

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: P621770

Luminaire Tested: VLT-FB-050U-050D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621770
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-050U-050D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - BATWING
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3747.2 lumens
Efficiency: N/A
Efficacy: 129.2 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

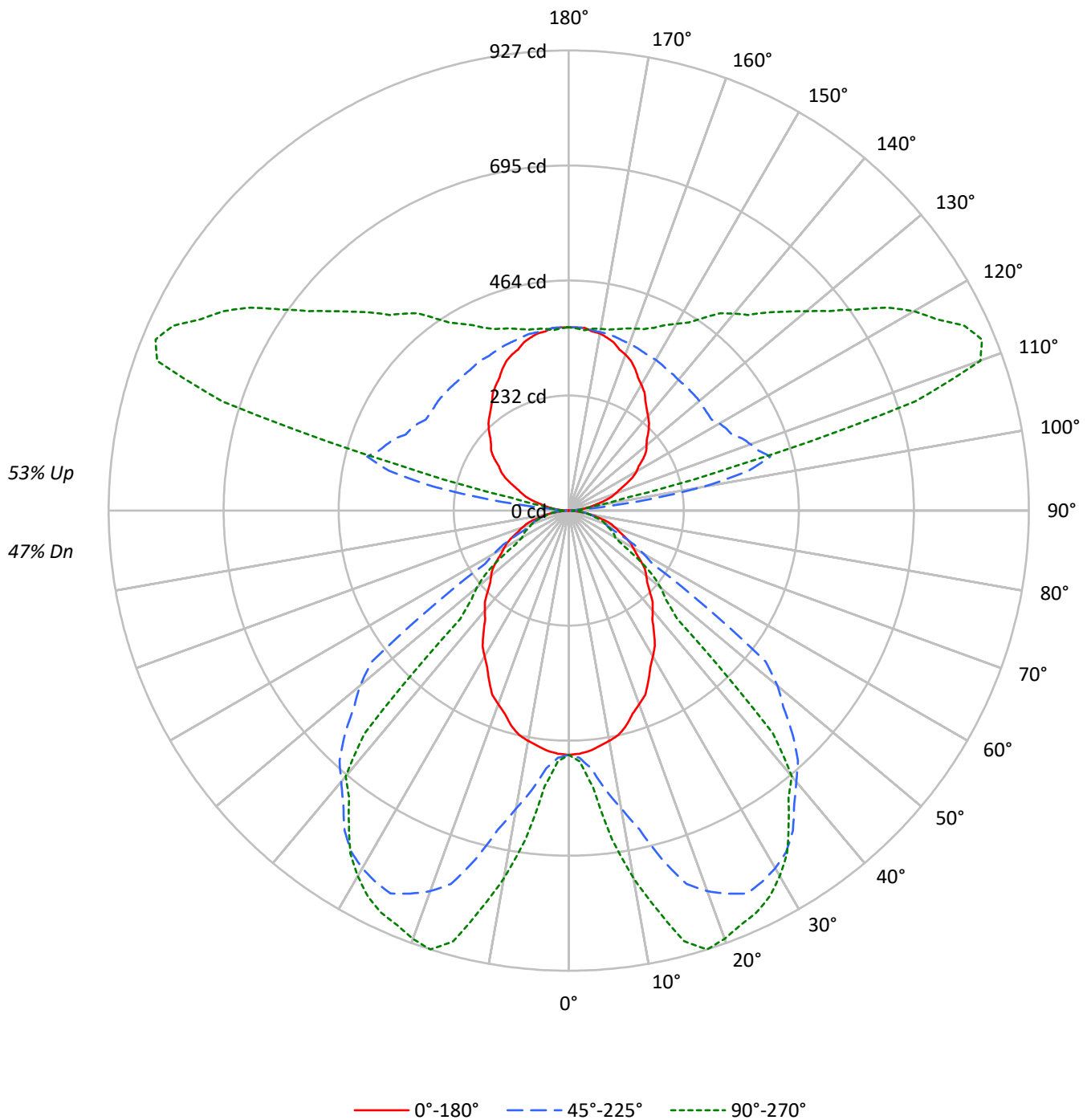
Input Watts (W): 29
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P621770

CATALOG NUMBER: VLT-FB-050U-050D-835-UNV-STD-W-4

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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	106	106	106	106	98	98	98	98	82	82	82		67	67	67		53
1	98	94	90	87	90	86	83	80	72	70	68		60	58	57		48
2	89	82	77	72	82	76	71	67	64	61	57		53	51	48		43
3	82	73	66	60	75	67	61	56	57	53	49		47	44	42		39
4	75	65	57	51	69	60	53	48	51	46	42		43	39	36		35
5	69	58	50	44	63	54	47	42	46	41	37		38	35	31		32
6	64	52	44	39	59	48	41	36	41	36	32		35	31	28		29
7	59	47	39	34	54	44	37	32	38	32	28		32	28	25		26
8	55	43	35	30	50	40	33	28	34	29	25		29	25	22		24
9	51	39	32	27	47	36	30	25	31	26	22		27	23	20		22
10	47	36	29	24	44	33	27	23	29	24	20		25	21	18		21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3531	3531	3531
5°	3501	3753	4019
10°	3432	4438	5480
15°	3328	5408	6671
20°	3169	6231	7010
25°	3001	6738	7078
30°	2809	6894	7043
35°	2619	6894	6763
40°	2464	6679	6548
45°	2344	6475	6136
50°	2277	6129	5702
55°	2214	4104	5139
60°	2153	2497	4550
65°	2105	1902	4163
70°	2077	1658	3858
75°	2024	1719	3664
80°	1777	1736	3653
85°	1317	1811	3564

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 6475 cd/sqm

TEST NUMBER: P621770

CATALOG NUMBER: VLT-FB-050U-050D-835-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.1	1.4
10°-20°	195.6	5.2
20°-30°	331.3	8.8
30°-40°	402.0	10.7
40°-50°	353.8	9.4
50°-60°	218.9	5.8
60°-70°	118.7	3.2
70°-80°	67.6	1.8
80°-90°	23.0	0.6
90°-100°	45.4	1.2
100°-110°	323.5	8.6
110°-120°	439.1	11.7
120°-130°	357.4	9.5
130°-140°	287.5	7.7
140°-150°	226.6	6.0
150°-160°	165.7	4.4
160°-170°	102.9	2.7
170°-180°	35.1	0.9
0°-30°	580.0	15.5
0°-40°	982.0	26.2
0°-60°	1554.7	41.5
0°-90°	1764.0	47.1
90°-120°	808.0	21.6
90°-150°	1679.5	44.8
90°-180°	1983.0	52.9
0°-180°	3747.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	492	492	492	492	492	
5°	486	502	521	543	558	46
15°	448	516	728	861	898	125
25°	379	519	851	876	894	174
35°	299	481	787	776	772	187
45°	231	395	638	541	309	179
55°	177	276	328	190	171	158
65°	124	155	112	96	95	123
75°	73	64	62	61	60	76
85°	16	22	22	20	19	19
90°	0	2	5	7	7	1
95°	19	34	19	21	26	21
105°	72	111	420	537	355	76
115°	128	155	362	753	880	127
125°	183	208	341	597	706	163
135°	228	252	344	492	564	175
145°	269	292	346	428	474	169
155°	316	327	353	388	406	145
165°	351	355	362	372	378	98
175°	369	372	369	367	365	35
180°	369	369	369	369	369	

TEST NUMBER: P621770

CATALOG NUMBER: VLT-FB-050U-050D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	492.0	492.0	492.0	492.0	492.0
2.5°	490.4	495.9	498.4	503.3	505.6
5°	486.0	501.6	521.0	543.3	558.0
7.5°	478.2	506.2	567.4	637.9	668.0
10°	471.0	509.1	609.0	710.9	752.0
12.5°	463.0	512.1	657.8	781.4	823.2
15°	448.0	516.4	728.0	860.8	898.0
17.5°	428.6	519.1	788.8	902.9	926.8
20°	415.0	519.6	816.0	908.2	918.0
22.5°	402.2	520.1	835.2	895.4	903.6
25°	379.0	518.8	851.0	876.4	894.0
27.5°	355.8	513.0	843.2	863.7	876.4
30°	339.0	507.2	832.0	849.0	850.0
32.5°	323.0	497.4	815.2	820.2	818.8
35°	299.0	480.9	787.0	775.9	772.0
37.5°	276.6	458.9	745.8	728.0	727.0
40°	263.0	442.9	713.0	696.1	699.0
42.5°	250.2	424.6	683.4	663.6	608.6
45°	231.0	395.3	638.0	540.7	309.0
47.5°	214.4	361.8	586.6	289.7	266.0
50°	204.0	338.9	549.0	254.7	242.0
52.5°	193.6	317.6	500.2	229.0	212.4
55°	177.0	275.8	328.0	189.6	171.0
57.5°	161.2	231.8	200.4	147.3	127.2
60°	150.0	205.7	174.0	118.8	108.0
62.5°	139.6	184.4	148.4	105.4	103.2
65°	124.0	155.3	112.0	96.0	95.0
67.5°	109.4	127.6	85.4	86.4	85.4
70°	99.0	107.8	79.0	80.0	79.0
72.5°	89.4	88.8	72.6	72.0	71.0
75°	73.0	64.2	62.0	61.0	60.0
77.5°	55.8	47.4	50.0	49.0	48.0
80°	43.0	40.1	42.0	41.0	40.0
82.5°	31.8	32.8	34.0	32.2	31.2
85°	16.0	21.9	22.0	20.0	19.0
87.5°	4.8	9.9	9.7	8.6	7.8
90°	0.0	2.3	4.6	7.0	7.0
92.5°	5.6	7.8	10.2	14.4	16.3
95°	18.6	34.5	18.6	21.0	25.5
97.5°	33.0	66.1	136.5	40.3	34.8
100°	44.1	82.7	274.0	80.7	53.4
102.5°	55.3	95.7	370.6	212.8	116.6
105°	72.0	110.6	420.3	536.9	355.3
107.5°	88.7	117.8	401.2	781.4	731.9
110°	99.8	127.1	390.1	821.1	882.4



TEST NUMBER: P621770

CATALOG NUMBER: VLT-FB-050U-050D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	111.0	138.2	378.9	797.9	900.9
115°	127.7	155.0	362.2	752.9	880.0
117.5°	144.9	171.7	358.0	704.2	835.0
120°	157.9	182.9	350.6	667.2	803.4
122.5°	167.2	194.0	341.3	635.4	760.7
125°	183.4	208.4	341.3	596.9	705.9
127.5°	196.9	222.3	341.8	552.3	659.9
130°	204.3	231.6	343.7	522.4	624.6
132.5°	213.6	240.9	343.7	509.0	593.0
135°	227.6	252.5	343.7	491.6	564.2
137.5°	239.2	266.0	343.7	472.3	534.5
140°	248.5	273.4	343.7	461.0	517.8
142.5°	257.7	280.9	345.5	448.0	501.1
145°	269.4	292.1	346.0	428.3	473.7
147.5°	283.3	303.3	348.8	414.1	449.1
150°	292.6	310.7	350.6	404.7	434.2
152.5°	301.9	318.2	350.6	397.1	421.2
155°	315.8	327.1	352.9	388.2	406.3
157.5°	326.9	337.8	355.7	382.5	395.7
160°	334.4	343.4	357.6	378.7	390.1
162.5°	339.9	349.0	359.4	376.8	384.5
165°	350.6	355.2	362.2	371.7	378.5
167.5°	356.7	360.7	364.6	369.3	373.4
170°	362.2	364.5	364.6	369.2	371.5
172.5°	364.1	368.2	366.4	367.4	369.7
175°	369.2	371.5	369.2	366.8	364.6
177.5°	369.2	371.0	369.2	369.2	367.3
180°	369.2	369.2	369.2	369.2	369.2

(END OF REPORT)