13.76	15.24
8H	4H	17.84	18.22	18.93	19.31	20.79	11.52	11.90	12.61	12.99	14.47
	6H	18.37	18.69	19.49	19.82	21.29	12.40	12.71	13.51	13.84	15.32
	8H	18.61	18.88	19.73	20.00	21.49	12.79	13.07	13.92	14.18	15.68
	12H	18.79	19.03	19.92	20.14	21.68	13.11	13.35	14.23	14.46	15.99
12H	4H	17.78	18.13	18.90	19.23	20.72	11.56	11.91	12.67	13.01	14.49
	6H	18.34	18.62	19.47	19.73	21.23	12.51	12.79	13.64	13.90	15.40
	8H	18.58	18.82	19.71	19.93	21.47	12.95	13.19	14.08	14.30	15.84