

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P621771

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

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621771  
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-840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

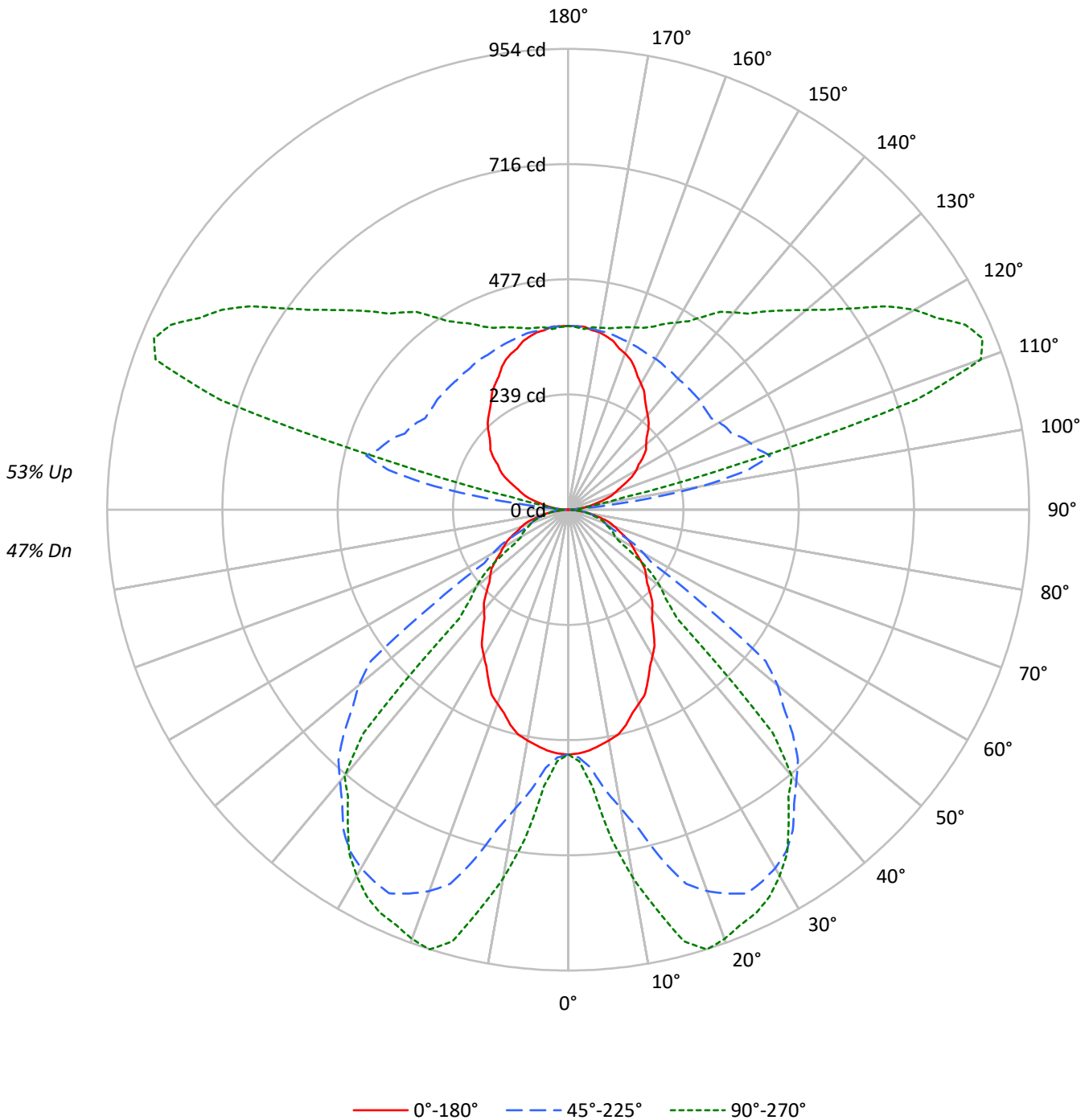
Lumens per Lamp: N/A  
Luminaire Lumens: 3858.9 lumens  
Efficiency: N/A  
Efficacy: 133.1 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 29  
Input Voltage (V): 120  
Input Current (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



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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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47
1	98	94	90	87	90	86	83	80	72	70	68	60	58	57	48	47	46	41
2	89	82	77	72	82	76	71	67	64	61	57	53	51	48	43	41	40	35
3	82	73	66	60	75	67	61	56	57	53	49	47	44	42	39	36	35	30
4	75	65	57	51	69	60	53	48	51	46	42	43	39	36	35	32	30	26
5	69	58	50	44	63	54	47	42	46	41	37	38	35	31	32	29	26	23
6	64	52	44	39	59	48	41	36	41	36	32	35	31	28	29	26	23	21
7	59	47	39	34	54	44	37	32	38	32	28	32	28	25	26	23	21	18
8	55	43	35	30	50	40	33	28	34	29	25	29	25	22	24	21	19	16
9	51	39	32	27	47	36	30	25	31	26	22	27	23	20	22	19	17	15
10	47	36	29	24	44	33	27	23	29	24	20	25	21	18	21	18	15	13

**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	1.4
10°-20°	201.5	5.2
20°-30°	341.2	8.8
30°-40°	413.9	10.7
40°-50°	364.3	9.4
50°-60°	225.5	5.8
60°-70°	122.2	3.2
70°-80°	69.6	1.8
80°-90°	23.6	0.6
90°-100°	46.8	1.2
100°-110°	333.1	8.6
110°-120°	452.2	11.7
120°-130°	368.1	9.5
130°-140°	296.0	7.7
140°-150°	233.4	6.0
150°-160°	170.7	4.4
160°-170°	106.0	2.7
170°-180°	36.1	0.9
0°-30°	597.3	15.5
0°-40°	1011.2	26.2
0°-60°	1601.0	41.5
0°-90°	1816.5	47.1
90°-120°	832.1	21.6
90°-150°	1729.6	44.8
90°-180°	2042.0	52.9
0°-180°	3858.9	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	2	5	7	7	1
95°	19	36	19	22	26	21
105°	74	114	433	553	366	78
115°	132	160	373	775	906	131
125°	189	215	352	615	727	168
135°	234	260	354	506	581	180
145°	277	301	356	441	488	174
155°	325	337	364	400	418	149
165°	361	366	373	383	390	101
175°	380	382	380	378	375	36
180°	380	380	380	380	380	

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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	10.2	10.0	8.8	8.0
90°	0.0	2.3	4.8	7.2	7.2
92.5°	5.7	8.1	10.5	14.9	16.7
95°	19.1	35.5	19.1	21.6	26.3
97.5°	34.0	68.1	140.6	41.5	35.9
100°	45.4	85.2	282.2	83.1	55.0
102.5°	56.9	98.5	381.6	219.2	120.0
105°	74.1	113.9	432.8	552.9	365.9
107.5°	91.3	121.3	413.2	804.7	753.7
110°	102.8	130.9	401.7	845.5	908.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	114.3	142.4	390.2	821.6	927.8
115°	131.5	159.6	373.0	775.3	906.3
117.5°	149.2	176.8	368.7	725.2	859.9
120°	162.6	188.3	361.1	687.1	827.4
122.5°	172.2	199.8	351.5	654.3	783.4
125°	188.9	214.6	351.5	614.7	726.9
127.5°	202.8	229.0	352.0	568.8	679.6
130°	210.4	238.5	353.9	538.0	643.2
132.5°	220.0	248.0	353.9	524.2	610.7
135°	234.3	260.1	353.9	506.2	581.1
137.5°	246.3	273.9	353.9	486.4	550.5
140°	255.9	281.6	353.9	474.8	533.2
142.5°	265.4	289.3	355.8	461.3	516.0
145°	277.4	300.8	356.3	441.0	487.8
147.5°	291.7	312.3	359.2	426.5	462.5
150°	301.3	320.0	361.1	416.8	447.2
152.5°	310.9	327.7	361.1	409.0	433.8
155°	325.2	336.9	363.5	399.8	418.5
157.5°	336.7	347.9	366.3	393.9	407.5
160°	344.3	353.7	368.2	390.0	401.7
162.5°	350.1	359.4	370.2	388.0	396.0
165°	361.1	365.7	373.0	382.8	389.8
167.5°	367.3	371.5	375.4	380.3	384.5
170°	373.0	375.4	375.4	380.3	382.6
172.5°	374.9	379.1	377.3	378.3	380.7
175°	380.2	382.5	380.2	377.8	375.4
177.5°	380.2	382.1	380.2	380.2	378.3
180°	380.2	380.2	380.2	380.2	380.2

(END OF REPORT)