

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: P621776

Luminaire Tested: VLT-FB-050U-075D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621776
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-075D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - BATWING
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

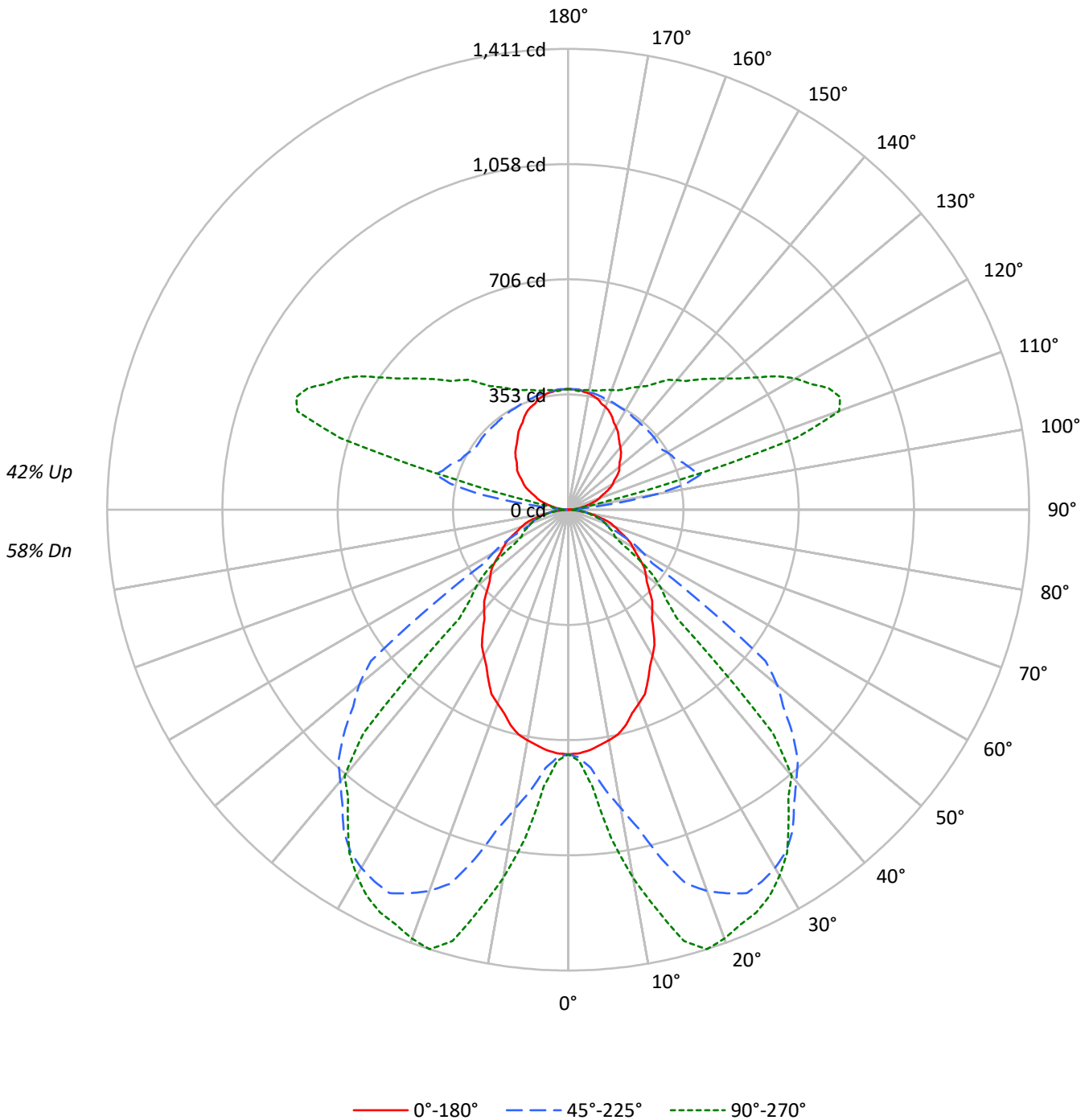
Lumens per Lamp: N/A
Luminaire Lumens: 4667.9 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.2
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									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	50	30	10	0													
RCR																																					
0	109	109	109	109	101	101	101	101	88	88	88	75	75	75	63	63	63	58																			
1	100	96	92	89	93	90	87	84	78	75	73	67	65	64	57	56	55	50																			
2	92	85	79	74	85	79	74	70	69	65	62	60	57	54	51	49	47	43																			
3	84	75	68	62	78	70	64	59	61	57	53	53	50	47	46	43	41	37																			
4	77	67	59	53	72	63	56	51	55	50	46	48	44	41	41	38	36	32																			
5	71	60	52	46	66	56	49	44	50	44	40	43	39	35	37	34	31	28																			
6	66	54	46	40	61	51	44	38	45	39	35	39	35	31	34	31	28	25																			
7	61	49	41	35	57	46	39	34	41	35	31	36	31	28	31	28	25	22																			
8	56	44	37	31	53	42	35	30	37	31	27	33	28	25	29	25	22	20																			
9	53	40	33	28	49	38	32	27	34	29	25	30	26	22	26	23	20	18																			
10	49	37	30	25	46	35	29	24	31	26	22	28	23	20	24	21	18	16																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5374	5374	5374
5°	5329	5713	6119
10°	5225	6755	8341
15°	5067	8233	10156
20°	4824	9485	10671
25°	4568	10257	10775
30°	4276	10494	10721
35°	3987	10495	10295
40°	3750	10167	9967
45°	3568	9856	4774
50°	3466	9330	4113
55°	3370	6247	3257
60°	3277	3802	2359
65°	3206	2895	2455
70°	3162	2524	2524
75°	3080	2617	2531
80°	2707	2641	2517
85°	2009	2758	2379

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 9856 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	1.7
10°-20°	297.8	6.4
20°-30°	504.4	10.8
30°-40°	611.9	13.1
40°-50°	538.6	11.5
50°-60°	333.3	7.1
60°-70°	180.7	3.9
70°-80°	102.9	2.2
80°-90°	34.5	0.7
90°-100°	45.4	1.0
100°-110°	323.5	6.9
110°-120°	439.1	9.4
120°-130°	357.4	7.7
130°-140°	287.5	6.2
140°-150°	226.6	4.9
150°-160°	165.7	3.5
160°-170°	102.9	2.2
170°-180°	35.1	0.8
0°-30°	882.9	18.9
0°-40°	1494.8	32.0
0°-60°	2366.6	50.7
0°-90°	2684.7	57.5
90°-120°	808.0	17.3
90°-150°	1679.5	36.0
90°-180°	1983.0	42.5
0°-180°	4667.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	749	749	749	749	749	
5°	740	764	793	827	849	70
15°	682	786	1108	1310	1367	191
25°	577	790	1295	1334	1361	265
35°	455	732	1198	1181	1175	285
45°	352	602	971	823	470	273
55°	269	420	499	289	260	241
65°	189	236	170	146	145	187
75°	111	98	94	93	91	116
85°	24	33	34	30	29	30
90°	0	2	5	7	7	2
95°	19	34	19	21	26	21
105°	72	111	420	537	355	76
115°	128	155	362	753	880	127
125°	183	208	341	597	706	163
135°	228	252	344	492	564	175
145°	269	292	346	428	474	169
155°	316	327	353	388	406	145
165°	351	355	362	372	378	98
175°	369	372	369	367	365	35
180°	369	369	369	369	369	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	748.9	748.9	748.9	748.9	748.9
2.5°	746.5	754.8	758.7	766.1	769.6
5°	739.8	763.6	793.1	827.1	849.4
7.5°	727.9	770.5	863.7	971.0	1016.8
10°	717.0	775.0	927.0	1082.2	1144.7
12.5°	704.8	779.5	1001.3	1189.4	1253.1
15°	682.0	786.1	1108.2	1310.4	1367.0
17.5°	652.4	790.2	1200.7	1374.5	1410.8
20°	631.7	791.0	1242.1	1382.5	1397.4
22.5°	612.2	791.7	1271.4	1363.0	1375.5
25°	576.9	789.8	1295.4	1334.1	1360.9
27.5°	541.6	780.9	1283.5	1314.7	1334.1
30°	516.0	772.0	1266.5	1292.4	1293.9
32.5°	491.7	757.2	1240.9	1248.5	1246.4
35°	455.1	732.0	1198.0	1181.1	1175.2
37.5°	421.0	698.5	1135.3	1108.1	1106.7
40°	400.3	674.2	1085.3	1059.6	1064.0
42.5°	380.9	646.4	1040.3	1010.1	926.4
45°	351.6	601.7	971.2	823.1	470.4
47.5°	326.4	550.8	892.9	440.9	404.9
50°	310.5	515.9	835.7	387.7	368.4
52.5°	294.7	483.4	761.4	348.6	323.3
55°	269.4	419.8	499.3	288.6	260.3
57.5°	245.4	352.8	305.1	224.3	193.6
60°	228.3	313.2	264.9	180.8	164.4
62.5°	212.5	280.7	225.9	160.4	157.1
65°	188.8	236.4	170.5	146.1	144.6
67.5°	166.5	194.2	130.0	131.5	130.0
70°	150.7	164.1	120.3	121.7	120.3
72.5°	136.1	135.2	110.5	109.6	108.1
75°	111.1	97.7	94.4	92.8	91.3
77.5°	84.9	72.1	76.1	74.6	73.1
80°	65.5	61.0	63.9	62.4	60.9
82.5°	48.4	49.9	51.8	49.0	47.5
85°	24.4	33.3	33.5	30.4	28.9
87.5°	7.3	14.9	14.3	12.3	11.1
90°	0.0	2.3	4.6	7.0	7.0
92.5°	5.6	7.8	10.2	14.4	16.3
95°	18.6	34.5	18.6	21.0	25.5
97.5°	33.0	66.1	136.5	40.3	34.8
100°	44.1	82.7	274.0	80.7	53.4
102.5°	55.3	95.7	370.6	212.8	116.6
105°	72.0	110.6	420.3	536.9	355.3
107.5°	88.7	117.8	401.2	781.4	731.9
110°	99.8	127.1	390.1	821.1	882.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	111.0	138.2	378.9	797.9	900.9
115°	127.7	155.0	362.2	752.9	880.0
117.5°	144.9	171.7	358.0	704.2	835.0
120°	157.9	182.9	350.6	667.2	803.4
122.5°	167.2	194.0	341.3	635.4	760.7
125°	183.4	208.4	341.3	596.9	705.9
127.5°	196.9	222.3	341.8	552.3	659.9
130°	204.3	231.6	343.7	522.4	624.6
132.5°	213.6	240.9	343.7	509.0	593.0
135°	227.6	252.5	343.7	491.6	564.2
137.5°	239.2	266.0	343.7	472.3	534.5
140°	248.5	273.4	343.7	461.0	517.8
142.5°	257.7	280.9	345.5	448.0	501.1
145°	269.4	292.1	346.0	428.3	473.7
147.5°	283.3	303.3	348.8	414.1	449.1
150°	292.6	310.7	350.6	404.7	434.2
152.5°	301.9	318.2	350.6	397.1	421.2
155°	315.8	327.1	352.9	388.2	406.3
157.5°	326.9	337.8	355.7	382.5	395.7
160°	334.4	343.4	357.6	378.7	390.1
162.5°	339.9	349.0	359.4	376.8	384.5
165°	350.6	355.2	362.2	371.7	378.5
167.5°	356.7	360.7	364.6	369.3	373.4
170°	362.2	364.5	364.6	369.2	371.5
172.5°	364.1	368.2	366.4	367.4	369.7
175°	369.2	371.5	369.2	366.8	364.6
177.5°	369.2	371.0	369.2	369.2	367.3
180°	369.2	369.2	369.2	369.2	369.2

(END OF REPORT)