

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: P621573

Luminaire Tested: VLT-F-150U-125D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621573
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-150U-125D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

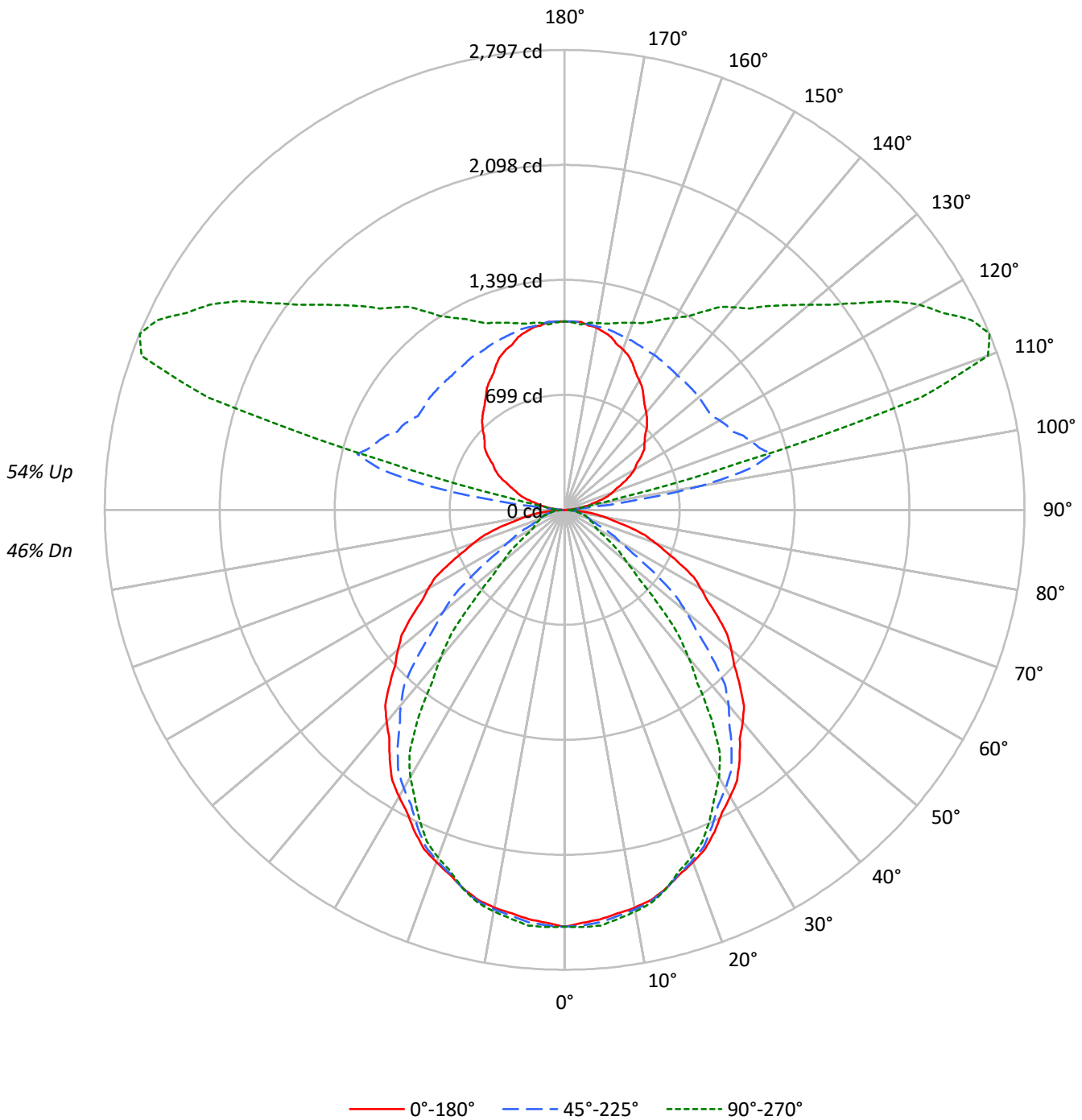
Lumens per Lamp: N/A
Luminaire Lumens: 11329.9 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 87.3
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46		
1	97	93	90	86	89	86	83	80	72	70	68	59	57	56	47	46	45	40		
2	89	82	77	72	82	76	71	67	64	60	57	53	50	48	42	41	39	34		
3	82	73	66	61	75	67	61	57	57	52	49	47	44	41	38	36	34	30		
4	75	65	57	52	69	60	54	48	51	46	42	42	39	36	34	32	30	26		
5	69	58	50	45	63	54	47	42	46	41	37	38	34	32	31	29	26	23		
6	64	52	45	39	59	49	42	37	41	36	32	35	31	28	29	26	24	21		
7	59	47	40	34	54	44	37	33	38	33	29	32	28	25	26	23	21	19		
8	55	43	36	31	51	40	34	29	35	29	26	29	25	22	24	21	19	17		
9	51	40	32	27	47	37	30	26	32	27	23	27	23	20	22	20	17	15		
10	48	36	29	25	44	34	28	23	29	24	21	25	21	18	21	18	16	14		

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.9	2.1
10°-20°	671.8	5.9
20°-30°	977.2	8.6
30°-40°	1081.1	9.5
40°-50°	928.2	8.2
50°-60°	642.7	5.7
60°-70°	382.9	3.4
70°-80°	188.7	1.7
80°-90°	60.8	0.5
90°-100°	140.9	1.2
100°-110°	1004.3	8.9
110°-120°	1363.4	12.0
120°-130°	1109.7	9.8
130°-140°	892.5	7.9
140°-150°	703.6	6.2
150°-160°	514.5	4.5
160°-170°	319.6	2.8
170°-180°	109.0	1.0
0°-30°	1887.9	16.7
0°-40°	2969.0	26.2
0°-60°	4539.9	40.1
0°-90°	5172.3	45.7
90°-120°	2508.7	22.1
90°-150°	5214.5	46.0
90°-180°	6158.0	54.4
0°-180°	11329.9	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	7	14	22	22	7
95°	58	107	58	65	79	65
105°	224	343	1305	1667	1103	236
115°	396	481	1125	2338	2732	394
125°	570	647	1060	1853	2192	506
135°	706	784	1067	1526	1752	544
145°	836	907	1074	1330	1471	525
155°	980	1016	1096	1205	1262	450
165°	1089	1103	1125	1154	1175	306
175°	1146	1153	1146	1139	1132	108
180°	1146	1146	1146	1146	1146	



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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	24.7	25.9	23.1	21.1
90°	0.0	7.0	14.4	21.6	21.6
92.5°	17.3	24.4	31.7	44.8	50.5
95°	57.7	107.0	57.7	65.2	79.3
97.5°	102.4	205.3	423.9	125.1	108.1
100°	137.0	256.8	850.7	250.4	165.8
102.5°	171.6	297.1	1150.6	660.8	361.9
105°	223.5	343.3	1304.9	1667.0	1103.0
107.5°	275.4	365.6	1245.8	2426.1	2272.4
110°	310.0	394.6	1211.2	2549.2	2739.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	344.6	429.2	1176.6	2477.2	2797.2
115°	396.5	481.1	1124.7	2337.6	2732.3
117.5°	449.9	533.0	1111.7	2186.4	2592.5
120°	490.2	567.8	1088.6	2071.5	2494.4
122.5°	519.1	602.3	1059.8	1972.7	2361.8
125°	569.5	647.1	1059.8	1853.3	2191.6
127.5°	611.4	690.3	1061.2	1714.8	2048.9
130°	634.4	719.0	1067.0	1622.1	1939.3
132.5°	663.3	747.8	1067.0	1580.4	1841.3
135°	706.5	784.1	1067.0	1526.3	1751.9
137.5°	742.6	825.7	1067.0	1466.4	1659.6
140°	771.4	848.9	1067.0	1431.5	1607.7
142.5°	800.2	872.1	1072.7	1390.8	1555.8
145°	836.3	906.8	1074.2	1329.7	1470.7
147.5°	879.5	941.6	1082.8	1285.7	1394.3
150°	908.4	964.8	1088.6	1256.5	1348.1
152.5°	937.2	988.0	1088.6	1233.1	1307.8
155°	980.5	1015.7	1095.8	1205.2	1261.6
157.5°	1015.1	1048.9	1104.5	1187.6	1228.5
160°	1038.1	1066.3	1110.2	1175.9	1211.2
162.5°	1055.4	1083.6	1116.0	1169.9	1193.9
165°	1088.6	1102.7	1124.7	1154.0	1175.1
167.5°	1107.4	1120.0	1131.9	1146.6	1159.3
170°	1124.7	1131.7	1131.9	1146.4	1153.5
172.5°	1130.4	1143.1	1137.6	1140.7	1147.7
175°	1146.3	1153.3	1146.3	1138.9	1131.9
177.5°	1146.3	1151.9	1146.3	1146.2	1140.5
180°	1146.3	1146.3	1146.3	1146.3	1146.3



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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	17.28	18.06	18.28	19.06	20.40	9.51	10.29	10.52	11.30	12.63
	3H	18.77	19.46	19.78	20.48	21.84	10.86	11.56	11.87	12.57	13.93
	4H	19.28	19.93	20.30	20.95	22.32	11.51	12.17	12.54	13.19	14.55
	6H	19.67	20.27	20.71	21.30	22.67	12.09	12.70	13.13	13.72	15.10
	8H	19.80	20.37	20.84	21.41	22.79	12.32	12.89	13.36	13.93	15.31
	12H	19.88	20.42	20.92	21.46	22.85	12.48	13.03	13.53	14.06	15.46
4H	2H	17.10	17.76	18.13	18.78	20.14	10.12	10.78	11.15	11.80	13.16
	3H	18.73	19.27	19.77	20.32	21.70	11.66	12.21	12.70	13.26	14.64
	4H	19.31	19.81	20.36	20.85	22.25	12.46	12.96	13.50	13.99	15.40
	6H	19.80	20.23	20.86	21.30	22.69	13.19	13.62	14.25	14.68	16.08
	8H	19.99	20.39	21.05	21.44	22.86	13.48	13.88	14.54	14.94	16.35
	12H	20.12	20.48	21.19	21.55	22.96	13.70	14.06	14.77	15.13	16.54
8H	4H	19.23	19.63	20.28	20.68	22.09	12.90	13.30	13.96	14.36	15.77
	6H	19.76	20.09	20.84	21.19	22.59	13.78	14.11	14.86	15.21	16.62
	8H	19.99	20.28	21.08	21.36	22.79	14.18	14.47	15.27	15.55	16.98
	12H	20.18	20.43	21.27	21.51	22.98	14.50	14.75	15.59	15.83	17.30
12H	4H	19.17	19.53	20.25	20.60	22.02	12.95	13.31	14.02	14.38	15.80
	6H	19.73	20.02	20.82	21.10	22.53	13.90	14.19	14.99	15.27	16.70
	8H	19.97	20.23	21.06	21.30	22.77	14.34	14.59	15.43	15.67	17.14