

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: P621785

Luminaire Tested: VLT-FB-050U-100D-935-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621785
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-935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

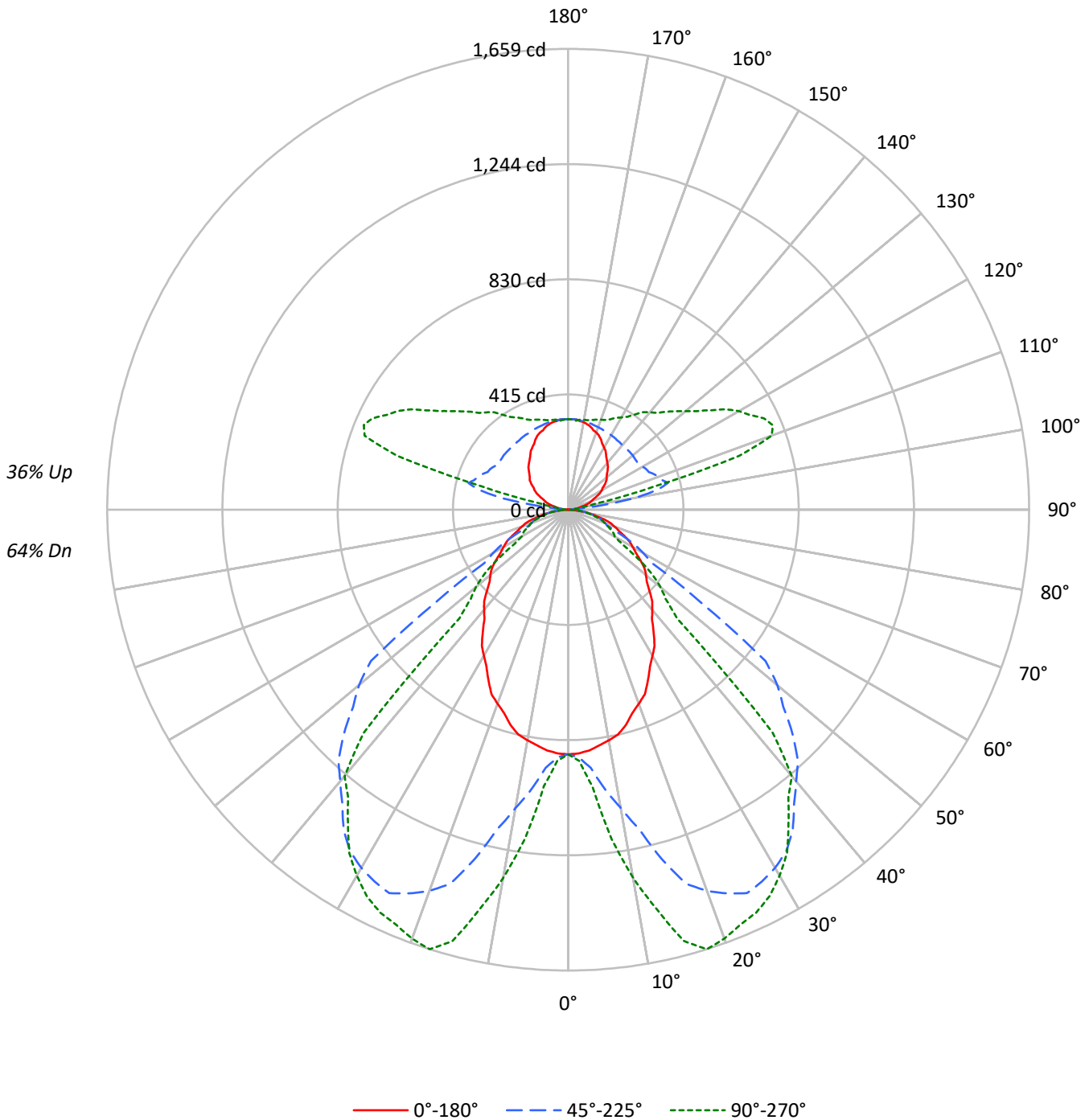
Lumens per Lamp: N/A
Luminaire Lumens: 4909.2 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

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°	6320	6320	6320
5°	6266	6718	7195
10°	6143	7943	9809
15°	5957	9681	11942
20°	5673	11154	12548
25°	5371	12061	12671
30°	5028	12340	12607
35°	4688	12341	12106
40°	4410	11956	11721
45°	4196	11589	5613
50°	4077	10971	4836
55°	3963	7345	3830
60°	3853	4471	2774
65°	3769	3404	2888
70°	3718	2967	2967
75°	3624	3078	2978
80°	3182	3108	2959
85°	2355	3244	2799

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 11589 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.0	1.9
10°-20°	350.2	7.1
20°-30°	593.1	12.1
30°-40°	719.5	14.7
40°-50°	633.3	12.9
50°-60°	391.9	8.0
60°-70°	212.5	4.3
70°-80°	121.0	2.5
80°-90°	40.3	0.8
90°-100°	40.1	0.8
100°-110°	285.8	5.8
110°-120°	388.0	7.9
120°-130°	315.8	6.4
130°-140°	254.0	5.2
140°-150°	200.3	4.1
150°-160°	146.4	3.0
160°-170°	90.9	1.9
170°-180°	31.0	0.6
0°-30°	1038.2	21.1
0°-40°	1757.7	35.8
0°-60°	2782.9	56.7
0°-90°	3156.8	64.3
90°-120°	714.0	14.5
90°-150°	1484.1	30.2
90°-180°	1752.0	35.7
0°-180°	4909.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	881	881	881	881	881	
5°	870	898	933	973	999	82
15°	802	924	1303	1541	1607	225
25°	678	929	1523	1569	1600	312
35°	535	861	1409	1389	1382	335
45°	414	708	1142	968	553	321
55°	317	494	587	339	306	284
65°	222	278	200	172	170	220
75°	131	115	111	109	107	137
85°	29	39	39	36	34	35
90°	0	2	4	6	6	2
95°	16	30	16	19	23	18
105°	64	98	371	474	314	67
115°	113	137	320	665	778	112
125°	162	184	302	528	624	144
135°	201	223	304	434	499	155
145°	238	258	306	378	419	149
155°	279	289	312	343	359	128
165°	310	314	320	328	334	87
175°	326	328	326	324	322	31
180°	326	326	326	326	326	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	880.7	880.7	880.7	880.7	880.7
2.5°	877.8	887.6	892.1	900.8	905.0
5°	869.9	897.9	932.6	972.6	998.8
7.5°	856.0	906.0	1015.6	1141.8	1195.7
10°	843.1	911.3	1090.1	1272.6	1346.1
12.5°	828.8	916.6	1177.5	1398.6	1473.5
15°	801.9	924.4	1303.1	1540.9	1607.4
17.5°	767.2	929.3	1412.0	1616.3	1659.0
20°	742.9	930.1	1460.6	1625.7	1643.2
22.5°	719.9	931.0	1495.0	1602.7	1617.4
25°	678.4	928.7	1523.3	1568.8	1600.3
27.5°	636.9	918.3	1509.3	1546.0	1568.8
30°	606.8	907.8	1489.3	1519.8	1521.5
32.5°	578.2	890.4	1459.2	1468.1	1465.7
35°	535.2	860.8	1408.7	1388.9	1381.9
37.5°	495.1	821.4	1335.0	1303.1	1301.3
40°	470.8	792.8	1276.3	1246.0	1251.2
42.5°	447.9	760.1	1223.3	1187.8	1089.4
45°	413.5	707.5	1142.0	967.9	553.1
47.5°	383.8	647.7	1050.0	518.5	476.1
50°	365.2	606.7	982.7	455.9	433.2
52.5°	346.5	568.5	895.4	410.0	380.2
55°	316.8	493.6	587.1	339.3	306.1
57.5°	288.5	414.9	358.7	263.7	227.7
60°	268.5	368.3	311.5	212.6	193.3
62.5°	249.9	330.0	265.6	188.6	184.7
65°	222.0	278.0	200.5	171.8	170.1
67.5°	195.8	228.4	152.9	154.6	152.9
70°	177.2	193.0	141.4	143.2	141.4
72.5°	160.0	159.0	130.0	128.8	127.1
75°	130.7	114.9	111.0	109.2	107.4
77.5°	99.9	84.8	89.5	87.7	85.9
80°	77.0	71.7	75.2	73.4	71.6
82.5°	56.9	58.7	60.9	57.6	55.8
85°	28.6	39.1	39.4	35.8	34.0
87.5°	8.6	17.4	16.6	14.1	12.7
90°	0.0	2.0	4.1	6.2	6.2
92.5°	4.9	6.9	9.0	12.8	14.4
95°	16.4	30.5	16.4	18.6	22.6
97.5°	29.1	58.4	120.6	35.6	30.8
100°	39.0	73.1	242.1	71.3	47.2
102.5°	48.8	84.5	327.5	188.1	103.0
105°	63.6	97.7	371.4	474.4	313.9
107.5°	78.4	104.1	354.6	690.5	646.7
110°	88.2	112.3	344.7	725.5	779.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	98.1	122.2	334.9	705.0	796.1
115°	112.9	136.9	320.1	665.3	777.6
117.5°	128.0	151.7	316.4	622.3	737.8
120°	139.5	161.6	309.8	589.6	709.9
122.5°	147.7	171.4	301.6	561.4	672.2
125°	162.1	184.2	301.6	527.5	623.8
127.5°	174.0	196.5	302.0	488.0	583.1
130°	180.6	204.6	303.7	461.7	551.9
132.5°	188.8	212.8	303.7	449.8	524.0
135°	201.1	223.1	303.7	434.4	498.6
137.5°	211.3	235.0	303.7	417.4	472.3
140°	219.5	241.6	303.7	407.4	457.6
142.5°	227.8	248.2	305.3	395.8	442.8
145°	238.0	258.1	305.7	378.4	418.6
147.5°	250.3	268.0	308.2	365.9	396.8
150°	258.5	274.6	309.8	357.6	383.7
152.5°	266.7	281.2	309.8	350.9	372.2
155°	279.0	289.1	311.9	343.0	359.1
157.5°	288.9	298.5	314.3	338.0	349.6
160°	295.5	303.5	316.0	334.7	344.7
162.5°	300.4	308.4	317.6	333.0	339.8
165°	309.8	313.8	320.1	328.4	334.4
167.5°	315.2	318.8	322.1	326.3	329.9
170°	320.1	322.1	322.1	326.3	328.3
172.5°	321.7	325.3	323.8	324.6	326.7
175°	326.2	328.2	326.2	324.1	322.1
177.5°	326.2	327.8	326.2	326.2	324.6
180°	326.2	326.2	326.2	326.2	326.2

(END OF REPORT)