

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: P621847

Luminaire Tested: VLT-FB-100U-075D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621847
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-830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

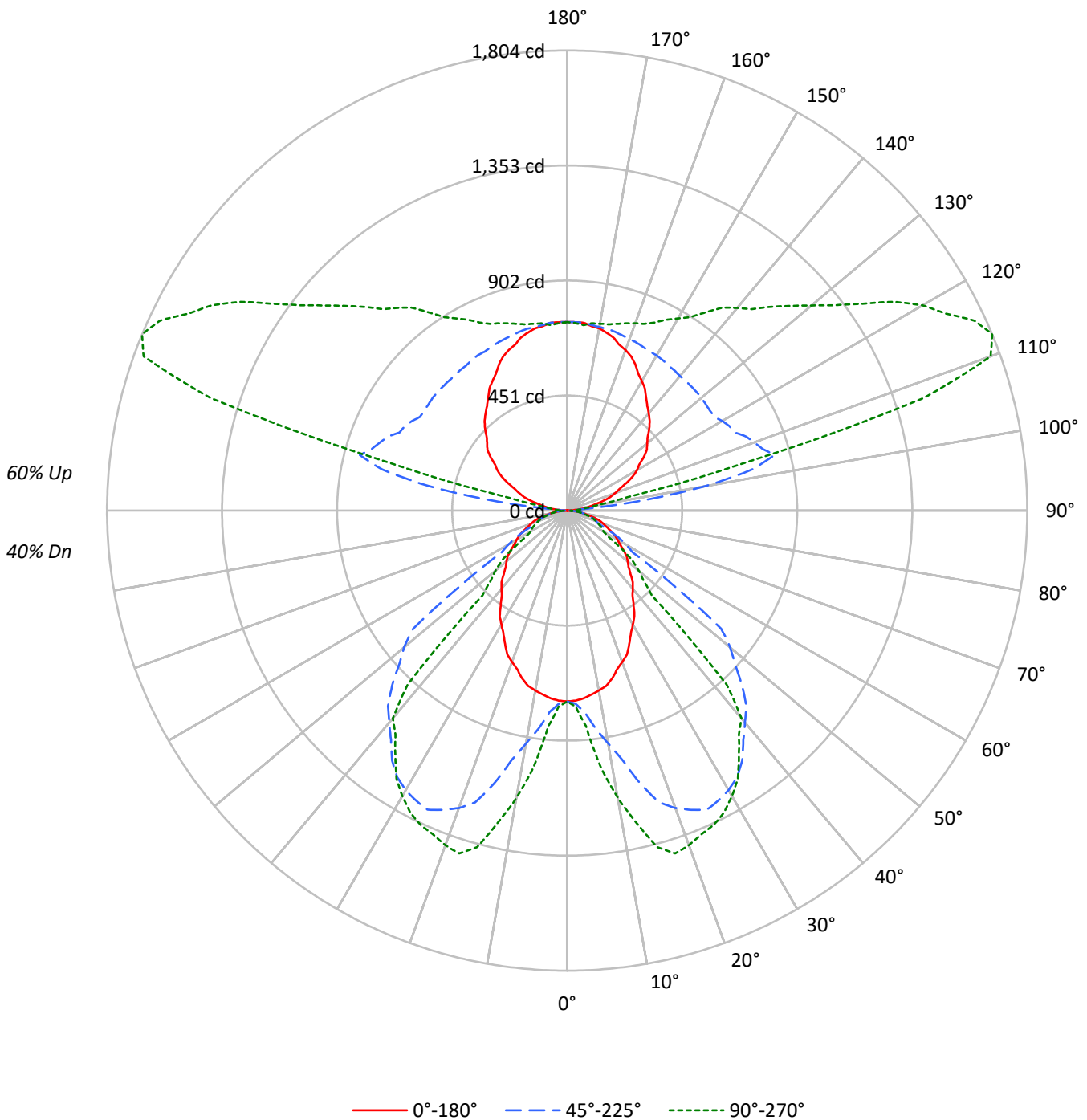
Lumens per Lamp: N/A
Luminaire Lumens: 6654.5 lumens
Efficiency: N/A
Efficacy: 131.5 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50.6
Input Voltage (V): 120
Input Current (A_{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	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°	5370	5370	5370
5°	5324	5708	6113
10°	5219	6749	8334
15°	5061	8225	10146
20°	4820	9477	10661
25°	4564	10247	10765
30°	4272	10484	10711
35°	3983	10485	10285
40°	3747	10158	9959
45°	3565	9847	4769
50°	3464	9321	4108
55°	3368	6240	3254
60°	3274	3798	2358
65°	3202	2892	2454
70°	3160	2520	2520
75°	3078	2615	2531
80°	2703	2641	2513
85°	2001	2758	2379

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 9847 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.7	1.2
10°-20°	297.5	4.5
20°-30°	503.9	7.6
30°-40°	611.3	9.2
40°-50°	538.1	8.1
50°-60°	333.0	5.0
60°-70°	180.5	2.7
70°-80°	102.8	1.5
80°-90°	35.3	0.5
90°-100°	90.9	1.4
100°-110°	647.7	9.7
110°-120°	879.4	13.2
120°-130°	715.7	10.8
130°-140°	575.6	8.7
140°-150°	453.8	6.8
150°-160°	331.8	5.0
160°-170°	206.1	3.1
170°-180°	70.3	1.1
0°-30°	882.1	13.3
0°-40°	1493.4	22.4
0°-60°	2364.4	35.5
0°-90°	2683.1	40.3
90°-120°	1618.0	24.3
90°-150°	3363.2	50.5
90°-180°	3971.0	59.7
0°-180°	6654.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	748	748	748	748	748	
5°	739	763	792	826	849	70
15°	681	785	1107	1309	1366	191
25°	576	789	1294	1333	1360	265
35°	455	731	1197	1180	1174	285
45°	351	601	970	822	470	273
55°	269	419	499	288	260	241
65°	189	236	170	146	144	187
75°	111	98	94	93	91	116
85°	24	33	34	30	29	30
90°	0	4	9	14	14	3
95°	37	69	37	42	51	42
105°	144	221	842	1075	711	152
115°	256	310	725	1508	1762	254
125°	367	417	684	1195	1414	326
135°	456	506	688	984	1130	351
145°	539	585	693	858	949	339
155°	632	655	707	777	814	290
165°	702	711	725	744	758	197
175°	739	744	739	735	730	70
180°	739	739	739	739	739	



TEST NUMBER: P621847

CATALOG NUMBER: VLT-FB-100U-075D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	748.3	748.3	748.3	748.3	748.3
2.5°	745.8	754.2	758.0	765.4	768.9
5°	739.1	762.9	792.4	826.3	848.6
7.5°	727.3	769.8	862.9	970.1	1015.9
10°	716.3	774.3	926.2	1081.2	1143.7
12.5°	704.2	778.8	1000.4	1188.3	1252.0
15°	681.3	785.4	1107.2	1309.2	1365.7
17.5°	651.8	789.5	1199.6	1373.2	1409.5
20°	631.2	790.3	1241.0	1381.3	1396.1
22.5°	611.7	791.0	1270.2	1361.7	1374.2
25°	576.4	789.1	1294.2	1332.9	1359.6
27.5°	541.1	780.2	1282.4	1313.5	1332.9
30°	515.6	771.3	1265.3	1291.2	1292.7
32.5°	491.2	756.5	1239.8	1247.4	1245.3
35°	454.7	731.3	1196.9	1180.0	1174.1
37.5°	420.7	697.9	1134.2	1107.1	1105.7
40°	400.0	673.6	1084.4	1058.6	1063.1
42.5°	380.5	645.8	1039.3	1009.2	925.6
45°	351.3	601.1	970.3	822.4	469.9
47.5°	326.1	550.3	892.1	440.5	404.5
50°	310.3	515.5	834.9	387.4	368.0
52.5°	294.4	483.0	760.7	348.3	323.0
55°	269.2	419.4	498.8	288.3	260.1
57.5°	245.2	352.5	304.8	224.1	193.5
60°	228.1	312.9	264.6	180.6	164.3
62.5°	212.3	280.4	225.7	160.2	157.0
65°	188.6	236.2	170.3	146.0	144.5
67.5°	166.4	194.0	129.9	131.4	129.9
70°	150.6	163.9	120.1	121.6	120.1
72.5°	136.0	135.1	110.4	109.5	108.0
75°	111.0	97.6	94.3	92.7	91.3
77.5°	84.9	72.1	76.0	74.5	73.0
80°	65.4	60.9	63.9	62.3	60.8
82.5°	48.4	49.9	51.7	48.9	47.5
85°	24.3	33.3	33.5	30.4	28.9
87.5°	7.3	15.3	15.2	13.7	12.5
90°	0.0	4.5	9.3	13.9	13.9
92.5°	11.2	15.7	20.5	28.9	32.5
95°	37.2	69.0	37.2	42.1	51.1
97.5°	66.0	132.4	273.4	80.7	69.7
100°	88.3	165.6	548.7	161.5	106.9
102.5°	110.7	191.6	742.1	426.2	233.4
105°	144.1	221.4	841.6	1075.1	711.4
107.5°	177.6	235.8	803.5	1564.7	1465.6
110°	199.9	254.5	781.2	1644.2	1766.9



TEST NUMBER: P621847

CATALOG NUMBER: VLT-FB-100U-075D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	222.3	276.8	758.9	1597.7	1804.1
115°	255.7	310.3	725.4	1507.7	1762.3
117.5°	290.1	343.8	717.0	1410.2	1672.1
120°	316.2	366.2	702.1	1336.0	1608.8
122.5°	334.8	388.4	683.5	1272.3	1523.3
125°	367.3	417.3	683.5	1195.3	1413.5
127.5°	394.3	445.2	684.5	1106.0	1321.5
130°	409.2	463.7	688.2	1046.2	1250.8
132.5°	427.8	482.3	688.2	1019.3	1187.6
135°	455.7	505.7	688.2	984.4	1129.9
137.5°	478.9	532.6	688.2	945.8	1070.4
140°	497.5	547.5	688.2	923.2	1036.9
142.5°	516.1	562.5	691.9	897.0	1003.4
145°	539.4	584.8	692.8	857.6	948.6
147.5°	567.3	607.3	698.4	829.3	899.3
150°	585.9	622.3	702.1	810.4	869.5
152.5°	604.5	637.2	702.1	795.3	843.5
155°	632.4	655.1	706.8	777.3	813.7
157.5°	654.7	676.5	712.4	766.0	792.3
160°	669.6	687.8	716.1	758.4	781.2
162.5°	680.7	698.9	719.8	754.6	770.0
165°	702.1	711.2	725.4	744.3	757.9
167.5°	714.2	722.4	730.0	739.5	747.7
170°	725.4	729.9	730.0	739.4	744.0
172.5°	729.1	737.3	733.7	735.7	740.3
175°	739.3	743.9	739.3	734.6	730.0
177.5°	739.3	743.0	739.3	739.2	735.6
180°	739.3	739.3	739.3	739.3	739.3

(END OF REPORT)