

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: P621454

Luminaire Tested: VLT-F-050U-125D-930-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621454
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-125D-930-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

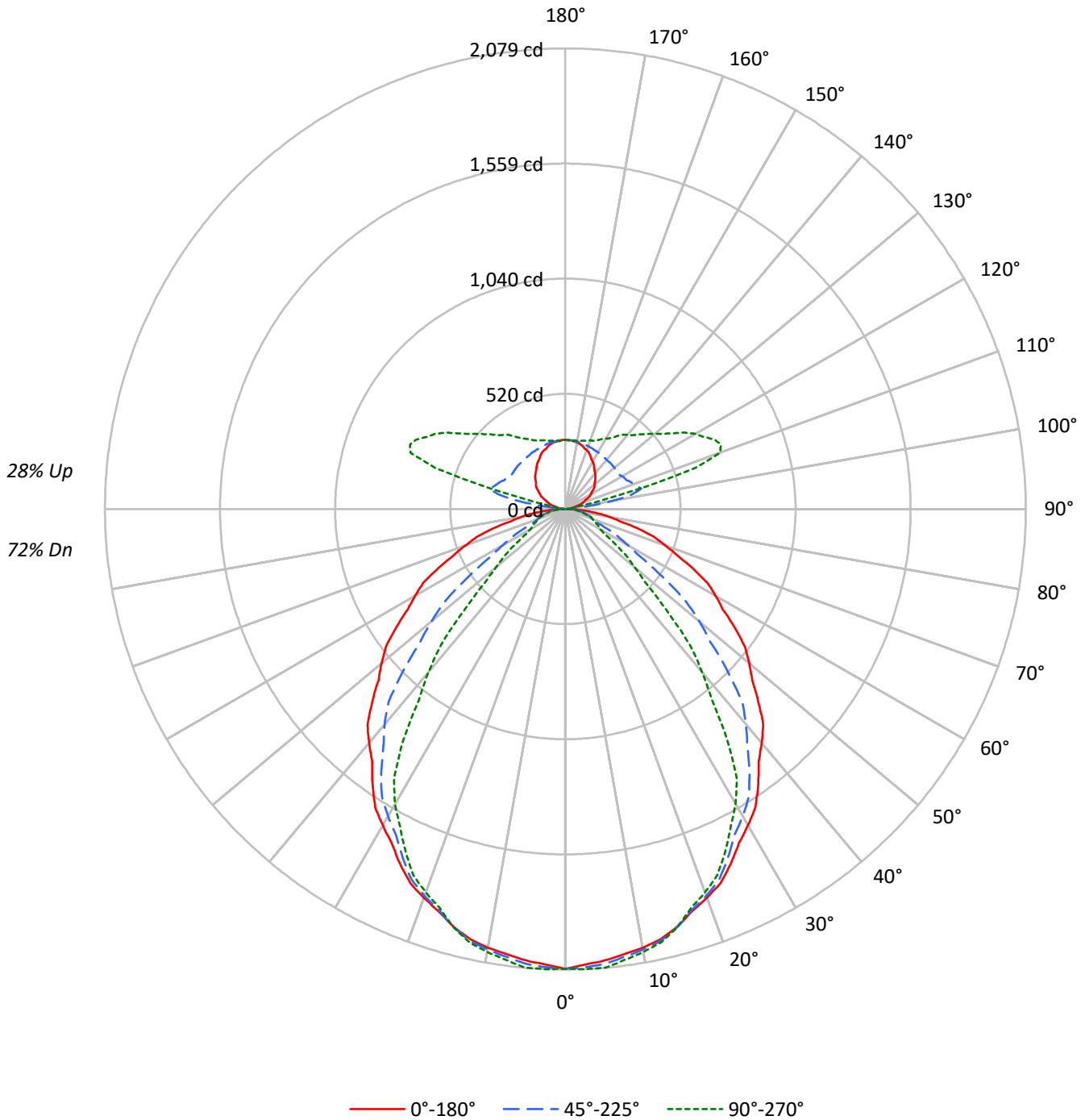
Lumens per Lamp: N/A
Luminaire Lumens: 5905.8 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 53.3
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	72		
1	104	100	96	93	98	95	91	88	85	83	81	77	75	73	69	67	66	62		
2	95	88	82	77	90	84	79	74	76	72	68	69	66	63	62	59	57	54		
3	88	79	71	66	83	75	69	63	68	63	59	62	58	54	56	53	50	47		
4	81	70	63	57	76	67	60	55	61	56	51	56	51	48	51	47	44	41		
5	75	63	55	49	71	61	53	48	55	49	45	51	46	42	46	42	39	36		
6	69	57	49	44	65	55	48	42	50	44	40	46	41	37	42	38	35	32		
7	64	52	44	39	61	50	43	38	46	40	36	42	37	33	39	35	31	29		
8	60	48	40	35	57	46	39	34	42	36	32	39	34	30	36	32	28	26		
9	56	44	36	31	53	42	35	31	39	33	29	36	31	27	33	29	26	24		
10	53	40	33	29	50	39	32	28	36	30	26	33	29	25	31	27	24	22		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14896	14896	14896
5°	14737	14845	14969
10°	14657	14720	14798
15°	14498	14513	14513
20°	14263	14198	14067
25°	13991	13753	13516
30°	13665	13273	12741
35°	13301	12699	11177
40°	12917	11892	8999
45°	12514	10533	6528
50°	12089	8810	4525
55°	11670	6707	3380
60°	11233	4647	2555
65°	10741	3313	2622
70°	10033	2790	2700
75°	9274	2853	2734
80°	8062	3013	2835
85°	6529	3351	2824

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12514 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.6	3.3
10°-20°	550.1	9.3
20°-30°	800.1	13.5
30°-40°	885.2	15.0
40°-50°	760.0	12.9
50°-60°	526.2	8.9
60°-70°	313.6	5.3
70°-80°	154.5	2.6
80°-90°	48.4	0.8
90°-100°	38.3	0.6
100°-110°	272.7	4.6
110°-120°	370.3	6.3
120°-130°	301.4	5.1
130°-140°	242.4	4.1
140°-150°	191.1	3.2
150°-160°	139.7	2.4
160°-170°	86.8	1.5
170°-180°	29.6	0.5
0°-30°	1545.8	26.2
0°-40°	2431.0	41.2
0°-60°	3717.1	62.9
0°-90°	4233.6	71.7
90°-120°	681.3	11.5
90°-150°	1416.2	24.0
90°-180°	1672.0	28.3
0°-180°	5905.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2076	2076	2076	2076	2076	
5°	2046	2077	2061	2059	2078	194
15°	1952	1977	1954	1943	1954	549
25°	1767	1780	1737	1707	1707	813
35°	1518	1514	1450	1333	1276	949
45°	1233	1212	1038	750	643	951
55°	933	893	536	308	270	834
65°	633	509	195	156	154	626
75°	334	146	103	101	99	353
85°	79	40	41	36	34	92
90°	0	2	4	6	6	4
95°	16	29	16	18	22	18
105°	61	93	354	453	300	64
115°	108	131	305	635	742	107
125°	155	176	288	503	595	137
135°	192	213	290	414	476	148
145°	227	246	292	361	399	143
155°	266	276	298	327	343	122
165°	296	300	305	313	319	83
175°	311	313	311	309	307	29
180°	311	311	311	311	311	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2075.8	2075.8	2075.8	2075.8	2075.8
2.5°	2058.7	2082.2	2070.7	2070.9	2079.3
5°	2045.8	2077.3	2060.8	2059.1	2078.0
7.5°	2026.9	2055.9	2038.9	2036.7	2053.1
10°	2011.5	2038.8	2020.1	2016.1	2030.8
12.5°	1989.2	2016.5	1996.1	1988.7	2003.3
15°	1951.5	1976.6	1953.6	1943.1	1953.6
17.5°	1903.8	1924.8	1898.7	1882.1	1888.4
20°	1867.8	1888.8	1859.2	1835.8	1842.1
22.5°	1828.4	1846.0	1812.9	1786.0	1790.6
25°	1767.0	1779.6	1737.0	1707.0	1707.0
27.5°	1698.8	1706.4	1656.8	1625.3	1616.5
30°	1649.1	1653.3	1601.9	1564.8	1537.6
32.5°	1597.6	1600.1	1541.9	1482.1	1439.8
35°	1518.3	1514.1	1449.6	1332.6	1275.9
37.5°	1433.8	1424.6	1348.4	1170.2	1085.9
40°	1378.9	1366.3	1269.5	1055.1	960.7
42.5°	1322.3	1304.7	1182.0	936.5	832.0
45°	1233.1	1212.1	1037.9	750.3	643.3
47.5°	1144.7	1117.0	890.4	581.2	489.4
50°	1082.9	1053.6	789.2	478.7	405.3
52.5°	1021.2	991.8	686.2	401.8	343.5
55°	932.8	893.0	536.1	307.9	270.2
57.5°	842.8	785.7	399.3	239.9	210.6
60°	782.7	707.2	323.8	199.0	178.0
62.5°	724.4	628.8	265.5	173.6	169.4
65°	632.6	508.9	195.1	156.5	154.4
67.5°	545.1	388.3	145.0	141.1	139.0
70°	478.2	306.3	133.0	130.8	128.7
72.5°	418.2	234.5	120.9	118.8	116.7
75°	334.5	145.8	102.9	100.7	98.6
77.5°	250.0	91.9	84.9	82.7	80.6
80°	195.1	75.6	72.9	70.7	68.6
82.5°	147.1	61.1	59.2	57.0	54.9
85°	79.3	39.5	40.7	36.4	34.3
87.5°	27.4	19.4	19.7	16.6	14.9
90°	0.0	1.9	3.9	5.9	5.9
92.5°	4.7	6.6	8.6	12.2	13.7
95°	15.7	29.1	15.7	17.7	21.5
97.5°	27.8	55.8	115.1	34.0	29.4
100°	37.2	69.7	231.0	68.0	45.0
102.5°	46.6	80.7	312.5	179.5	98.3
105°	60.7	93.2	354.4	452.7	299.6
107.5°	74.8	99.3	338.3	658.9	617.1
110°	84.2	107.2	328.9	692.3	744.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	93.6	116.6	319.5	672.7	759.7
115°	107.7	130.7	305.4	634.8	742.0
117.5°	122.2	144.8	301.9	593.8	704.1
120°	133.1	154.2	295.6	562.6	677.4
122.5°	141.0	163.6	287.8	535.7	641.4
125°	154.7	175.7	287.8	503.3	595.2
127.5°	166.0	187.5	288.2	465.7	556.4
130°	172.3	195.3	289.8	440.5	526.7
132.5°	180.1	203.1	289.8	429.2	500.0
135°	191.9	212.9	289.8	414.5	475.8
137.5°	201.7	224.3	289.8	398.2	450.7
140°	209.5	230.6	289.8	388.7	436.6
142.5°	217.3	236.9	291.3	377.7	422.5
145°	227.1	246.3	291.7	361.1	399.4
147.5°	238.9	255.7	294.1	349.2	378.7
150°	246.7	262.0	295.6	341.2	366.1
152.5°	254.5	268.3	295.6	334.9	355.2
155°	266.3	275.8	297.6	327.3	342.6
157.5°	275.7	284.9	299.9	322.5	333.6
160°	281.9	289.6	301.5	319.4	328.9
162.5°	286.6	294.3	303.1	317.7	324.2
165°	295.6	299.5	305.4	313.4	319.1
167.5°	300.7	304.2	307.4	311.4	314.8
170°	305.4	307.3	307.4	311.3	313.3
172.5°	307.0	310.4	309.0	309.8	311.7
175°	311.3	313.2	311.3	309.3	307.4
177.5°	311.3	312.8	311.3	311.3	309.7
180°	311.3	311.3	311.3	311.3	311.3



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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	18.84	19.86	19.60	20.63	21.56	11.08	12.09	11.83	12.86	13.79
	3H	20.35	21.26	21.12	22.04	23.00	12.44	13.35	13.21	14.13	15.09
	4H	20.87	21.72	21.66	22.51	23.48	13.10	13.96	13.89	14.75	15.72
	6H	21.27	22.06	22.07	22.86	23.84	13.70	14.49	14.50	15.28	16.27
	8H	21.41	22.16	22.22	22.97	23.96	13.93	14.68	14.74	15.49	16.48
	12H	21.50	22.21	22.31	23.02	24.03	14.10	14.81	14.92	15.62	16.63
4H	2H	18.69	19.54	19.48	20.33	21.31	11.71	12.57	12.51	13.36	14.33
	3H	20.34	21.05	21.15	21.87	22.86	13.28	13.99	14.08	14.81	15.80
	4H	20.94	21.58	21.76	22.40	23.42	14.08	14.72	14.90	15.54	16.56
	6H	21.44	21.99	22.27	22.84	23.86	14.83	15.38	15.66	16.23	17.25
	8H	21.63	22.14	22.47	22.99	24.02	15.12	15.64	15.96	16.48	17.51
	12H	21.76	22.23	22.62	23.09	24.13	15.34	15.81	16.20	16.67	17.71
8H	4H	20.87	21.38	21.70	22.22	23.26	14.54	15.06	15.38	15.90	16.94
	6H	21.41	21.83	22.27	22.72	23.75	15.43	15.86	16.30	16.74	17.78
	8H	21.64	22.02	22.52	22.90	23.95	15.83	16.20	16.70	17.08	18.14
	12H	21.84	22.17	22.71	23.04	24.15	16.15	16.48	17.03	17.36	18.46
12H	4H	20.82	21.29	21.68	22.15	23.19	14.60	15.06	15.46	15.93	16.96
	6H	21.38	21.76	22.25	22.64	23.69	15.55	15.92	16.42	16.80	17.86
	8H	21.63	21.96	22.50	22.83	23.94	15.99	16.33	16.87	17.20	18.31