

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: P621786

Luminaire Tested: VLT-FB-050U-100D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621786
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-100D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - BATWING
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

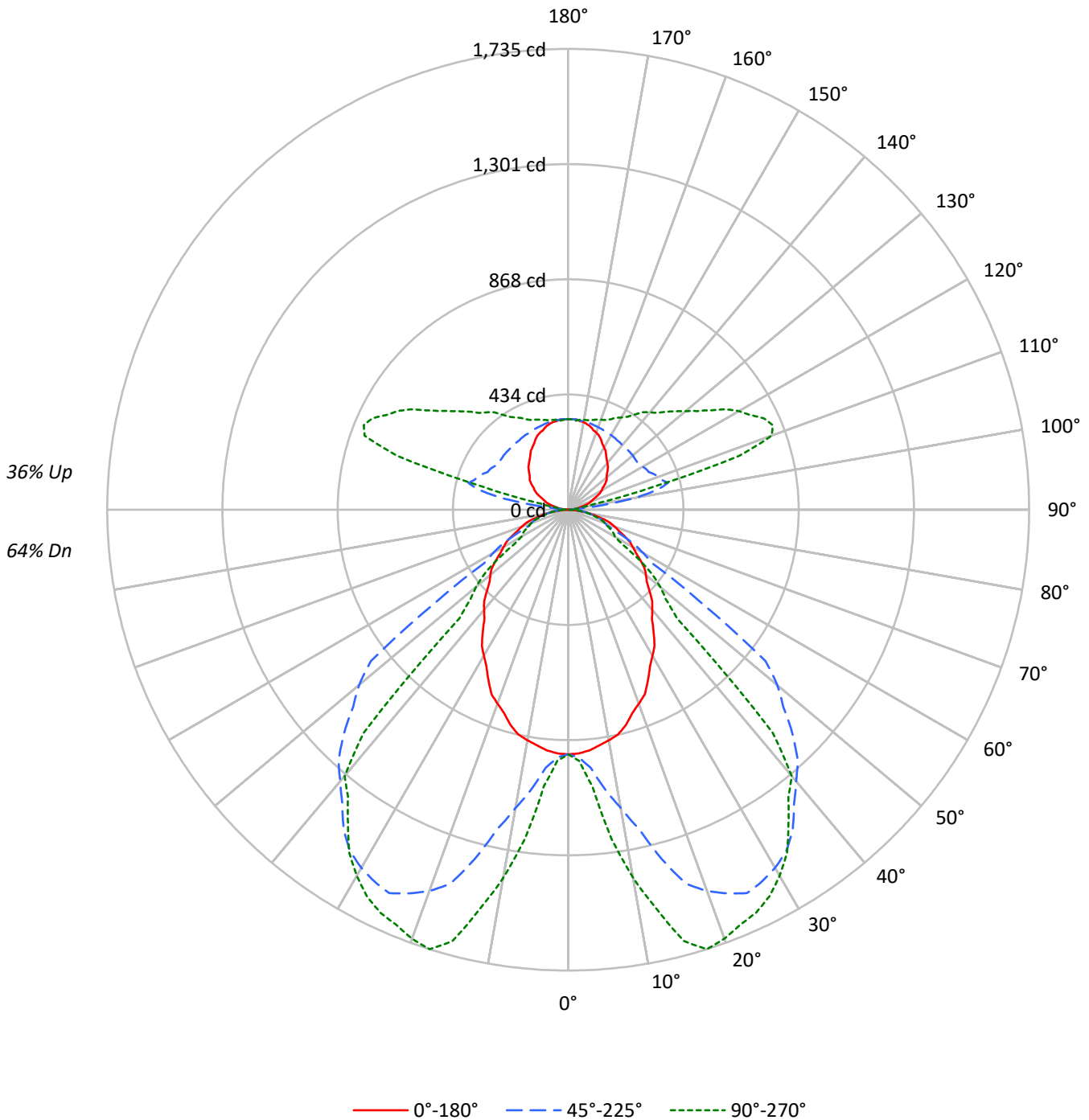
Lumens per Lamp: N/A
Luminaire Lumens: 5134.3 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 43.8
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	50	30	10	0	
RCR																						
0	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	64				
1	102	98	94	91	96	92	89	86	81	79	77	71	70	68	62	61	60	56				
2	93	86	80	75	88	81	76	72	72	68	65	64	61	58	56	54	52	48				
3	86	76	69	64	80	72	66	61	64	59	55	57	53	50	50	47	45	41				
4	79	68	60	55	74	65	58	52	58	52	48	51	47	44	45	42	39	36				
5	73	61	53	47	68	58	51	45	52	46	42	46	42	38	41	37	35	32				
6	67	55	47	41	63	52	45	40	47	41	37	42	37	34	37	34	31	28				
7	62	50	42	36	58	47	40	35	43	37	32	38	34	30	34	30	27	25				
8	58	45	38	32	54	43	36	31	39	33	29	35	30	27	31	28	25	22				
9	54	42	34	29	51	40	33	28	36	30	26	32	28	24	29	25	22	20				
10	50	38	31	26	47	36	30	25	33	27	24	30	25	22	27	23	20	18				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6610	6610	6610
5°	6554	7025	7525
10°	6425	8308	10258
15°	6231	10125	12489
20°	5933	11665	13124
25°	5618	12614	13251
30°	5258	12906	13186
35°	4903	12906	12660
40°	4613	12504	12258
45°	4388	12121	5871
50°	4263	11474	5057
55°	4146	7682	4005
60°	4030	4674	2902
65°	3941	3561	3019
70°	3888	3103	3103
75°	3790	3219	3114
80°	3327	3248	3095
85°	2470	3392	2931

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 12121 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.3	1.9
10°-20°	366.2	7.1
20°-30°	620.3	12.1
30°-40°	752.5	14.7
40°-50°	662.3	12.9
50°-60°	409.8	8.0
60°-70°	222.2	4.3
70°-80°	126.6	2.5
80°-90°	42.2	0.8
90°-100°	41.9	0.8
100°-110°	298.9	5.8
110°-120°	405.8	7.9
120°-130°	330.3	6.4
130°-140°	265.7	5.2
140°-150°	209.4	4.1
150°-160°	153.1	3.0
160°-170°	95.1	1.9
170°-180°	32.4	0.6
0°-30°	1085.9	21.1
0°-40°	1838.3	35.8
0°-60°	2910.5	56.7
0°-90°	3301.5	64.3
90°-120°	746.7	14.5
90°-150°	1552.1	30.2
90°-180°	1833.0	35.7
0°-180°	5134.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	921	921	921	921	921	
5°	910	939	975	1017	1045	86
15°	839	967	1363	1612	1681	235
25°	710	971	1593	1641	1674	326
35°	560	900	1473	1453	1445	351
45°	432	740	1194	1012	578	335
55°	331	516	614	355	320	297
65°	232	291	210	180	178	230
75°	137	120	116	114	112	143
85°	30	41	41	37	36	36
90°	0	2	4	6	6	2
95°	17	32	17	19	24	19
105°	66	102	388	496	328	70
115°	118	143	335	696	813	117
125°	170	193	315	552	652	151
135°	210	233	318	454	522	162
145°	249	270	320	396	438	156
155°	292	302	326	359	376	134
165°	324	328	335	344	350	91
175°	341	343	341	339	337	32
180°	341	341	341	341	341	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	921.1	921.1	921.1	921.1	921.1
2.5°	918.1	928.3	933.0	942.1	946.5
5°	909.8	939.1	975.3	1017.2	1044.6
7.5°	895.2	947.6	1062.2	1194.2	1250.5
10°	881.7	953.1	1140.1	1330.9	1407.8
12.5°	866.8	958.7	1231.4	1462.7	1541.1
15°	838.7	966.8	1362.9	1611.6	1681.1
17.5°	802.4	971.9	1476.7	1690.4	1735.0
20°	776.9	972.8	1527.6	1700.3	1718.6
22.5°	752.9	973.7	1563.6	1676.2	1691.6
25°	709.5	971.3	1593.1	1640.7	1673.6
27.5°	666.1	960.4	1578.5	1616.9	1640.7
30°	634.6	949.5	1557.6	1589.4	1591.3
32.5°	604.7	931.2	1526.1	1535.4	1532.9
35°	559.7	900.2	1473.3	1452.6	1445.2
37.5°	517.8	859.0	1396.2	1362.8	1361.0
40°	492.4	829.2	1334.8	1303.1	1308.6
42.5°	468.4	794.9	1279.4	1242.2	1139.3
45°	432.4	740.0	1194.4	1012.3	578.5
47.5°	401.4	677.4	1098.2	542.3	498.0
50°	381.9	634.5	1027.8	476.8	453.0
52.5°	362.4	594.5	936.4	428.7	397.6
55°	331.4	516.2	614.0	354.9	320.1
57.5°	301.8	433.9	375.2	275.8	238.1
60°	280.8	385.1	325.7	222.3	202.2
62.5°	261.3	345.2	277.8	197.2	193.2
65°	232.1	290.7	209.7	179.7	177.8
67.5°	204.8	238.9	159.9	161.7	159.9
70°	185.3	201.8	147.9	149.7	147.9
72.5°	167.4	166.3	135.9	134.7	132.9
75°	136.7	120.2	116.1	114.2	112.3
77.5°	104.5	88.7	93.6	91.7	89.9
80°	80.5	75.0	78.6	76.7	74.9
82.5°	59.5	61.4	63.7	60.2	58.4
85°	30.0	40.9	41.2	37.4	35.6
87.5°	9.0	18.2	17.3	14.7	13.3
90°	0.0	2.1	4.3	6.4	6.4
92.5°	5.2	7.2	9.4	13.3	15.0
95°	17.2	31.9	17.2	19.4	23.6
97.5°	30.5	61.1	126.2	37.2	32.2
100°	40.8	76.4	253.2	74.5	49.4
102.5°	51.1	88.4	342.5	196.7	107.7
105°	66.5	102.2	388.4	496.2	328.3
107.5°	82.0	108.8	370.8	722.1	676.4
110°	92.3	117.5	360.5	758.8	815.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	102.6	127.8	350.2	737.4	832.6
115°	118.0	143.2	334.8	695.8	813.3
117.5°	133.9	158.7	330.9	650.8	771.7
120°	145.9	169.0	324.0	616.6	742.5
122.5°	154.5	179.3	315.4	587.2	703.0
125°	169.5	192.6	315.4	551.6	652.4
127.5°	182.0	205.5	315.9	510.4	609.9
130°	188.8	214.0	317.6	482.8	577.2
132.5°	197.4	222.6	317.6	470.4	548.1
135°	210.3	233.4	317.6	454.3	521.5
137.5°	221.0	245.8	317.6	436.5	494.0
140°	229.6	252.7	317.6	426.1	478.5
142.5°	238.2	259.6	319.3	414.0	463.1
145°	248.9	269.9	319.7	395.8	437.8
147.5°	261.8	280.3	322.3	382.7	415.0
150°	270.4	287.2	324.0	374.0	401.3
152.5°	279.0	294.1	324.0	367.0	389.3
155°	291.8	302.3	326.2	358.7	375.5
157.5°	302.1	312.2	328.8	353.5	365.7
160°	309.0	317.4	330.5	350.0	360.5
162.5°	314.2	322.6	332.2	348.2	355.4
165°	324.0	328.2	334.8	343.5	349.8
167.5°	329.6	333.4	336.9	341.3	345.1
170°	334.8	336.9	336.9	341.2	343.3
172.5°	336.5	340.3	338.6	339.5	341.6
175°	341.2	343.3	341.2	339.0	336.9
177.5°	341.2	342.9	341.2	341.2	339.5
180°	341.2	341.2	341.2	341.2	341.2

(END OF REPORT)