

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: P621775

Luminaire Tested: VLT-FB-050U-075D-830-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621775  
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-075D-830-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - BATWING  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

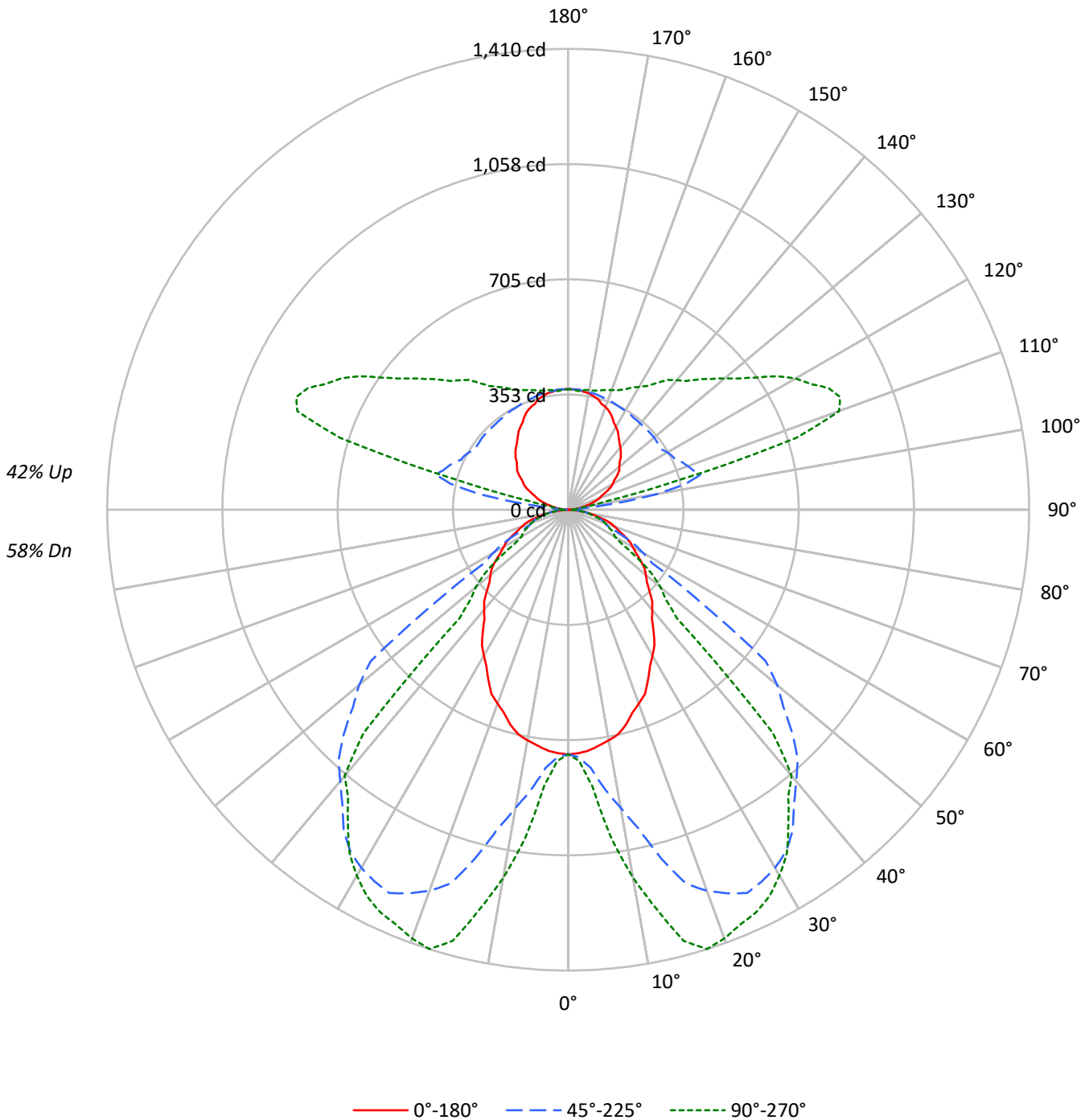
Lumens per Lamp: N/A  
Luminaire Lumens: 4663.7 lumens  
Efficiency: N/A  
Efficacy: 128.8 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 36.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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: P621775  
CATALOG NUMBER: VLT-FB-050U-075D-830-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P621775

CATALOG NUMBER: VLT-FB-050U-075D-830-UNV-STD-W-4

**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	109	109	109	109	101	101	101	101	88	88	88	75	75	75	63	63	63	58
1	100	96	92	89	93	90	87	84	78	75	73	67	65	64	57	56	55	50
2	92	85	79	74	85	79	74	70	69	65	62	60	57	54	51	49	47	43
3	84	75	68	62	78	70	64	59	61	57	53	53	50	47	46	43	41	37
4	77	67	59	53	72	63	56	51	55	50	46	48	44	41	41	38	36	32
5	71	60	52	46	66	56	49	44	50	44	40	43	39	35	37	34	31	28
6	66	54	46	40	61	51	44	38	45	39	35	39	35	31	34	31	28	25
7	61	49	41	35	57	46	39	34	41	35	31	36	31	28	31	28	25	22
8	56	44	37	31	53	42	35	30	37	31	27	33	28	25	29	25	22	20
9	53	40	33	28	49	38	32	27	34	29	25	30	26	22	26	23	20	18
10	49	37	30	25	46	35	29	24	31	26	22	28	23	20	24	21	18	16

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5370	5370	5370
5°	5324	5708	6113
10°	5219	6749	8334
15°	5061	8225	10146
20°	4820	9477	10661
25°	4564	10247	10765
30°	4272	10484	10711
35°	3983	10485	10285
40°	3747	10158	9959
45°	3565	9847	4769
50°	3464	9321	4108
55°	3368	6240	3254
60°	3274	3798	2358
65°	3202	2892	2454
70°	3160	2520	2520
75°	3078	2615	2531
80°	2703	2641	2513
85°	2001	2758	2379

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 9847 cd/sqm



TEST NUMBER: P621775

CATALOG NUMBER: VLT-FB-050U-075D-830-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.7	1.7
10°-20°	297.5	6.4
20°-30°	503.9	10.8
30°-40°	611.3	13.1
40°-50°	538.1	11.5
50°-60°	333.0	7.1
60°-70°	180.5	3.9
70°-80°	102.8	2.2
80°-90°	34.5	0.7
90°-100°	45.4	1.0
100°-110°	323.2	6.9
110°-120°	438.7	9.4
120°-130°	357.1	7.7
130°-140°	287.2	6.2
140°-150°	226.4	4.9
150°-160°	165.6	3.5
160°-170°	102.8	2.2
170°-180°	35.1	0.8
0°-30°	882.1	18.9
0°-40°	1493.4	32.0
0°-60°	2364.4	50.7
0°-90°	2682.3	57.5
90°-120°	807.3	17.3
90°-150°	1677.9	36.0
90°-180°	1981.0	42.5
0°-180°	4663.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	748	748	748	748	748	
5°	739	763	792	826	849	70
15°	681	785	1107	1309	1366	191
25°	576	789	1294	1333	1360	265
35°	455	731	1197	1180	1174	285
45°	351	601	970	822	470	273
55°	269	419	499	288	260	241
65°	189	236	170	146	144	187
75°	111	98	94	93	91	116
85°	24	33	34	30	29	30
90°	0	2	5	7	7	2
95°	19	34	19	21	26	21
105°	72	110	420	536	355	76
115°	128	155	362	752	879	127
125°	183	208	341	596	705	163
135°	227	252	343	491	564	175
145°	269	292	346	428	473	169
155°	316	327	353	388	406	145
165°	350	355	362	371	378	98
175°	369	371	369	366	364	35
180°	369	369	369	369	369	



TEST NUMBER: P621775

CATALOG NUMBER: VLT-FB-050U-075D-830-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	748.3	748.3	748.3	748.3	748.3
2.5°	745.8	754.2	758.0	765.4	768.9
5°	739.1	762.9	792.4	826.3	848.6
7.5°	727.3	769.8	862.9	970.1	1015.9
10°	716.3	774.3	926.2	1081.2	1143.7
12.5°	704.2	778.8	1000.4	1188.3	1252.0
15°	681.3	785.4	1107.2	1309.2	1365.7
17.5°	651.8	789.5	1199.6	1373.2	1409.5
20°	631.2	790.3	1241.0	1381.3	1396.1
22.5°	611.7	791.0	1270.2	1361.7	1374.2
25°	576.4	789.1	1294.2	1332.9	1359.6
27.5°	541.1	780.2	1282.4	1313.5	1332.9
30°	515.6	771.3	1265.3	1291.2	1292.7
32.5°	491.2	756.5	1239.8	1247.4	1245.3
35°	454.7	731.3	1196.9	1180.0	1174.1
37.5°	420.7	697.9	1134.2	1107.1	1105.7
40°	400.0	673.6	1084.4	1058.6	1063.1
42.5°	380.5	645.8	1039.3	1009.2	925.6
45°	351.3	601.1	970.3	822.4	469.9
47.5°	326.1	550.3	892.1	440.5	404.5
50°	310.3	515.5	834.9	387.4	368.0
52.5°	294.4	483.0	760.7	348.3	323.0
55°	269.2	419.4	498.8	288.3	260.1
57.5°	245.2	352.5	304.8	224.1	193.5
60°	228.1	312.9	264.6	180.6	164.3
62.5°	212.3	280.4	225.7	160.2	157.0
65°	188.6	236.2	170.3	146.0	144.5
67.5°	166.4	194.0	129.9	131.4	129.9
70°	150.6	163.9	120.1	121.6	120.1
72.5°	136.0	135.1	110.4	109.5	108.0
75°	111.0	97.6	94.3	92.7	91.3
77.5°	84.9	72.1	76.0	74.5	73.0
80°	65.4	60.9	63.9	62.3	60.8
82.5°	48.4	49.9	51.7	48.9	47.5
85°	24.3	33.3	33.5	30.4	28.9
87.5°	7.3	14.9	14.3	12.3	11.1
90°	0.0	2.3	4.6	7.0	7.0
92.5°	5.6	7.8	10.2	14.4	16.2
95°	18.6	34.4	18.6	21.0	25.5
97.5°	32.9	66.1	136.4	40.2	34.8
100°	44.1	82.6	273.7	80.6	53.4
102.5°	55.2	95.6	370.3	212.6	116.5
105°	71.9	110.5	419.9	536.4	354.9
107.5°	88.6	117.7	400.9	780.7	731.2
110°	99.8	127.0	389.7	820.3	881.6



TEST NUMBER: P621775

CATALOG NUMBER: VLT-FB-050U-075D-830-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	110.9	138.1	378.6	797.1	900.1
115°	127.6	154.8	361.9	752.2	879.2
117.5°	144.8	171.5	357.7	703.6	834.2
120°	157.8	182.7	350.3	666.6	802.7
122.5°	167.0	193.8	341.0	634.8	760.0
125°	183.3	208.2	341.0	596.4	705.2
127.5°	196.7	222.1	341.5	551.8	659.3
130°	204.2	231.4	343.3	522.0	624.1
132.5°	213.4	240.6	343.3	508.6	592.5
135°	227.3	252.3	343.3	491.1	563.7
137.5°	238.9	265.7	343.3	471.9	534.0
140°	248.2	273.2	343.3	460.6	517.3
142.5°	257.5	280.6	345.2	447.6	500.6
145°	269.1	291.8	345.7	427.9	473.3
147.5°	283.0	303.0	348.4	413.7	448.7
150°	292.3	310.5	350.3	404.3	433.8
152.5°	301.6	317.9	350.3	396.8	420.8
155°	315.5	326.8	352.6	387.8	406.0
157.5°	326.6	337.5	355.4	382.2	395.3
160°	334.1	343.1	357.3	378.4	389.7
162.5°	339.6	348.7	359.1	376.5	384.2
165°	350.3	354.8	361.9	371.3	378.1
167.5°	356.3	360.4	364.2	369.0	373.0
170°	361.9	364.2	364.2	368.9	371.2
172.5°	363.8	367.8	366.1	367.1	369.3
175°	368.9	371.1	368.9	366.5	364.2
177.5°	368.9	370.7	368.9	368.8	367.0
180°	368.9	368.9	368.9	368.9	368.9

(END OF REPORT)