

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: P621523

Luminaire Tested: VLT-F-100U-125D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621523
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-100U-125D-830-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

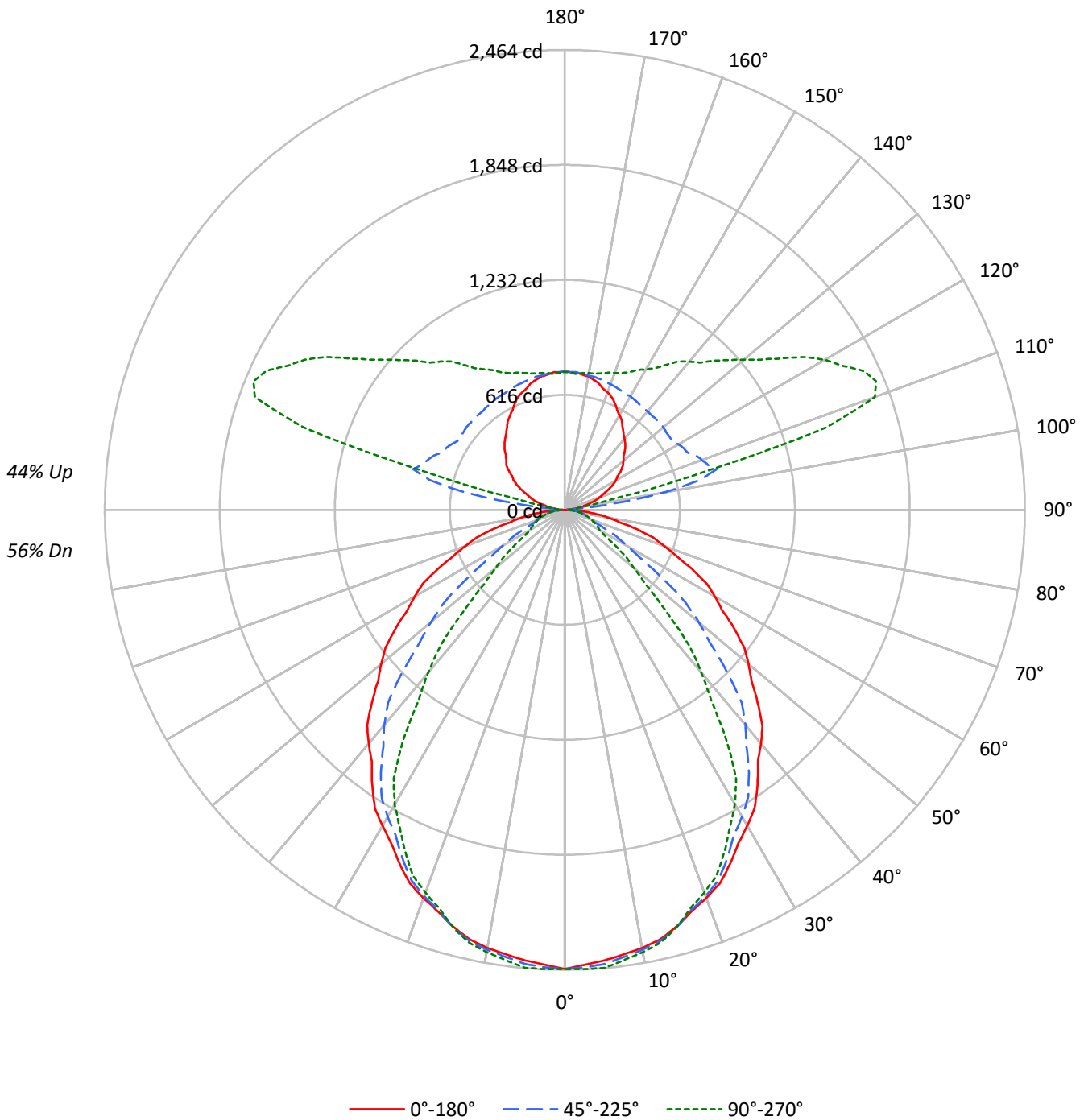
Lumens per Lamp: N/A
Luminaire Lumens: 8988.6 lumens
Efficiency: N/A
Efficacy: 132.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 67.7
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	0
RCR																		
0	109	109	109	109	101	101	101	101	87	87	87	73	73	73	61	61	61	56
1	100	96	92	89	93	89	86	83	77	75	73	66	64	63	56	54	53	49
2	92	85	79	74	85	79	74	70	69	65	62	59	56	54	50	48	46	42
3	84	75	68	63	78	70	64	59	61	57	53	53	49	46	45	42	40	37
4	77	67	59	54	72	63	56	51	55	50	46	48	44	40	41	38	35	32
5	71	60	52	47	66	56	50	44	50	44	40	43	39	36	37	34	31	28
6	66	54	46	41	61	51	44	39	45	39	35	39	35	32	34	31	28	25
7	61	49	42	36	57	46	39	35	41	35	31	36	32	28	31	28	25	23
8	57	45	37	32	53	42	36	31	38	32	28	33	29	25	29	25	23	21
9	53	41	34	29	50	39	32	28	35	29	25	30	26	23	27	23	21	19
10	50	38	31	26	46	36	29	25	32	27	23	28	24	21	25	21	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17651	17651	17651
5°	17462	17590	17736
10°	17367	17441	17534
15°	17178	17197	17197
20°	16901	16823	16668
25°	16578	16296	16014
30°	16191	15728	15096
35°	15760	15047	13245
40°	15305	14092	10664
45°	14828	12480	7736
50°	14325	10439	5361
55°	13828	7947	4006
60°	13311	5507	3027
65°	12728	3926	3106
70°	11888	3305	3200
75°	10990	3383	3241
80°	9554	3570	3360
85°	7739	3977	3351

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14828 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.8	2.6
10°-20°	651.8	7.3
20°-30°	948.1	10.5
30°-40°	1048.9	11.7
40°-50°	900.5	10.0
50°-60°	623.5	6.9
60°-70°	371.5	4.1
70°-80°	183.1	2.0
80°-90°	58.2	0.6
90°-100°	90.9	1.0
100°-110°	647.7	7.2
110°-120°	879.4	9.8
120°-130°	715.7	8.0
130°-140°	575.6	6.4
140°-150°	453.8	5.0
150°-160°	331.8	3.7
160°-170°	206.1	2.3
170°-180°	70.3	0.8
0°-30°	1831.6	20.4
0°-40°	2880.5	32.0
0°-60°	4404.5	49.0
0°-90°	5017.2	55.8
90°-120°	1618.0	18.0
90°-150°	3363.2	37.4
90°-180°	3971.0	44.2
0°-180°	8988.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2460	2460	2460	2460	2460	
5°	2424	2461	2442	2440	2462	230
15°	2312	2342	2315	2302	2315	651
25°	2094	2109	2058	2023	2023	963
35°	1799	1794	1718	1579	1512	1124
45°	1461	1436	1230	889	762	1127
55°	1105	1058	635	365	320	988
65°	750	603	231	185	183	742
75°	396	173	122	119	117	418
85°	94	47	48	43	41	109
90°	0	4	9	14	14	6
95°	37	69	37	42	51	42
105°	144	221	842	1075	711	152
115°	256	310	725	1508	1762	254
125°	367	417	684	1195	1414	326
135°	456	506	688	984	1130	351
145°	539	585	693	858	949	339
155°	632	655	707	777	814	290
165°	702	711	725	744	758	197
175°	739	744	739	735	730	70
180°	739	739	739	739	739	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2459.7	2459.7	2459.7	2459.7	2459.7
2.5°	2439.3	2467.2	2453.6	2453.8	2463.7
5°	2424.1	2461.3	2441.9	2439.8	2462.2
7.5°	2401.7	2436.0	2415.9	2413.3	2432.7
10°	2383.4	2415.7	2393.6	2388.9	2406.3
12.5°	2357.0	2389.3	2365.1	2356.4	2373.8
15°	2312.3	2342.1	2314.8	2302.4	2314.8
17.5°	2255.9	2280.7	2249.8	2230.1	2237.6
20°	2213.2	2238.0	2203.0	2175.2	2182.7
22.5°	2166.4	2187.3	2148.1	2116.2	2121.7
25°	2093.8	2108.7	2058.2	2022.6	2022.6
27.5°	2013.0	2021.9	1963.1	1925.8	1915.4
30°	1954.0	1959.0	1898.1	1854.2	1821.9
32.5°	1893.0	1896.0	1827.0	1756.2	1706.0
35°	1799.0	1794.0	1717.7	1579.0	1511.9
37.5°	1698.9	1688.0	1597.8	1386.6	1286.7
40°	1633.8	1618.9	1504.3	1250.2	1138.4
42.5°	1566.8	1545.9	1400.6	1109.6	985.9
45°	1461.1	1436.2	1229.8	889.0	762.3
47.5°	1356.4	1323.6	1055.0	688.7	579.8
50°	1283.2	1248.4	935.1	567.2	480.2
52.5°	1210.0	1175.2	813.1	476.1	407.1
55°	1105.3	1058.1	635.2	364.9	320.2
57.5°	998.6	931.0	473.1	284.3	249.5
60°	927.5	838.0	383.7	235.7	210.9
62.5°	858.3	745.0	314.6	205.7	200.7
65°	749.6	603.0	231.2	185.4	182.9
67.5°	645.9	460.1	171.8	167.1	164.7
70°	566.6	362.9	157.5	154.9	152.5
72.5°	495.5	277.8	143.3	140.7	138.2
75°	396.4	172.8	122.0	119.4	116.9
77.5°	296.3	108.9	100.6	98.0	95.5
80°	231.2	89.6	86.4	83.8	81.3
82.5°	174.3	72.4	70.1	67.5	65.0
85°	94.0	46.8	48.3	43.1	40.7
87.5°	32.5	23.5	24.2	21.0	19.1
90°	0.0	4.5	9.3	13.9	13.9
92.5°	11.2	15.7	20.5	28.9	32.5
95°	37.2	69.0	37.2	42.1	51.1
97.5°	66.0	132.4	273.4	80.7	69.7
100°	88.3	165.6	548.7	161.5	106.9
102.5°	110.7	191.6	742.1	426.2	233.4
105°	144.1	221.4	841.6	1075.1	711.4
107.5°	177.6	235.8	803.5	1564.7	1465.6
110°	199.9	254.5	781.2	1644.2	1766.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	222.3	276.8	758.9	1597.7	1804.1
115°	255.7	310.3	725.4	1507.7	1762.3
117.5°	290.1	343.8	717.0	1410.2	1672.1
120°	316.2	366.2	702.1	1336.0	1608.8
122.5°	334.8	388.4	683.5	1272.3	1523.3
125°	367.3	417.3	683.5	1195.3	1413.5
127.5°	394.3	445.2	684.5	1106.0	1321.5
130°	409.2	463.7	688.2	1046.2	1250.8
132.5°	427.8	482.3	688.2	1019.3	1187.6
135°	455.7	505.7	688.2	984.4	1129.9
137.5°	478.9	532.6	688.2	945.8	1070.4
140°	497.5	547.5	688.2	923.2	1036.9
142.5°	516.1	562.5	691.9	897.0	1003.4
145°	539.4	584.8	692.8	857.6	948.6
147.5°	567.3	607.3	698.4	829.3	899.3
150°	585.9	622.3	702.1	810.4	869.5
152.5°	604.5	637.2	702.1	795.3	843.5
155°	632.4	655.1	706.8	777.3	813.7
157.5°	654.7	676.5	712.4	766.0	792.3
160°	669.6	687.8	716.1	758.4	781.2
162.5°	680.7	698.9	719.8	754.6	770.0
165°	702.1	711.2	725.4	744.3	757.9
167.5°	714.2	722.4	730.0	739.5	747.7
170°	725.4	729.9	730.0	739.4	744.0
172.5°	729.1	737.3	733.7	735.7	740.3
175°	739.3	743.9	739.3	734.6	730.0
177.5°	739.3	743.0	739.3	739.2	735.6
180°	739.3	739.3	739.3	739.3	739.3



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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	18.12	18.98	19.04	19.91	21.10	10.36	11.22	11.28	12.15	13.34
	3H	19.62	20.39	20.55	21.32	22.54	11.71	12.48	12.64	13.42	14.63
	4H	20.13	20.86	21.08	21.80	23.02	12.37	13.09	13.31	14.03	15.26
	6H	20.53	21.20	21.48	22.14	23.38	12.96	13.62	13.91	14.57	15.81
	8H	20.66	21.29	21.62	22.26	23.49	13.18	13.81	14.14	14.78	16.01
	12H	20.74	21.34	21.71	22.30	23.56	13.35	13.95	14.31	14.91	16.17
4H	2H	17.95	18.68	18.90	19.62	20.85	10.98	11.70	11.93	12.64	13.87
	3H	19.59	20.19	20.55	21.16	22.40	12.53	13.13	13.49	14.10	15.34
	4H	20.18	20.73	21.15	21.70	22.96	13.32	13.87	14.29	14.84	16.10
	6H	20.68	21.15	21.66	22.14	23.40	14.06	14.53	15.04	15.52	16.78
	8H	20.86	21.30	21.84	22.28	23.56	14.35	14.79	15.34	15.78	17.05
	12H	20.99	21.39	21.99	22.39	23.67	14.57	14.97	15.57	15.97	17.25
8H	4H	20.10	20.54	21.08	21.52	22.80	13.78	14.22	14.76	15.20	16.48
	6H	20.63	21.00	21.64	22.02	23.30	14.66	15.02	15.67	16.05	17.32
	8H	20.87	21.19	21.88	22.20	23.49	15.06	15.37	16.07	16.39	17.68
	12H	21.06	21.34	22.07	22.35	23.68	15.37	15.66	16.39	16.66	18.00
12H	4H	20.05	20.44	21.05	21.44	22.72	13.83	14.22	14.83	15.22	16.50
	6H	20.61	20.93	21.62	21.94	23.23	14.77	15.09	15.79	16.11	17.40
	8H	20.85	21.13	21.87	22.14	23.48	15.22	15.50	16.23	16.51	17.84