

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: P621556

Luminaire Tested: VLT-F-150U-050D-930-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621556
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-930-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

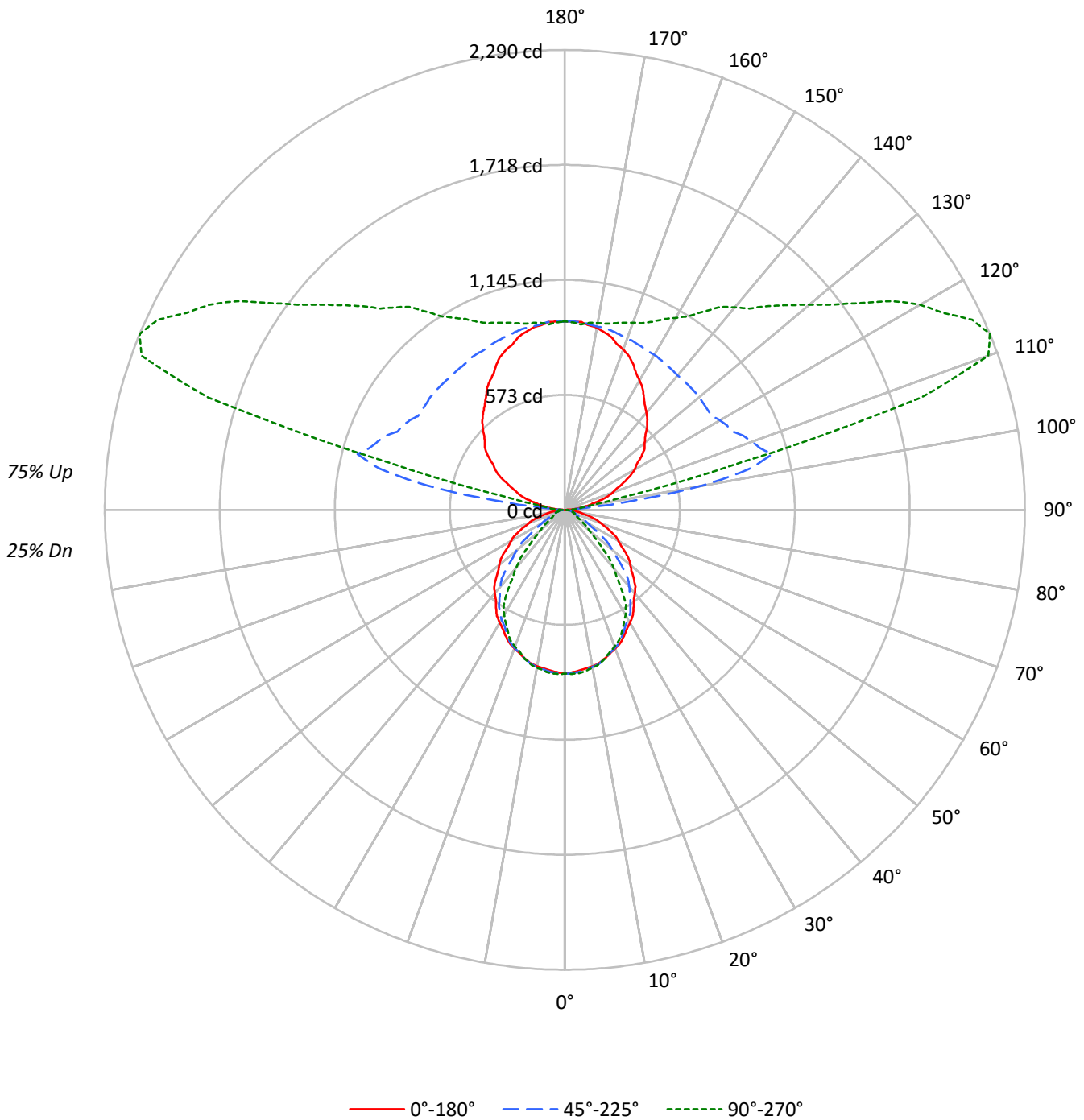
Lumens per Lamp: N/A
Luminaire Lumens: 6708.1 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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°	5857	5857	5857
5°	5794	5837	5886
10°	5763	5788	5818
15°	5700	5706	5706
20°	5608	5582	5531
25°	5501	5408	5314
30°	5373	5219	5010
35°	5230	4993	4395
40°	5079	4676	3538
45°	4920	4142	2568
50°	4754	3464	1780
55°	4589	2637	1329
60°	4418	1827	1005
65°	4223	1302	1031
70°	3944	1097	1062
75°	3646	1123	1076
80°	3170	1186	1116
85°	2569	1317	1112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4920 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.9	1.1
10°-20°	216.3	3.2
20°-30°	314.6	4.7
30°-40°	348.1	5.2
40°-50°	298.8	4.5
50°-60°	206.9	3.1
60°-70°	123.3	1.8
70°-80°	60.7	0.9
80°-90°	20.9	0.3
90°-100°	115.4	1.7
100°-110°	822.3	12.3
110°-120°	1116.3	16.6
120°-130°	908.6	13.5
130°-140°	730.8	10.9
140°-150°	576.1	8.6
150°-160°	421.3	6.3
160°-170°	261.7	3.9
170°-180°	89.2	1.3
0°-30°	607.8	9.1
0°-40°	955.8	14.2
0°-60°	1461.6	21.8
0°-90°	1666.5	24.8
90°-120°	2054.0	30.6
90°-150°	4269.5	63.6
90°-180°	5042.0	75.2
0°-180°	6708.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	816	816	816	816	816	
5°	804	817	810	810	817	76
15°	767	777	768	764	768	216
25°	695	700	683	671	671	320
35°	597	595	570	524	502	373
45°	485	477	408	295	253	374
55°	367	351	211	121	106	328
65°	249	200	77	62	61	246
75°	132	57	40	40	39	139
85°	31	16	16	14	14	36
90°	0	6	12	18	18	3
95°	47	88	47	53	65	53
105°	183	281	1068	1365	903	193
115°	325	394	921	1914	2237	322
125°	466	530	868	1517	1794	414
135°	578	642	874	1250	1434	445
145°	685	742	880	1089	1204	430
155°	803	832	897	987	1033	369
165°	891	903	921	945	962	250
175°	939	944	939	932	927	89
180°	939	939	939	939	939	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	816.2	816.2	816.2	816.2	816.2
2.5°	809.5	818.7	814.2	814.3	817.6
5°	804.4	816.8	810.3	809.6	817.1
7.5°	797.0	808.4	801.7	800.8	807.3
10°	790.9	801.6	794.3	792.7	798.5
12.5°	782.1	792.9	784.8	781.9	787.7
15°	767.3	777.2	768.1	764.0	768.1
17.5°	748.6	756.8	746.6	740.0	742.5
20°	734.4	742.7	731.0	721.8	724.3
22.5°	718.9	725.8	712.8	702.3	704.1
25°	694.8	699.7	683.0	671.2	671.2
27.5°	668.0	670.9	651.4	639.1	635.6
30°	648.4	650.1	629.9	615.3	604.6
32.5°	628.2	629.2	606.3	582.8	566.1
35°	597.0	595.3	570.0	524.0	501.7
37.5°	563.8	560.1	530.2	460.1	427.0
40°	542.2	537.2	499.2	414.9	377.7
42.5°	519.9	513.0	464.8	368.2	327.2
45°	484.8	476.6	408.1	295.0	253.0
47.5°	450.1	439.2	350.1	228.5	192.4
50°	425.8	414.3	310.3	188.2	159.4
52.5°	401.5	390.0	269.8	158.0	135.1
55°	366.8	351.1	210.8	121.1	106.2
57.5°	331.4	308.9	157.0	94.3	82.8
60°	307.8	278.1	127.3	78.2	70.0
62.5°	284.8	247.2	104.4	68.3	66.6
65°	248.7	200.1	76.7	61.5	60.7
67.5°	214.3	152.7	57.0	55.5	54.6
70°	188.0	120.4	52.3	51.4	50.6
72.5°	164.4	92.2	47.6	46.7	45.9
75°	131.5	57.3	40.5	39.6	38.8
77.5°	98.3	36.2	33.4	32.5	31.7
80°	76.7	29.7	28.7	27.8	27.0
82.5°	57.8	24.0	23.3	22.4	21.6
85°	31.2	15.5	16.0	14.3	13.5
87.5°	10.8	8.6	9.8	9.6	8.9
90°	0.0	5.8	11.8	17.7	17.7
92.5°	14.2	19.9	26.0	36.7	41.3
95°	47.2	87.6	47.2	53.4	64.9
97.5°	83.8	168.1	347.1	102.4	88.5
100°	112.2	210.3	696.5	205.0	135.8
102.5°	140.5	243.2	942.1	541.0	296.3
105°	183.0	281.1	1068.4	1364.9	903.1
107.5°	225.5	299.4	1020.0	1986.4	1860.6
110°	253.8	323.1	991.7	2087.3	2243.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	282.2	351.4	963.3	2028.3	2290.3
115°	324.7	393.9	920.8	1914.0	2237.2
117.5°	368.3	436.4	910.2	1790.2	2122.7
120°	401.4	464.9	891.3	1696.1	2042.4
122.5°	425.0	493.1	867.7	1615.2	1933.8
125°	466.3	529.8	867.7	1517.4	1794.5
127.5°	500.6	565.2	868.9	1404.0	1677.6
130°	519.5	588.7	873.6	1328.1	1587.9
132.5°	543.1	612.3	873.6	1294.0	1507.6
135°	578.5	642.0	873.6	1249.7	1434.4
137.5°	608.0	676.1	873.6	1200.7	1358.8
140°	631.6	695.1	873.6	1172.0	1316.3
142.5°	655.2	714.1	878.3	1138.8	1273.8
145°	684.7	742.4	879.5	1088.8	1204.2
147.5°	720.1	770.9	886.6	1052.7	1141.6
150°	743.8	789.9	891.3	1028.8	1103.8
152.5°	767.4	808.9	891.3	1009.6	1070.8
155°	802.8	831.6	897.2	986.8	1033.0
157.5°	831.1	858.8	904.3	972.4	1005.8
160°	850.0	873.1	909.0	962.8	991.7
162.5°	864.2	887.3	913.8	957.9	977.5
165°	891.3	902.9	920.8	944.9	962.2
167.5°	906.7	917.1	926.7	938.8	949.2
170°	920.8	926.6	926.7	938.7	944.5
172.5°	925.6	936.0	931.5	934.0	939.7
175°	938.6	944.3	938.6	932.5	926.7
177.5°	938.6	943.2	938.6	938.5	933.8
180°	938.6	938.6	938.6	938.6	938.6



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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	10.75	11.41	11.91	12.54	14.14	2.99	3.64	4.14	4.78	6.37
	3H	12.23	12.81	13.39	13.96	15.57	4.33	4.91	5.49	6.05	7.66
	4H	12.74	13.29	13.90	14.43	16.05	4.97	5.52	6.14	6.67	8.28
	6H	13.12	13.63	14.30	14.78	16.40	5.55	6.06	6.73	7.20	8.83
	8H	13.25	13.73	14.43	14.89	16.51	5.77	6.25	6.95	7.41	9.03
	12H	13.32	13.78	14.50	14.94	16.57	5.93	6.39	7.11	7.54	9.18
4H	2H	10.56	11.11	11.74	12.26	13.87	3.58	4.13	4.76	5.28	6.89
	3H	12.18	12.64	13.36	13.81	15.43	5.11	5.57	6.29	6.74	8.37
	4H	12.76	13.18	13.94	14.34	15.98	5.90	6.32	7.08	7.48	9.13
	6H	13.24	13.60	14.43	14.78	16.42	6.63	6.99	7.82	8.17	9.80
	8H	13.42	13.76	14.61	14.93	16.58	6.92	7.26	8.10	8.43	10.08
	12H	13.54	13.85	14.74	15.03	16.69	7.13	7.43	8.33	8.62	10.27
8H	4H	12.66	13.00	13.85	14.17	15.82	6.34	6.68	7.53	7.85	9.50
	6H	13.19	13.47	14.39	14.68	16.33	7.22	7.49	8.42	8.71	10.36
	8H	13.42	13.67	14.63	14.86	16.52	7.61	7.85	8.82	9.05	10.71
	12H	13.60	13.82	14.82	15.01	16.70	7.93	8.14	9.14	9.33	11.03
12H	4H	12.60	12.91	13.80	14.09	15.75	6.38	6.69	7.58	7.87	9.52
	6H	13.16	13.40	14.37	14.60	16.26	7.33	7.57	8.54	8.77	10.43
	8H	13.40	13.61	14.61	14.80	16.50	7.77	7.98	8.98	9.17	10.87