

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: P621789

Luminaire Tested: VLT-FB-050U-125D-840-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621789  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/2/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: VLT-FB-050U-125D-840-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - BATWING  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

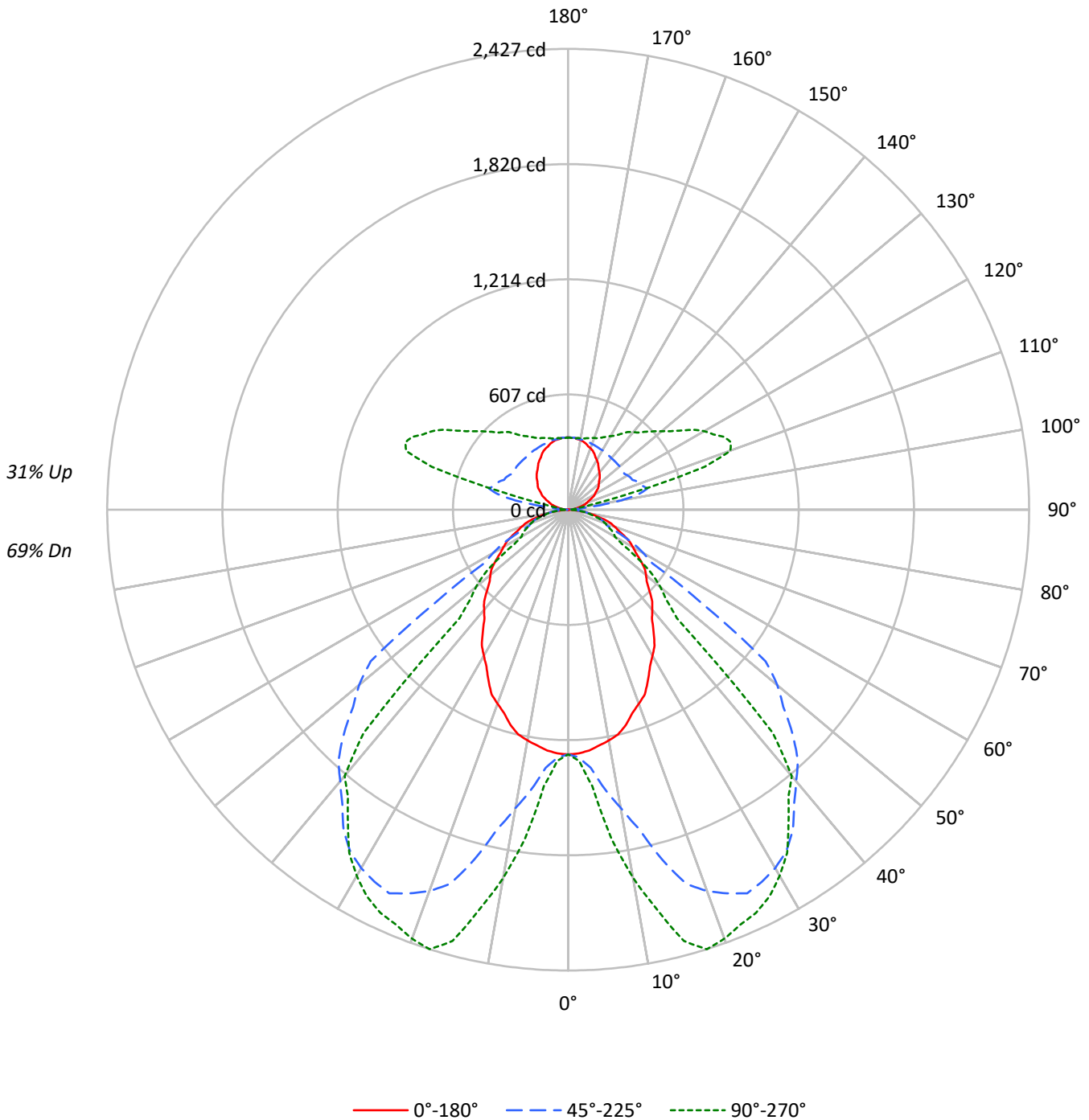
Lumens per Lamp: N/A  
Luminaire Lumens: 6661.0 lumens  
Efficiency: N/A  
Efficacy: 125.0 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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										
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	50	30	10	0														
RCR																																						
0	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	69																				
1	103	99	95	92	97	94	90	87	84	81	79	75	73	71	67	65	64	60																				
2	94	87	81	76	89	83	78	73	75	70	67	67	64	61	60	57	55	52																				
3	87	78	70	65	82	74	67	62	66	61	57	60	56	53	54	51	48	45																				
4	80	69	61	55	75	66	59	53	60	54	50	54	49	46	48	45	42	39																				
5	74	62	54	48	69	59	52	46	54	48	43	49	44	40	44	40	37	34																				
6	68	56	48	42	64	53	46	41	49	43	38	44	39	35	40	36	33	30																				
7	63	51	43	37	60	48	41	36	44	38	34	40	35	31	37	32	29	27																				
8	59	46	38	33	55	44	37	32	40	34	30	37	32	28	34	29	26	24																				
9	55	42	35	30	52	41	34	29	37	31	27	34	29	25	31	27	24	22																				
10	51	39	32	27	48	37	31	26	34	28	24	31	26	23	29	25	22	20																				

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

	0°	45°	90°
0°	9247	9247	9247
5°	9169	9829	10527
10°	8989	11622	14351
15°	8717	14165	17472
20°	8300	16321	18360
25°	7859	17647	18539
30°	7357	18056	18446
35°	6860	18057	17712
40°	6452	17493	17149
45°	6140	16958	8213
50°	5965	16052	7076
55°	5800	10748	5604
60°	5639	6540	4060
65°	5515	4980	4225
70°	5440	4341	4341
75°	5301	4503	4356
80°	4653	4546	4331
85°	3450	4742	4100

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 16958 cd/sqm



TEST NUMBER: P621789

CATALOG NUMBER: VLT-FB-050U-125D-840-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.0	2.1
10°-20°	512.4	7.7
20°-30°	867.8	13.0
30°-40°	1052.7	15.8
40°-50°	926.6	13.9
50°-60°	573.4	8.6
60°-70°	310.9	4.7
70°-80°	177.1	2.7
80°-90°	58.8	0.9
90°-100°	46.8	0.7
100°-110°	333.1	5.0
110°-120°	452.2	6.8
120°-130°	368.1	5.5
130°-140°	296.0	4.4
140°-150°	233.4	3.5
150°-160°	170.7	2.6
160°-170°	106.0	1.6
170°-180°	36.1	0.5
0°-30°	1519.1	22.8
0°-40°	2571.9	38.6
0°-60°	4071.9	61.1
0°-90°	4618.6	69.3
90°-120°	832.1	12.5
90°-150°	1729.6	26.0
90°-180°	2042.0	30.7
0°-180°	6661.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1289	1289	1289	1289	1289	
5°	1273	1314	1364	1423	1461	120
15°	1173	1353	1907	2255	2352	329
25°	993	1359	2229	2295	2342	456
35°	783	1259	2061	2032	2022	491
45°	605	1035	1671	1416	809	469
55°	464	722	859	496	448	415
65°	325	407	293	251	249	322
75°	191	168	162	160	157	200
85°	42	57	58	52	50	51
90°	0	2	5	7	7	3
95°	19	36	19	22	26	21
105°	74	114	433	553	366	78
115°	132	160	373	775	906	131
125°	189	215	352	615	727	168
135°	234	260	354	506	581	180
145°	277	301	356	441	488	174
155°	325	337	364	400	418	149
165°	361	366	373	383	390	101
175°	380	382	380	378	375	36
180°	380	380	380	380	380	

TEST NUMBER: P621789

CATALOG NUMBER: VLT-FB-050U-125D-840-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1288.6	1288.6	1288.6	1288.6	1288.6
2.5°	1284.4	1298.7	1305.3	1318.1	1324.2
5°	1272.9	1313.8	1364.5	1423.0	1461.4
7.5°	1252.4	1325.7	1486.1	1670.7	1749.5
10°	1233.6	1333.5	1595.0	1862.0	1969.5
12.5°	1212.6	1341.2	1722.8	2046.4	2156.0
15°	1173.3	1352.6	1906.7	2254.6	2351.9
17.5°	1122.5	1359.7	2065.9	2364.9	2427.4
20°	1086.9	1360.9	2137.2	2378.7	2404.3
22.5°	1053.4	1362.2	2187.4	2345.1	2366.6
25°	992.6	1358.8	2228.8	2295.4	2341.5
27.5°	931.9	1343.7	2208.4	2262.1	2295.4
30°	887.9	1328.3	2179.1	2223.7	2226.2
32.5°	846.0	1302.8	2135.1	2148.1	2144.5
35°	783.1	1259.4	2061.2	2032.2	2021.9
37.5°	724.4	1201.8	1953.3	1906.6	1904.1
40°	688.8	1160.0	1867.4	1823.0	1830.7
42.5°	655.3	1112.2	1789.9	1737.9	1594.0
45°	605.0	1035.2	1671.0	1416.2	809.3
47.5°	561.5	947.7	1536.3	758.6	696.7
50°	534.3	887.7	1437.9	667.1	633.8
52.5°	507.1	831.8	1310.1	599.8	556.3
55°	463.6	722.2	859.1	496.5	447.9
57.5°	422.2	607.1	524.9	385.9	333.1
60°	392.9	538.8	455.7	311.0	282.9
62.5°	365.6	482.9	388.7	275.9	270.3
65°	324.8	406.7	293.3	251.4	248.8
67.5°	286.5	334.2	223.7	226.2	223.7
70°	259.3	282.3	206.9	209.5	206.9
72.5°	234.1	232.6	190.1	188.5	186.0
75°	191.2	168.1	162.4	159.7	157.1
77.5°	146.1	124.1	131.0	128.3	125.7
80°	112.6	104.9	110.0	107.3	104.8
82.5°	83.3	85.8	89.0	84.3	81.7
85°	41.9	57.3	57.6	52.3	49.8
87.5°	12.6	25.3	24.0	20.2	18.2
90°	0.0	2.3	4.8	7.2	7.2
92.5°	5.7	8.1	10.5	14.9	16.7
95°	19.1	35.5	19.1	21.6	26.3
97.5°	34.0	68.1	140.6	41.5	35.9
100°	45.4	85.2	282.2	83.1	55.0
102.5°	56.9	98.5	381.6	219.2	120.0
105°	74.1	113.9	432.8	552.9	365.9
107.5°	91.3	121.3	413.2	804.7	753.7
110°	102.8	130.9	401.7	845.5	908.7

TEST NUMBER: P621789

CATALOG NUMBER: VLT-FB-050U-125D-840-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	114.3	142.4	390.2	821.6	927.8
115°	131.5	159.6	373.0	775.3	906.3
117.5°	149.2	176.8	368.7	725.2	859.9
120°	162.6	188.3	361.1	687.1	827.4
122.5°	172.2	199.8	351.5	654.3	783.4
125°	188.9	214.6	351.5	614.7	726.9
127.5°	202.8	229.0	352.0	568.8	679.6
130°	210.4	238.5	353.9	538.0	643.2
132.5°	220.0	248.0	353.9	524.2	610.7
135°	234.3	260.1	353.9	506.2	581.1
137.5°	246.3	273.9	353.9	486.4	550.5
140°	255.9	281.6	353.9	474.8	533.2
142.5°	265.4	289.3	355.8	461.3	516.0
145°	277.4	300.8	356.3	441.0	487.8
147.5°	291.7	312.3	359.2	426.5	462.5
150°	301.3	320.0	361.1	416.8	447.2
152.5°	310.9	327.7	361.1	409.0	433.8
155°	325.2	336.9	363.5	399.8	418.5
157.5°	336.7	347.9	366.3	393.9	407.5
160°	344.3	353.7	368.2	390.0	401.7
162.5°	350.1	359.4	370.2	388.0	396.0
165°	361.1	365.7	373.0	382.8	389.8
167.5°	367.3	371.5	375.4	380.3	384.5
170°	373.0	375.4	375.4	380.3	382.6
172.5°	374.9	379.1	377.3	378.3	380.7
175°	380.2	382.5	380.2	377.8	375.4
177.5°	380.2	382.1	380.2	380.2	378.3
180°	380.2	380.2	380.2	380.2	380.2

(END OF REPORT)