

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: P621855

Luminaire Tested: VLT-FB-100U-100D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621855
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-840-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, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

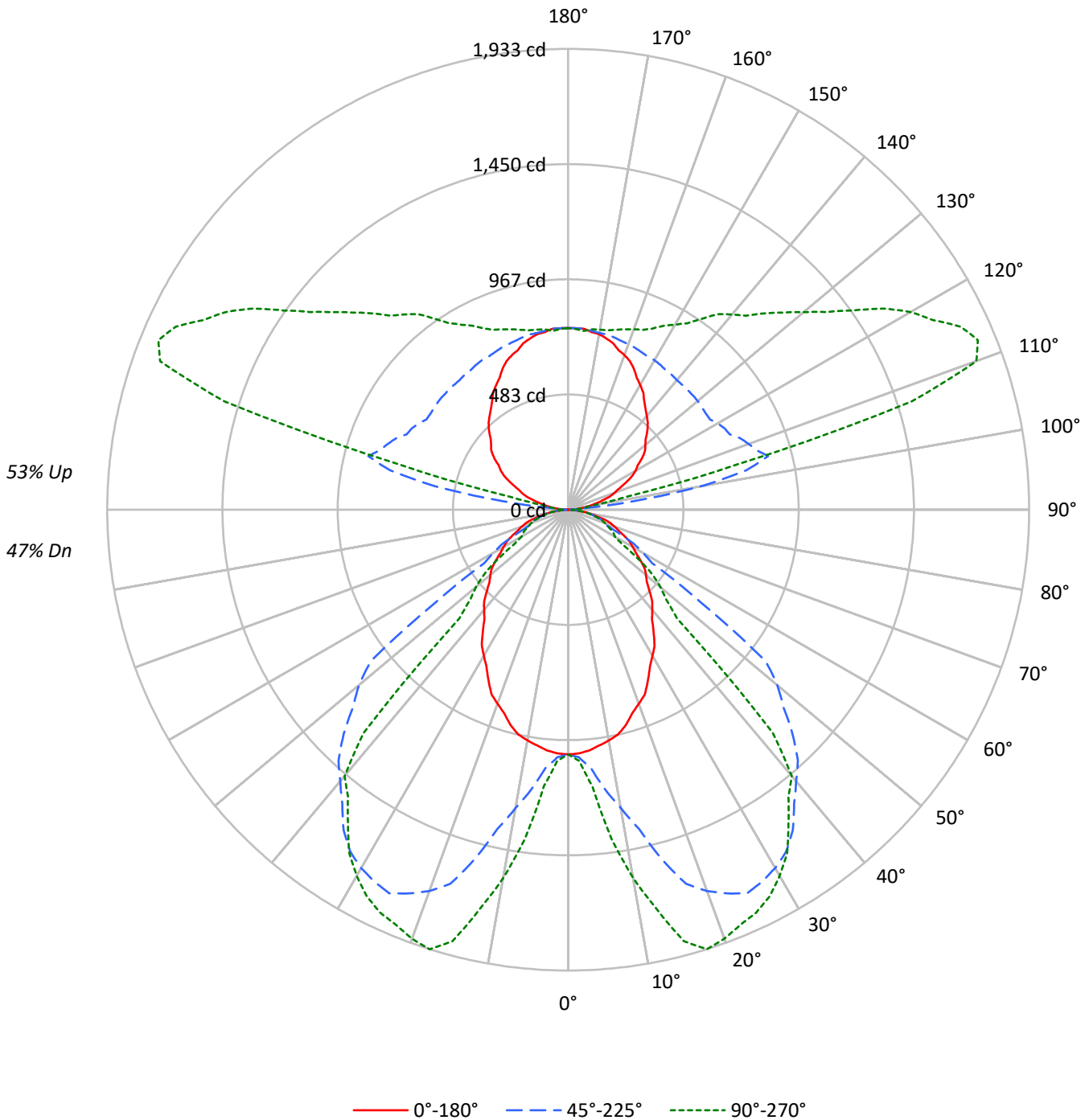
Lumens per Lamp: N/A
Luminaire Lumens: 7773.2 lumens
Efficiency: N/A
Efficacy: 133.6 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

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



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7365	7365	7365
5°	7303	7829	8385
10°	7159	9257	11431
15°	6943	11283	13917
20°	6611	12999	14624
25°	6260	14056	14766
30°	5860	14381	14693
35°	5464	14382	14107
40°	5139	13933	13660
45°	4890	13506	6542
50°	4751	12786	5635
55°	4619	8560	4463
60°	4491	5210	3233
65°	4393	3966	3365
70°	4333	3458	3458
75°	4223	3585	3471
80°	3707	3620	3446
85°	2750	3779	3260

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 13506 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.7	1.4
10°-20°	408.1	5.3
20°-30°	691.2	8.9
30°-40°	838.5	10.8
40°-50°	738.0	9.5
50°-60°	456.7	5.9
60°-70°	247.6	3.2
70°-80°	141.1	1.8
80°-90°	47.9	0.6
90°-100°	93.7	1.2
100°-110°	667.6	8.6
110°-120°	906.4	11.7
120°-130°	737.7	9.5
130°-140°	593.3	7.6
140°-150°	467.8	6.0
150°-160°	342.0	4.4
160°-170°	212.4	2.7
170°-180°	72.4	0.9
0°-30°	1210.0	15.6
0°-40°	2048.5	26.4
0°-60°	3243.2	41.7
0°-90°	3679.7	47.3
90°-120°	1667.7	21.5
90°-150°	3466.6	44.6
90°-180°	4094.0	52.7
0°-180°	7773.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1026	1026	1026	1026	1026	
5°	1014	1046	1087	1133	1164	96
15°	935	1077	1519	1796	1873	262
25°	791	1082	1775	1828	1865	363
35°	624	1003	1642	1619	1610	391
45°	482	825	1331	1128	645	374
55°	369	575	684	396	357	331
65°	259	324	234	200	198	257
75°	152	134	129	127	125	159
85°	33	46	46	42	40	41
90°	0	5	10	14	14	3
95°	38	71	38	43	53	43
105°	149	228	868	1108	733	157
115°	264	320	748	1554	1816	262
125°	379	430	704	1232	1457	336
135°	470	521	709	1015	1165	361
145°	556	603	714	884	978	349
155°	652	675	728	801	839	299
165°	724	733	748	767	781	203
175°	762	767	762	757	752	72
180°	762	762	762	762	762	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1026.3	1026.3	1026.3	1026.3	1026.3
2.5°	1023.0	1034.4	1039.7	1049.8	1054.7
5°	1013.8	1046.5	1086.8	1133.4	1164.0
7.5°	997.6	1055.9	1183.6	1330.7	1393.5
10°	982.5	1062.1	1270.4	1483.1	1568.7
12.5°	965.9	1068.2	1372.2	1630.0	1717.3
15°	934.6	1077.3	1518.7	1795.8	1873.3
17.5°	894.1	1083.0	1645.5	1883.6	1933.4
20°	865.7	1084.0	1702.2	1894.6	1915.0
22.5°	839.0	1085.0	1742.3	1867.8	1885.0
25°	790.6	1082.3	1775.2	1828.2	1864.9
27.5°	742.2	1070.2	1759.0	1801.7	1828.2
30°	707.2	1058.0	1735.6	1771.1	1773.2
32.5°	673.8	1037.7	1700.6	1710.9	1708.1
35°	623.7	1003.1	1641.7	1618.6	1610.4
37.5°	577.0	957.2	1555.8	1518.6	1516.6
40°	548.6	923.9	1487.4	1452.0	1458.2
42.5°	521.9	885.8	1425.6	1384.2	1269.6
45°	481.9	824.6	1330.9	1128.0	644.6
47.5°	447.3	754.8	1223.7	604.3	554.9
50°	425.6	707.0	1145.3	531.3	504.8
52.5°	403.9	662.5	1043.5	477.8	443.1
55°	369.2	575.2	684.2	395.5	356.7
57.5°	336.3	483.5	418.0	307.4	265.3
60°	312.9	429.2	363.0	247.7	225.3
62.5°	291.2	384.6	309.6	219.8	215.3
65°	258.7	323.9	233.6	200.2	198.2
67.5°	228.2	266.2	178.2	180.2	178.2
70°	206.5	224.9	164.8	166.8	164.8
72.5°	186.5	185.3	151.4	150.2	148.1
75°	152.3	133.9	129.3	127.2	125.2
77.5°	116.4	98.9	104.3	102.2	100.1
80°	89.7	83.6	87.6	85.5	83.4
82.5°	66.3	68.4	70.9	67.1	65.1
85°	33.4	45.6	45.9	41.7	39.6
87.5°	10.0	20.7	20.3	17.9	16.2
90°	0.0	4.7	9.6	14.4	14.4
92.5°	11.5	16.2	21.1	29.8	33.5
95°	38.3	71.1	38.3	43.3	52.7
97.5°	68.1	136.5	281.8	83.1	71.9
100°	91.1	170.7	565.5	166.5	110.2
102.5°	114.1	197.5	764.9	439.3	240.6
105°	148.6	228.2	867.5	1108.2	733.3
107.5°	183.1	243.1	828.2	1612.8	1510.7
110°	206.1	262.3	805.2	1694.7	1821.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	229.1	285.3	782.2	1646.8	1859.6
115°	263.6	319.8	747.7	1554.0	1816.5
117.5°	299.1	354.4	739.0	1453.6	1723.5
120°	325.9	377.5	723.7	1377.1	1658.3
122.5°	345.1	400.4	704.5	1311.4	1570.1
125°	378.6	430.2	704.5	1232.1	1457.0
127.5°	406.4	458.9	705.5	1140.0	1362.1
130°	421.8	478.0	709.3	1078.4	1289.3
132.5°	440.9	497.2	709.3	1050.7	1224.1
135°	469.7	521.2	709.3	1014.7	1164.6
137.5°	493.7	549.0	709.3	974.9	1103.3
140°	512.8	564.4	709.3	951.6	1068.8
142.5°	532.0	579.8	713.2	924.6	1034.3
145°	556.0	602.8	714.1	884.0	977.7
147.5°	584.7	626.0	719.9	854.8	926.9
150°	603.9	641.4	723.7	835.3	896.2
152.5°	623.1	656.8	723.7	819.7	869.4
155°	651.8	675.2	728.5	801.2	838.7
157.5°	674.8	697.3	734.3	789.5	816.7
160°	690.2	708.9	738.1	781.8	805.2
162.5°	701.7	720.4	741.9	777.7	793.7
165°	723.7	733.1	747.7	767.2	781.2
167.5°	736.2	744.6	752.5	762.2	770.7
170°	747.7	752.4	752.5	762.2	766.8
172.5°	751.5	759.9	756.3	758.3	763.0
175°	762.1	766.7	762.1	757.2	752.5
177.5°	762.1	765.8	762.1	762.0	758.2
180°	762.1	762.1	762.1	762.1	762.1

(END OF REPORT)