

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: P621566

Luminaire Tested: VLT-F-150U-100D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621566
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-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

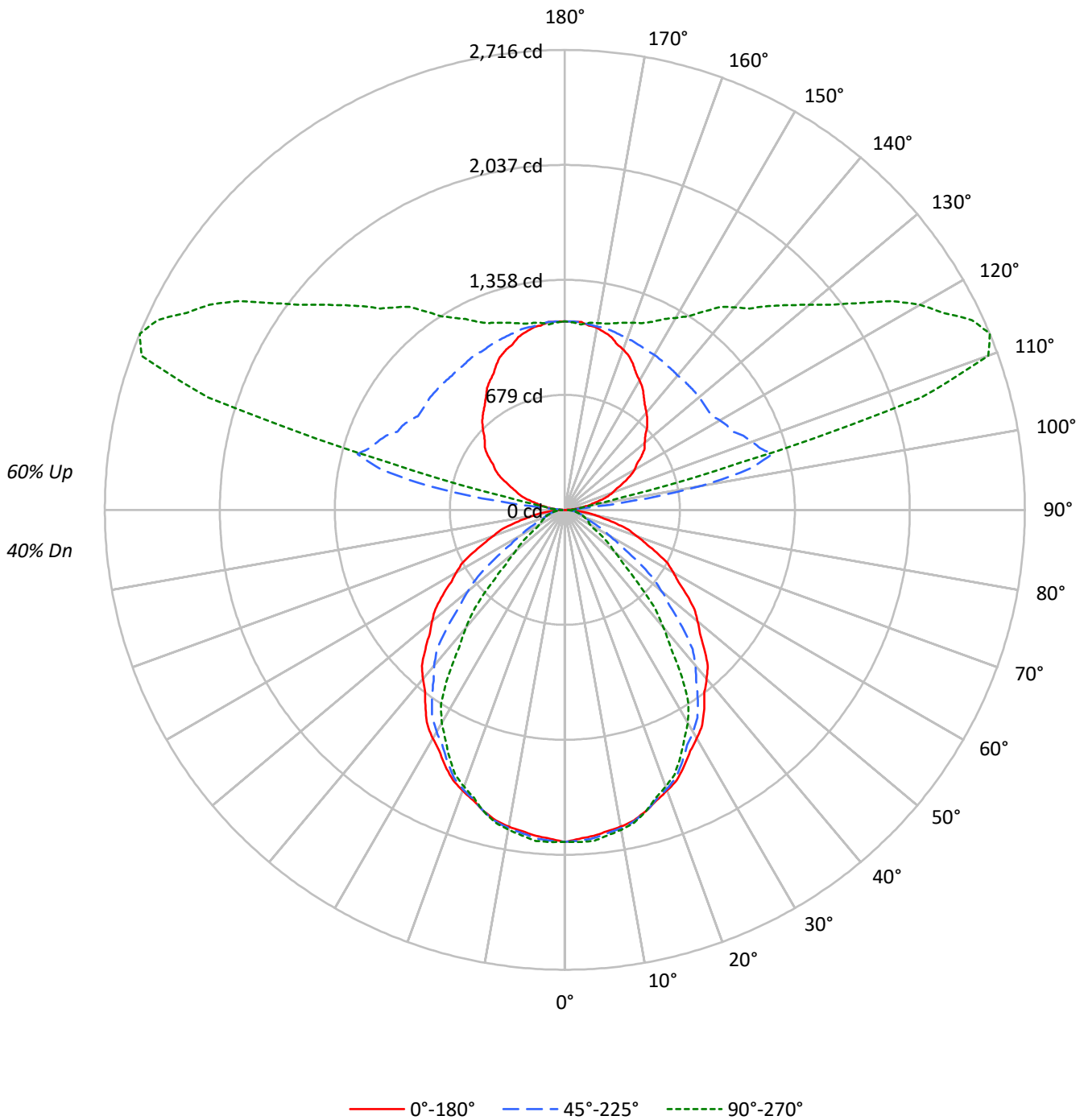
Lumens per Lamp: N/A
Luminaire Lumens: 9980.2 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

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



TEST NUMBER: P621566
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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	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°	14071	14071	14071
5°	13920	14023	14139
10°	13845	13904	13978
15°	13695	13710	13710
20°	13474	13412	13288
25°	13216	12991	12767
30°	12908	12538	12035
35°	12564	11996	10559
40°	12201	11234	8501
45°	11821	9949	6167
50°	11421	8323	4275
55°	11025	6336	3193
60°	10612	4390	2413
65°	10147	3129	2476
70°	9477	2635	2549
75°	8761	2695	2584
80°	7616	2847	2678
85°	6175	3170	2668

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11821 cd/sqm



TEST NUMBER: P621566

CATALOG NUMBER: VLT-F-150U-100D-835-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.8	1.9
10°-20°	519.6	5.2
20°-30°	755.8	7.6
30°-40°	836.2	8.4
40°-50°	717.9	7.2
50°-60°	497.1	5.0
60°-70°	296.2	3.0
70°-80°	145.9	1.5
80°-90°	47.6	0.5
90°-100°	136.8	1.4
100°-110°	975.2	9.8
110°-120°	1324.0	13.3
120°-130°	1077.6	10.8
130°-140°	866.7	8.7
140°-150°	683.3	6.8
150°-160°	499.6	5.0
160°-170°	310.3	3.1
170°-180°	105.8	1.1
0°-30°	1460.2	14.6
0°-40°	2296.3	23.0
0°-60°	3511.3	35.2
0°-90°	4001.0	40.1
90°-120°	2436.0	24.4
90°-150°	5063.5	50.7
90°-180°	5979.0	59.9
0°-180°	9980.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1961	1961	1961	1961	1961	
5°	1932	1962	1947	1945	1963	183
15°	1843	1867	1845	1836	1845	519
25°	1669	1681	1641	1612	1612	768
35°	1434	1430	1369	1259	1205	896
45°	1165	1145	980	709	608	899
55°	881	844	506	291	255	788
65°	598	481	184	148	146	592
75°	316	138	97	95	93	334
85°	75	37	38	34	32	87
90°	0	7	14	21	21	6
95°	56	104	56	63	77	63
105°	217	333	1267	1619	1071	229
115°	385	467	1092	2270	2653	382
125°	553	628	1029	1800	2128	491
135°	686	761	1036	1482	1701	528
145°	812	880	1043	1291	1428	510
155°	952	986	1064	1170	1225	437
165°	1057	1071	1092	1121	1141	297
175°	1113	1120	1113	1106	1099	105
180°	1113	1113	1113	1113	1113	

TEST NUMBER: P621566

CATALOG NUMBER: VLT-F-150U-100D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1960.9	1960.9	1960.9	1960.9	1960.9
2.5°	1944.7	1966.8	1956.0	1956.2	1964.1
5°	1932.5	1962.2	1946.7	1945.1	1962.9
7.5°	1914.7	1942.0	1926.0	1923.9	1939.4
10°	1900.1	1925.8	1908.2	1904.5	1918.3
12.5°	1879.0	1904.8	1885.5	1878.5	1892.4
15°	1843.4	1867.1	1845.4	1835.5	1845.4
17.5°	1798.4	1818.2	1793.5	1777.9	1783.8
20°	1764.4	1784.2	1756.3	1734.1	1740.1
22.5°	1727.1	1743.7	1712.5	1687.1	1691.4
25°	1669.2	1681.0	1640.8	1612.4	1612.4
27.5°	1604.7	1611.9	1565.0	1535.3	1527.0
30°	1557.8	1561.7	1513.2	1478.2	1452.4
32.5°	1509.1	1511.5	1456.5	1400.1	1360.0
35°	1434.2	1430.2	1369.4	1258.8	1205.3
37.5°	1354.4	1345.7	1273.8	1105.4	1025.8
40°	1302.5	1290.6	1199.2	996.6	907.5
42.5°	1249.0	1232.4	1116.6	884.6	786.0
45°	1164.8	1145.0	980.4	708.7	607.7
47.5°	1081.3	1055.2	841.1	549.0	462.3
50°	1023.0	995.2	745.5	452.2	382.9
52.5°	964.6	936.9	648.2	379.6	324.5
55°	881.2	843.5	506.4	290.9	255.2
57.5°	796.1	742.2	377.2	226.7	198.9
60°	739.4	668.1	305.9	187.9	168.1
62.5°	684.3	594.0	250.8	164.0	160.0
65°	597.6	480.7	184.3	147.8	145.8
67.5°	514.9	366.8	136.9	133.2	131.3
70°	451.7	289.3	125.6	123.5	121.5
72.5°	395.0	221.5	114.2	112.2	110.2
75°	316.0	137.7	97.2	95.2	93.2
77.5°	236.2	86.9	80.2	78.1	76.2
80°	184.3	71.4	68.9	66.8	64.8
82.5°	139.0	57.8	55.9	53.8	51.9
85°	75.0	37.3	38.5	34.4	32.4
87.5°	25.9	19.4	20.6	18.7	17.2
90°	0.0	6.8	14.0	21.0	21.0
92.5°	16.8	23.6	30.8	43.5	49.0
95°	56.0	103.9	56.0	63.3	77.0
97.5°	99.4	199.3	411.6	121.4	105.0
100°	133.0	249.4	826.1	243.2	161.0
102.5°	166.6	288.5	1117.3	641.7	351.4
105°	217.0	333.4	1267.1	1618.7	1071.1
107.5°	267.4	355.0	1209.7	2355.8	2206.6
110°	301.0	383.2	1176.1	2475.4	2660.2



TEST NUMBER: P621566

CATALOG NUMBER: VLT-F-150U-100D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	334.6	416.8	1142.5	2405.5	2716.2
115°	385.0	467.2	1092.1	2269.9	2653.2
117.5°	436.8	517.6	1079.5	2123.1	2517.4
120°	476.0	551.3	1057.1	2011.5	2422.2
122.5°	504.0	584.8	1029.1	1915.6	2293.4
125°	553.0	628.3	1029.1	1799.6	2128.2
127.5°	593.7	670.3	1030.5	1665.1	1989.6
130°	616.1	698.2	1036.1	1575.1	1883.2
132.5°	644.1	726.2	1036.1	1534.7	1788.0
135°	686.1	761.4	1036.1	1482.1	1701.2
137.5°	721.1	801.8	1036.1	1424.0	1611.5
140°	749.1	824.4	1036.1	1390.0	1561.1
142.5°	777.1	846.9	1041.7	1350.6	1510.7
145°	812.1	880.5	1043.1	1291.2	1428.1
147.5°	854.1	914.3	1051.5	1248.5	1353.9
150°	882.1	936.8	1057.1	1220.1	1309.1
152.5°	910.1	959.4	1057.1	1197.4	1269.9
155°	952.1	986.3	1064.1	1170.3	1225.1
157.5°	985.7	1018.5	1072.5	1153.2	1192.9
160°	1008.1	1035.5	1078.1	1141.9	1176.1
162.5°	1024.9	1052.3	1083.7	1136.0	1159.3
165°	1057.1	1070.8	1092.1	1120.6	1141.1
167.5°	1075.3	1087.6	1099.1	1113.4	1125.7
170°	1092.1	1098.9	1099.1	1113.3	1120.1
172.5°	1097.7	1110.0	1104.7	1107.7	1114.5
175°	1113.1	1119.9	1113.1	1105.9	1099.1
177.5°	1113.1	1118.6	1113.1	1113.0	1107.5
180°	1113.1	1113.1	1113.1	1113.1	1113.1



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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	15.80	16.54	16.85	17.59	19.00	8.03	8.78	9.08	9.82	11.23
	3H	17.29	17.95	18.34	19.00	20.43	9.38	10.04	10.44	11.10	12.53
	4H	17.79	18.42	18.86	19.48	20.91	10.03	10.66	11.10	11.71	13.15
	6H	18.19	18.76	19.26	19.82	21.27	10.61	11.19	11.69	12.25	13.70
	8H	18.31	18.86	19.40	19.94	21.38	10.83	11.38	11.92	12.46	13.90
	12H	18.39	18.91	19.48	19.98	21.45	11.00	11.52	12.08	12.59	14.05
4H	2H	15.62	16.24	16.69	17.30	18.74	8.64	9.26	9.71	10.32	11.76
	3H	17.24	17.76	18.32	18.85	20.30	10.18	10.70	11.26	11.78	13.23
	4H	17.83	18.31	18.92	19.38	20.85	10.97	11.45	12.06	12.52	13.99
	6H	18.32	18.72	19.41	19.82	21.29	11.70	12.11	12.80	13.21	14.67
	8H	18.50	18.88	19.60	19.97	21.45	11.99	12.37	13.09	13.46	14.94
	12H	18.62	18.97	19.74	20.07	21.56	12.21	12.55	13.32	13.65	15.14
8H	4H	17.74	18.12	18.83	19.21	20.69	11.42	11.80	12.51	12.89	14.37
	6H	18.27	18.58	19.39	19.72	21.19	12.30	12.61	13.41	13.74	15.22
	8H	18.50	18.78	19.63	19.89	21.39	12.69	12.96	13.81	14.08	15.58
	12H	18.69	18.93	19.81	20.04	21.57	13.01	13.25	14.13	14.36	15.89
12H	4H	17.68	18.03	18.79	19.13	20.61	11.46	11.80	12.57	12.91	14.39
	6H	18.24	18.52	19.36	19.63	21.13	12.41	12.69	13.53	13.80	15.30
	8H	18.48	18.72	19.60	19.83	21.36	12.85	13.09	13.97	14.20	15.73