

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: P621650

Luminaire Tested: VLT-FA-0U-050D-835-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621650  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-21)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/2/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: VLT-FA-0U-050D-835-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 500 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

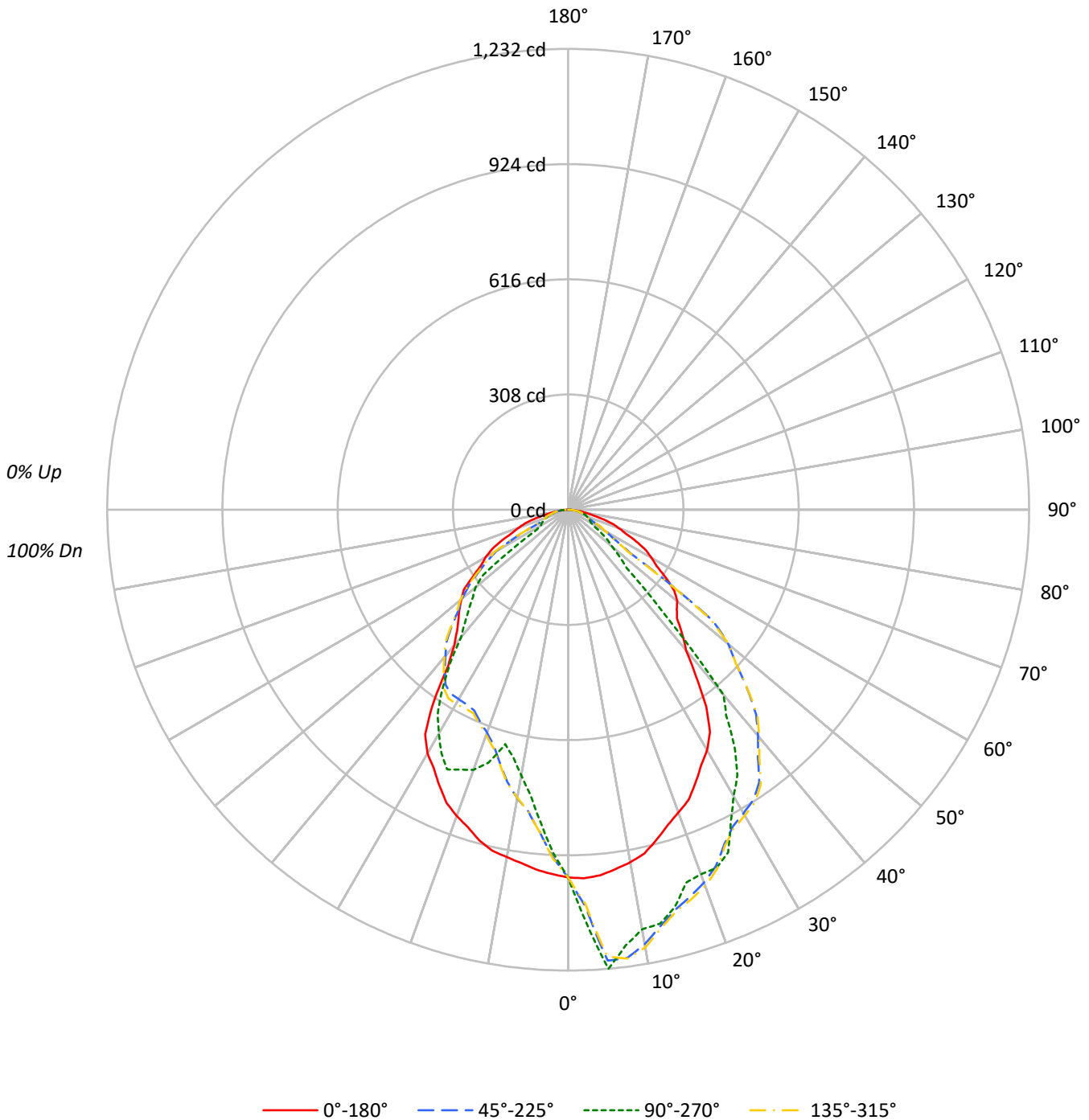
Lumens per Lamp: N/A  
Luminaire Lumens: 2027.0 lumens  
Efficiency: N/A  
Efficacy: 140.8 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90					88				
2	102	95	89	85	100	93	88	84	90	86	82	87	83	80	84	81	78					76				
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68					66				
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	69	64	60					58				
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54					52				
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48					46				
7	70	58	50	44	68	57	49	44	56	49	44	54	48	43	53	47	43					41				
8	66	53	45	40	64	52	45	40	51	44	40	50	44	39	49	43	39					37				
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36					34				
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33					31				

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

	0°	90°	180°	270°
0°	7054	7054	7054	7054
5°	7066	8875	6958	6051
10°	6973	8299	6871	5254
15°	6783	8172	6805	4821
20°	6575	7919	6651	5651
25°	6374	8005	6445	6065
30°	6148	7325	6231	5726
35°	5633	6789	5493	5133
40°	4590	6042	4431	4178
45°	4171	2243	4212	3806
50°	4242	1708	4164	3617
55°	4003	1326	3866	2164
60°	3688	1019	3660	1206
65°	3396	1053	3328	1273
70°	3021	1112	2937	1322
75°	2578	1164	2468	1359
80°	1942	1198	1818	1405
85°	1317	1070	1153	1317

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 7723 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.8	4.7
10°-20°	259.8	12.8
20°-30°	388.7	19.2
30°-40°	442.0	21.8
40°-50°	378.0	18.7
50°-60°	254.9	12.6
60°-70°	131.6	6.5
70°-80°	59.4	2.9
80°-90°	17.7	0.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	743.3	36.7
0°-40°	1185.3	58.5
0°-60°	1818.3	89.7
0°-90°	2027.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2027.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	983	983	983	983	983	
5°	981	1232	966	840	981	93
15°	913	1100	916	649	913	257
25°	805	1011	814	766	805	370
35°	643	775	627	586	643	393
45°	411	221	415	375	411	326
55°	320	106	309	173	320	285
65°	200	62	196	75	200	198
75°	93	42	89	49	93	99
85°	16	13	14	16	16	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0
2.5°	986.2	1019.8	1062.2	1091.3	1103.8	1091.3	1055.0	1019.6	975.0	961.7	930.2
5°	981.0	1084.6	1210.0	1225.2	1232.0	1225.2	1199.0	1078.4	966.0	918.1	866.0
7.5°	969.0	1150.3	1208.6	1174.8	1175.0	1181.3	1210.4	1144.7	953.4	878.1	814.2
10°	957.0	1186.8	1179.0	1130.2	1139.0	1135.1	1188.0	1179.6	943.0	856.0	783.0
12.5°	941.0	1198.2	1139.8	1123.8	1133.4	1127.9	1145.6	1191.9	934.2	840.1	747.0
15°	913.0	1181.9	1107.0	1100.0	1100.0	1104.9	1112.0	1186.8	916.0	811.4	703.0
17.5°	884.2	1149.4	1084.2	1049.5	1045.8	1052.3	1092.4	1157.7	890.2	779.5	660.4
20°	861.0	1127.0	1061.0	1020.4	1037.0	1022.3	1070.0	1133.0	871.0	759.5	634.0
22.5°	840.2	1099.1	1031.4	1014.1	1036.2	1014.5	1039.6	1105.2	848.6	737.1	614.0
25°	805.0	1052.4	987.0	1003.2	1011.0	1003.2	991.0	1056.5	814.0	708.4	593.0
27.5°	770.0	1003.1	953.8	964.7	940.8	959.2	959.2	1003.3	778.4	675.0	586.6
30°	742.0	968.8	937.0	921.2	884.0	913.3	944.0	969.1	752.0	653.2	585.0
32.5°	705.2	937.5	920.2	865.5	841.6	861.5	928.0	936.9	711.2	633.6	583.4
35°	643.0	893.3	890.0	799.4	775.0	793.6	897.0	891.0	627.0	602.6	571.0
37.5°	559.6	853.9	832.2	732.7	693.8	727.8	838.8	849.7	527.4	574.1	542.0
40°	490.0	827.3	789.0	683.1	645.0	678.2	794.0	825.0	473.0	554.2	510.0
42.5°	450.8	803.8	743.4	630.6	394.6	622.6	748.4	800.8	439.4	528.4	482.0
45°	411.0	761.0	677.0	349.1	221.0	332.5	678.0	750.4	415.0	489.3	439.0
47.5°	393.6	708.4	607.6	210.3	186.6	204.2	607.0	696.9	393.8	450.1	398.0
50°	380.0	675.3	558.0	185.3	153.0	178.4	559.0	664.4	373.0	423.8	370.0
52.5°	357.6	635.7	486.8	153.5	132.2	149.8	475.0	623.2	351.4	395.2	334.8
55°	320.0	559.6	203.0	120.7	106.0	115.8	193.0	540.7	309.0	350.1	294.0
57.5°	280.2	476.3	142.4	93.9	82.2	93.0	141.4	457.3	275.0	296.5	256.4
60°	257.0	420.3	116.0	78.8	71.0	77.8	115.0	403.6	255.0	260.9	222.0
62.5°	233.8	363.5	96.0	69.3	67.0	68.4	95.8	345.2	230.2	230.6	156.4
65°	200.0	275.3	71.0	63.0	62.0	62.0	69.0	265.4	196.0	190.1	90.0
67.5°	165.6	197.7	57.0	58.0	57.0	57.0	56.0	192.1	161.6	151.6	68.0
70°	144.0	151.8	53.0	54.0	53.0	53.0	52.0	147.8	140.0	117.5	64.0
72.5°	123.2	103.6	49.0	49.2	49.0	49.0	48.0	97.3	119.2	82.6	58.4
75°	93.0	51.9	42.0	42.0	42.0	42.0	41.0	49.9	89.0	53.8	50.0
77.5°	64.6	34.3	34.8	34.6	34.6	33.8	33.8	34.0	60.8	37.1	40.4
80°	47.0	28.4	30.0	29.0	29.0	29.0	29.0	27.4	44.0	31.3	34.0
82.5°	33.4	22.6	24.4	23.4	23.4	23.4	23.4	22.4	30.4	25.5	27.6
85°	16.0	15.0	16.0	14.0	13.0	14.0	15.0	15.0	14.0	16.9	18.0
87.5°	4.8	7.1	6.4	4.8	4.8	4.8	5.6	6.3	4.0	7.9	7.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	983.0	983.0	983.0	983.0	983.0	983.0
2.5°	919.0	918.2	919.8	933.4	961.2	986.2
5°	837.1	840.0	842.9	866.0	914.5	981.0
7.5°	774.1	769.8	776.5	814.0	873.6	969.0
10°	730.8	721.0	730.8	782.0	851.4	957.0
12.5°	689.9	677.8	693.1	749.2	833.1	941.0
15°	637.3	649.0	642.2	705.0	805.4	913.0
17.5°	649.7	708.8	662.3	666.6	778.0	884.2
20°	679.4	740.0	698.9	641.0	760.3	861.0
22.5°	706.2	752.0	714.8	619.4	742.6	840.2
25°	726.9	766.0	724.9	600.0	717.0	805.0
27.5°	727.9	733.4	728.3	598.4	685.3	770.0
30°	714.5	691.0	712.5	600.0	662.8	742.0
32.5°	676.0	649.4	667.8	596.8	640.1	705.2
35°	621.2	586.0	611.4	580.0	604.9	643.0
37.5°	563.4	518.8	554.0	546.8	574.9	559.6
40°	524.2	446.0	516.4	514.0	558.4	490.0
42.5°	474.1	407.6	467.0	487.6	540.4	450.8
45°	382.8	375.0	378.9	443.0	501.9	411.0
47.5°	350.1	344.8	348.1	402.4	458.5	393.6
50°	330.8	324.0	328.9	376.0	430.8	380.0
52.5°	304.2	285.6	302.2	340.0	402.2	357.6
55°	228.7	173.0	227.8	299.0	359.1	320.0
57.5°	134.2	100.0	131.3	260.2	304.3	280.2
60°	90.8	84.0	91.8	229.0	267.8	257.0
62.5°	83.0	80.8	83.1	159.4	235.2	233.8
65°	76.0	75.0	76.0	92.0	194.1	200.0
67.5°	68.8	67.8	69.6	70.6	153.3	165.6
70°	64.0	63.0	64.0	65.0	117.6	144.0
72.5°	58.4	57.4	58.4	59.4	82.7	123.2
75°	50.0	49.0	50.0	51.0	54.9	93.0
77.5°	40.4	40.4	41.4	41.4	38.4	64.6
80°	34.0	34.0	35.0	35.0	33.3	47.0
82.5°	27.6	26.8	28.6	29.4	27.5	33.4
85°	17.0	16.0	18.0	19.0	18.0	16.0
87.5°	6.4	5.6	7.2	8.8	8.7	4.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)