

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: P621456

Luminaire Tested: VLT-F-050U-125D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621456
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-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

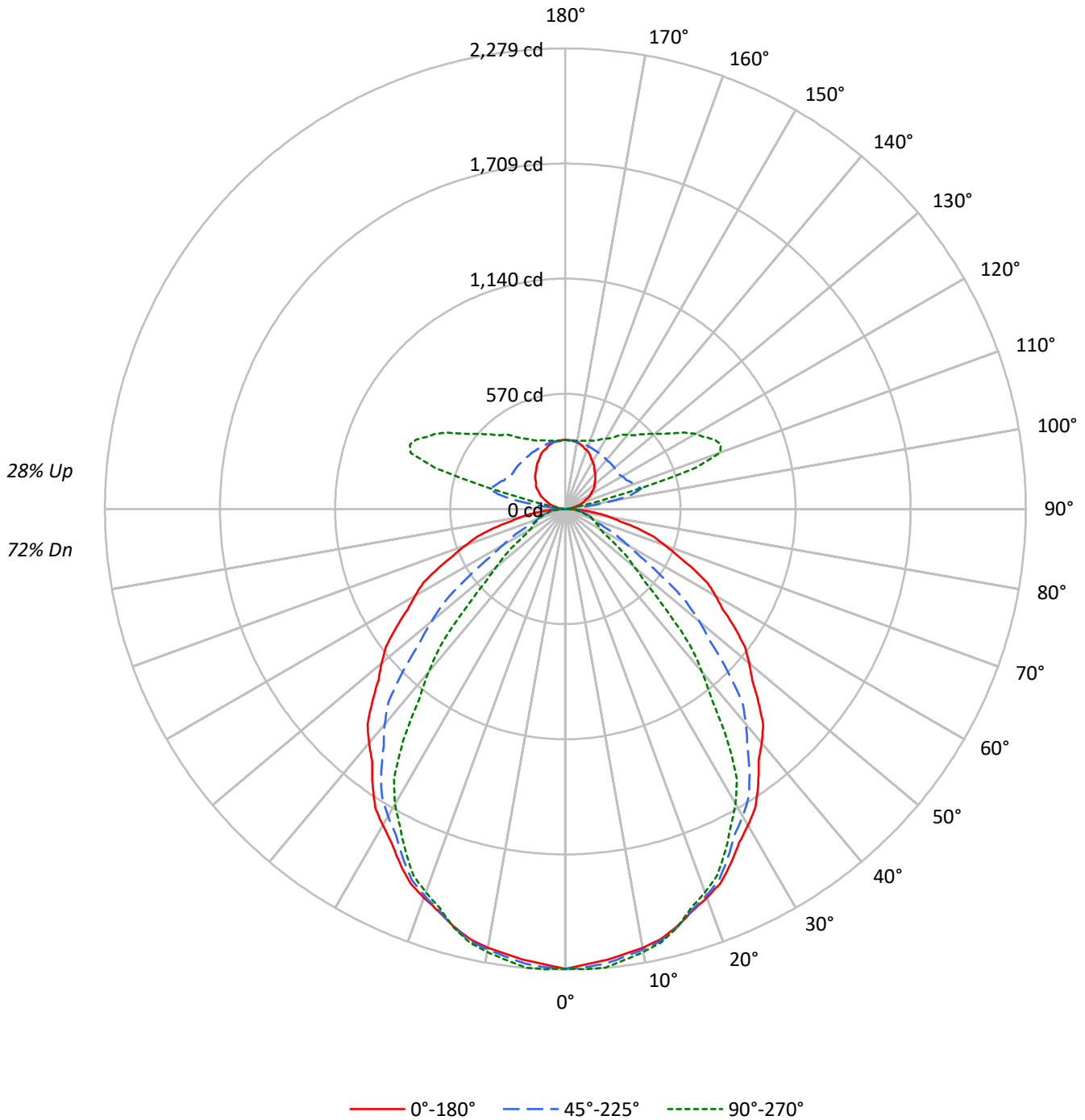
Lumens per Lamp: N/A
Luminaire Lumens: 6473.0 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16327	16327	16327
5°	16152	16270	16406
10°	16065	16133	16219
15°	15890	15907	15907
20°	15633	15562	15418
25°	15334	15074	14813
30°	14977	14548	13964
35°	14578	13919	12251
40°	14157	13034	9864
45°	13715	11545	7156
50°	13251	9656	4959
55°	12791	7351	3706
60°	12312	5093	2800
65°	11774	3632	2873
70°	10996	3057	2958
75°	10167	3127	2997
80°	8839	3302	3108
85°	7163	3680	3096

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13715 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.4	3.3
10°-20°	602.9	9.3
20°-30°	877.0	13.5
30°-40°	970.2	15.0
40°-50°	833.0	12.9
50°-60°	576.8	8.9
60°-70°	343.7	5.3
70°-80°	169.3	2.6
80°-90°	53.1	0.8
90°-100°	41.9	0.6
100°-110°	298.9	4.6
110°-120°	405.8	6.3
120°-130°	330.3	5.1
130°-140°	265.7	4.1
140°-150°	209.4	3.2
150°-160°	153.1	2.4
160°-170°	95.1	1.5
170°-180°	32.4	0.5
0°-30°	1694.2	26.2
0°-40°	2664.4	41.2
0°-60°	4074.1	62.9
0°-90°	4640.2	71.7
90°-120°	746.7	11.5
90°-150°	1552.1	24.0
90°-180°	1833.0	28.3
0°-180°	6473.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2275	2275	2275	2275	2275	
5°	2242	2277	2259	2257	2278	213
15°	2139	2166	2141	2130	2141	602
25°	1937	1950	1904	1871	1871	891
35°	1664	1660	1589	1460	1398	1040
45°	1352	1328	1138	822	705	1043
55°	1022	979	588	338	296	914
65°	693	558	214	172	169	687
75°	367	160	113	110	108	387
85°	87	43	45	40	38	101
90°	0	2	4	6	6	5
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°	2275.2	2275.2	2275.2	2275.2	2275.2
2.5°	2256.4	2282.1	2269.5	2269.8	2278.9
5°	2242.3	2276.8	2258.7	2256.9	2277.5
7.5°	2221.6	2253.3	2234.8	2232.3	2250.3
10°	2204.7	2234.6	2214.1	2209.7	2225.8
12.5°	2180.2	2210.1	2187.8	2179.7	2195.7
15°	2138.9	2166.4	2141.2	2129.7	2141.2
17.5°	2086.7	2109.7	2081.0	2062.9	2069.8
20°	2047.2	2070.2	2037.8	2012.1	2019.0
22.5°	2004.0	2023.3	1987.0	1957.5	1962.6
25°	1936.7	1950.5	1903.8	1870.9	1870.9
27.5°	1862.0	1870.3	1815.9	1781.4	1771.7
30°	1807.5	1812.1	1755.7	1715.1	1685.2
32.5°	1751.0	1753.8	1689.9	1624.5	1578.1
35°	1664.1	1659.5	1588.9	1460.5	1398.5
37.5°	1571.5	1561.4	1477.9	1282.6	1190.2
40°	1511.3	1497.5	1391.4	1156.4	1053.0
42.5°	1449.3	1430.0	1295.5	1026.4	912.0
45°	1351.5	1328.5	1137.6	822.3	705.1
47.5°	1254.6	1224.3	975.9	637.0	536.4
50°	1187.0	1154.8	864.9	524.7	444.2
52.5°	1119.3	1087.1	752.1	440.4	376.5
55°	1022.4	978.8	587.6	337.5	296.2
57.5°	923.7	861.2	437.6	263.0	230.8
60°	857.9	775.2	354.9	218.1	195.1
62.5°	794.0	689.2	291.0	190.3	185.7
65°	693.4	557.8	213.9	171.5	169.2
67.5°	597.5	425.6	158.9	154.6	152.3
70°	524.1	335.7	145.7	143.3	141.0
72.5°	458.3	257.0	132.6	130.2	127.9
75°	366.7	159.8	112.8	110.4	108.1
77.5°	274.1	100.8	93.1	90.7	88.4
80°	213.9	82.9	79.9	77.5	75.2
82.5°	161.2	67.0	64.9	62.5	60.2
85°	87.0	43.3	44.7	39.9	37.6
87.5°	30.1	21.3	21.5	18.2	16.3
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	19.16	20.18	19.92	20.95	21.88	11.40	12.41	12.15	13.18	14.11
	3H	20.67	21.57	21.44	22.36	23.31	12.76	13.67	13.53	14.45	15.41
	4H	21.19	22.04	21.98	22.83	23.80	13.42	14.28	14.21	15.06	16.04
	6H	21.59	22.38	22.39	23.18	24.16	14.02	14.80	14.82	15.60	16.59
	8H	21.73	22.48	22.54	23.29	24.28	14.25	14.99	15.06	15.81	16.80
	12H	21.81	22.53	22.63	23.34	24.35	14.42	15.13	15.23	15.94	16.95
4H	2H	19.01	19.86	19.80	20.65	21.62	12.03	12.89	12.82	13.67	14.65
	3H	20.66	21.37	21.47	22.19	23.18	13.60	14.30	14.40	15.13	16.11
	4H	21.26	21.90	22.07	22.72	23.74	14.40	15.04	15.22	15.86	16.88
	6H	21.76	22.31	22.59	23.16	24.18	15.14	15.70	15.98	16.54	17.57
	8H	21.95	22.46	22.79	23.31	24.34	15.44	15.96	16.28	16.80	17.83
	12H	22.08	22.55	22.94	23.41	24.45	15.66	16.13	16.52	16.99	18.03
8H	4H	21.18	21.70	22.02	22.54	23.58	14.86	15.38	15.70	16.22	17.25
	6H	21.72	22.15	22.59	23.04	24.07	15.75	16.18	16.62	17.06	18.09
	8H	21.96	22.34	22.84	23.22	24.27	16.14	16.52	17.02	17.40	18.45
	12H	22.15	22.49	23.03	23.36	24.47	16.47	16.80	17.35	17.67	18.78
12H	4H	21.14	21.60	22.00	22.47	23.51	14.92	15.38	15.78	16.25	17.28
	6H	21.70	22.08	22.57	22.96	24.01	15.86	16.24	16.74	17.12	18.17
	8H	21.95	22.28	22.82	23.15	24.26	16.31	16.65	17.19	17.52	18.62