

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: P621438

Luminaire Tested: VLT-F-050U-050D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621438
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-050D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

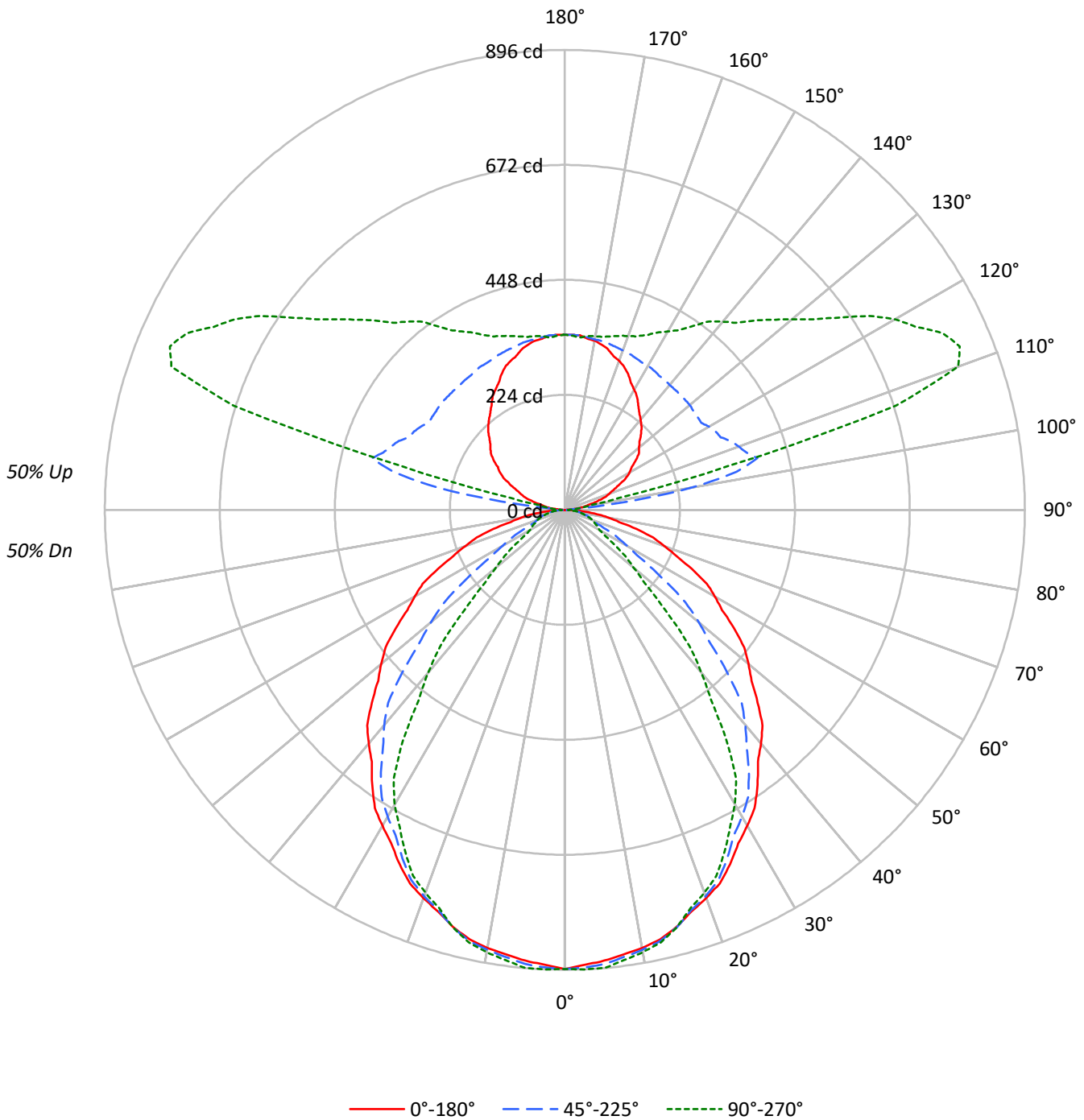
Lumens per Lamp: N/A
Luminaire Lumens: 3657.8 lumens
Efficiency: N/A
Efficacy: 126.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 29
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					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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	98	94	91	87	91	87	84	81	74	72	70	62	60	59	51	50	49	43				
2	90	83	78	73	83	77	72	68	66	62	59	55	53	50	45	44	42	38				
3	83	74	67	61	76	69	63	58	59	54	50	49	46	43	41	39	37	33				
4	76	66	58	53	70	61	55	50	53	48	44	44	41	38	37	34	32	29				
5	70	59	51	45	65	55	48	43	47	42	38	40	36	33	34	31	28	25				
6	65	53	45	40	60	50	43	38	43	38	34	37	33	29	31	28	25	23				
7	60	48	41	35	55	45	38	33	39	34	30	34	29	26	28	25	23	20				
8	56	44	36	31	52	41	34	30	36	30	27	31	27	24	26	23	21	18				
9	52	40	33	28	48	38	31	27	33	28	24	28	24	21	24	21	19	17				
10	49	37	30	25	45	35	28	24	30	25	22	26	22	19	23	19	17	15				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6420	6420	6420
5°	6351	6397	6451
10°	6317	6344	6377
15°	6248	6255	6255
20°	6147	6119	6063
25°	6029	5927	5824
30°	5889	5721	5490
35°	5732	5473	4817
40°	5566	5125	3878
45°	5393	4539	2814
50°	5210	3797	1950
55°	5029	2890	1456
60°	4841	2002	1101
65°	4629	1428	1129
70°	4324	1202	1164
75°	3998	1231	1178
80°	3475	1298	1223
85°	2816	1449	1219

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5393 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.3	2.3
10°-20°	237.1	6.5
20°-30°	344.8	9.4
30°-40°	381.5	10.4
40°-50°	327.5	9.0
50°-60°	226.8	6.2
60°-70°	135.1	3.7
70°-80°	66.6	1.8
80°-90°	21.3	0.6
90°-100°	41.9	1.1
100°-110°	298.9	8.2
110°-120°	405.8	11.1
120°-130°	330.3	9.0
130°-140°	265.7	7.3
140°-150°	209.4	5.7
150°-160°	153.1	4.2
160°-170°	95.1	2.6
170°-180°	32.4	0.9
0°-30°	666.2	18.2
0°-40°	1047.6	28.6
0°-60°	1601.9	43.8
0°-90°	1825.0	49.9
90°-120°	746.7	20.4
90°-150°	1552.1	42.4
90°-180°	1833.0	50.1
0°-180°	3657.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	895	895	895	895	895	
5°	882	895	888	887	896	84
15°	841	852	842	837	842	237
25°	762	767	749	736	736	350
35°	654	652	625	574	550	409
45°	531	522	447	323	277	410
55°	402	385	231	133	116	359
65°	273	219	84	67	66	270
75°	144	63	44	43	42	152
85°	34	17	18	16	15	40
90°	0	2	4	6	6	2
95°	17	32	17	19	24	19
105°	66	102	388	496	328	70
115°	118	143	335	696	813	117
125°	170	193	315	552	652	151
135°	210	233	318	454	522	162
145°	249	270	320	396	438	156
155°	292	302	326	359	376	134
165°	324	328	335	344	350	91
175°	341	343	341	339	337	32
180°	341	341	341	341	341	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	894.6	894.6	894.6	894.6	894.6
2.5°	887.2	897.3	892.4	892.5	896.1
5°	881.7	895.2	888.1	887.4	895.5
7.5°	873.5	886.0	878.7	877.8	884.8
10°	866.9	878.6	870.6	868.9	875.2
12.5°	857.3	869.0	860.2	857.0	863.4
15°	841.0	851.8	841.9	837.4	841.9
17.5°	820.5	829.5	818.3	811.1	813.8
20°	805.0	814.0	801.3	791.2	793.9
22.5°	787.9	795.5	781.3	769.7	771.7
25°	761.5	766.9	748.6	735.6	735.6
27.5°	732.1	735.4	714.0	700.4	696.6
30°	710.7	712.5	690.4	674.4	662.6
32.5°	688.5	689.6	664.5	638.7	620.5
35°	654.3	652.5	624.7	574.3	549.9
37.5°	617.9	613.9	581.1	504.3	468.0
40°	594.2	588.8	547.1	454.7	414.0
42.5°	569.8	562.3	509.4	403.6	358.6
45°	531.4	522.4	447.3	323.3	277.3
47.5°	493.3	481.4	383.7	250.5	210.9
50°	466.7	454.1	340.1	206.3	174.7
52.5°	440.1	427.4	295.7	173.2	148.1
55°	402.0	384.8	231.0	132.7	116.4
57.5°	363.2	338.6	172.1	103.4	90.8
60°	337.3	304.8	139.5	85.7	76.7
62.5°	312.2	271.0	114.4	74.8	73.0
65°	272.6	219.3	84.1	67.4	66.5
67.5°	234.9	167.3	62.5	60.8	59.9
70°	206.1	132.0	57.3	56.4	55.5
72.5°	180.2	101.1	52.1	51.2	50.3
75°	144.2	62.8	44.4	43.4	42.5
77.5°	107.8	39.6	36.6	35.7	34.7
80°	84.1	32.6	31.4	30.5	29.6
82.5°	63.4	26.3	25.5	24.6	23.7
85°	34.2	17.0	17.6	15.7	14.8
87.5°	11.8	8.6	9.0	7.9	7.2
90°	0.0	2.1	4.3	6.4	6.4
92.5°	5.2	7.2	9.4	13.3	15.0
95°	17.2	31.9	17.2	19.4	23.6
97.5°	30.5	61.1	126.2	37.2	32.2
100°	40.8	76.4	253.2	74.5	49.4
102.5°	51.1	88.4	342.5	196.7	107.7
105°	66.5	102.2	388.4	496.2	328.3
107.5°	82.0	108.8	370.8	722.1	676.4
110°	92.3	117.5	360.5	758.8	815.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	102.6	127.8	350.2	737.4	832.6
115°	118.0	143.2	334.8	695.8	813.3
117.5°	133.9	158.7	330.9	650.8	771.7
120°	145.9	169.0	324.0	616.6	742.5
122.5°	154.5	179.3	315.4	587.2	703.0
125°	169.5	192.6	315.4	551.6	652.4
127.5°	182.0	205.5	315.9	510.4	609.9
130°	188.8	214.0	317.6	482.8	577.2
132.5°	197.4	222.6	317.6	470.4	548.1
135°	210.3	233.4	317.6	454.3	521.5
137.5°	221.0	245.8	317.6	436.5	494.0
140°	229.6	252.7	317.6	426.1	478.5
142.5°	238.2	259.6	319.3	414.0	463.1
145°	248.9	269.9	319.7	395.8	437.8
147.5°	261.8	280.3	322.3	382.7	415.0
150°	270.4	287.2	324.0	374.0	401.3
152.5°	279.0	294.1	324.0	367.0	389.3
155°	291.8	302.3	326.2	358.7	375.5
157.5°	302.1	312.2	328.8	353.5	365.7
160°	309.0	317.4	330.5	350.0	360.5
162.5°	314.2	322.6	332.2	348.2	355.4
165°	324.0	328.2	334.8	343.5	349.8
167.5°	329.6	333.4	336.9	341.3	345.1
170°	334.8	336.9	336.9	341.2	343.3
172.5°	336.5	340.3	338.6	339.5	341.6
175°	341.2	343.3	341.2	339.0	336.9
177.5°	341.2	342.9	341.2	341.2	339.5
180°	341.2	341.2	341.2	341.2	341.2



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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	14.07	14.88	15.04	15.86	17.13	6.30	7.11	7.27	8.09	9.37
	3H	15.56	16.29	16.54	17.27	18.57	7.65	8.38	8.63	9.36	10.66
	4H	16.07	16.76	17.07	17.75	19.05	8.31	8.99	9.30	9.98	11.29
	6H	16.47	17.10	17.47	18.09	19.41	8.89	9.52	9.90	10.52	11.84
	8H	16.60	17.20	17.61	18.21	19.52	9.12	9.72	10.13	10.73	12.04
	12H	16.68	17.25	17.69	18.25	19.59	9.28	9.85	10.30	10.85	12.19
4H	2H	13.89	14.58	14.89	15.57	16.88	6.91	7.60	7.91	8.59	9.90
	3H	15.53	16.10	16.54	17.11	18.43	8.46	9.03	9.47	10.05	11.37
	4H	16.12	16.63	17.13	17.64	18.99	9.26	9.78	10.27	10.79	12.13
	6H	16.61	17.05	17.63	18.09	19.43	9.99	10.44	11.02	11.47	12.82
	8H	16.79	17.21	17.82	18.23	19.59	10.29	10.70	11.31	11.73	13.08
	12H	16.92	17.29	17.96	18.34	19.70	10.50	10.88	11.55	11.92	13.28
8H	4H	16.03	16.44	17.06	17.47	18.83	9.71	10.12	10.74	11.15	12.51
	6H	16.56	16.91	17.61	17.97	19.33	10.59	10.93	11.64	12.00	13.36
	8H	16.80	17.10	17.86	18.15	19.53	10.99	11.29	12.04	12.34	13.71
	12H	16.98	17.25	18.05	18.30	19.71	11.30	11.57	12.36	12.62	14.03
12H	4H	15.98	16.35	17.02	17.39	18.75	9.76	10.13	10.80	11.17	12.53
	6H	16.54	16.84	17.59	17.89	19.26	10.70	11.01	11.76	12.06	13.43
	8H	16.78	17.04	17.84	18.09	19.51	11.15	11.41	12.21	12.46	13.88