

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: P621807

Luminaire Tested: VLT-FB-075U-100D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621807
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-075U-100D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - BATWING
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

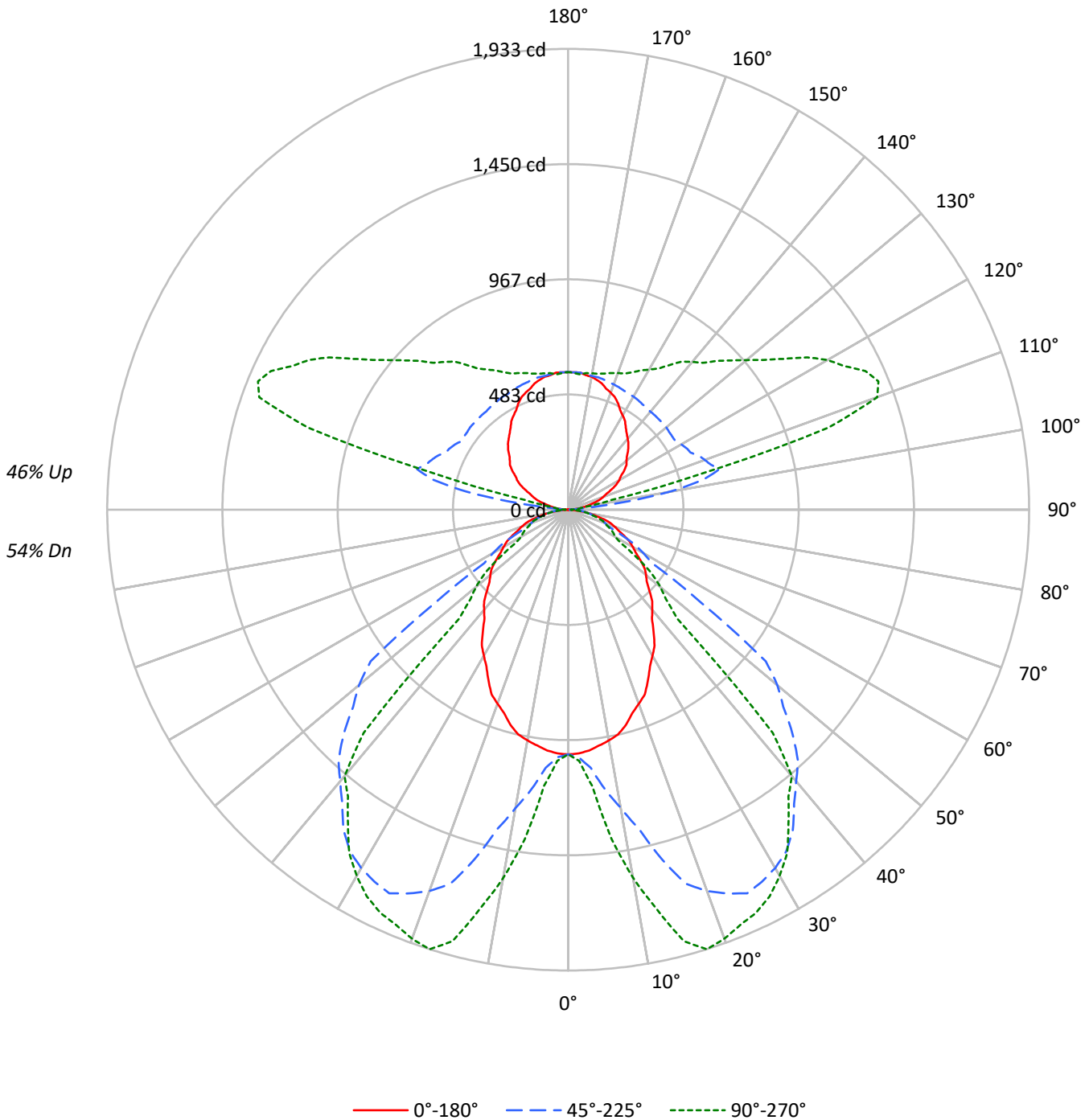
Lumens per Lamp: N/A
Luminaire Lumens: 6778.7 lumens
Efficiency: N/A
Efficacy: 135.6 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50
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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54
1	99	95	92	88	92	89	85	83	76	74	72	65	63	62	54	53	52	47
2	91	84	78	73	84	78	73	69	68	64	61	58	55	52	48	47	45	40
3	83	74	67	62	77	69	63	58	60	55	52	51	48	45	43	41	39	35
4	77	66	59	53	71	62	55	50	54	49	44	46	42	39	39	36	34	31
5	71	59	51	46	65	55	48	43	48	43	39	42	38	34	36	32	30	27
6	65	53	45	40	60	50	43	38	44	38	34	38	33	30	32	29	26	24
7	60	48	40	35	56	45	38	33	40	34	30	34	30	27	30	26	24	21
8	56	44	36	31	52	41	34	30	36	31	27	32	27	24	27	24	21	19
9	52	40	33	28	48	38	31	26	33	28	24	29	25	22	25	22	19	17
10	49	37	30	25	45	35	28	24	31	25	22	27	22	19	23	20	17	15

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	1.6
10°-20°	408.1	6.0
20°-30°	691.2	10.2
30°-40°	838.5	12.4
40°-50°	738.0	10.9
50°-60°	456.7	6.7
60°-70°	247.6	3.7
70°-80°	141.1	2.1
80°-90°	47.4	0.7
90°-100°	70.9	1.0
100°-110°	505.5	7.5
110°-120°	686.3	10.1
120°-130°	558.6	8.2
130°-140°	449.3	6.6
140°-150°	354.2	5.2
150°-160°	259.0	3.8
160°-170°	160.9	2.4
170°-180°	54.9	0.8
0°-30°	1210.0	17.8
0°-40°	2048.5	30.2
0°-60°	3243.2	47.8
0°-90°	3679.3	54.3
90°-120°	1262.7	18.6
90°-150°	2624.7	38.7
90°-180°	3099.0	45.7
0°-180°	6778.7	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	4	7	11	11	3
95°	29	54	29	33	40	32
105°	112	173	657	839	555	119
115°	200	242	566	1177	1375	198
125°	287	326	533	933	1103	255
135°	356	395	537	768	882	274
145°	421	456	541	669	740	264
155°	494	511	552	607	635	227
165°	548	555	566	581	592	154
175°	577	580	577	573	570	55
180°	577	577	577	577	577	

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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	20.5	19.8	17.2	15.5
90°	0.0	3.5	7.3	10.9	10.9
92.5°	8.7	12.3	16.0	22.6	25.4
95°	29.0	53.9	29.0	32.8	39.9
97.5°	51.5	103.3	213.4	62.9	54.4
100°	68.9	129.3	428.2	126.0	83.5
102.5°	86.4	149.5	579.2	332.6	182.2
105°	112.5	172.8	656.8	839.1	555.2
107.5°	138.6	184.0	627.1	1221.2	1143.8
110°	156.0	198.6	609.6	1283.1	1378.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	173.5	216.0	592.2	1246.9	1408.0
115°	199.6	242.2	566.1	1176.6	1375.3
117.5°	226.4	268.3	559.6	1100.5	1304.9
120°	246.8	285.8	548.0	1042.7	1255.6
122.5°	261.3	303.1	533.4	992.9	1188.8
125°	286.7	325.7	533.4	932.8	1103.2
127.5°	307.7	347.5	534.2	863.1	1031.3
130°	319.3	361.9	537.1	816.5	976.2
132.5°	333.9	376.4	537.1	795.5	926.8
135°	355.6	394.7	537.1	768.3	881.8
137.5°	373.8	415.6	537.1	738.1	835.4
140°	388.3	427.3	537.1	720.5	809.2
142.5°	402.8	439.0	540.0	700.1	783.1
145°	420.9	456.4	540.7	669.3	740.3
147.5°	442.7	473.9	545.0	647.2	701.8
150°	457.2	485.6	548.0	632.5	678.6
152.5°	471.7	497.3	548.0	620.7	658.3
155°	493.5	511.3	551.6	606.7	635.0
157.5°	510.9	528.0	555.9	597.8	618.3
160°	522.5	536.7	558.8	591.9	609.6
162.5°	531.3	545.5	561.7	588.9	600.9
165°	548.0	555.0	566.1	580.9	591.5
167.5°	557.4	563.8	569.7	577.1	583.5
170°	566.1	569.6	569.7	577.1	580.6
172.5°	569.0	575.4	572.6	574.2	577.7
175°	577.0	580.5	577.0	573.3	569.7
177.5°	577.0	579.8	577.0	576.9	574.1
180°	577.0	577.0	577.0	577.0	577.0

(END OF REPORT)