

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: P621759

Luminaire Tested: VLT-FB-025U-100D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621759
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-025U-100D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - BATWING
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

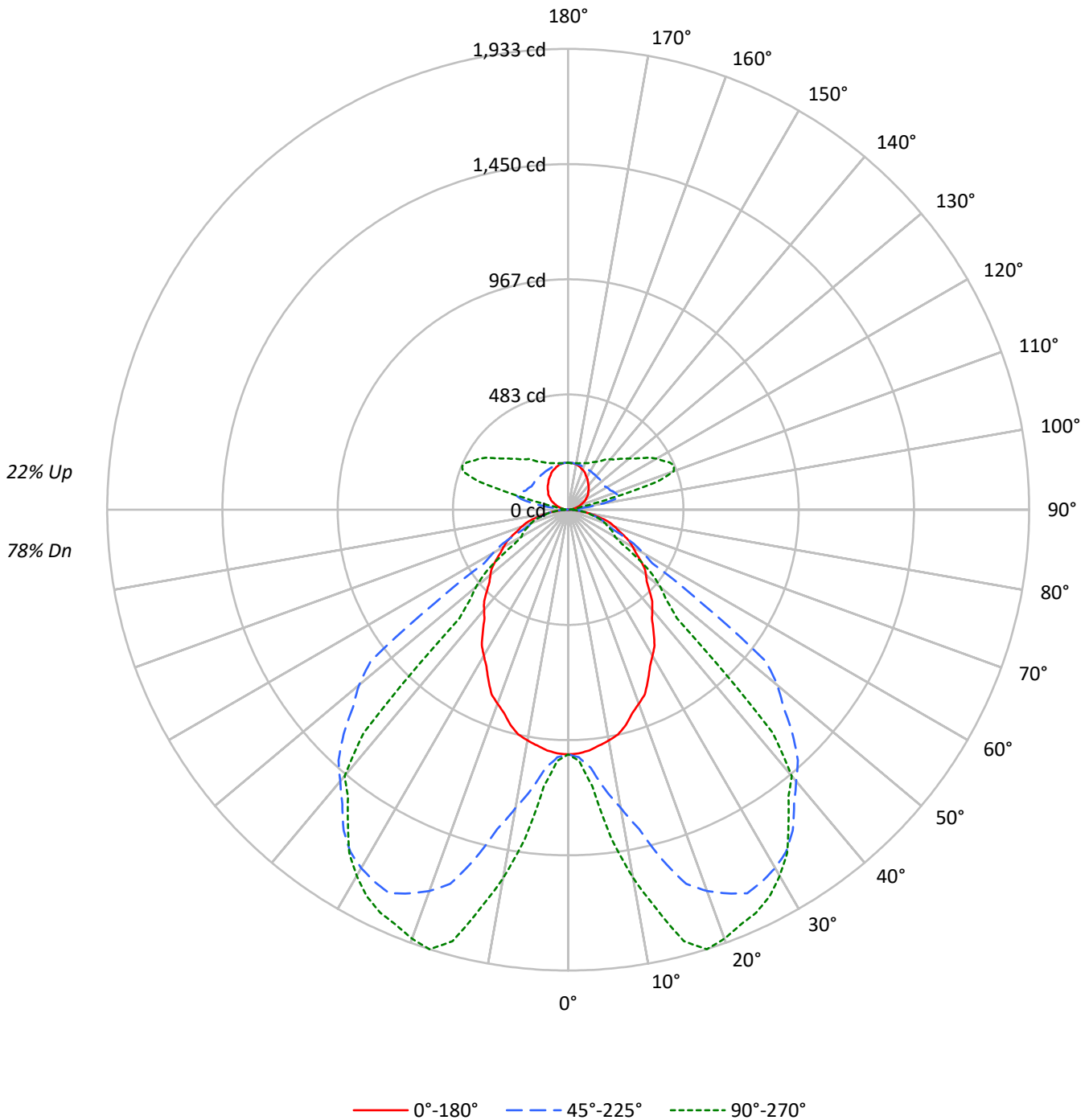
Lumens per Lamp: N/A
Luminaire Lumens: 4736.7 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 37.5
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									
RC	80									70									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	114	114	114	114	108	108	108	108	99	99	99	90	90	90	82	82	82	82	82	82	82	82	82	78													
1	105	101	97	94	100	96	93	90	88	86	83	81	79	77	74	72	71	71	71	71	71	71	71	67													
2	96	89	83	78	92	85	80	76	78	74	71	72	69	66	66	63	61	61	61	61	61	61	61	58													
3	89	79	72	66	84	76	70	64	70	65	60	64	60	57	59	56	53	53	53	53	53	53	53	50													
4	81	71	63	57	78	68	61	55	63	57	52	58	53	49	53	50	46	46	46	46	46	46	46	44													
5	75	64	55	50	72	61	54	48	57	50	46	52	47	43	48	44	41	41	41	41	41	41	41	38													
6	70	57	49	43	66	55	48	42	51	45	40	48	42	38	44	40	36	36	36	36	36	36	36	34													
7	64	52	44	38	61	50	43	38	47	40	36	43	38	34	40	36	32	32	32	32	32	32	32	30													
8	60	47	40	34	57	46	39	34	43	36	32	40	34	31	37	33	29	29	29	29	29	29	29	27													
9	56	44	36	31	53	42	35	30	39	33	29	37	31	28	34	30	26	26	26	26	26	26	26	24													
10	52	40	33	28	50	39	32	27	36	30	26	34	29	25	32	27	24	24	24	24	24	24	24	22													

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	2.3
10°-20°	408.1	8.6
20°-30°	691.2	14.6
30°-40°	838.5	17.7
40°-50°	738.0	15.6
50°-60°	456.7	9.6
60°-70°	247.6	5.2
70°-80°	141.1	3.0
80°-90°	46.6	1.0
90°-100°	24.2	0.5
100°-110°	172.6	3.6
110°-120°	234.3	4.9
120°-130°	190.7	4.0
130°-140°	153.4	3.2
140°-150°	120.9	2.6
150°-160°	88.4	1.9
160°-170°	54.9	1.2
170°-180°	18.7	0.4
0°-30°	1210.0	25.5
0°-40°	2048.5	43.2
0°-60°	3243.2	68.5
0°-90°	3678.4	77.7
90°-120°	431.2	9.1
90°-150°	896.2	18.9
90°-180°	1058.0	22.3
0°-180°	4736.7	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	1	2	4	4	2
95°	10	18	10	11	14	11
105°	38	59	224	286	190	40
115°	68	83	193	402	470	68
125°	98	111	182	318	377	87
135°	121	135	183	262	301	93
145°	144	156	185	228	253	90
155°	168	175	188	207	217	77
165°	187	190	193	198	202	53
175°	197	198	197	196	194	19
180°	197	197	197	197	197	



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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	20.0	18.9	15.7	14.1
90°	0.0	1.2	2.5	3.7	3.7
92.5°	3.0	4.2	5.5	7.7	8.7
95°	9.9	18.4	9.9	11.2	13.6
97.5°	17.6	35.3	72.9	21.5	18.6
100°	23.5	44.1	146.2	43.0	28.5
102.5°	29.5	51.1	197.8	113.6	62.2
105°	38.4	59.0	224.3	286.5	189.6
107.5°	47.3	62.8	214.1	417.0	390.5
110°	53.3	67.8	208.2	438.1	470.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	59.2	73.8	202.2	425.7	480.7
115°	68.1	82.7	193.3	401.8	469.6
117.5°	77.3	91.6	191.1	375.8	445.6
120°	84.3	97.6	187.1	356.0	428.7
122.5°	89.2	103.5	182.1	339.0	405.9
125°	97.9	111.2	182.1	318.5	376.7
127.5°	105.1	118.6	182.4	294.7	352.1
130°	109.0	123.6	183.4	278.8	333.3
132.5°	114.0	128.5	183.4	271.6	316.4
135°	121.4	134.8	183.4	262.3	301.1
137.5°	127.6	141.9	183.4	252.0	285.2
140°	132.6	145.9	183.4	246.0	276.3
142.5°	137.5	149.9	184.4	239.0	267.4
145°	143.7	155.8	184.6	228.5	252.8
147.5°	151.2	161.8	186.1	221.0	239.6
150°	156.1	165.8	187.1	216.0	231.7
152.5°	161.1	169.8	187.1	211.9	224.8
155°	168.5	174.6	188.3	207.1	216.8
157.5°	174.5	180.3	189.8	204.1	211.1
160°	178.4	183.3	190.8	202.1	208.2
162.5°	181.4	186.2	191.8	201.1	205.2
165°	187.1	189.5	193.3	198.3	202.0
167.5°	190.3	192.5	194.5	197.1	199.2
170°	193.3	194.5	194.5	197.0	198.2
172.5°	194.3	196.5	195.5	196.0	197.3
175°	197.0	198.2	197.0	195.7	194.5
177.5°	197.0	198.0	197.0	197.0	196.0
180°	197.0	197.0	197.0	197.0	197.0

(END OF REPORT)