

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: P621443

Luminaire Tested: VLT-F-050U-075D-935-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621443
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-050U-075D-935-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

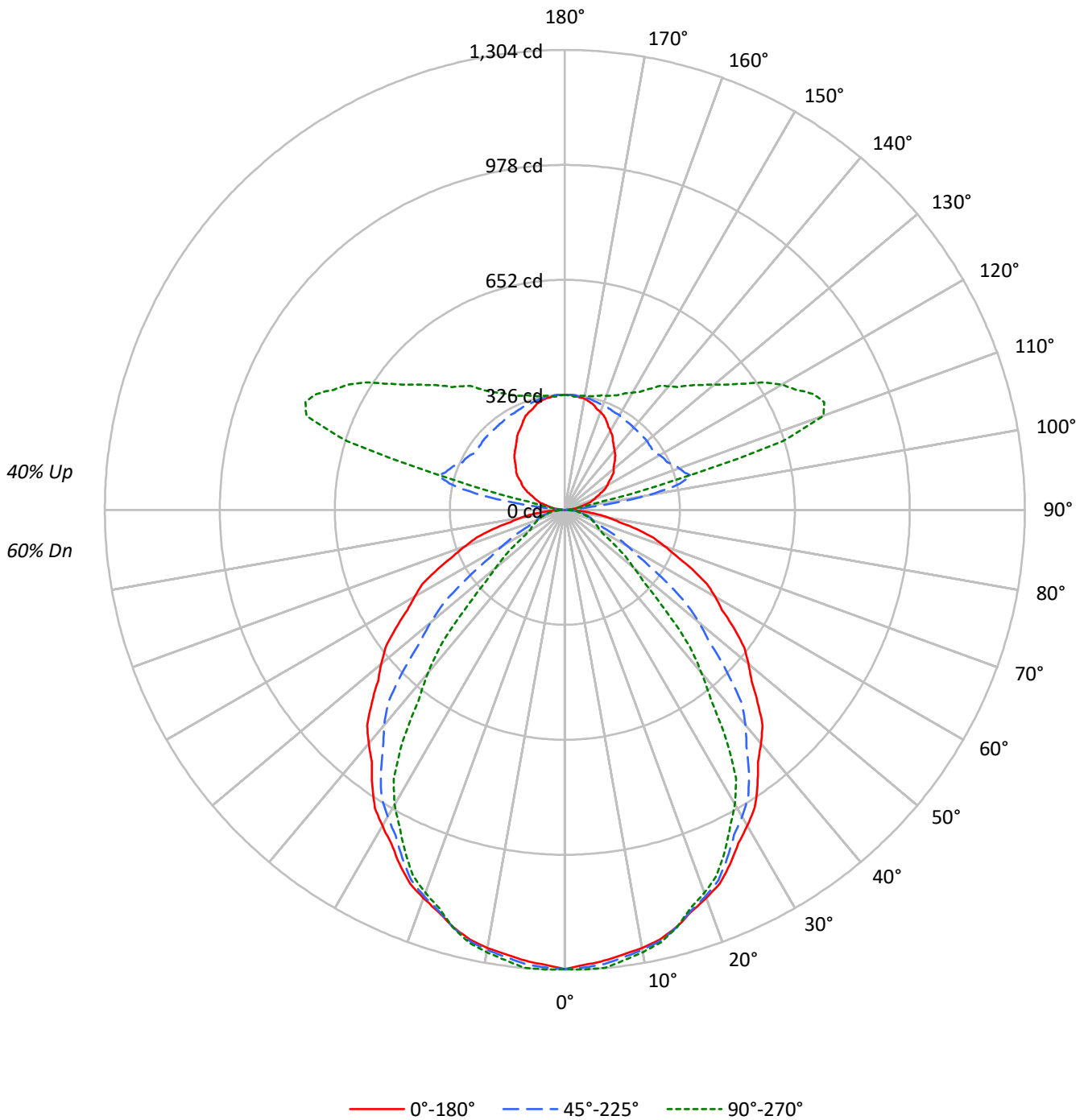
Lumens per Lamp: N/A
Luminaire Lumens: 4408.3 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 36.2
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	
RC	80									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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	60	
1	101	97	93	90	94	91	88	85	79	77	75	69	67	66	59	58	57	52	
2	93	86	80	75	86	80	75	71	71	67	63	62	59	56	53	51	49	45	
3	85	76	69	64	79	72	65	60	63	58	54	55	52	49	48	45	43	39	
4	78	68	60	55	73	64	57	52	57	51	47	50	46	42	43	40	38	35	
5	72	61	53	47	67	58	51	45	51	46	41	45	41	37	40	36	34	31	
6	67	55	47	42	62	52	45	40	46	41	37	41	37	33	36	33	30	27	
7	62	50	42	37	58	47	40	35	42	37	33	38	33	30	33	30	27	24	
8	58	46	38	33	54	43	36	32	39	33	29	35	30	27	31	27	24	22	
9	54	42	35	30	51	40	33	29	36	30	26	32	28	24	28	25	22	20	
10	51	39	32	27	47	37	30	26	33	28	24	30	25	22	27	23	20	18	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9344	9344	9344
5°	9243	9312	9389
10°	9194	9233	9282
15°	9094	9104	9104
20°	8947	8906	8824
25°	8776	8626	8478
30°	8571	8326	7992
35°	8342	7966	7011
40°	8102	7459	5645
45°	7849	6607	4095
50°	7584	5526	2838
55°	7320	4207	2121
60°	7047	2915	1602
65°	6738	2078	1644
70°	6294	1750	1693
75°	5817	1791	1716
80°	5058	1889	1777
85°	4100	2108	1770

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7849 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.7	2.8
10°-20°	345.0	7.8
20°-30°	501.9	11.4
30°-40°	555.2	12.6
40°-50°	476.7	10.8
50°-60°	330.1	7.5
60°-70°	196.7	4.5
70°-80°	96.9	2.2
80°-90°	30.7	0.7
90°-100°	40.1	0.9
100°-110°	285.8	6.5
110°-120°	388.0	8.8
120°-130°	315.8	7.2
130°-140°	254.0	5.8
140°-150°	200.3	4.5
150°-160°	146.4	3.3
160°-170°	90.9	2.1
170°-180°	31.0	0.7
0°-30°	969.6	22.0
0°-40°	1524.8	34.6
0°-60°	2331.6	52.9
0°-90°	2655.9	60.2
90°-120°	714.0	16.2
90°-150°	1484.1	33.7
90°-180°	1752.0	39.7
0°-180°	4408.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1302	1302	1302	1302	1302	
5°	1283	1303	1293	1292	1303	122
15°	1224	1240	1225	1219	1225	345
25°	1108	1116	1090	1071	1071	510
35°	952	950	909	836	800	595
45°	773	760	651	471	404	597
55°	585	560	336	193	170	523
65°	397	319	122	98	97	393
75°	210	92	65	63	62	221
85°	50	25	26	23	22	58
90°	0	2	4	6	6	3
95°	16	30	16	19	23	18
105°	64	98	371	474	314	67
115°	113	137	320	665	778	112
125°	162	184	302	528	624	144
135°	201	223	304	434	499	155
145°	238	258	306	378	419	149
155°	279	289	312	343	359	128
165°	310	314	320	328	334	87
175°	326	328	326	324	322	31
180°	326	326	326	326	326	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1302.1	1302.1	1302.1	1302.1	1302.1
2.5°	1291.3	1306.0	1298.8	1299.0	1304.2
5°	1283.2	1303.0	1292.7	1291.6	1303.4
7.5°	1271.4	1289.6	1278.9	1277.6	1287.8
10°	1261.7	1278.8	1267.1	1264.6	1273.8
12.5°	1247.7	1264.8	1252.0	1247.4	1256.6
15°	1224.1	1239.8	1225.4	1218.8	1225.4
17.5°	1194.2	1207.4	1191.0	1180.6	1184.5
20°	1171.6	1184.8	1166.2	1151.5	1155.5
22.5°	1146.9	1157.9	1137.2	1120.3	1123.2
25°	1108.4	1116.3	1089.5	1070.7	1070.7
27.5°	1065.6	1070.3	1039.2	1019.5	1014.0
30°	1034.4	1037.0	1004.8	981.6	964.5
32.5°	1002.1	1003.7	967.1	929.7	903.1
35°	952.3	949.7	909.3	835.9	800.3
37.5°	899.3	893.6	845.8	734.0	681.2
40°	864.9	857.0	796.3	661.8	602.6
42.5°	829.4	818.4	741.4	587.4	521.9
45°	773.4	760.3	651.0	470.6	403.5
47.5°	718.0	700.7	558.5	364.6	307.0
50°	679.3	660.9	495.0	300.3	254.2
52.5°	640.5	622.1	430.4	252.1	215.5
55°	585.1	560.1	336.3	193.2	169.5
57.5°	528.6	492.9	250.5	150.5	132.1
60°	491.0	443.6	203.1	124.8	111.6
62.5°	454.4	394.4	166.5	108.9	106.3
65°	396.8	319.2	122.4	98.2	96.8
67.5°	341.9	243.6	90.9	88.5	87.2
70°	300.0	192.1	83.4	82.0	80.7
72.5°	262.3	147.1	75.9	74.5	73.2
75°	209.8	91.5	64.6	63.2	61.9
77.5°	156.8	57.7	53.3	51.9	50.6
80°	122.4	47.4	45.7	44.4	43.0
82.5°	92.3	38.4	37.1	35.8	34.4
85°	49.8	24.8	25.6	22.8	21.5
87.5°	17.2	12.4	12.7	10.9	9.8
90°	0.0	2.0	4.1	6.2	6.2
92.5°	4.9	6.9	9.0	12.8	14.4
95°	16.4	30.5	16.4	18.6	22.6
97.5°	29.1	58.4	120.6	35.6	30.8
100°	39.0	73.1	242.1	71.3	47.2
102.5°	48.8	84.5	327.5	188.1	103.0
105°	63.6	97.7	371.4	474.4	313.9
107.5°	78.4	104.1	354.6	690.5	646.7
110°	88.2	112.3	344.7	725.5	779.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	98.1	122.2	334.9	705.0	796.1
115°	112.9	136.9	320.1	665.3	777.6
117.5°	128.0	151.7	316.4	622.3	737.8
120°	139.5	161.6	309.8	589.6	709.9
122.5°	147.7	171.4	301.6	561.4	672.2
125°	162.1	184.2	301.6	527.5	623.8
127.5°	174.0	196.5	302.0	488.0	583.1
130°	180.6	204.6	303.7	461.7	551.9
132.5°	188.8	212.8	303.7	449.8	524.0
135°	201.1	223.1	303.7	434.4	498.6
137.5°	211.3	235.0	303.7	417.4	472.3
140°	219.5	241.6	303.7	407.4	457.6
142.5°	227.8	248.2	305.3	395.8	442.8
145°	238.0	258.1	305.7	378.4	418.6
147.5°	250.3	268.0	308.2	365.9	396.8
150°	258.5	274.6	309.8	357.6	383.7
152.5°	266.7	281.2	309.8	350.9	372.2
155°	279.0	289.1	311.9	343.0	359.1
157.5°	288.9	298.5	314.3	338.0	349.6
160°	295.5	303.5	316.0	334.7	344.7
162.5°	300.4	308.4	317.6	333.0	339.8
165°	309.8	313.8	320.1	328.4	334.4
167.5°	315.2	318.8	322.1	326.3	329.9
170°	320.1	322.1	322.1	326.3	328.3
172.5°	321.7	325.3	323.8	324.6	326.7
175°	326.2	328.2	326.2	324.1	322.1
177.5°	326.2	327.8	326.2	326.2	324.6
180°	326.2	326.2	326.2	326.2	326.2



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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	16.30	17.20	17.17	18.08	19.21	8.53	9.43	9.41	10.32	11.44
	3H	17.79	18.60	18.68	19.49	20.64	9.89	10.69	10.78	11.59	12.74
	4H	18.31	19.07	19.21	19.97	21.13	10.54	11.30	11.45	12.20	13.36
	6H	18.71	19.40	19.62	20.31	21.48	11.13	11.83	12.05	12.74	13.91
	8H	18.84	19.50	19.76	20.43	21.60	11.36	12.02	12.28	12.95	14.12
	12H	18.92	19.55	19.85	20.47	21.67	11.53	12.16	12.45	13.08	14.27
4H	2H	16.13	16.89	17.04	17.79	18.95	9.15	9.91	10.06	10.81	11.97
	3H	17.77	18.40	18.69	19.33	20.51	10.71	11.34	11.63	12.27	13.44
	4H	18.36	18.93	19.29	19.86	21.06	11.51	12.08	12.43	13.01	14.20
	6H	18.86	19.35	19.80	20.30	21.50	12.25	12.74	13.19	13.69	14.89
	8H	19.05	19.50	19.99	20.45	21.66	12.54	13.00	13.48	13.95	15.16
	12H	19.18	19.59	20.14	20.56	21.77	12.76	13.17	13.72	14.14	15.35
8H	4H	18.28	18.74	19.23	19.69	20.90	11.96	12.42	12.91	13.37	14.58
	6H	18.82	19.20	19.79	20.19	21.40	12.85	13.22	13.82	14.21	15.43
	8H	19.05	19.39	20.03	20.37	21.60	13.24	13.57	14.22	14.55	15.78
	12H	19.25	19.54	20.23	20.51	21.79	13.56	13.86	14.54	14.83	16.11
12H	4H	18.24	18.65	19.20	19.61	20.83	12.01	12.43	12.98	13.39	14.61
	6H	18.79	19.13	19.77	20.11	21.34	12.96	13.30	13.94	14.28	15.50
	8H	19.04	19.33	20.02	20.30	21.58	13.40	13.70	14.39	14.67	15.95