

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: P621769

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

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621769
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-830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

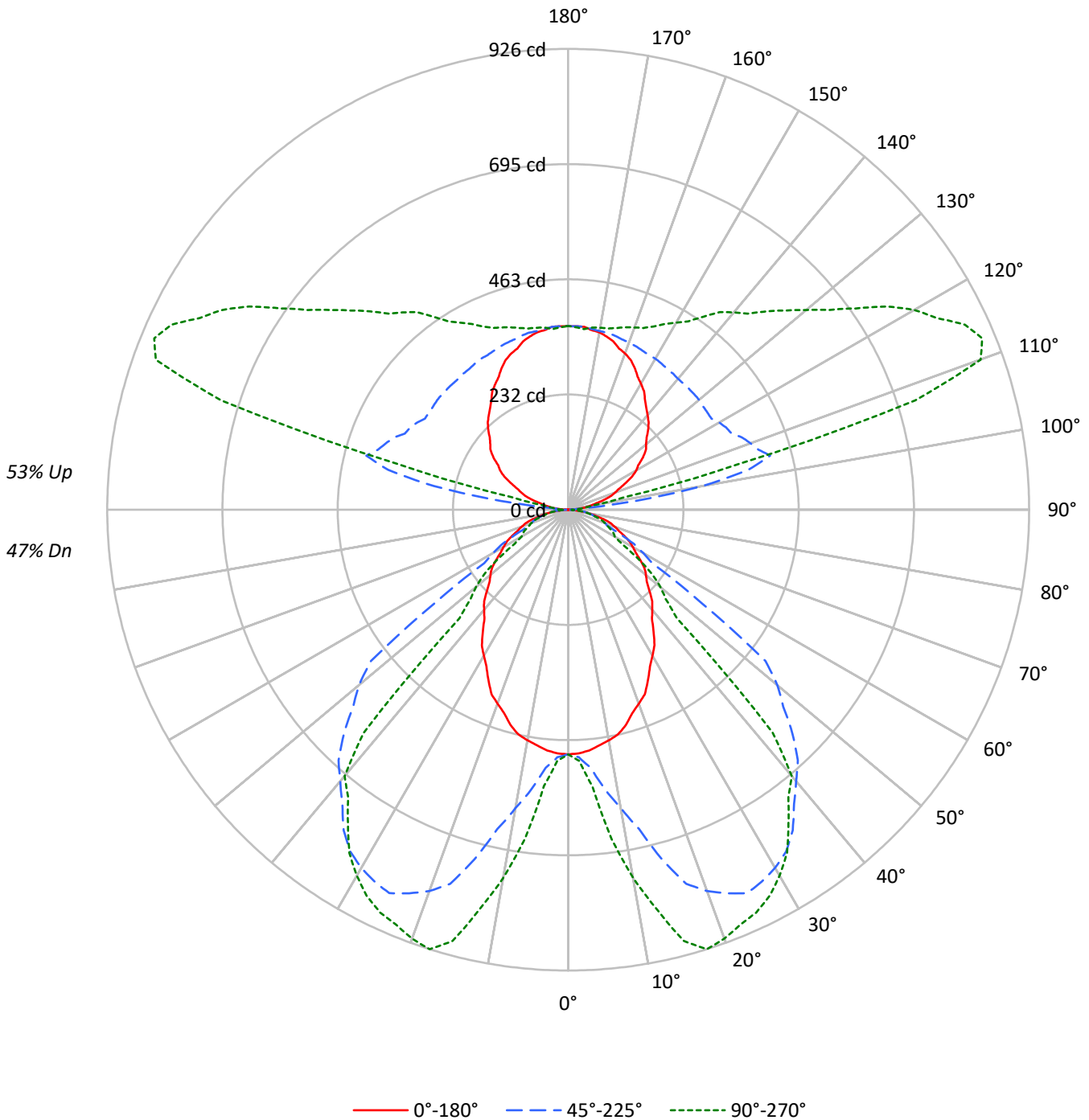
Lumens per Lamp: N/A
Luminaire Lumens: 3743.7 lumens
Efficiency: N/A
Efficacy: 129.1 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 29
Input Voltage (V): 120
Input Current (A_{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									
RC	80									70									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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47						47													
1	98	94	90	87	90	86	83	80	72	70	68	60	58	57	48	47	46	41						41													
2	89	82	77	72	82	76	71	67	64	61	57	53	51	48	43	41	40	35						35													
3	82	73	66	60	75	67	61	56	57	53	49	47	44	42	39	36	35	30						30													
4	75	65	57	51	69	60	53	48	51	46	42	43	39	36	35	32	30	26						26													
5	69	58	50	44	63	54	47	42	46	41	37	38	35	31	32	29	26	23						23													
6	64	52	44	39	59	48	41	36	41	36	32	35	31	28	29	26	23	21						21													
7	59	47	39	34	54	44	37	32	38	32	28	32	28	25	26	23	21	18						18													
8	55	43	35	30	50	40	33	28	34	29	25	29	25	22	24	21	19	16						16													
9	51	39	32	27	47	36	30	25	31	26	22	27	23	20	22	19	17	15						15													
10	47	36	29	24	44	33	27	23	29	24	20	25	21	18	21	18	15	13						13													

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3528	3528	3528
5°	3498	3749	4016
10°	3429	4434	5474
15°	3325	5403	6665
20°	3166	6226	7004
25°	2998	6732	7072
30°	2806	6887	7037
35°	2617	6888	6757
40°	2462	6673	6542
45°	2342	6469	6133
50°	2275	6123	5699
55°	2212	4100	2137
60°	2151	2494	1549
65°	2104	1900	1611
70°	2075	1655	1655
75°	2021	1716	1661
80°	1777	1736	1653
85°	1317	1811	1564

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 6469 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.0	1.4
10°-20°	195.5	5.2
20°-30°	331.0	8.8
30°-40°	401.6	10.7
40°-50°	353.5	9.4
50°-60°	218.7	5.8
60°-70°	118.6	3.2
70°-80°	67.5	1.8
80°-90°	22.9	0.6
90°-100°	45.4	1.2
100°-110°	323.2	8.6
110°-120°	438.7	11.7
120°-130°	357.1	9.5
130°-140°	287.2	7.7
140°-150°	226.4	6.0
150°-160°	165.6	4.4
160°-170°	102.8	2.7
170°-180°	35.1	0.9
0°-30°	579.5	15.5
0°-40°	981.1	26.2
0°-60°	1553.3	41.5
0°-90°	1762.3	47.1
90°-120°	807.3	21.6
90°-150°	1677.9	44.8
90°-180°	1981.0	52.9
0°-180°	3743.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	492	492	492	492	492	
5°	486	501	520	543	558	46
15°	448	516	727	860	897	125
25°	379	518	850	876	893	174
35°	299	480	786	775	771	187
45°	231	395	637	540	309	179
55°	177	276	328	189	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	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	491.6	491.6	491.6	491.6	491.6
2.5°	490.0	495.4	498.0	502.8	505.1
5°	485.6	501.2	520.5	542.8	557.5
7.5°	477.8	505.7	566.9	637.3	667.4
10°	470.6	508.7	608.5	710.3	751.3
12.5°	462.6	511.6	657.2	780.6	822.5
15°	447.6	516.0	727.3	860.1	897.2
17.5°	428.2	518.7	788.1	902.1	926.0
20°	414.6	519.2	815.3	907.4	917.2
22.5°	401.8	519.7	834.4	894.6	902.8
25°	378.7	518.4	850.2	875.6	893.2
27.5°	355.5	512.6	842.4	862.9	875.6
30°	338.7	506.7	831.2	848.3	849.2
32.5°	322.7	497.0	814.5	819.4	818.1
35°	298.7	480.4	786.3	775.2	771.3
37.5°	276.4	458.4	745.1	727.3	726.3
40°	262.8	442.5	712.4	695.4	698.4
42.5°	250.0	424.3	682.8	663.0	608.1
45°	230.8	394.9	637.4	540.2	308.7
47.5°	214.2	361.5	586.1	289.4	265.8
50°	203.8	338.6	548.5	254.5	241.8
52.5°	193.4	317.3	499.7	228.8	212.2
55°	176.8	275.5	327.7	189.4	170.8
57.5°	161.1	231.6	200.2	147.2	127.1
60°	149.9	205.5	173.8	118.6	107.9
62.5°	139.5	184.2	148.3	105.3	103.1
65°	123.9	155.1	111.9	95.9	94.9
67.5°	109.3	127.5	85.3	86.3	85.3
70°	98.9	107.7	78.9	79.9	78.9
72.5°	89.3	88.7	72.5	71.9	70.9
75°	72.9	64.1	61.9	60.9	59.9
77.5°	55.7	47.3	50.0	48.9	48.0
80°	43.0	40.0	42.0	40.9	40.0
82.5°	31.8	32.7	34.0	32.1	31.2
85°	16.0	21.8	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	16.2
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



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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)