

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: P621891

Luminaire Tested: VLT-FB-150U-050D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621891
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-150U-050D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - BATWING
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

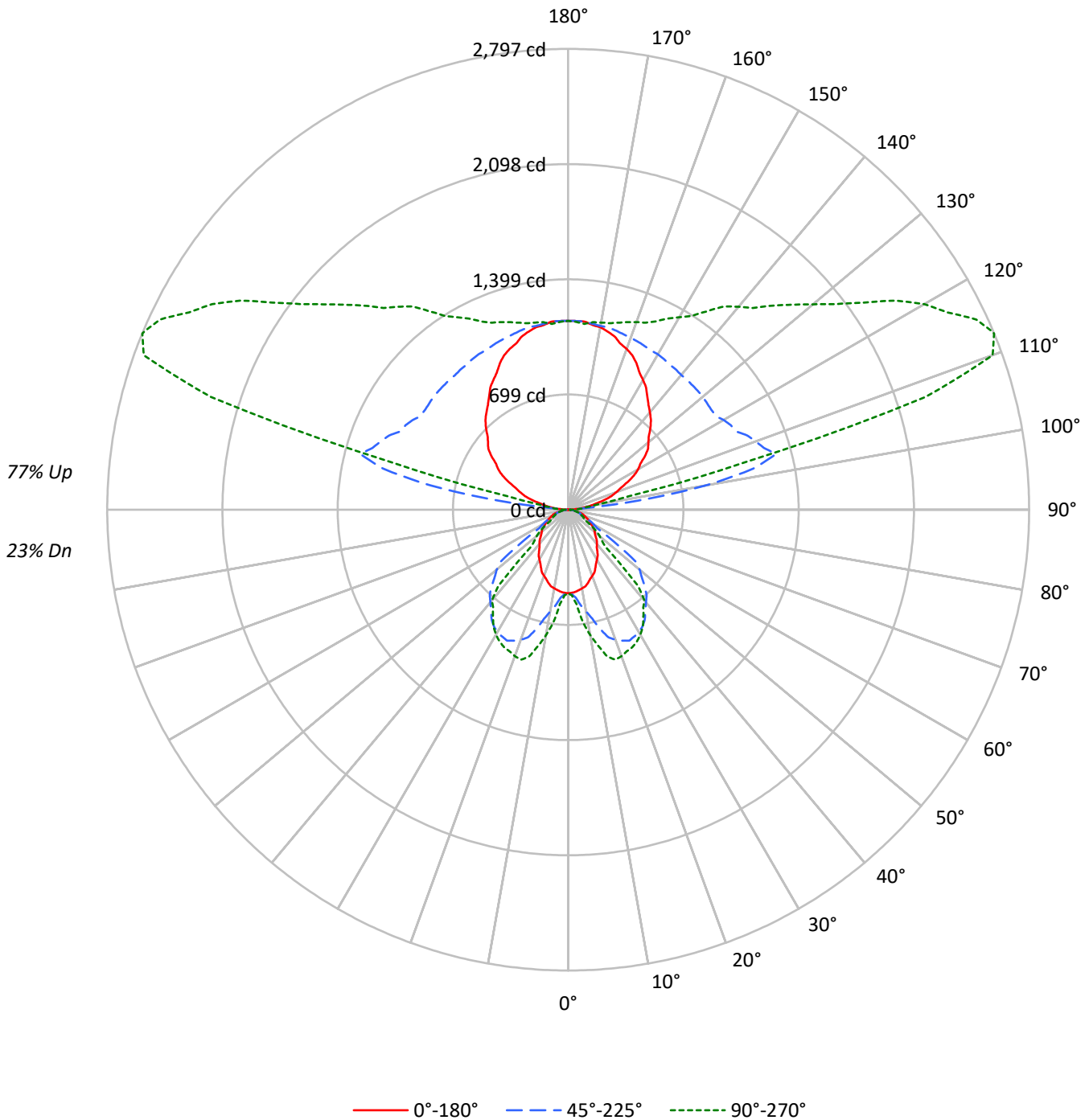
Lumens per Lamp: N/A
Luminaire Lumens: 7975.8 lumens
Efficiency: N/A
Efficacy: 126.6 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 63
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	0
RCR																		
0	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	23
1	92	88	84	81	82	78	75	73	60	58	56	43	42	41	28	27	27	20
2	84	77	71	67	74	69	64	60	53	50	47	38	36	35	25	24	23	17
3	77	68	61	56	68	61	55	50	47	43	40	34	32	30	22	21	20	15
4	70	60	53	47	62	54	47	43	42	37	34	30	28	25	20	18	17	13
5	64	53	46	40	57	48	41	36	37	33	29	27	24	22	18	16	15	11
6	59	48	40	35	52	43	36	32	33	29	25	25	22	19	16	15	13	10
7	55	43	35	30	48	39	32	28	30	26	22	22	19	17	15	13	12	9
8	50	39	32	27	45	35	29	24	27	23	20	20	17	15	14	12	11	8
9	47	35	28	23	42	32	26	21	25	21	17	19	16	13	13	11	9	7
10	44	32	25	21	39	29	23	19	23	19	16	17	14	12	12	10	9	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3636	3636	3636
5°	3605	3865	4139
10°	3534	4570	5643
15°	3428	5570	6870
20°	3264	6417	7220
25°	3090	6939	7290
30°	2893	7100	7253
35°	2697	7100	6964
40°	2537	6879	6743
45°	2414	6667	3229
50°	2346	6312	2782
55°	2281	4226	2203
60°	2217	2572	1596
65°	2168	1958	1661
70°	2140	1708	1708
75°	2085	1769	1713
80°	1831	1789	1703
85°	1359	1869	1614

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6667 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.6	0.7
10°-20°	201.5	2.5
20°-30°	341.2	4.3
30°-40°	413.9	5.2
40°-50°	364.3	4.6
50°-60°	225.5	2.8
60°-70°	122.2	1.5
70°-80°	69.6	0.9
80°-90°	25.4	0.3
90°-100°	140.9	1.8
100°-110°	1004.3	12.6
110°-120°	1363.4	17.1
120°-130°	1109.7	13.9
130°-140°	892.5	11.2
140°-150°	703.6	8.8
150°-160°	514.5	6.5
160°-170°	319.6	4.0
170°-180°	109.0	1.4
0°-30°	597.3	7.5
0°-40°	1011.2	12.7
0°-60°	1601.0	20.1
0°-90°	1818.3	22.8
90°-120°	2508.7	31.5
90°-150°	5214.5	65.4
90°-180°	6158.0	77.2
0°-180°	7975.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	507	507	507	507	507	
5°	500	517	536	560	575	47
15°	461	532	750	886	925	129
25°	390	534	876	902	921	179
35°	308	495	810	799	795	193
45°	238	407	657	557	318	185
55°	182	284	338	195	176	163
65°	128	160	115	99	98	127
75°	75	66	64	63	62	79
85°	16	22	23	21	20	20
90°	0	7	14	22	22	3
95°	58	107	58	65	79	65
105°	224	343	1305	1667	1103	236
115°	396	481	1125	2338	2732	394
125°	570	647	1060	1853	2192	506
135°	706	784	1067	1526	1752	544
145°	836	907	1074	1330	1471	525
155°	980	1016	1096	1205	1262	450
165°	1089	1103	1125	1154	1175	306
175°	1146	1153	1146	1139	1132	108
180°	1146	1146	1146	1146	1146	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	506.7	506.7	506.7	506.7	506.7
2.5°	505.0	510.7	513.3	518.3	520.7
5°	500.5	516.6	536.5	559.5	574.6
7.5°	492.5	521.3	584.3	656.9	687.9
10°	485.0	524.3	627.2	732.1	774.4
12.5°	476.8	527.4	677.4	804.6	847.7
15°	461.4	531.8	749.7	886.5	924.8
17.5°	441.4	534.6	812.3	929.9	954.4
20°	427.4	535.1	840.3	935.3	945.4
22.5°	414.2	535.6	860.1	922.1	930.5
25°	390.3	534.3	876.4	902.5	920.7
27.5°	366.4	528.3	868.3	889.4	902.5
30°	349.1	522.3	856.8	874.3	875.3
32.5°	332.6	512.3	839.5	844.6	843.2
35°	307.9	495.2	810.5	799.0	795.0
37.5°	284.8	472.5	768.0	749.7	748.7
40°	270.8	456.1	734.3	716.8	719.8
42.5°	257.7	437.3	703.8	683.3	626.7
45°	237.9	407.1	657.0	556.9	318.2
47.5°	220.8	372.6	604.1	298.3	273.9
50°	210.1	349.0	565.4	262.3	249.2
52.5°	199.4	327.0	515.1	235.8	218.7
55°	182.3	284.0	337.8	195.2	176.1
57.5°	166.0	238.7	206.4	151.7	131.0
60°	154.5	211.9	179.2	122.3	111.2
62.5°	143.8	189.9	152.8	108.5	106.3
65°	127.7	159.9	115.3	98.8	97.8
67.5°	112.7	131.4	87.9	89.0	87.9
70°	102.0	111.0	81.4	82.4	81.4
72.5°	92.1	91.5	74.8	74.1	73.1
75°	75.2	66.1	63.8	62.8	61.8
77.5°	57.5	48.8	51.5	50.4	49.4
80°	44.3	41.3	43.3	42.2	41.2
82.5°	32.7	33.8	35.0	33.1	32.1
85°	16.5	22.5	22.7	20.6	19.6
87.5°	4.9	11.2	11.9	11.7	10.9
90°	0.0	7.0	14.4	21.6	21.6
92.5°	17.3	24.4	31.7	44.8	50.5
95°	57.7	107.0	57.7	65.2	79.3
97.5°	102.4	205.3	423.9	125.1	108.1
100°	137.0	256.8	850.7	250.4	165.8
102.5°	171.6	297.1	1150.6	660.8	361.9
105°	223.5	343.3	1304.9	1667.0	1103.0
107.5°	275.4	365.6	1245.8	2426.1	2272.4
110°	310.0	394.6	1211.2	2549.2	2739.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	344.6	429.2	1176.6	2477.2	2797.2
115°	396.5	481.1	1124.7	2337.6	2732.3
117.5°	449.9	533.0	1111.7	2186.4	2592.5
120°	490.2	567.8	1088.6	2071.5	2494.4
122.5°	519.1	602.3	1059.8	1972.7	2361.8
125°	569.5	647.1	1059.8	1853.3	2191.6
127.5°	611.4	690.3	1061.2	1714.8	2048.9
130°	634.4	719.0	1067.0	1622.1	1939.3
132.5°	663.3	747.8	1067.0	1580.4	1841.3
135°	706.5	784.1	1067.0	1526.3	1751.9
137.5°	742.6	825.7	1067.0	1466.4	1659.6
140°	771.4	848.9	1067.0	1431.5	1607.7
142.5°	800.2	872.1	1072.7	1390.8	1555.8
145°	836.3	906.8	1074.2	1329.7	1470.7
147.5°	879.5	941.6	1082.8	1285.7	1394.3
150°	908.4	964.8	1088.6	1256.5	1348.1
152.5°	937.2	988.0	1088.6	1233.1	1307.8
155°	980.5	1015.7	1095.8	1205.2	1261.6
157.5°	1015.1	1048.9	1104.5	1187.6	1228.5
160°	1038.1	1066.3	1110.2	1175.9	1211.2
162.5°	1055.4	1083.6	1116.0	1169.9	1193.9
165°	1088.6	1102.7	1124.7	1154.0	1175.1
167.5°	1107.4	1120.0	1131.9	1146.6	1159.3
170°	1124.7	1131.7	1131.9	1146.4	1153.5
172.5°	1130.4	1143.1	1137.6	1140.7	1147.7
175°	1146.3	1153.3	1146.3	1138.9	1131.9
177.5°	1146.3	1151.9	1146.3	1146.2	1140.5
180°	1146.3	1146.3	1146.3	1146.3	1146.3

(END OF REPORT)