

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: P621849

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

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621849  
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-100U-075D-840-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - BATWING  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

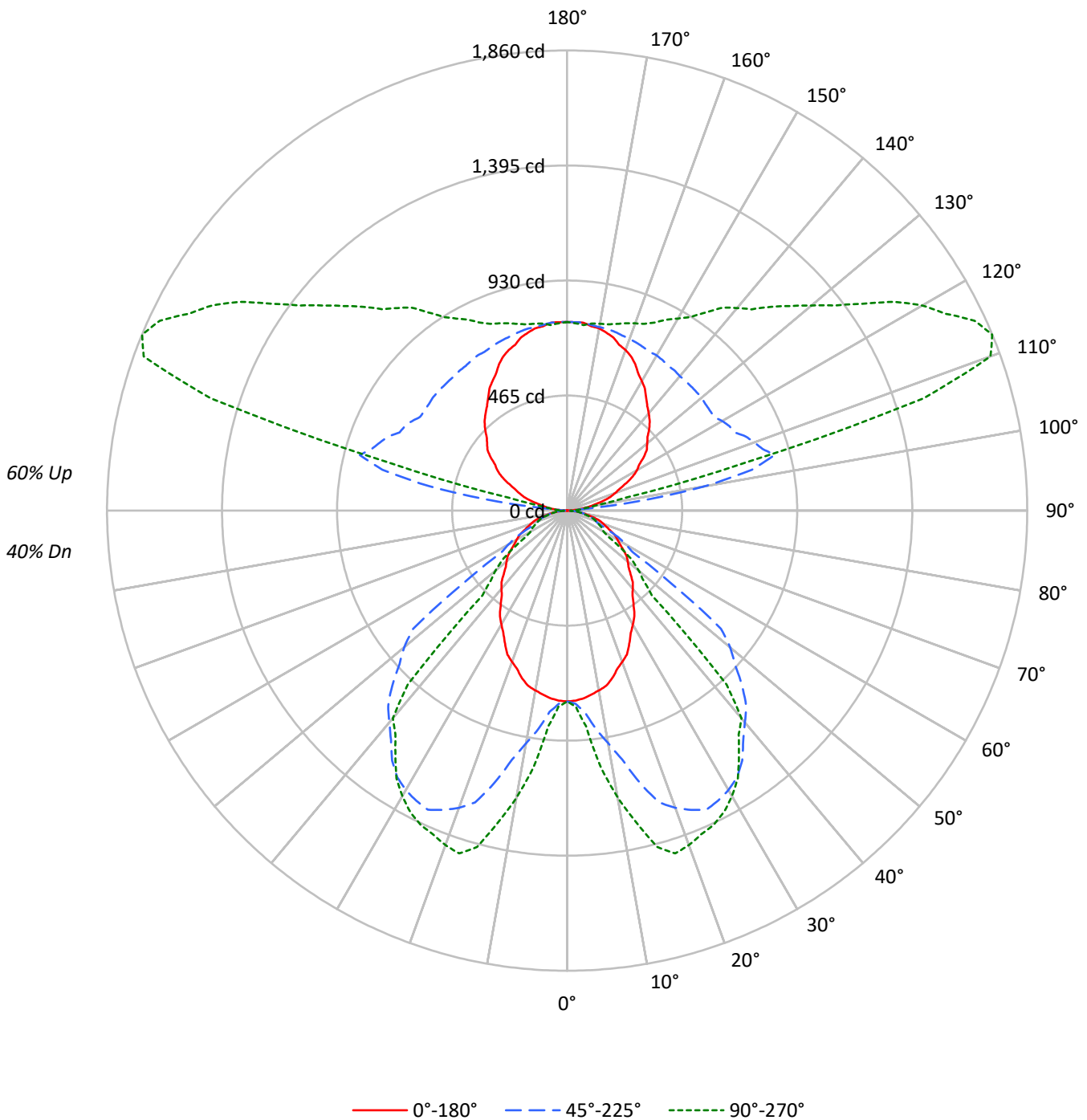
Lumens per Lamp: N/A  
Luminaire Lumens: 6859.1 lumens  
Efficiency: N/A  
Efficacy: 135.6 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 50.6  
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	50	30	10	50	30	10	0		
RCR																										
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40								
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	42	42	41	35								
2	88	81	75	70	80	74	69	65	61	58	55	49	47	45	38	36	35	30								
3	80	71	65	59	73	66	60	55	54	50	46	44	41	38	34	32	30	26								
4	74	63	56	50	67	58	52	47	48	44	40	39	36	33	31	28	27	23								
5	68	57	49	43	62	52	45	40	43	38	34	35	32	29	28	25	23	20								
6	62	51	43	37	57	47	40	35	39	34	30	32	28	25	25	23	21	18								
7	58	46	38	33	53	42	36	31	35	30	27	29	25	22	23	20	18	16								
8	54	42	34	29	49	38	32	27	32	27	24	27	23	20	21	18	16	14								
9	50	38	31	26	45	35	29	24	30	25	21	24	21	18	20	17	15	13								
10	46	35	28	23	42	32	26	22	27	22	19	22	19	16	18	15	13	11								

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

	0°	45°	90°
0°	5535	5535	5535
5°	5488	5883	6301
10°	5380	6957	8589
15°	5217	8478	10458
20°	4968	9769	10990
25°	4704	10562	11096
30°	4403	10807	11041
35°	4106	10807	10602
40°	3862	10470	10265
45°	3675	10149	4916
50°	3570	9608	4236
55°	3472	6433	3354
60°	3374	3915	2430
65°	3301	2982	2528
70°	3256	2597	2597
75°	3172	2695	2609
80°	2785	2719	2591
85°	2067	2841	2454

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 10149 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.2	1.2
10°-20°	306.7	4.5
20°-30°	519.4	7.6
30°-40°	630.1	9.2
40°-50°	554.6	8.1
50°-60°	343.2	5.0
60°-70°	186.1	2.7
70°-80°	106.0	1.5
80°-90°	36.4	0.5
90°-100°	93.7	1.4
100°-110°	667.6	9.7
110°-120°	906.4	13.2
120°-130°	737.7	10.8
130°-140°	593.3	8.7
140°-150°	467.8	6.8
150°-160°	342.0	5.0
160°-170°	212.4	3.1
170°-180°	72.4	1.1
0°-30°	909.3	13.3
0°-40°	1539.3	22.4
0°-60°	2437.2	35.5
0°-90°	2765.6	40.3
90°-120°	1667.7	24.3
90°-150°	3466.6	50.5
90°-180°	4094.0	59.7
0°-180°	6859.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	771	771	771	771	771	
5°	762	786	817	852	875	72
15°	702	810	1141	1350	1408	197
25°	594	813	1334	1374	1401	273
35°	469	754	1234	1216	1210	294
45°	362	620	1000	848	484	281
55°	278	432	514	297	268	248
65°	194	243	176	150	149	193
75°	114	101	97	96	94	120
85°	25	34	34	31	30	31
90°	0	5	10	14	14	3
95°	38	71	38	43	53	43
105°	149	228	868	1108	733	157
115°	264	320	748	1554	1816	262
125°	379	430	704	1232	1457	336
135°	470	521	709	1015	1165	361
145°	556	603	714	884	978	349
155°	652	675	728	801	839	299
165°	724	733	748	767	781	203
175°	762	767	762	757	752	72
180°	762	762	762	762	762	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	771.3	771.3	771.3	771.3	771.3
2.5°	768.8	777.3	781.3	788.9	792.6
5°	761.9	786.4	816.7	851.7	874.7
7.5°	749.6	793.5	889.5	999.9	1047.2
10°	738.3	798.1	954.7	1114.5	1178.8
12.5°	725.8	802.7	1031.2	1224.8	1290.5
15°	702.3	809.6	1141.2	1349.5	1407.7
17.5°	671.9	813.8	1236.5	1415.5	1452.9
20°	650.6	814.6	1279.2	1423.7	1439.1
22.5°	630.5	815.3	1309.3	1403.6	1416.5
25°	594.1	813.3	1334.0	1373.8	1401.4
27.5°	557.8	804.2	1321.8	1353.9	1373.8
30°	531.4	795.1	1304.2	1330.9	1332.5
32.5°	506.3	779.8	1277.9	1285.7	1283.6
35°	468.7	753.8	1233.7	1216.3	1210.2
37.5°	433.6	719.3	1169.1	1141.2	1139.6
40°	412.3	694.3	1117.7	1091.2	1095.8
42.5°	392.2	665.7	1071.3	1040.2	954.0
45°	362.1	619.6	1000.1	847.7	484.4
47.5°	336.1	567.2	919.6	454.1	417.0
50°	319.8	531.3	860.6	399.3	379.4
52.5°	303.5	497.8	784.1	359.0	333.0
55°	277.5	432.3	514.2	297.2	268.1
57.5°	252.7	363.4	314.1	231.0	199.4
60°	235.1	322.5	272.8	186.2	169.3
62.5°	218.8	289.0	232.6	165.1	161.8
65°	194.4	243.4	175.6	150.5	148.9
67.5°	171.5	200.0	133.9	135.4	133.9
70°	155.2	169.0	123.8	125.4	123.8
72.5°	140.1	139.2	113.8	112.8	111.3
75°	114.4	100.6	97.2	95.6	94.1
77.5°	87.5	74.3	78.4	76.8	75.2
80°	67.4	62.8	65.8	64.2	62.7
82.5°	49.8	51.4	53.3	50.4	48.9
85°	25.1	34.3	34.5	31.3	29.8
87.5°	7.5	15.8	15.7	14.1	12.9
90°	0.0	4.7	9.6	14.4	14.4
92.5°	11.5	16.2	21.1	29.8	33.5
95°	38.3	71.1	38.3	43.3	52.7
97.5°	68.1	136.5	281.8	83.1	71.9
100°	91.1	170.7	565.5	166.5	110.2
102.5°	114.1	197.5	764.9	439.3	240.6
105°	148.6	228.2	867.5	1108.2	733.3
107.5°	183.1	243.1	828.2	1612.8	1510.7
110°	206.1	262.3	805.2	1694.7	1821.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	229.1	285.3	782.2	1646.8	1859.6
115°	263.6	319.8	747.7	1554.0	1816.5
117.5°	299.1	354.4	739.0	1453.6	1723.5
120°	325.9	377.5	723.7	1377.1	1658.3
122.5°	345.1	400.4	704.5	1311.4	1570.1
125°	378.6	430.2	704.5	1232.1	1457.0
127.5°	406.4	458.9	705.5	1140.0	1362.1
130°	421.8	478.0	709.3	1078.4	1289.3
132.5°	440.9	497.2	709.3	1050.7	1224.1
135°	469.7	521.2	709.3	1014.7	1164.6
137.5°	493.7	549.0	709.3	974.9	1103.3
140°	512.8	564.4	709.3	951.6	1068.8
142.5°	532.0	579.8	713.2	924.6	1034.3
145°	556.0	602.8	714.1	884.0	977.7
147.5°	584.7	626.0	719.9	854.8	926.9
150°	603.9	641.4	723.7	835.3	896.2
152.5°	623.1	656.8	723.7	819.7	869.4
155°	651.8	675.2	728.5	801.2	838.7
157.5°	674.8	697.3	734.3	789.5	816.7
160°	690.2	708.9	738.1	781.8	805.2
162.5°	701.7	720.4	741.9	777.7	793.7
165°	723.7	733.1	747.7	767.2	781.2
167.5°	736.2	744.6	752.5	762.2	770.7
170°	747.7	752.4	752.5	762.2	766.8
172.5°	751.5	759.9	756.3	758.3	763.0
175°	762.1	766.7	762.1	757.2	752.5
177.5°	762.1	765.8	762.1	762.0	758.2
180°	762.1	762.1	762.1	762.1	762.1

(END OF REPORT)