

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: P621455

Luminaire Tested: VLT-F-050U-125D-935-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621455  
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-125D-935-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

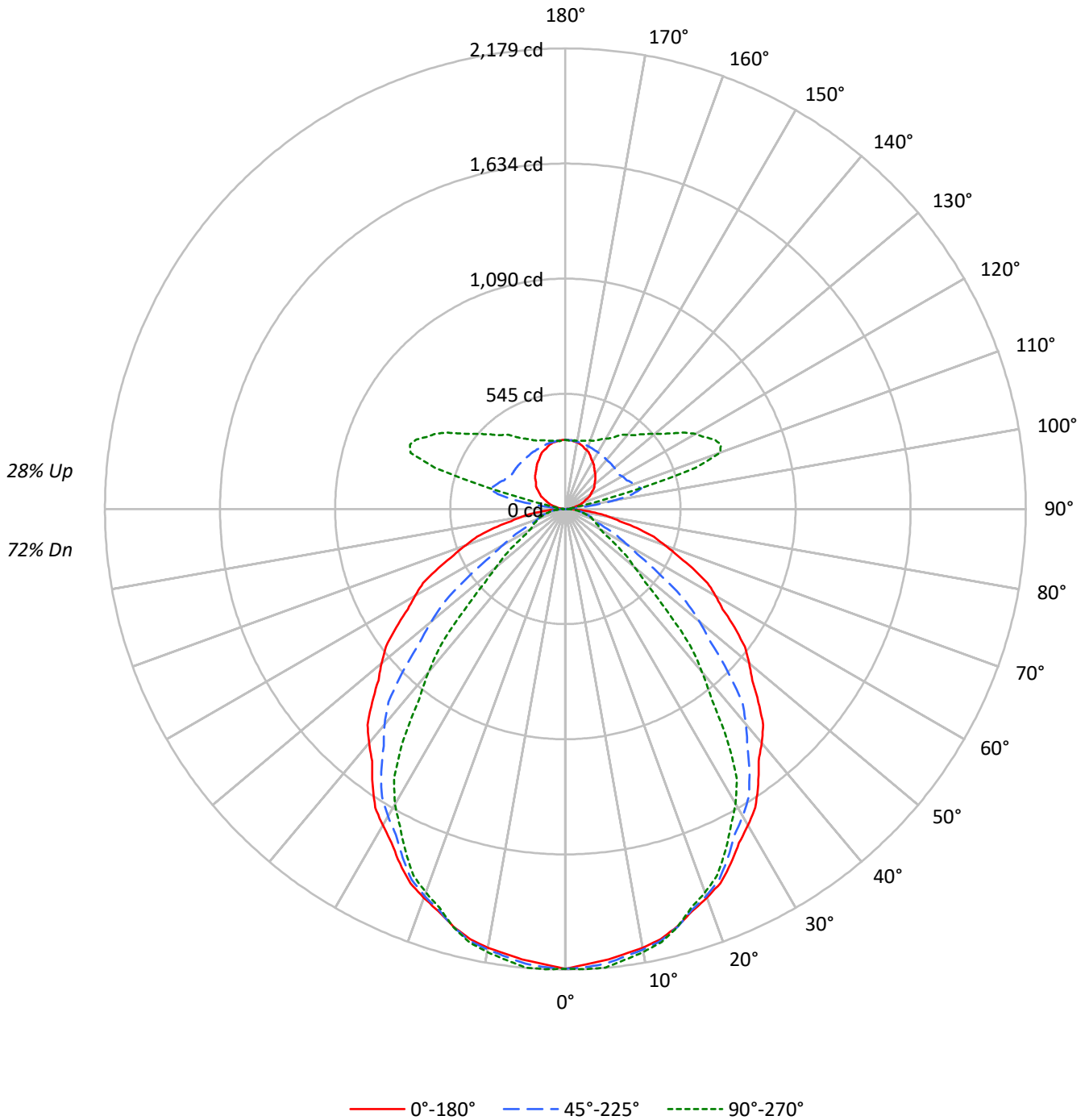
Lumens per Lamp: N/A  
Luminaire Lumens: 6189.3 lumens  
Efficiency: N/A  
Efficacy: 116.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 53.3  
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	76	76	72	
1	104	100	96	93	98	95	91	88	85	83	81	77	75	73	69	67	66	66	66	66	62	
2	95	88	82	77	90	84	79	74	76	72	68	69	66	63	62	59	57	57	57	57	54	
3	88	79	71	66	83	75	69	63	68	63	59	62	58	54	56	53	50	50	50	50	47	
4	81	70	63	57	76	67	60	55	61	56	51	56	51	48	51	47	44	44	44	44	41	
5	75	63	55	49	71	61	53	48	55	49	45	51	46	42	46	42	39	39	39	39	36	
6	69	57	49	44	65	55	48	42	50	44	40	46	41	37	42	38	35	35	35	35	32	
7	64	52	44	39	61	50	43	38	46	40	36	42	37	33	39	35	31	31	31	31	29	
8	60	48	40	35	57	46	39	34	42	36	32	39	34	30	36	32	28	28	28	28	26	
9	56	44	36	31	53	42	35	31	39	33	29	36	31	27	33	29	26	26	26	26	24	
10	53	40	33	29	50	39	32	28	36	30	26	33	29	25	31	27	24	24	24	24	22	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	15611	15611	15611
5°	15444	15557	15687
10°	15360	15426	15508
15°	15193	15210	15210
20°	14948	14880	14742
25°	14662	14414	14164
30°	14320	13911	13352
35°	13938	13309	11714
40°	13537	12463	9431
45°	13114	11038	6842
50°	12670	9232	4742
55°	12231	7029	3543
60°	11773	4871	2677
65°	11258	3472	2747
70°	10516	2923	2828
75°	9721	2992	2867
80°	8451	3157	2971
85°	6850	3516	2964

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13114 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	205.0	3.3
10°-20°	576.5	9.3
20°-30°	838.5	13.5
30°-40°	927.7	15.0
40°-50°	796.4	12.9
50°-60°	551.5	8.9
60°-70°	328.6	5.3
70°-80°	161.9	2.6
80°-90°	50.7	0.8
90°-100°	40.1	0.6
100°-110°	285.8	4.6
110°-120°	388.0	6.3
120°-130°	315.8	5.1
130°-140°	254.0	4.1
140°-150°	200.3	3.2
150°-160°	146.4	2.4
160°-170°	90.9	1.5
170°-180°	31.0	0.5
0°-30°	1620.0	26.2
0°-40°	2547.6	41.2
0°-60°	3895.5	62.9
0°-90°	4436.8	71.7
90°-120°	714.0	11.5
90°-150°	1484.1	24.0
90°-180°	1752.0	28.3
0°-180°	6189.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2175	2175	2175	2175	2175	
5°	2144	2177	2160	2158	2178	203
15°	2045	2072	2047	2036	2047	576
25°	1852	1865	1820	1789	1789	852
35°	1591	1587	1519	1396	1337	994
45°	1292	1270	1088	786	674	997
55°	978	936	562	323	283	874
65°	663	533	204	164	162	657
75°	351	153	108	106	103	370
85°	83	41	43	38	36	96
90°	0	2	4	6	6	5
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°	2175.4	2175.4	2175.4	2175.4	2175.4
2.5°	2157.5	2182.1	2170.1	2170.3	2179.0
5°	2144.0	2176.9	2159.7	2157.9	2177.7
7.5°	2124.2	2154.5	2136.8	2134.5	2151.6
10°	2108.0	2136.6	2117.0	2112.9	2128.3
12.5°	2084.7	2113.2	2091.8	2084.1	2099.5
15°	2045.1	2071.5	2047.3	2036.4	2047.3
17.5°	1995.2	2017.2	1989.8	1972.4	1979.0
20°	1957.5	1979.4	1948.5	1923.9	1930.5
22.5°	1916.1	1934.6	1899.9	1871.7	1876.5
25°	1851.8	1865.0	1820.4	1788.9	1788.9
27.5°	1780.4	1788.3	1736.3	1703.3	1694.1
30°	1728.2	1732.6	1678.8	1639.9	1611.4
32.5°	1674.3	1676.9	1615.9	1553.3	1508.9
35°	1591.1	1586.7	1519.2	1396.5	1337.2
37.5°	1502.6	1492.9	1413.1	1226.4	1138.1
40°	1445.1	1431.9	1330.4	1105.7	1006.8
42.5°	1385.7	1367.3	1238.7	981.4	872.0
45°	1292.2	1270.3	1087.7	786.3	674.2
47.5°	1199.6	1170.6	933.1	609.1	512.8
50°	1134.9	1104.2	827.0	501.7	424.8
52.5°	1070.2	1039.4	719.2	421.1	360.0
55°	977.6	935.9	561.8	322.7	283.2
57.5°	883.2	823.4	418.5	251.5	220.7
60°	820.3	741.2	339.4	208.5	186.5
62.5°	759.2	659.0	278.2	181.9	177.5
65°	663.0	533.3	204.5	164.0	161.8
67.5°	571.3	406.9	151.9	147.8	145.6
70°	501.2	321.0	139.3	137.0	134.8
72.5°	438.2	245.7	126.8	124.5	122.3
75°	350.6	152.8	107.9	105.6	103.4
77.5°	262.0	96.4	89.0	86.7	84.5
80°	204.5	79.3	76.4	74.1	71.9
82.5°	154.2	64.1	62.0	59.7	57.5
85°	83.2	41.4	42.7	38.2	36.0
87.5°	28.8	20.4	20.6	17.4	15.6
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	19.01	20.02	19.76	20.79	21.72	11.24	12.26	12.00	13.03	13.95
	3H	20.51	21.42	21.28	22.20	23.16	12.60	13.51	13.38	14.29	15.25
	4H	21.03	21.89	21.82	22.68	23.65	13.27	14.12	14.06	14.91	15.88
	6H	21.44	22.22	22.24	23.02	24.01	13.86	14.65	14.66	15.45	16.43
	8H	21.57	22.32	22.38	23.14	24.12	14.09	14.84	14.90	15.66	16.64
	12H	21.66	22.37	22.47	23.18	24.19	14.26	14.97	15.08	15.78	16.79
4H	2H	18.85	19.71	19.65	20.50	21.47	11.88	12.73	12.67	13.52	14.49
	3H	20.51	21.21	21.31	22.04	23.02	13.44	14.15	14.25	14.97	15.96
	4H	21.10	21.74	21.92	22.56	23.58	14.24	14.88	15.06	15.71	16.72
	6H	21.60	22.15	22.44	23.00	24.02	14.99	15.54	15.82	16.39	17.41
	8H	21.79	22.31	22.63	23.15	24.18	15.28	15.80	16.12	16.64	17.68
	12H	21.93	22.39	22.79	23.26	24.29	15.51	15.97	16.37	16.84	17.87
8H	4H	21.03	21.54	21.87	22.39	23.42	14.71	15.22	15.55	16.07	17.10
	6H	21.57	21.99	22.43	22.88	23.91	15.59	16.02	16.46	16.91	17.94
	8H	21.80	22.18	22.68	23.06	24.11	15.99	16.37	16.87	17.25	18.30
	12H	22.00	22.33	22.88	23.20	24.31	16.32	16.65	17.19	17.52	18.63
12H	4H	20.99	21.45	21.84	22.31	23.35	14.76	15.23	15.62	16.09	17.13
	6H	21.54	21.92	22.42	22.80	23.85	15.71	16.09	16.59	16.97	18.02
	8H	21.79	22.12	22.67	22.99	24.10	16.16	16.49	17.04	17.36	18.47