

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P621853

Luminaire Tested: VLT-FB-100U-100D-830-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621853  
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-830-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

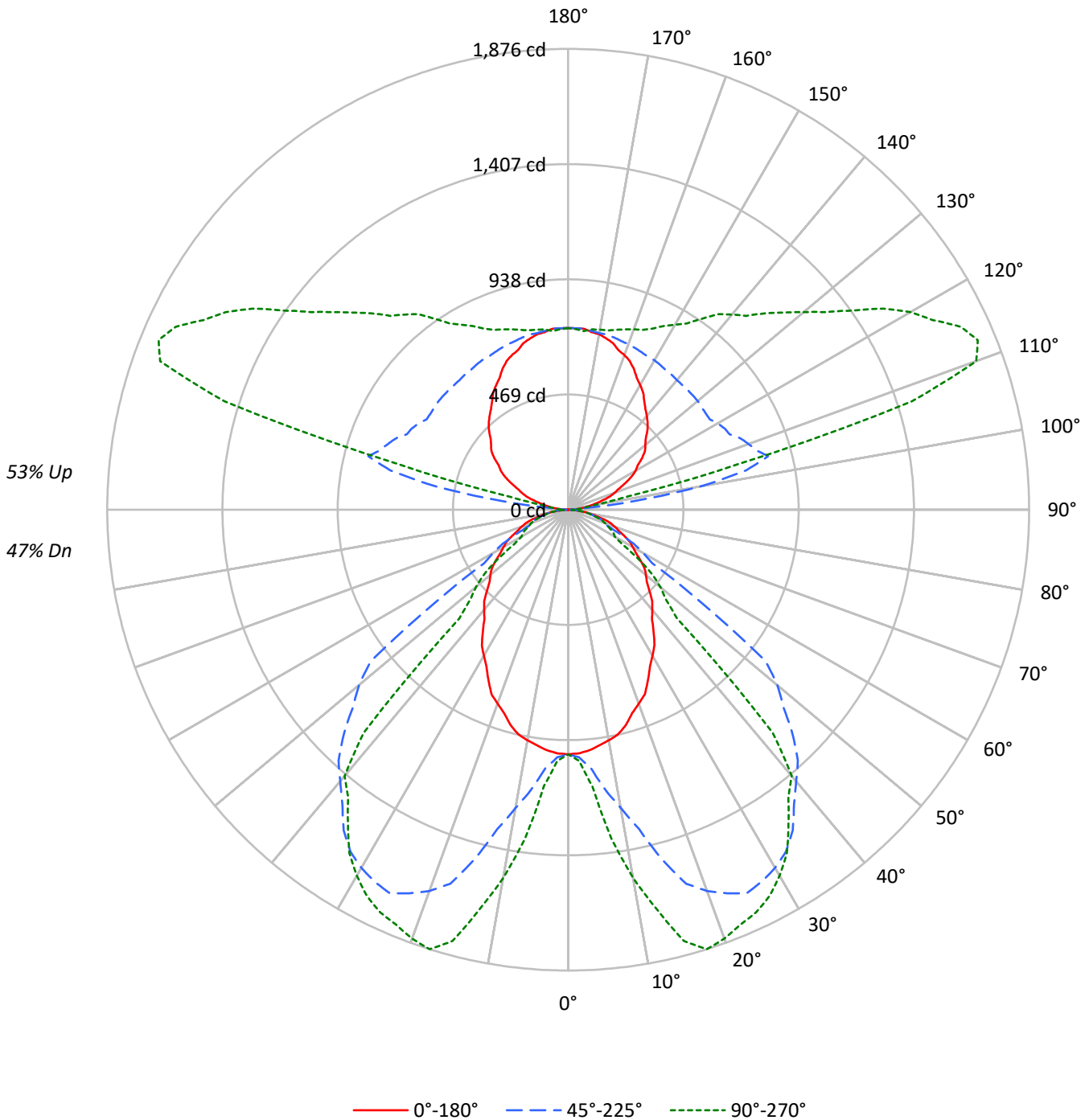
Lumens per Lamp: N/A  
Luminaire Lumens: 7541.3 lumens  
Efficiency: N/A  
Efficacy: 129.6 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 58.2  
Input Voltage (V): 120  
Input Current (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



TEST NUMBER: P621853  
CATALOG NUMBER: VLT-FB-100U-100D-830-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P621853

CATALOG NUMBER: VLT-FB-100U-100D-830-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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	47				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°	7145	7145	7145
5°	7085	7595	8135
10°	6946	8981	11090
15°	6736	10946	13502
20°	6414	12612	14188
25°	6073	13637	14326
30°	5685	13952	14255
35°	5301	13953	13687
40°	4986	13517	13252
45°	4744	13104	6347
50°	4610	12404	5468
55°	4481	8305	4330
60°	4357	5055	3137
65°	4262	3849	3265
70°	4205	3355	3355
75°	4095	3480	3366
80°	3595	3513	3347
85°	2668	3664	3170

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 13104 cd/sqm



TEST NUMBER: P621853

CATALOG NUMBER: VLT-FB-100U-100D-830-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.4	1.4
10°-20°	395.9	5.3
20°-30°	670.6	8.9
30°-40°	813.5	10.8
40°-50°	716.0	9.5
50°-60°	443.1	5.9
60°-70°	240.2	3.2
70°-80°	136.8	1.8
80°-90°	46.4	0.6
90°-100°	90.9	1.2
100°-110°	647.7	8.6
110°-120°	879.4	11.7
120°-130°	715.7	9.5
130°-140°	575.6	7.6
140°-150°	453.8	6.0
150°-160°	331.8	4.4
160°-170°	206.1	2.7
170°-180°	70.3	0.9
0°-30°	1173.9	15.6
0°-40°	1987.4	26.4
0°-60°	3146.5	41.7
0°-90°	3569.9	47.3
90°-120°	1618.0	21.5
90°-150°	3363.2	44.6
90°-180°	3971.0	52.7
0°-180°	7541.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	996	996	996	996	996	
5°	984	1015	1054	1100	1129	93
15°	907	1045	1473	1742	1817	254
25°	767	1050	1722	1774	1809	352
35°	605	973	1593	1570	1562	379
45°	468	800	1291	1094	625	363
55°	358	558	664	384	346	321
65°	251	314	227	194	192	249
75°	148	130	126	123	121	154
85°	32	44	44	40	38	39
90°	0	4	9	14	14	3
95°	37	69	37	42	51	42
105°	144	221	842	1075	711	152
115°	256	310	725	1508	1762	254
125°	367	417	684	1195	1414	326
135°	456	506	688	984	1130	351
145°	539	585	693	858	949	339
155°	632	655	707	777	814	290
165°	702	711	725	744	758	197
175°	739	744	739	735	730	70
180°	739	739	739	739	739	



TEST NUMBER: P621853

CATALOG NUMBER: VLT-FB-100U-100D-830-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	995.7	995.7	995.7	995.7	995.7
2.5°	992.5	1003.6	1008.7	1018.5	1023.3
5°	983.6	1015.3	1054.4	1099.6	1129.3
7.5°	967.8	1024.4	1148.3	1291.0	1351.9
10°	953.2	1030.4	1232.5	1438.8	1521.9
12.5°	937.0	1036.4	1331.3	1581.3	1666.0
15°	906.7	1045.2	1473.4	1742.2	1817.4
17.5°	867.4	1050.7	1596.4	1827.4	1875.7
20°	839.9	1051.6	1651.5	1838.1	1857.9
22.5°	814.0	1052.6	1690.3	1812.1	1828.8
25°	767.0	1050.0	1722.3	1773.7	1809.3
27.5°	720.1	1038.3	1706.5	1748.0	1773.7
30°	686.1	1026.5	1683.8	1718.3	1720.3
32.5°	653.7	1006.7	1649.8	1659.9	1657.1
35°	605.1	973.2	1592.8	1570.3	1562.4
37.5°	559.8	928.7	1509.4	1473.3	1471.3
40°	532.3	896.4	1443.0	1408.7	1414.7
42.5°	506.4	859.4	1383.1	1342.9	1231.7
45°	467.5	800.0	1291.2	1094.4	625.4
47.5°	433.9	732.3	1187.2	586.2	538.3
50°	412.9	686.0	1111.1	515.5	489.8
52.5°	391.8	642.7	1012.3	463.5	429.9
55°	358.2	558.1	663.8	383.7	346.1
57.5°	326.2	469.1	405.6	298.2	257.4
60°	303.6	416.4	352.2	240.3	218.6
62.5°	282.5	373.2	300.3	213.2	208.9
65°	251.0	314.3	226.7	194.2	192.3
67.5°	221.4	258.2	172.8	174.8	172.8
70°	200.4	218.2	159.9	161.9	159.9
72.5°	180.9	179.7	146.9	145.7	143.7
75°	147.7	129.9	125.5	123.4	121.4
77.5°	112.9	95.9	101.2	99.1	97.1
80°	87.0	81.1	85.0	82.9	81.0
82.5°	64.4	66.3	68.8	65.1	63.1
85°	32.4	44.3	44.5	40.4	38.5
87.5°	9.7	20.1	19.7	17.3	15.7
90°	0.0	4.5	9.3	13.9	13.9
92.5°	11.2	15.7	20.5	28.9	32.5
95°	37.2	69.0	37.2	42.1	51.1
97.5°	66.0	132.4	273.4	80.7	69.7
100°	88.3	165.6	548.7	161.5	106.9
102.5°	110.7	191.6	742.1	426.2	233.4
105°	144.1	221.4	841.6	1075.1	711.4
107.5°	177.6	235.8	803.5	1564.7	1465.6
110°	199.9	254.5	781.2	1644.2	1766.9



TEST NUMBER: P621853

CATALOG NUMBER: VLT-FB-100U-100D-830-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	222.3	276.8	758.9	1597.7	1804.1
115°	255.7	310.3	725.4	1507.7	1762.3
117.5°	290.1	343.8	717.0	1410.2	1672.1
120°	316.2	366.2	702.1	1336.0	1608.8
122.5°	334.8	388.4	683.5	1272.3	1523.3
125°	367.3	417.3	683.5	1195.3	1413.5
127.5°	394.3	445.2	684.5	1106.0	1321.5
130°	409.2	463.7	688.2	1046.2	1250.8
132.5°	427.8	482.3	688.2	1019.3	1187.6
135°	455.7	505.7	688.2	984.4	1129.9
137.5°	478.9	532.6	688.2	945.8	1070.4
140°	497.5	547.5	688.2	923.2	1036.9
142.5°	516.1	562.5	691.9	897.0	1003.4
145°	539.4	584.8	692.8	857.6	948.6
147.5°	567.3	607.3	698.4	829.3	899.3
150°	585.9	622.3	702.1	810.4	869.5
152.5°	604.5	637.2	702.1	795.3	843.5
155°	632.4	655.1	706.8	777.3	813.7
157.5°	654.7	676.5	712.4	766.0	792.3
160°	669.6	687.8	716.1	758.4	781.2
162.5°	680.7	698.9	719.8	754.6	770.0
165°	702.1	711.2	725.4	744.3	757.9
167.5°	714.2	722.4	730.0	739.5	747.7
170°	725.4	729.9	730.0	739.4	744.0
172.5°	729.1	737.3	733.7	735.7	740.3
175°	739.3	743.9	739.3	734.6	730.0
177.5°	739.3	743.0	739.3	739.2	735.6
180°	739.3	739.3	739.3	739.3	739.3

(END OF REPORT)