

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: P621858

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

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621858
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-100D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - BATWING
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

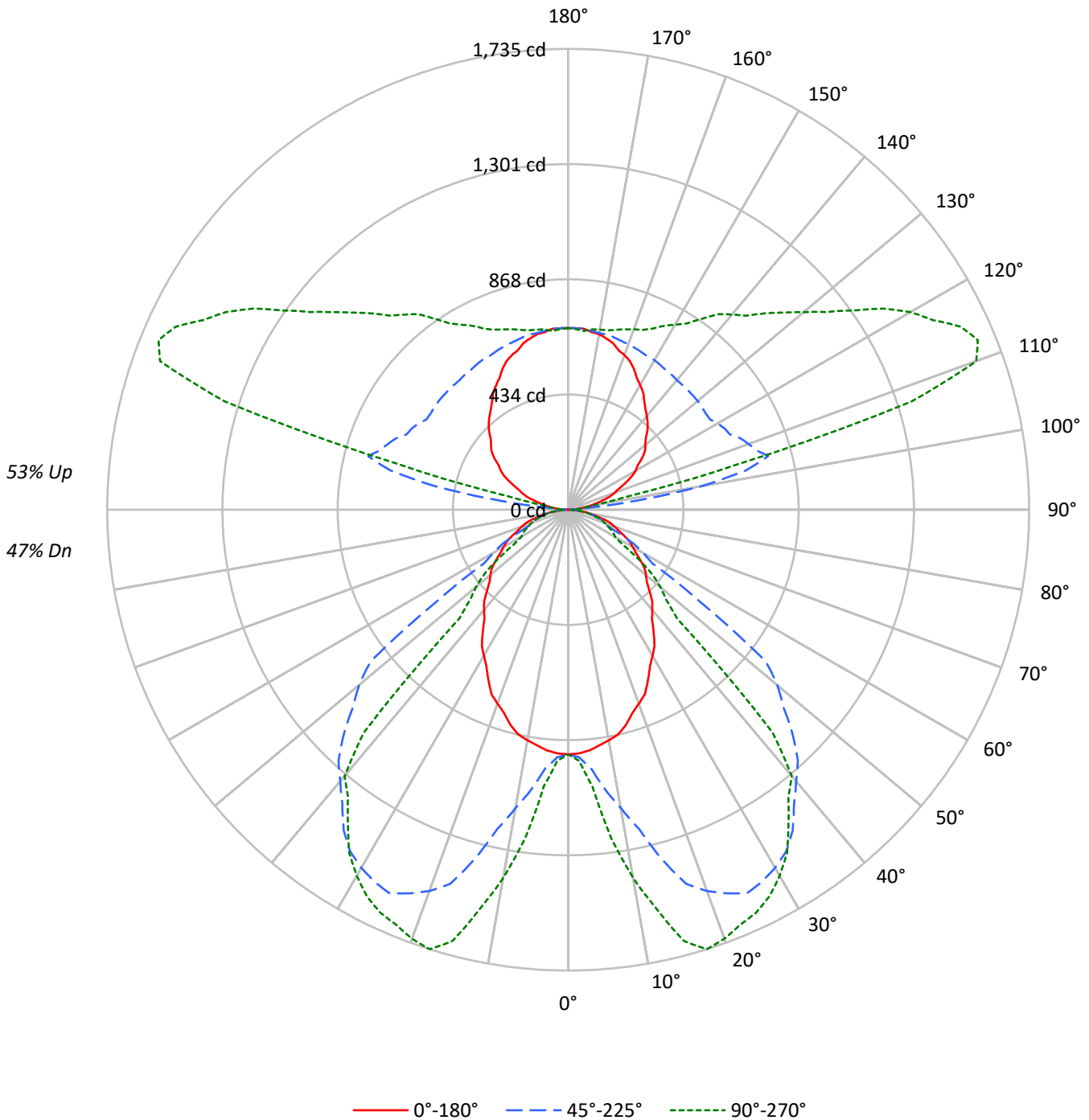
Lumens per Lamp: N/A
Luminaire Lumens: 6975.8 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.2
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



TEST NUMBER: P621858
CATALOG NUMBER: VLT-FB-100U-100D-940-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P621858

CATALOG NUMBER: VLT-FB-100U-100D-940-UNV-STD-W-4

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	0
RCR																				
0	107	107	107	107	98	98	98	98	82	82	82		67	67	67		54	54	54	47
1	98	94	90	87	90	86	83	80	73	70	68		60	58	57		48	47	46	41
2	89	82	77	72	82	76	71	67	64	61	58		53	51	49		43	42	40	35
3	82	73	66	60	75	67	61	57	57	53	49		48	44	42		39	37	35	31
4	75	65	57	52	69	60	53	48	51	46	42		43	39	36		35	32	30	27
5	69	58	50	44	63	54	47	42	46	41	37		39	35	32		32	29	27	23
6	64	52	44	39	59	48	41	36	41	36	32		35	31	28		29	26	24	21
7	59	47	39	34	54	44	37	32	38	32	28		32	28	25		26	23	21	18
8	55	43	35	30	50	40	33	28	34	29	25		29	25	22		24	21	19	16
9	51	39	32	27	47	36	30	25	31	26	22		27	23	20		22	19	17	15
10	48	36	29	24	44	33	27	23	29	24	20		25	21	18		21	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6610	6610	6610
5°	6554	7025	7525
10°	6425	8308	10258
15°	6231	10125	12489
20°	5933	11665	13124
25°	5618	12614	13251
30°	5258	12906	13186
35°	4903	12906	12660
40°	4613	12504	12258
45°	4388	12121	5871
50°	4263	11474	5057
55°	4146	7682	4005
60°	4030	4674	2902
65°	3941	3561	3019
70°	3888	3103	3103
75°	3790	3219	3114
80°	3327	3248	3095
85°	2470	3392	2931

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 12121 cd/sqm



TEST NUMBER: P621858

CATALOG NUMBER: VLT-FB-100U-100D-940-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.3	1.4
10°-20°	366.2	5.3
20°-30°	620.3	8.9
30°-40°	752.5	10.8
40°-50°	662.3	9.5
50°-60°	409.8	5.9
60°-70°	222.2	3.2
70°-80°	126.6	1.8
80°-90°	42.9	0.6
90°-100°	84.1	1.2
100°-110°	599.2	8.6
110°-120°	813.4	11.7
120°-130°	662.0	9.5
130°-140°	532.5	7.6
140°-150°	419.8	6.0
150°-160°	306.9	4.4
160°-170°	190.7	2.7
170°-180°	65.0	0.9
0°-30°	1085.9	15.6
0°-40°	1838.3	26.4
0°-60°	2910.5	41.7
0°-90°	3302.2	47.3
90°-120°	1496.6	21.5
90°-150°	3111.0	44.6
90°-180°	3674.0	52.7
0°-180°	6975.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	921	921	921	921	921	
5°	910	939	975	1017	1045	86
15°	839	967	1363	1612	1681	235
25°	710	971	1593	1641	1674	326
35°	560	900	1473	1453	1445	351
45°	432	740	1194	1012	578	335
55°	331	516	614	355	320	297
65°	232	291	210	180	178	230
75°	137	120	116	114	112	143
85°	30	41	41	37	36	36
90°	0	4	9	13	13	3
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	



TEST NUMBER: P621858

CATALOG NUMBER: VLT-FB-100U-100D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	921.1	921.1	921.1	921.1	921.1
2.5°	918.1	928.3	933.0	942.1	946.5
5°	909.8	939.1	975.3	1017.2	1044.6
7.5°	895.2	947.6	1062.2	1194.2	1250.5
10°	881.7	953.1	1140.1	1330.9	1407.8
12.5°	866.8	958.7	1231.4	1462.7	1541.1
15°	838.7	966.8	1362.9	1611.6	1681.1
17.5°	802.4	971.9	1476.7	1690.4	1735.0
20°	776.9	972.8	1527.6	1700.3	1718.6
22.5°	752.9	973.7	1563.6	1676.2	1691.6
25°	709.5	971.3	1593.1	1640.7	1673.6
27.5°	666.1	960.4	1578.5	1616.9	1640.7
30°	634.6	949.5	1557.6	1589.4	1591.3
32.5°	604.7	931.2	1526.1	1535.4	1532.9
35°	559.7	900.2	1473.3	1452.6	1445.2
37.5°	517.8	859.0	1396.2	1362.8	1361.0
40°	492.4	829.2	1334.8	1303.1	1308.6
42.5°	468.4	794.9	1279.4	1242.2	1139.3
45°	432.4	740.0	1194.4	1012.3	578.5
47.5°	401.4	677.4	1098.2	542.3	498.0
50°	381.9	634.5	1027.8	476.8	453.0
52.5°	362.4	594.5	936.4	428.7	397.6
55°	331.4	516.2	614.0	354.9	320.1
57.5°	301.8	433.9	375.2	275.8	238.1
60°	280.8	385.1	325.7	222.3	202.2
62.5°	261.3	345.2	277.8	197.2	193.2
65°	232.1	290.7	209.7	179.7	177.8
67.5°	204.8	238.9	159.9	161.7	159.9
70°	185.3	201.8	147.9	149.7	147.9
72.5°	167.4	166.3	135.9	134.7	132.9
75°	136.7	120.2	116.1	114.2	112.3
77.5°	104.5	88.7	93.6	91.7	89.9
80°	80.5	75.0	78.6	76.7	74.9
82.5°	59.5	61.4	63.7	60.2	58.4
85°	30.0	40.9	41.2	37.4	35.6
87.5°	9.0	18.6	18.2	16.0	14.6
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



TEST NUMBER: P621858

CATALOG NUMBER: VLT-FB-100U-100D-940-UNV-STD-W-4

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)