

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: P621437

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

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621437
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-050D-935-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

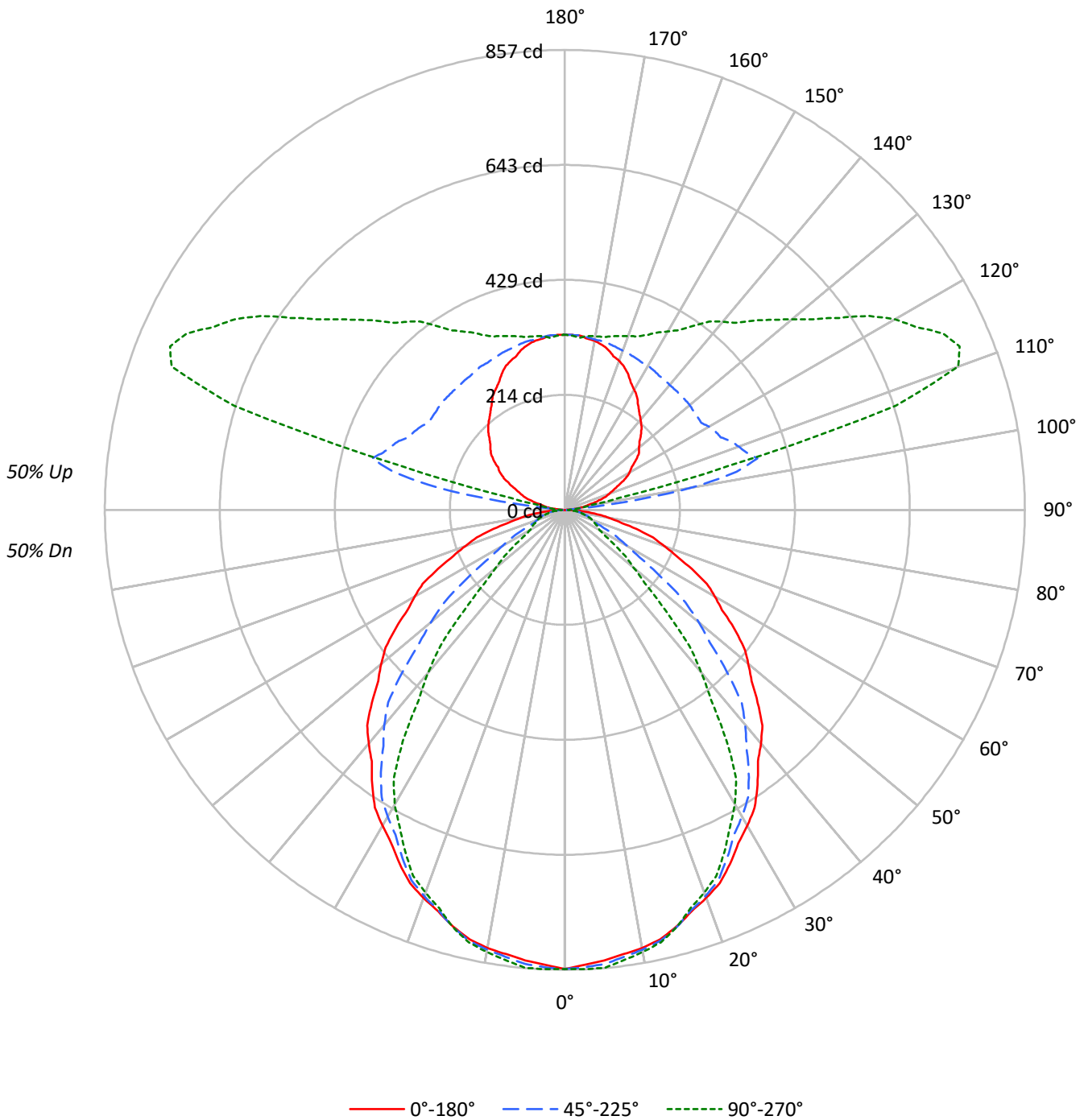
Lumens per Lamp: N/A
Luminaire Lumens: 3497.5 lumens
Efficiency: N/A
Efficacy: 120.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 29
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					70					50					30					
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
RCR																					
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50			
1	98	94	91	87	91	87	84	81	74	72	70	62	60	59	51	50	49	43			
2	90	83	78	73	83	77	72	68	66	62	59	55	53	50	45	44	42	38			
3	83	74	67	61	76	69	63	58	59	54	50	49	46	43	41	39	37	33			
4	76	66	58	53	70	61	55	50	53	48	44	44	41	38	37	34	32	29			
5	70	59	51	45	65	55	48	43	47	42	38	40	36	33	34	31	28	25			
6	65	53	45	40	60	50	43	38	43	38	34	37	33	29	31	28	25	23			
7	60	48	41	35	55	45	38	33	39	34	30	34	29	26	28	25	23	20			
8	56	44	36	31	52	41	34	30	36	30	27	31	27	24	26	23	21	18			
9	52	40	33	28	48	38	31	27	33	28	24	28	24	21	24	21	19	17			
10	49	37	30	25	45	35	28	24	30	25	22	26	22	19	23	19	17	15			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6138	6138	6138
5°	6072	6117	6168
10°	6040	6065	6097
15°	5974	5980	5980
20°	5878	5850	5797
25°	5765	5668	5569
30°	5630	5470	5250
35°	5480	5233	4606
40°	5323	4900	3709
45°	5156	4340	2690
50°	4981	3630	1864
55°	4809	2764	1392
60°	4628	1915	1052
65°	4427	1365	1080
70°	4135	1150	1112
75°	3823	1176	1126
80°	3322	1240	1169
85°	2692	1383	1161

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5156 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.6	2.3
10°-20°	226.7	6.5
20°-30°	329.7	9.4
30°-40°	364.8	10.4
40°-50°	313.2	9.0
50°-60°	216.8	6.2
60°-70°	129.2	3.7
70°-80°	63.7	1.8
80°-90°	20.4	0.6
90°-100°	40.1	1.1
100°-110°	285.8	8.2
110°-120°	388.0	11.1
120°-130°	315.8	9.0
130°-140°	254.0	7.3
140°-150°	200.3	5.7
150°-160°	146.4	4.2
160°-170°	90.9	2.6
170°-180°	31.0	0.9
0°-30°	637.0	18.2
0°-40°	1001.7	28.6
0°-60°	1531.7	43.8
0°-90°	1745.0	49.9
90°-120°	714.0	20.4
90°-150°	1484.1	42.4
90°-180°	1752.0	50.1
0°-180°	3497.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	855	855	855	855	855	
5°	843	856	849	848	856	80
15°	804	814	805	801	805	226
25°	728	733	716	703	703	335
35°	626	624	597	549	526	391
45°	508	500	428	309	265	392
55°	384	368	221	127	111	344
65°	261	210	80	64	64	258
75°	138	60	42	42	41	145
85°	33	16	17	15	14	38
90°	0	2	4	6	6	2
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°	855.4	855.4	855.4	855.4	855.4
2.5°	848.3	858.0	853.3	853.3	856.8
5°	843.0	856.0	849.2	848.5	856.3
7.5°	835.2	847.2	840.2	839.3	846.0
10°	828.9	840.1	832.4	830.8	836.8
12.5°	819.7	830.9	822.5	819.5	825.5
15°	804.1	814.5	805.0	800.7	805.0
17.5°	784.5	793.2	782.4	775.6	778.1
20°	769.7	778.3	766.1	756.5	759.1
22.5°	753.4	760.7	747.0	736.0	737.9
25°	728.1	733.3	715.8	703.4	703.4
27.5°	700.0	703.1	682.7	669.7	666.1
30°	679.5	681.3	660.1	644.8	633.6
32.5°	658.3	659.4	635.3	610.7	593.3
35°	625.6	623.9	597.4	549.1	525.8
37.5°	590.8	587.0	555.6	482.2	447.5
40°	568.2	563.0	523.1	434.8	395.9
42.5°	544.9	537.6	487.1	385.9	342.9
45°	508.1	499.5	427.7	309.2	265.1
47.5°	471.7	460.3	366.9	239.5	201.7
50°	446.2	434.2	325.2	197.3	167.0
52.5°	420.8	408.7	282.8	165.6	141.6
55°	384.4	368.0	220.9	126.9	111.3
57.5°	347.3	323.8	164.5	98.9	86.8
60°	322.5	291.4	133.4	82.0	73.3
62.5°	298.5	259.1	109.4	71.5	69.8
65°	260.7	209.7	80.4	64.5	63.6
67.5°	224.6	160.0	59.7	58.1	57.3
70°	197.1	126.2	54.8	53.9	53.0
72.5°	172.3	96.6	49.8	48.9	48.1
75°	137.9	60.1	42.4	41.5	40.6
77.5°	103.0	37.9	35.0	34.1	33.2
80°	80.4	31.2	30.0	29.1	28.3
82.5°	60.6	25.2	24.4	23.5	22.6
85°	32.7	16.3	16.8	15.0	14.1
87.5°	11.3	8.3	8.6	7.6	6.9
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	13.91	14.73	14.88	15.70	16.98	6.15	6.96	7.12	7.94	9.21
	3H	15.41	16.13	16.39	17.12	18.41	7.50	8.22	8.48	9.21	10.51
	4H	15.92	16.60	16.91	17.59	18.90	8.15	8.83	9.14	9.82	11.13
	6H	16.31	16.94	17.32	17.94	19.25	8.74	9.37	9.74	10.36	11.68
	8H	16.44	17.04	17.45	18.05	19.37	8.96	9.56	9.97	10.57	11.89
	12H	16.52	17.09	17.54	18.09	19.43	9.12	9.69	10.14	10.70	12.04
4H	2H	13.74	14.42	14.74	15.41	16.72	6.76	7.44	7.76	8.43	9.74
	3H	15.37	15.94	16.38	16.96	18.28	8.31	8.88	9.32	9.89	11.21
	4H	15.96	16.48	16.98	17.49	18.83	9.10	9.62	10.12	10.63	11.97
	6H	16.45	16.90	17.48	17.93	19.27	9.84	10.28	10.86	11.32	12.66
	8H	16.64	17.05	17.66	18.08	19.44	10.13	10.54	11.16	11.57	12.93
	12H	16.77	17.14	17.81	18.18	19.54	10.34	10.72	11.39	11.76	13.12
8H	4H	15.87	16.29	16.90	17.32	18.67	9.55	9.97	10.58	10.99	12.35
	6H	16.41	16.75	17.46	17.82	19.17	10.43	10.77	11.48	11.84	13.20
	8H	16.64	16.94	17.70	18.00	19.37	10.83	11.13	11.88	12.18	13.55
	12H	16.83	17.10	17.89	18.14	19.56	11.14	11.41	12.20	12.46	13.87
12H	4H	15.82	16.20	16.87	17.24	18.60	9.60	9.97	10.64	11.01	12.38
	6H	16.38	16.68	17.44	17.74	19.11	10.55	10.85	11.60	11.90	13.27
	8H	16.62	16.89	17.68	17.93	19.35	10.99	11.25	12.05	12.30	13.72