

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: P621846

Luminaire Tested: VLT-FB-100U-050D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621846
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-100U-050D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - BATWING
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

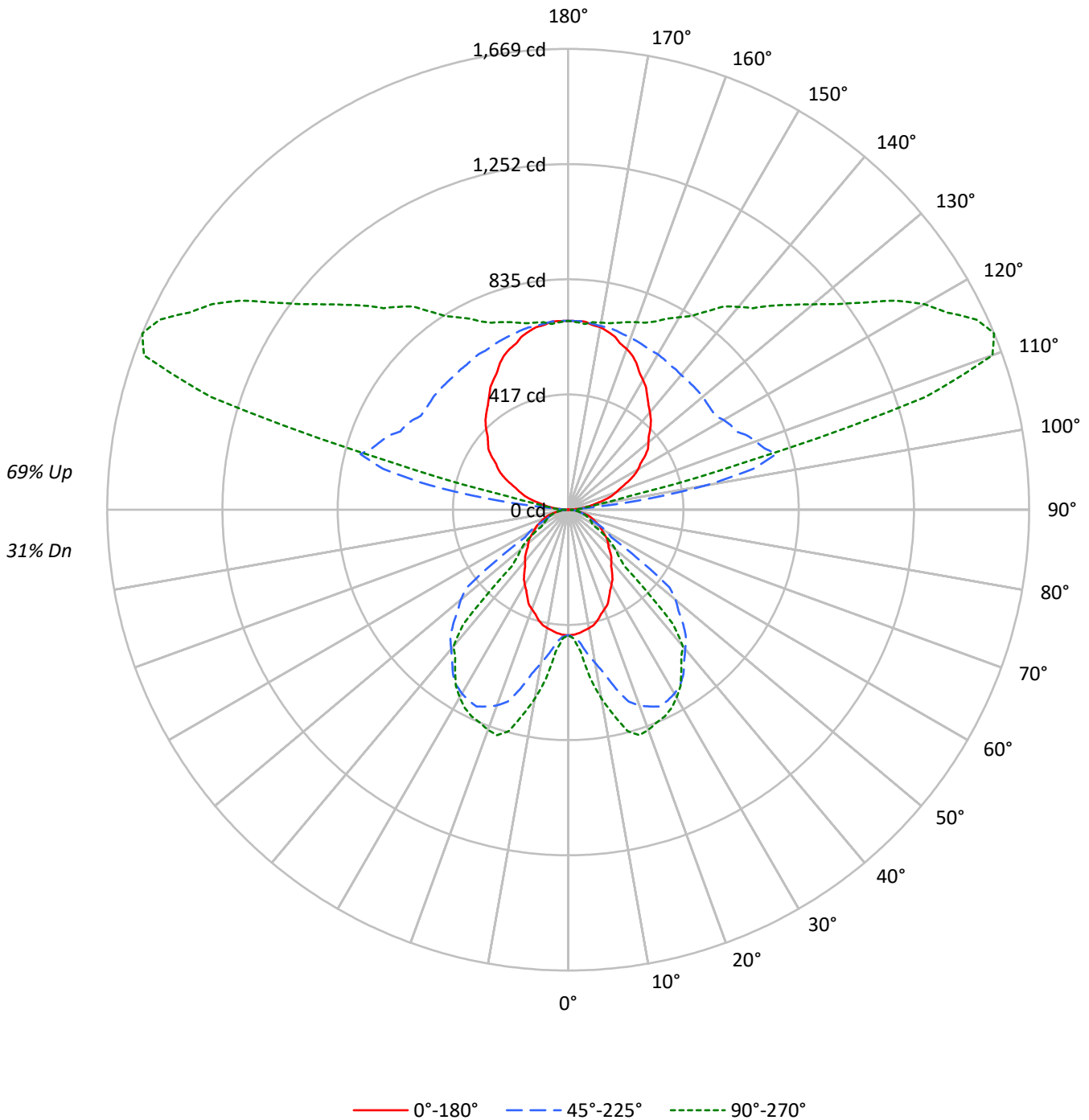
Lumens per Lamp: N/A
Luminaire Lumens: 5304.5 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 43.4
Input Voltage (V): 120
Input Current (A_{in}): 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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	38	38	38	38	38	38	31	
1	94	90	86	83	84	81	78	75	64	62	60	49	47	46	34	34	33	34	34	33	27	
2	86	79	73	68	77	71	66	62	57	53	50	43	41	39	31	30	28	31	30	28	23	
3	78	70	63	57	70	63	57	52	50	46	43	38	36	34	28	26	25	28	26	25	20	
4	72	62	54	49	64	56	49	44	45	40	37	34	31	29	25	23	21	25	23	21	17	
5	66	55	47	42	59	50	43	38	40	35	32	31	28	25	22	20	19	22	20	19	15	
6	61	49	41	36	54	45	38	33	36	31	28	28	25	22	20	18	17	20	18	17	13	
7	56	44	37	31	50	40	34	29	33	28	24	25	22	19	19	16	15	19	16	15	12	
8	52	40	33	28	47	37	30	26	30	25	21	23	20	17	17	15	13	17	15	13	11	
9	48	36	29	25	43	33	27	23	27	22	19	21	18	15	16	14	12	16	14	12	10	
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11	15	12	11	9	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3263	3263	3263
5°	3235	3468	3715
10°	3172	4101	5064
15°	3076	4998	6165
20°	2929	5759	6479
25°	2774	6227	6542
30°	2596	6371	6509
35°	2420	6371	6250
40°	2277	6172	6051
45°	2167	5983	2898
50°	2104	5665	2496
55°	2047	3792	1977
60°	1989	2308	1432
65°	1946	1757	1491
70°	1920	1532	1532
75°	1871	1589	1539
80°	1641	1603	1529
85°	1219	1671	1449

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5983 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.0	0.9
10°-20°	180.8	3.4
20°-30°	306.2	5.8
30°-40°	371.5	7.0
40°-50°	327.0	6.2
50°-60°	202.3	3.8
60°-70°	109.7	2.1
70°-80°	62.5	1.2
80°-90°	22.0	0.4
90°-100°	84.1	1.6
100°-110°	599.2	11.3
110°-120°	813.4	15.3
120°-130°	662.0	12.5
130°-140°	532.5	10.0
140°-150°	419.8	7.9
150°-160°	306.9	5.8
160°-170°	190.7	3.6
170°-180°	65.0	1.2
0°-30°	536.0	10.1
0°-40°	907.5	17.1
0°-60°	1436.8	27.1
0°-90°	1631.0	30.7
90°-120°	1496.6	28.2
90°-150°	3111.0	58.6
90°-180°	3674.0	69.3
0°-180°	5304.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	455	455	455	455	455	
5°	449	464	482	502	516	42
15°	414	477	673	796	830	116
25°	350	480	786	810	826	161
35°	276	444	727	717	714	173
45°	214	365	590	500	286	166
55°	164	255	303	175	158	146
65°	115	144	104	89	88	114
75°	68	59	57	56	56	70
85°	15	20	20	18	18	18
90°	0	4	9	13	13	2
95°	34	64	34	39	47	38
105°	133	205	778	994	658	141
115°	237	287	671	1395	1630	235
125°	340	386	632	1106	1308	302
135°	422	468	637	911	1045	324
145°	499	541	641	793	877	313
155°	585	606	654	719	753	269
165°	650	658	671	688	701	182
175°	684	688	684	680	675	65
180°	684	684	684	684	684	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	454.7	454.7	454.7	454.7	454.7
2.5°	453.2	458.3	460.6	465.1	467.3
5°	449.1	463.6	481.5	502.1	515.7
7.5°	441.9	467.8	524.4	589.5	617.3
10°	435.3	470.5	562.8	657.0	695.0
12.5°	427.9	473.3	607.9	722.1	760.8
15°	414.0	477.3	672.8	795.6	829.9
17.5°	396.1	479.8	729.0	834.5	856.5
20°	383.5	480.2	754.1	839.4	848.4
22.5°	371.7	480.7	771.9	827.5	835.1
25°	350.3	479.5	786.5	809.9	826.2
27.5°	328.8	474.1	779.3	798.2	809.9
30°	313.3	468.7	768.9	784.6	785.5
32.5°	298.5	459.7	753.4	758.0	756.7
35°	276.3	444.4	727.3	717.1	713.5
37.5°	255.6	424.1	689.2	672.8	671.9
40°	243.1	409.3	658.9	643.3	646.0
42.5°	231.2	392.4	631.6	613.2	562.4
45°	213.5	365.3	589.6	499.7	285.6
47.5°	198.1	334.4	542.1	267.7	245.8
50°	188.5	313.2	507.4	235.4	223.6
52.5°	178.9	293.5	462.3	211.7	196.3
55°	163.6	254.8	303.1	175.2	158.0
57.5°	149.0	214.2	185.2	136.2	117.6
60°	138.6	190.1	160.8	109.8	99.8
62.5°	129.0	170.4	137.1	97.4	95.4
65°	114.6	143.5	103.5	88.7	87.8
67.5°	101.1	117.9	78.9	79.8	78.9
70°	91.5	99.6	73.0	73.9	73.0
72.5°	82.6	82.1	67.1	66.5	65.6
75°	67.5	59.3	57.3	56.4	55.5
77.5°	51.6	43.8	46.2	45.3	44.4
80°	39.7	37.0	38.8	37.9	37.0
82.5°	29.4	30.3	31.4	29.7	28.8
85°	14.8	20.2	20.3	18.5	17.6
87.5°	4.4	9.6	9.9	9.2	8.5
90°	0.0	4.2	8.6	12.9	12.9
92.5°	10.3	14.5	18.9	26.7	30.1
95°	34.4	63.8	34.4	38.9	47.3
97.5°	61.1	122.5	252.9	74.6	64.5
100°	81.7	153.2	507.5	149.4	98.9
102.5°	102.4	177.2	686.5	394.2	215.9
105°	133.3	204.8	778.5	994.5	658.1
107.5°	164.3	218.1	743.2	1447.4	1355.7
110°	184.9	235.4	722.6	1520.9	1634.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	205.6	256.1	701.9	1477.9	1668.8
115°	236.6	287.0	671.0	1394.6	1630.1
117.5°	268.4	318.0	663.2	1304.4	1546.7
120°	292.5	338.7	649.5	1235.9	1488.2
122.5°	309.7	359.3	632.3	1176.9	1409.0
125°	339.8	386.0	632.3	1105.7	1307.5
127.5°	364.7	411.8	633.1	1023.0	1222.4
130°	378.5	429.0	636.6	967.7	1157.0
132.5°	395.7	446.2	636.6	942.9	1098.5
135°	421.5	467.8	636.6	910.6	1045.2
137.5°	443.0	492.6	636.6	874.9	990.1
140°	460.2	506.5	636.6	854.0	959.1
142.5°	477.4	520.3	640.0	829.8	928.2
145°	498.9	541.0	640.9	793.3	877.4
147.5°	524.7	561.7	646.0	767.1	831.8
150°	541.9	575.6	649.5	749.6	804.3
152.5°	559.1	589.4	649.5	735.6	780.2
155°	585.0	606.0	653.8	719.0	752.7
157.5°	605.6	625.8	658.9	708.5	732.9
160°	619.4	636.2	662.4	701.6	722.6
162.5°	629.7	646.5	665.8	698.0	712.3
165°	649.5	657.9	671.0	688.5	701.1
167.5°	660.7	668.2	675.3	684.0	691.6
170°	671.0	675.2	675.3	684.0	688.2
172.5°	674.4	682.0	678.7	680.5	684.7
175°	683.9	688.1	683.9	679.5	675.3
177.5°	683.9	687.2	683.9	683.8	680.4
180°	683.9	683.9	683.9	683.9	683.9

(END OF REPORT)