

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: P621453

Luminaire Tested: VLT-F-050U-125D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621453
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-840-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, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7212.9 lumens
Efficiency: N/A
Efficacy: 135.3 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

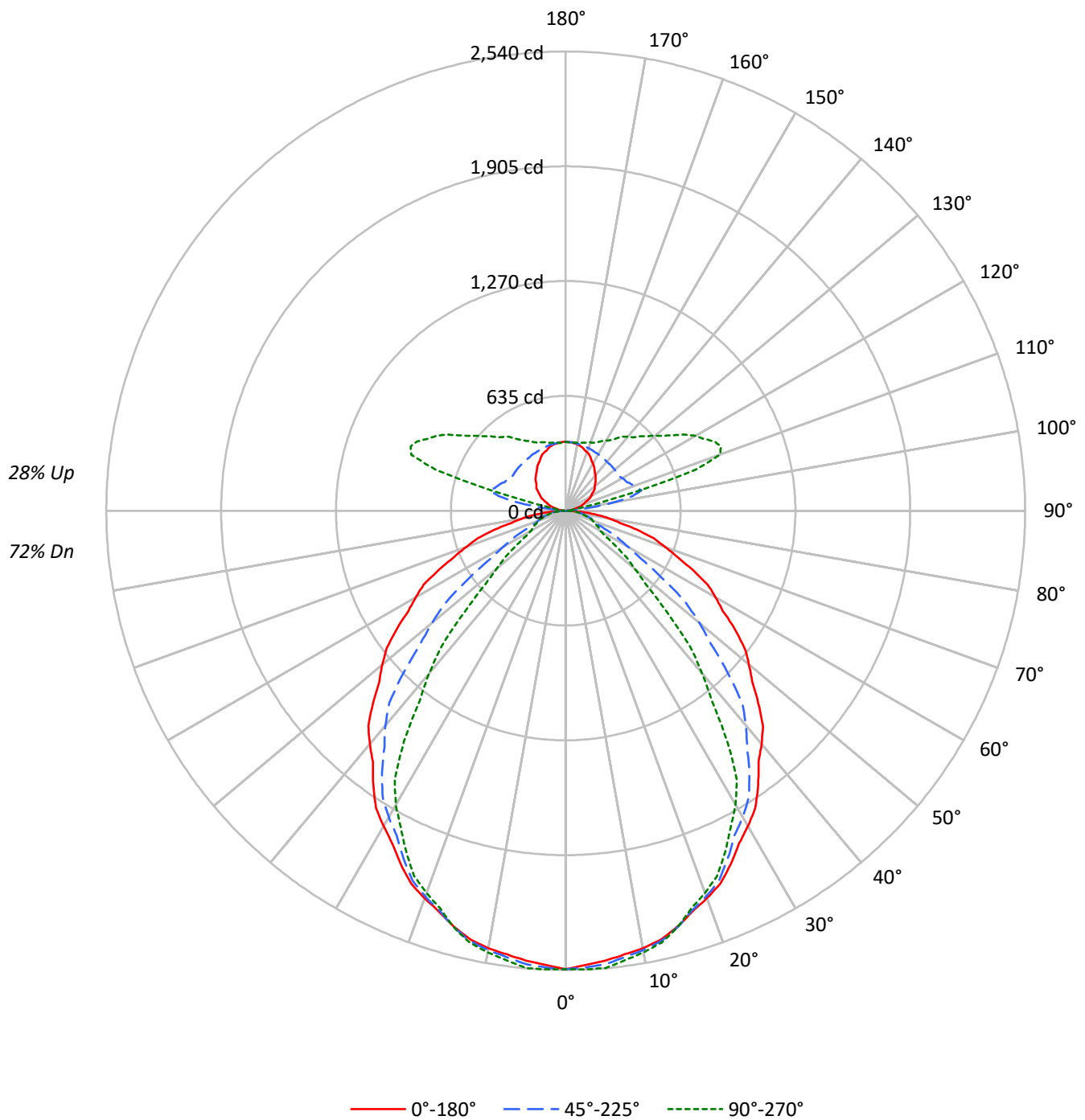
Input Watts (W): 53.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P621453

CATALOG NUMBER: VLT-F-050U-125D-840-UNV-STD-W-4

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76
1	104	100	96	93	98	95	91	88	85	83	81	77	75	73	69	67	66
2	95	88	82	77	90	84	79	74	76	72	68	69	66	63	62	59	57
3	88	79	71	66	83	75	69	63	68	63	59	62	58	54	56	53	50
4	81	70	63	57	76	67	60	55	61	56	51	56	51	48	51	47	44
5	75	63	55	49	71	61	53	48	55	49	45	51	46	42	46	42	39
6	69	57	49	44	65	55	48	42	50	44	40	46	41	37	42	38	35
7	64	52	44	39	61	50	43	38	46	40	36	42	37	33	39	35	31
8	60	48	40	35	57	46	39	34	42	36	32	39	34	30	36	32	28
9	56	44	36	31	53	42	35	31	39	33	29	36	31	27	33	29	26
10	53	40	33	29	50	39	32	28	36	30	26	33	29	25	31	27	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18193	18193	18193
5°	17998	18130	18281
10°	17901	17978	18073
15°	17706	17726	17726
20°	17420	17340	17181
25°	17087	16798	16507
30°	16689	16212	15560
35°	16244	15510	13652
40°	15776	14524	10991
45°	15283	12864	7974
50°	14765	10760	5526
55°	14254	8192	4129
60°	13720	5676	3120
65°	13119	4046	3202
70°	12255	3407	3296
75°	11329	3485	3341
80°	9848	3678	3463
85°	7978	4100	3450

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 15283 cd/sqm

TEST NUMBER: P621453

CATALOG NUMBER: VLT-F-050U-125D-840-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.9	3.3
10°-20°	671.8	9.3
20°-30°	977.2	13.5
30°-40°	1081.1	15.0
40°-50°	928.2	12.9
50°-60°	642.7	8.9
60°-70°	382.9	5.3
70°-80°	188.7	2.6
80°-90°	59.1	0.8
90°-100°	46.8	0.6
100°-110°	333.1	4.6
110°-120°	452.2	6.3
120°-130°	368.1	5.1
130°-140°	296.0	4.1
140°-150°	233.4	3.2
150°-160°	170.7	2.4
160°-170°	106.0	1.5
170°-180°	36.1	0.5
0°-30°	1887.9	26.2
0°-40°	2969.0	41.2
0°-60°	4539.9	62.9
0°-90°	5170.6	71.7
90°-120°	832.1	11.5
90°-150°	1729.6	24.0
90°-180°	2042.0	28.3
0°-180°	7212.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2535	2535	2535	2535	2535	
5°	2499	2537	2517	2515	2538	237
15°	2383	2414	2386	2373	2386	671
25°	2158	2174	2122	2085	2085	993
35°	1854	1849	1770	1628	1558	1159
45°	1506	1480	1268	916	786	1162
55°	1139	1091	655	376	330	1018
65°	773	622	238	191	189	765
75°	409	178	126	123	120	431
85°	97	48	50	44	42	112
90°	0	2	5	7	7	5
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	

TEST NUMBER: P621453

CATALOG NUMBER: VLT-F-050U-125D-840-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2535.3	2535.3	2535.3	2535.3	2535.3
2.5°	2514.3	2543.0	2529.0	2529.2	2539.5
5°	2498.6	2537.0	2516.9	2514.8	2537.9
7.5°	2475.6	2510.9	2490.2	2487.5	2507.5
10°	2456.7	2490.0	2467.2	2462.3	2480.3
12.5°	2429.5	2462.7	2437.8	2428.8	2446.7
15°	2383.4	2414.1	2386.0	2373.2	2386.0
17.5°	2325.2	2350.8	2318.9	2298.7	2306.4
20°	2281.2	2306.8	2270.7	2242.1	2249.8
22.5°	2233.0	2254.5	2214.2	2181.3	2186.9
25°	2158.1	2173.5	2121.5	2084.8	2084.8
27.5°	2074.8	2084.1	2023.5	1985.0	1974.3
30°	2014.1	2019.2	1956.5	1911.2	1877.9
32.5°	1951.2	1954.3	1883.1	1810.2	1758.4
35°	1854.3	1849.2	1770.5	1627.5	1558.4
37.5°	1751.1	1739.8	1646.9	1429.2	1326.3
40°	1684.1	1668.7	1550.5	1288.6	1173.3
42.5°	1614.9	1593.4	1443.6	1143.7	1016.2
45°	1506.0	1480.4	1267.6	916.3	785.7
47.5°	1398.1	1364.3	1087.4	709.8	597.7
50°	1322.6	1286.8	963.8	584.6	495.0
52.5°	1247.2	1211.4	838.1	490.8	419.6
55°	1139.3	1090.6	654.8	376.1	330.0
57.5°	1029.3	959.6	487.7	293.0	257.2
60°	956.0	863.8	395.5	243.0	217.4
62.5°	884.7	767.9	324.2	212.0	206.9
65°	772.6	621.5	238.3	191.1	188.6
67.5°	665.8	474.2	177.0	172.3	169.7
70°	584.1	374.1	162.4	159.7	157.1
72.5°	510.7	286.4	147.7	145.0	142.5
75°	408.6	178.1	125.7	123.0	120.5
77.5°	305.4	112.3	103.7	101.0	98.5
80°	238.3	92.4	89.0	86.4	83.8
82.5°	179.7	74.7	72.3	69.6	67.0
85°	96.9	48.2	49.8	44.5	41.9
87.5°	33.5	23.7	24.0	20.2	18.2
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



TEST NUMBER: P621453

CATALOG NUMBER: VLT-F-050U-125D-840-UNV-STD-W-4

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	19.54	20.55	20.29	21.32	22.25	11.77	12.79	12.53	13.56	14.49
	3H	21.04	21.95	21.81	22.73	23.69	13.14	14.04	13.91	14.82	15.78
	4H	21.56	22.42	22.35	23.21	24.18	13.80	14.65	14.59	15.44	16.41
	6H	21.97	22.75	22.77	23.55	24.54	14.39	15.18	15.20	15.98	16.96
	8H	22.11	22.85	22.92	23.67	24.65	14.62	15.37	15.44	16.19	17.17
	12H	22.19	22.90	23.01	23.71	24.72	14.79	15.51	15.61	16.32	17.33
4H	2H	19.39	20.24	20.18	21.03	22.00	12.41	13.26	13.20	14.05	15.02
	3H	21.04	21.74	21.84	22.57	23.56	13.97	14.68	14.78	15.50	16.49
	4H	21.63	22.27	22.45	23.10	24.11	14.77	15.41	15.59	16.24	17.25
	6H	22.13	22.69	22.97	23.53	24.56	15.52	16.07	16.36	16.92	17.94
	8H	22.32	22.84	23.16	23.68	24.72	15.82	16.33	16.65	17.17	18.21
	12H	22.46	22.92	23.32	23.79	24.82	16.04	16.50	16.90	17.37	18.40
8H	4H	21.56	22.08	22.40	22.92	23.95	15.24	15.75	16.08	16.60	17.63
	6H	22.10	22.53	22.97	23.41	24.45	16.13	16.55	16.99	17.44	18.47
	8H	22.34	22.71	23.21	23.59	24.65	16.52	16.90	17.40	17.78	18.83
	12H	22.53	22.86	23.41	23.74	24.84	16.85	17.18	17.72	18.05	19.16
12H	4H	21.52	21.98	22.37	22.84	23.88	15.29	15.76	16.15	16.62	17.66
	6H	22.07	22.45	22.95	23.33	24.38	16.24	16.62	17.12	17.50	18.55
	8H	22.32	22.66	23.20	23.53	24.63	16.69	17.02	17.57	17.89	19.00

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

8 of 8