

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: P621565

Luminaire Tested: VLT-F-150U-100D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621565
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-830-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

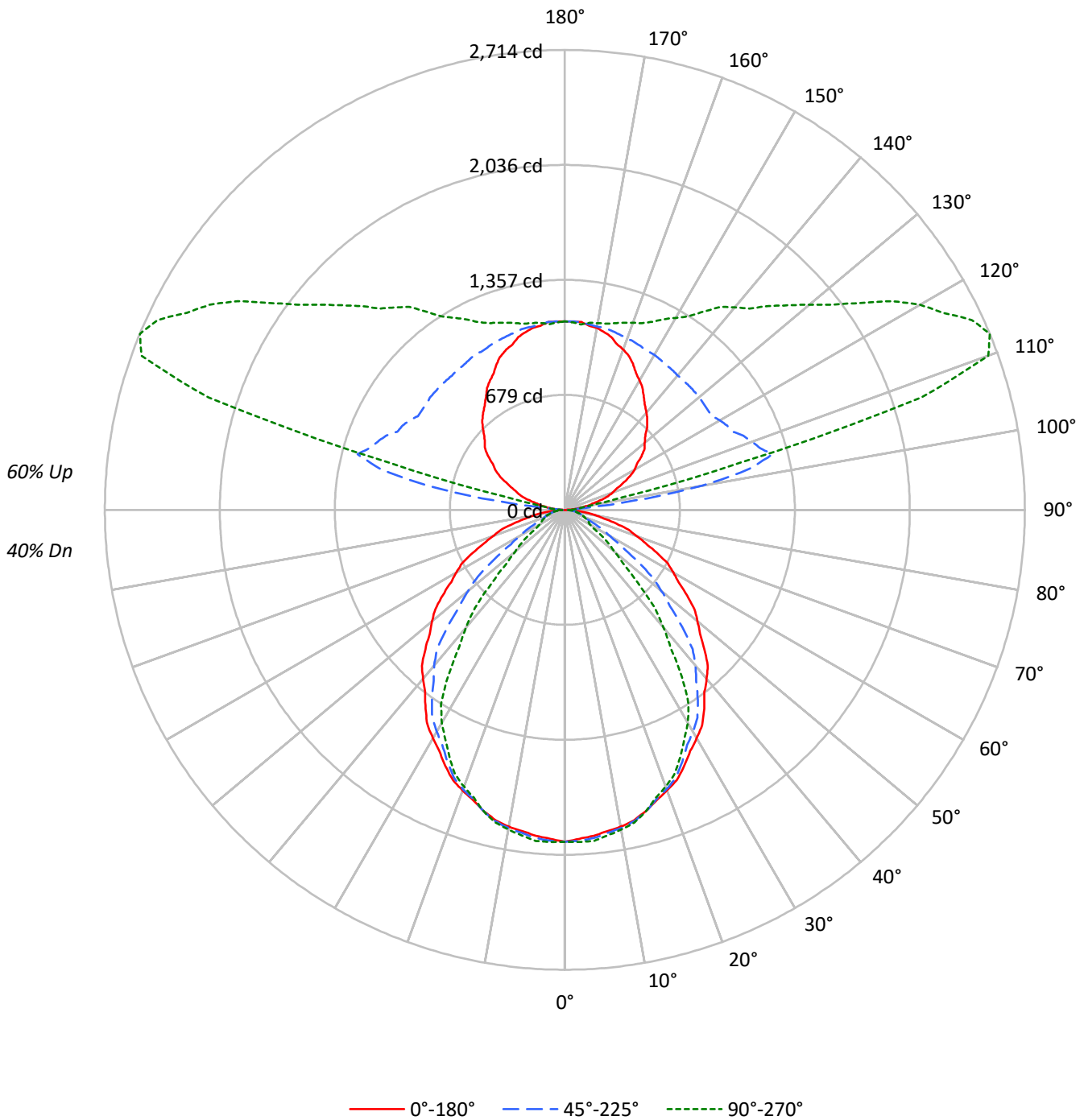
Lumens per Lamp: N/A
Luminaire Lumens: 9971.2 lumens
Efficiency: N/A
Efficacy: 128.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

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	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°	14058	14058	14058
5°	13908	14010	14126
10°	13833	13892	13966
15°	13682	13697	13697
20°	13462	13400	13276
25°	13204	12980	12756
30°	12896	12527	12024
35°	12553	11985	10549
40°	12190	11223	8494
45°	11810	9940	6162
50°	11409	8315	4270
55°	11015	6331	3190
60°	10602	4386	2411
65°	10137	3128	2474
70°	9469	2633	2547
75°	8753	2692	2581
80°	7612	2843	2678
85°	6167	3170	2668

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11810 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.6	1.9
10°-20°	519.1	5.2
20°-30°	755.1	7.6
30°-40°	835.4	8.4
40°-50°	717.2	7.2
50°-60°	496.6	5.0
60°-70°	295.9	3.0
70°-80°	145.8	1.5
80°-90°	47.5	0.5
90°-100°	136.7	1.4
100°-110°	974.3	9.8
110°-120°	1322.8	13.3
120°-130°	1076.6	10.8
130°-140°	865.9	8.7
140°-150°	682.6	6.8
150°-160°	499.1	5.0
160°-170°	310.0	3.1
170°-180°	105.7	1.1
0°-30°	1458.9	14.6
0°-40°	2294.3	23.0
0°-60°	3508.1	35.2
0°-90°	3997.4	40.1
90°-120°	2433.8	24.4
90°-150°	5059.0	50.7
90°-180°	5974.0	59.9
0°-180°	9971.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1959	1959	1959	1959	1959	
5°	1931	1960	1945	1943	1961	183
15°	1842	1866	1844	1834	1844	519
25°	1668	1680	1639	1611	1611	767
35°	1433	1429	1368	1258	1204	895
45°	1164	1144	980	708	607	898
55°	880	843	506	291	255	787
65°	597	480	184	148	146	591
75°	316	138	97	95	93	333
85°	75	37	38	34	32	87
90°	0	7	14	21	21	6
95°	56	104	56	63	77	63
105°	217	333	1266	1617	1070	229
115°	385	467	1091	2268	2651	382
125°	553	628	1028	1798	2126	491
135°	685	761	1035	1481	1700	527
145°	811	880	1042	1290	1427	510
155°	951	985	1063	1169	1224	437
165°	1056	1070	1091	1120	1140	297
175°	1112	1119	1112	1105	1098	105
180°	1112	1112	1112	1112	1112	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1959.1	1959.1	1959.1	1959.1	1959.1
2.5°	1942.9	1965.1	1954.2	1954.4	1962.3
5°	1930.8	1960.4	1944.9	1943.3	1961.1
7.5°	1913.0	1940.3	1924.3	1922.2	1937.6
10°	1898.4	1924.1	1906.5	1902.7	1916.6
12.5°	1877.3	1903.1	1883.8	1876.8	1890.7
15°	1841.7	1865.5	1843.7	1833.8	1843.7
17.5°	1796.8	1816.6	1791.9	1776.3	1782.2
20°	1762.8	1782.6	1754.7	1732.6	1738.5
22.5°	1725.5	1742.2	1711.0	1685.6	1689.9
25°	1667.7	1679.5	1639.3	1611.0	1611.0
27.5°	1603.3	1610.4	1563.6	1533.9	1525.6
30°	1556.3	1560.3	1511.8	1476.8	1451.1
32.5°	1507.8	1510.1	1455.2	1398.8	1358.8
35°	1432.9	1428.9	1368.1	1257.6	1204.2
37.5°	1353.2	1344.4	1272.6	1104.4	1024.9
40°	1301.3	1289.5	1198.1	995.7	906.7
42.5°	1247.9	1231.3	1115.6	883.8	785.3
45°	1163.7	1143.9	979.5	708.1	607.2
47.5°	1080.3	1054.2	840.3	548.5	461.8
50°	1022.0	994.3	744.8	451.8	382.5
52.5°	963.8	936.1	647.6	379.2	324.2
55°	880.4	842.8	506.0	290.6	255.0
57.5°	795.4	741.6	376.8	226.4	198.7
60°	738.7	667.5	305.6	187.8	168.0
62.5°	683.7	593.4	250.6	163.8	159.9
65°	597.0	480.3	184.2	147.7	145.7
67.5°	514.5	366.4	136.8	133.1	131.1
70°	451.3	289.1	125.5	123.4	121.4
72.5°	394.7	221.3	114.1	112.1	110.1
75°	315.7	137.6	97.1	95.1	93.1
77.5°	236.0	86.8	80.1	78.1	76.1
80°	184.2	71.4	68.8	66.7	64.8
82.5°	138.8	57.7	55.9	53.8	51.8
85°	74.9	37.3	38.5	34.4	32.4
87.5°	25.9	19.4	20.6	18.7	17.1
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	103.8	56.0	63.3	76.9
97.5°	99.3	199.2	411.3	121.3	104.9
100°	132.9	249.2	825.3	242.9	160.9
102.5°	166.5	288.2	1116.3	641.1	351.1
105°	216.8	333.1	1266.0	1617.2	1070.1
107.5°	267.2	354.7	1208.6	2353.7	2204.6
110°	300.8	382.8	1175.0	2473.2	2657.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	334.3	416.4	1141.5	2403.3	2713.8
115°	384.7	466.8	1091.1	2267.9	2650.8
117.5°	436.4	517.1	1078.5	2121.2	2515.2
120°	475.6	550.8	1056.1	2009.7	2420.0
122.5°	503.6	584.3	1028.2	1913.8	2291.3
125°	552.6	627.8	1028.2	1798.0	2126.3
127.5°	593.1	669.7	1029.6	1663.6	1987.8
130°	615.5	697.6	1035.2	1573.7	1881.5
132.5°	643.5	725.5	1035.2	1533.3	1786.3
135°	685.4	760.7	1035.2	1480.8	1699.6
137.5°	720.4	801.1	1035.2	1422.7	1610.1
140°	748.4	823.6	1035.2	1388.8	1559.7
142.5°	776.4	846.1	1040.8	1349.3	1509.4
145°	811.3	879.7	1042.2	1290.1	1426.8
147.5°	853.3	913.5	1050.5	1247.4	1352.7
150°	881.3	936.0	1056.1	1219.0	1307.9
152.5°	909.3	958.5	1056.1	1196.3	1268.8
155°	951.2	985.4	1063.1	1169.3	1224.0
157.5°	984.8	1017.6	1071.5	1152.2	1191.8
160°	1007.2	1034.5	1077.1	1140.8	1175.0
162.5°	1024.0	1051.3	1082.7	1135.0	1158.3
165°	1056.1	1069.8	1091.1	1119.6	1140.1
167.5°	1074.3	1086.6	1098.1	1112.4	1124.7
170°	1091.1	1098.0	1098.1	1112.3	1119.1
172.5°	1096.7	1109.0	1103.7	1106.7	1113.5
175°	1112.1	1118.9	1112.1	1104.9	1098.1
177.5°	1112.1	1117.6	1112.1	1112.0	1106.5
180°	1112.1	1112.1	1112.1	1112.1	1112.1



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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	8.77	9.08	9.82	11.23
	3H	17.28	17.95	18.34	19.00	20.43	9.38	10.04	10.43	11.09	12.52
	4H	17.79	18.42	18.86	19.48	20.91	10.03	10.65	11.09	11.71	13.15
	6H	18.18	18.76	19.26	19.82	21.27	10.61	11.19	11.69	12.25	13.69
	8H	18.31	18.86	19.39	19.94	21.38	10.83	11.38	11.91	12.46	13.90
	12H	18.39	18.91	19.47	19.98	21.44	10.99	11.51	12.08	12.58	14.05
4H	2H	15.61	16.24	16.69	17.30	18.73	8.63	9.26	9.71	10.32	11.76
	3H	17.24	17.76	18.32	18.85	20.29	10.18	10.70	11.26	11.78	13.23
	4H	17.83	18.30	18.91	19.38	20.85	10.97	11.44	12.05	12.52	13.99
	6H	18.31	18.72	19.41	19.82	21.28	11.70	12.11	12.80	13.21	14.67
	8H	18.50	18.88	19.59	19.97	21.45	11.99	12.37	13.09	13.46	14.94
	12H	18.62	18.97	19.73	20.07	21.55	12.20	12.55	13.31	13.65	15.14
8H	4H	17.73	18.12	18.83	19.21	20.69	11.41	11.79	12.51	12.88	14.36
	6H	18.27	18.58	19.38	19.71	21.19	12.29	12.61	13.41	13.74	15.21
	8H	18.50	18.78	19.62	19.89	21.39	12.69	12.96	13.81	14.08	15.57
	12H	18.69	18.93	19.81	20.04	21.57	13.00	13.25	14.13	14.36	15.89
12H	4H	17.68	18.02	18.79	19.13	20.61	11.46	11.80	12.57	12.91	14.39
	6H	18.24	18.51	19.36	19.63	21.12	12.41	12.68	13.53	13.80	15.29
	8H	18.48	18.72	19.60	19.83	21.36	12.84	13.09	13.97	14.20	15.73