

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: P621781

Luminaire Tested: VLT-FB-050U-100D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621781
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-830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

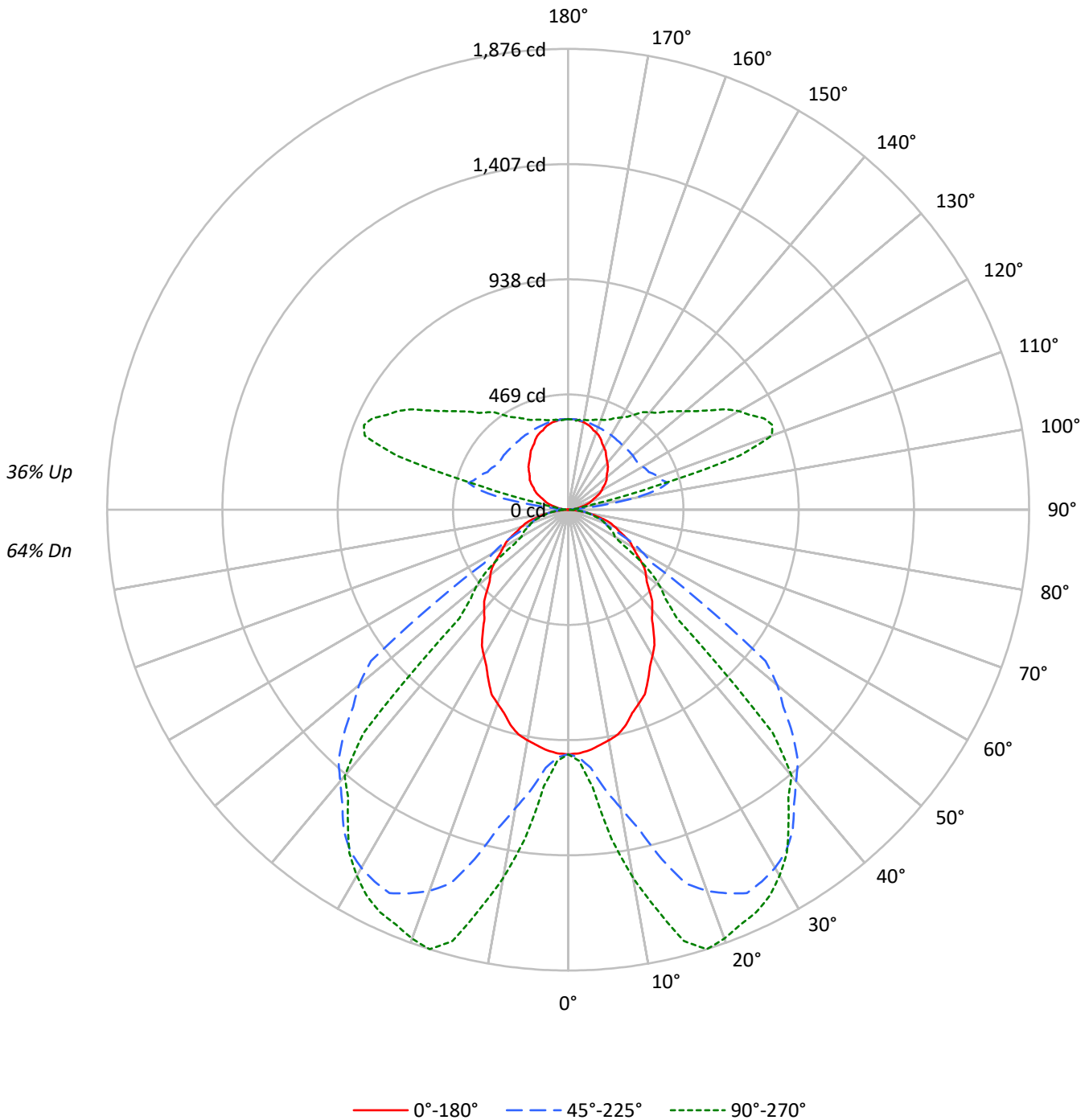
Lumens per Lamp: N/A
Luminaire Lumens: 5550.5 lumens
Efficiency: N/A
Efficacy: 126.7 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

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°	7145	7145	7145
5°	7085	7595	8135
10°	6946	8981	11090
15°	6736	10946	13502
20°	6414	12612	14188
25°	6073	13637	14326
30°	5685	13952	14255
35°	5301	13953	13687
40°	4986	13517	13252
45°	4744	13104	6347
50°	4610	12404	5468
55°	4481	8305	4330
60°	4357	5055	3137
65°	4262	3849	3265
70°	4205	3355	3355
75°	4095	3480	3366
80°	3595	3513	3347
85°	2668	3664	3170

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 13104 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.4	1.9
10°-20°	395.9	7.1
20°-30°	670.6	12.1
30°-40°	813.5	14.7
40°-50°	716.0	12.9
50°-60°	443.1	8.0
60°-70°	240.2	4.3
70°-80°	136.8	2.5
80°-90°	45.6	0.8
90°-100°	45.4	0.8
100°-110°	323.2	5.8
110°-120°	438.7	7.9
120°-130°	357.1	6.4
130°-140°	287.2	5.2
140°-150°	226.4	4.1
150°-160°	165.6	3.0
160°-170°	102.8	1.9
170°-180°	35.1	0.6
0°-30°	1173.9	21.1
0°-40°	1987.4	35.8
0°-60°	3146.5	56.7
0°-90°	3569.1	64.3
90°-120°	807.3	14.5
90°-150°	1677.9	30.2
90°-180°	1981.0	35.7
0°-180°	5550.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	996	996	996	996	996	
5°	984	1015	1054	1100	1129	93
15°	907	1045	1473	1742	1817	254
25°	767	1050	1722	1774	1809	352
35°	605	973	1593	1570	1562	379
45°	468	800	1291	1094	625	363
55°	358	558	664	384	346	321
65°	251	314	227	194	192	249
75°	148	130	126	123	121	154
85°	32	44	44	40	38	39
90°	0	2	5	7	7	2
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	



TEST NUMBER: P621781

CATALOG NUMBER: VLT-FB-050U-100D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	995.7	995.7	995.7	995.7	995.7
2.5°	992.5	1003.6	1008.7	1018.5	1023.3
5°	983.6	1015.3	1054.4	1099.6	1129.3
7.5°	967.8	1024.4	1148.3	1291.0	1351.9
10°	953.2	1030.4	1232.5	1438.8	1521.9
12.5°	937.0	1036.4	1331.3	1581.3	1666.0
15°	906.7	1045.2	1473.4	1742.2	1817.4
17.5°	867.4	1050.7	1596.4	1827.4	1875.7
20°	839.9	1051.6	1651.5	1838.1	1857.9
22.5°	814.0	1052.6	1690.3	1812.1	1828.8
25°	767.0	1050.0	1722.3	1773.7	1809.3
27.5°	720.1	1038.3	1706.5	1748.0	1773.7
30°	686.1	1026.5	1683.8	1718.3	1720.3
32.5°	653.7	1006.7	1649.8	1659.9	1657.1
35°	605.1	973.2	1592.8	1570.3	1562.4
37.5°	559.8	928.7	1509.4	1473.3	1471.3
40°	532.3	896.4	1443.0	1408.7	1414.7
42.5°	506.4	859.4	1383.1	1342.9	1231.7
45°	467.5	800.0	1291.2	1094.4	625.4
47.5°	433.9	732.3	1187.2	586.2	538.3
50°	412.9	686.0	1111.1	515.5	489.8
52.5°	391.8	642.7	1012.3	463.5	429.9
55°	358.2	558.1	663.8	383.7	346.1
57.5°	326.2	469.1	405.6	298.2	257.4
60°	303.6	416.4	352.2	240.3	218.6
62.5°	282.5	373.2	300.3	213.2	208.9
65°	251.0	314.3	226.7	194.2	192.3
67.5°	221.4	258.2	172.8	174.8	172.8
70°	200.4	218.2	159.9	161.9	159.9
72.5°	180.9	179.7	146.9	145.7	143.7
75°	147.7	129.9	125.5	123.4	121.4
77.5°	112.9	95.9	101.2	99.1	97.1
80°	87.0	81.1	85.0	82.9	81.0
82.5°	64.4	66.3	68.8	65.1	63.1
85°	32.4	44.3	44.5	40.4	38.5
87.5°	9.7	19.7	18.7	15.9	14.3
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



TEST NUMBER: P621781

CATALOG NUMBER: VLT-FB-050U-100D-830-UNV-STD-W-4

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)