

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: P621441

Luminaire Tested: VLT-F-050U-075D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621441
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: VLT-F-050U-075D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

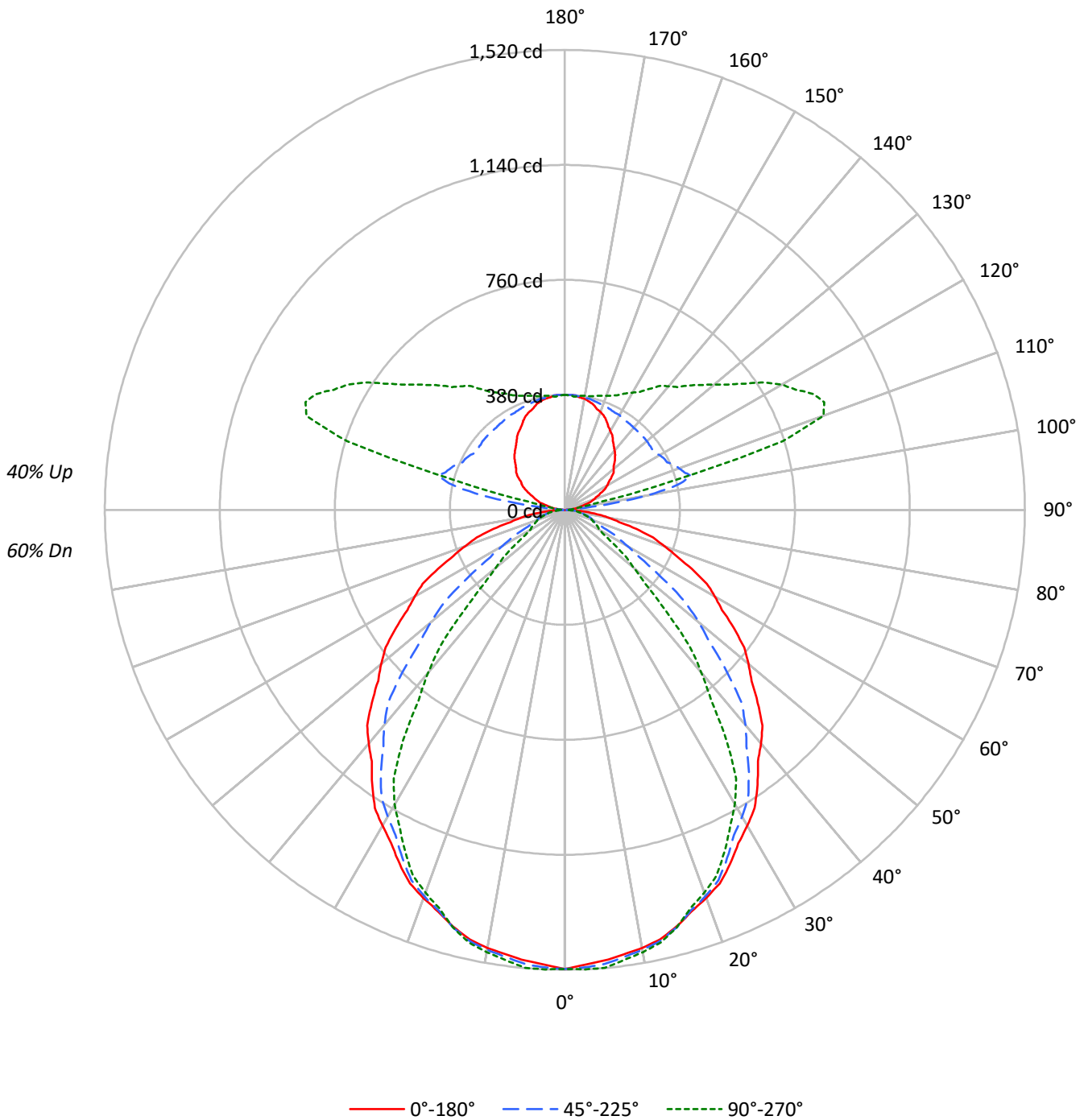
Lumens per Lamp: N/A
Luminaire Lumens: 5137.5 lumens
Efficiency: N/A
Efficacy: 141.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 36.2
Input Voltage (V): 120
Input Current (Ain): 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					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	60		
1	101	97	93	90	94	91	88	85	79	77	75	69	67	66	59	58	57	52		
2	93	86	80	75	86	80	75	71	71	67	63	62	59	56	53	51	49	45		
3	85	76	69	64	79	72	65	60	63	58	54	55	52	49	48	45	43	39		
4	78	68	60	55	73	64	57	52	57	51	47	50	46	42	43	40	38	35		
5	72	61	53	47	67	58	51	45	51	46	41	45	41	37	40	36	34	31		
6	67	55	47	42	62	52	45	40	46	41	37	41	37	33	36	33	30	27		
7	62	50	42	37	58	47	40	35	42	37	33	38	33	30	33	30	27	24		
8	58	46	38	33	54	43	36	32	39	33	29	35	30	27	31	27	24	22		
9	54	42	35	30	51	40	33	29	36	30	26	32	28	24	28	25	22	20		
10	51	39	32	27	47	37	30	26	33	28	24	30	25	22	27	23	20	18		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10889	10889	10889
5°	10773	10852	10942
10°	10714	10760	10817
15°	10598	10609	10609
20°	10427	10379	10283
25°	10227	10054	9880
30°	9989	9703	9314
35°	9723	9283	8171
40°	9442	8693	6579
45°	9148	7700	4773
50°	8837	6440	3308
55°	8531	4903	2471
60°	8212	3397	1867
65°	7851	2423	1917
70°	7335	2039	1974
75°	6779	2085	1999
80°	5897	2203	2074
85°	4775	2454	2067

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9148 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.0	2.8
10°-20°	402.1	7.8
20°-30°	584.9	11.4
30°-40°	647.1	12.6
40°-50°	555.6	10.8
50°-60°	384.7	7.5
60°-70°	229.2	4.5
70°-80°	112.9	2.2
80°-90°	35.7	0.7
90°-100°	46.8	0.9
100°-110°	333.1	6.5
110°-120°	452.2	8.8
120°-130°	368.1	7.2
130°-140°	296.0	5.8
140°-150°	233.4	4.5
150°-160°	170.7	3.3
160°-170°	106.0	2.1
170°-180°	36.1	0.7
0°-30°	1130.0	22.0
0°-40°	1777.1	34.6
0°-60°	2717.3	52.9
0°-90°	3095.1	60.2
90°-120°	832.1	16.2
90°-150°	1729.6	33.7
90°-180°	2042.0	39.7
0°-180°	5137.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1517	1517	1517	1517	1517	
5°	1496	1518	1506	1505	1519	142
15°	1426	1445	1428	1420	1428	402
25°	1292	1301	1270	1248	1248	594
35°	1110	1107	1060	974	933	694
45°	901	886	759	548	470	695
55°	682	653	392	225	198	609
65°	462	372	143	114	113	458
75°	244	107	75	74	72	258
85°	58	29	30	27	25	67
90°	0	2	5	7	7	4
95°	19	36	19	22	26	21
105°	74	114	433	553	366	78
115°	132	160	373	775	906	131
125°	189	215	352	615	727	168
135°	234	260	354	506	581	180
145°	277	301	356	441	488	174
155°	325	337	364	400	418	149
165°	361	366	373	383	390	101
175°	380	382	380	378	375	36
180°	380	380	380	380	380	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1517.4	1517.4	1517.4	1517.4	1517.4
2.5°	1504.9	1522.1	1513.7	1513.8	1520.0
5°	1495.5	1518.5	1506.5	1505.2	1519.0
7.5°	1481.7	1502.9	1490.5	1488.9	1500.8
10°	1470.4	1490.3	1476.7	1473.8	1484.5
12.5°	1454.1	1474.0	1459.1	1453.7	1464.5
15°	1426.5	1444.9	1428.1	1420.4	1428.1
17.5°	1391.7	1407.0	1388.0	1375.8	1380.4
20°	1365.4	1380.7	1359.1	1342.0	1346.6
22.5°	1336.5	1349.4	1325.3	1305.6	1309.0
25°	1291.7	1300.9	1269.8	1247.8	1247.8
27.5°	1241.9	1247.4	1211.1	1188.1	1181.7
30°	1205.5	1208.6	1171.0	1143.9	1124.0
32.5°	1167.9	1169.7	1127.1	1083.5	1052.5
35°	1109.9	1106.8	1059.7	974.1	932.7
37.5°	1048.1	1041.4	985.7	855.5	793.8
40°	1008.0	998.8	928.0	771.3	702.3
42.5°	966.6	953.7	864.1	684.6	608.2
45°	901.4	886.0	758.7	548.5	470.3
47.5°	836.8	816.6	650.9	424.9	357.7
50°	791.6	770.2	576.9	349.9	296.3
52.5°	746.5	725.0	501.6	293.7	251.1
55°	681.9	652.8	391.9	225.1	197.5
57.5°	616.1	574.4	291.9	175.4	153.9
60°	572.2	517.0	236.7	145.4	130.1
62.5°	529.5	459.6	194.1	126.9	123.8
65°	462.4	372.0	142.7	114.4	112.9
67.5°	398.5	283.8	106.0	103.1	101.6
70°	349.6	223.9	97.2	95.6	94.1
72.5°	305.7	171.4	88.4	86.8	85.3
75°	244.5	106.6	75.2	73.6	72.1
77.5°	182.8	67.2	62.1	60.5	58.9
80°	142.7	55.3	53.3	51.7	50.2
82.5°	107.5	44.7	43.3	41.7	40.1
85°	58.0	28.9	29.8	26.6	25.1
87.5°	20.1	14.4	14.8	12.7	11.5
90°	0.0	2.3	4.8	7.2	7.2
92.5°	5.7	8.1	10.5	14.9	16.7
95°	19.1	35.5	19.1	21.6	26.3
97.5°	34.0	68.1	140.6	41.5	35.9
100°	45.4	85.2	282.2	83.1	55.0
102.5°	56.9	98.5	381.6	219.2	120.0
105°	74.1	113.9	432.8	552.9	365.9
107.5°	91.3	121.3	413.2	804.7	753.7
110°	102.8	130.9	401.7	845.5	908.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	114.3	142.4	390.2	821.6	927.8
115°	131.5	159.6	373.0	775.3	906.3
117.5°	149.2	176.8	368.7	725.2	859.9
120°	162.6	188.3	361.1	687.1	827.4
122.5°	172.2	199.8	351.5	654.3	783.4
125°	188.9	214.6	351.5	614.7	726.9
127.5°	202.8	229.0	352.0	568.8	679.6
130°	210.4	238.5	353.9	538.0	643.2
132.5°	220.0	248.0	353.9	524.2	610.7
135°	234.3	260.1	353.9	506.2	581.1
137.5°	246.3	273.9	353.9	486.4	550.5
140°	255.9	281.6	353.9	474.8	533.2
142.5°	265.4	289.3	355.8	461.3	516.0
145°	277.4	300.8	356.3	441.0	487.8
147.5°	291.7	312.3	359.2	426.5	462.5
150°	301.3	320.0	361.1	416.8	447.2
152.5°	310.9	327.7	361.1	409.0	433.8
155°	325.2	336.9	363.5	399.8	418.5
157.5°	336.7	347.9	366.3	393.9	407.5
160°	344.3	353.7	368.2	390.0	401.7
162.5°	350.1	359.4	370.2	388.0	396.0
165°	361.1	365.7	373.0	382.8	389.8
167.5°	367.3	371.5	375.4	380.3	384.5
170°	373.0	375.4	375.4	380.3	382.6
172.5°	374.9	379.1	377.3	378.3	380.7
175°	380.2	382.5	380.2	377.8	375.4
177.5°	380.2	382.1	380.2	380.2	378.3
180°	380.2	380.2	380.2	380.2	380.2



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	16.83	17.73	17.70	18.62	19.74	9.06	9.96	9.94	10.85	11.97
	3H	18.33	19.13	19.21	20.03	21.17	10.42	11.22	11.31	12.12	13.27
	4H	18.84	19.60	19.75	20.50	21.66	11.08	11.83	11.98	12.74	13.89
	6H	19.24	19.94	20.16	20.85	22.02	11.67	12.36	12.58	13.27	14.44
	8H	19.37	20.04	20.30	20.96	22.13	11.89	12.56	12.82	13.48	14.65
	12H	19.46	20.08	20.38	21.01	22.20	12.06	12.69	12.99	13.61	14.80
4H	2H	16.66	17.42	17.57	18.32	19.48	9.68	10.44	10.59	11.34	12.50
	3H	18.30	18.93	19.22	19.87	21.04	11.24	11.87	12.16	12.80	13.97
	4H	18.90	19.47	19.82	20.40	21.59	12.04	12.61	12.97	13.54	14.74
	6H	19.39	19.88	20.33	20.84	22.04	12.78	13.27	13.72	14.22	15.42
	8H	19.58	20.04	20.52	20.98	22.20	13.07	13.53	14.02	14.48	15.69
	12H	19.71	20.12	20.67	21.09	22.30	13.29	13.70	14.25	14.67	15.89
8H	4H	18.82	19.27	19.76	20.22	21.43	12.49	12.95	13.44	13.90	15.11
	6H	19.35	19.73	20.32	20.72	21.93	13.38	13.76	14.35	14.75	15.96
	8H	19.59	19.92	20.57	20.90	22.13	13.77	14.11	14.75	15.09	16.32
	12H	19.78	20.07	20.76	21.04	22.32	14.09	14.39	15.08	15.36	16.64
12H	4H	18.77	19.18	19.73	20.15	21.36	12.54	12.96	13.51	13.92	15.14
	6H	19.32	19.66	20.30	20.64	21.87	13.49	13.83	14.47	14.81	16.04
	8H	19.57	19.86	20.55	20.84	22.11	13.94	14.23	14.92	15.20	16.48