

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: P621420

Luminaire Tested: VLT-F-025U-075D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621420
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-025U-075D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

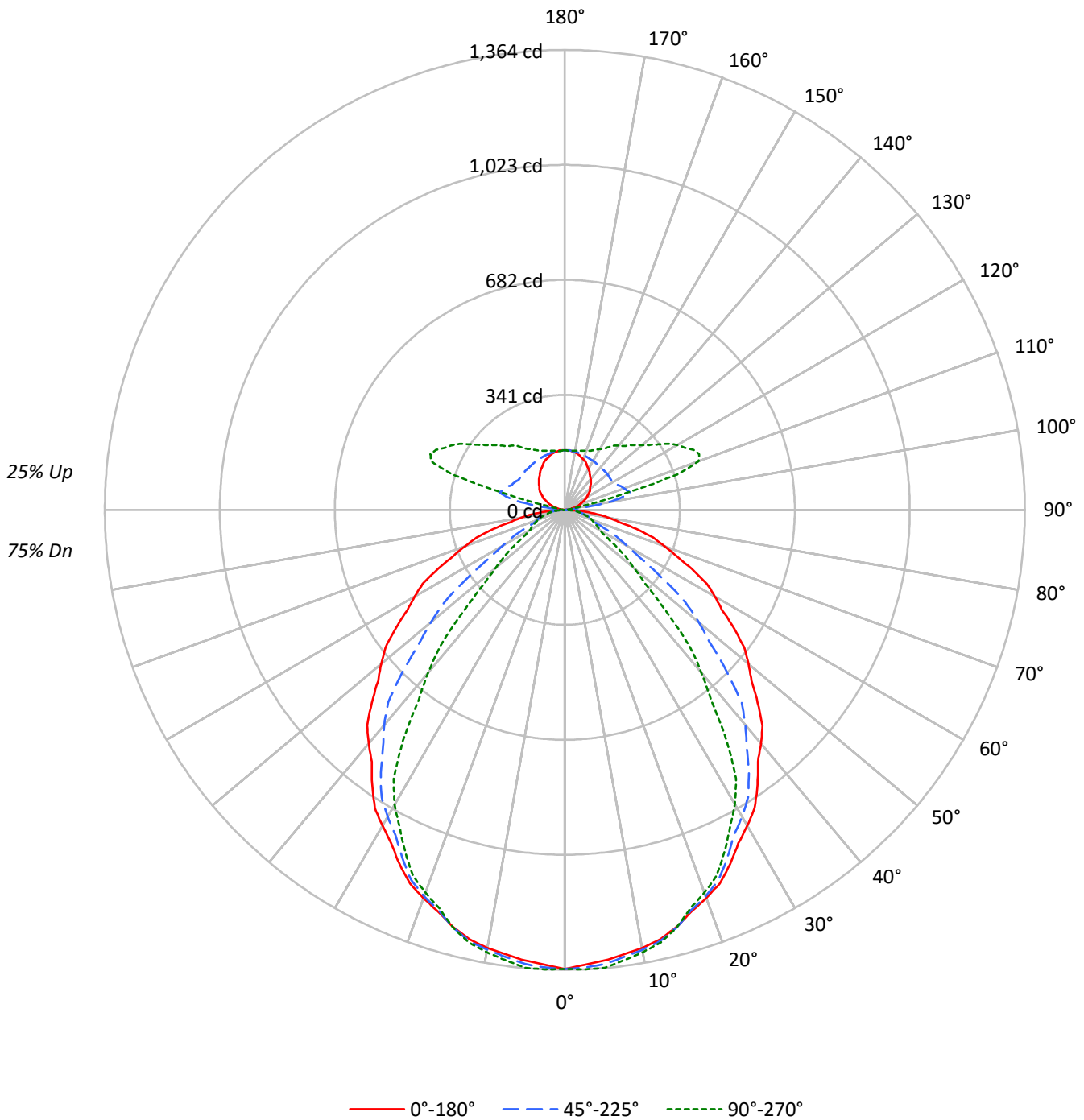
Lumens per Lamp: N/A
Luminaire Lumens: 3727.0 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 29.9
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	113	113	113	113	107	107	107	107	97	97	97	87	87	87	79	79	79	75				
1	104	100	97	93	99	96	92	89	87	84	82	79	77	75	71	70	69	65				
2	96	89	83	78	91	85	80	75	77	73	70	70	67	64	64	62	59	56				
3	88	79	72	66	84	76	69	64	69	64	60	63	59	56	58	55	52	49				
4	81	71	63	57	77	68	61	56	62	57	52	57	53	49	52	49	46	43				
5	75	64	56	50	71	61	54	49	56	50	46	52	47	43	48	44	40	38				
6	70	58	50	44	66	56	48	43	51	45	41	47	42	38	44	39	36	34				
7	65	53	45	39	62	51	43	38	47	41	36	43	38	34	40	36	33	30				
8	60	48	41	35	58	46	39	34	43	37	33	40	35	31	37	33	29	27				
9	57	44	37	32	54	43	36	31	40	34	30	37	32	28	34	30	27	25				
10	53	41	34	29	51	40	33	28	37	31	27	34	29	26	32	28	25	23				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9772	9772	9772
5°	9668	9738	9820
10°	9615	9656	9707
15°	9511	9521	9521
20°	9357	9314	9228
25°	9178	9022	8866
30°	8964	8708	8358
35°	8725	8331	7332
40°	8474	7801	5903
45°	8209	6910	4283
50°	7931	5779	2968
55°	7657	4400	2218
60°	7370	3048	1676
65°	7047	2173	1720
70°	6582	1830	1771
75°	6086	1871	1794
80°	5290	1975	1860
85°	4290	2198	1853

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8209 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.3	3.4
10°-20°	360.8	9.7
20°-30°	524.9	14.1
30°-40°	580.7	15.6
40°-50°	498.5	13.4
50°-60°	345.2	9.3
60°-70°	205.7	5.5
70°-80°	101.3	2.7
80°-90°	31.7	0.9
90°-100°	21.7	0.6
100°-110°	154.9	4.2
110°-120°	210.3	5.6
120°-130°	171.2	4.6
130°-140°	137.7	3.7
140°-150°	108.5	2.9
150°-160°	79.4	2.1
160°-170°	49.3	1.3
170°-180°	16.8	0.5
0°-30°	1014.1	27.2
0°-40°	1594.8	42.8
0°-60°	2438.5	65.4
0°-90°	2777.2	74.5
90°-120°	386.9	10.4
90°-150°	804.3	21.6
90°-180°	950.0	25.5
0°-180°	3727.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1362	1362	1362	1362	1362	
5°	1342	1363	1352	1351	1363	127
15°	1280	1297	1282	1275	1282	360
25°	1159	1168	1140	1120	1120	533
35°	996	993	951	874	837	622
45°	809	795	681	492	422	624
55°	612	586	352	202	177	547
65°	415	334	128	103	101	411
75°	220	96	68	66	65	232
85°	52	26	27	24	22	60
90°	0	1	2	3	3	3
95°	9	16	9	10	12	10
105°	34	53	201	257	170	36
115°	61	74	174	360	421	61
125°	88	100	164	286	338	78
135°	109	121	165	235	270	84
145°	129	140	166	205	227	81
155°	151	157	169	186	195	69
165°	168	170	174	178	181	47
175°	177	178	177	176	175	17
180°	177	177	177	177	177	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1361.8	<i>1361.8</i>	1361.8	1361.8	1361.8
2.5°	<i>1350.5</i>	<i>1365.9</i>	<i>1358.4</i>	<i>1358.5</i>	<i>1364.0</i>
5°	1342.1	<i>1362.7</i>	1351.9	1350.8	1363.2
7.5°	1329.7	<i>1348.7</i>	1337.6	1336.1	1346.9
10°	1319.6	<i>1337.5</i>	1325.2	1322.6	1332.2
12.5°	1304.9	<i>1322.8</i>	1309.4	1304.6	1314.2
15°	1280.2	<i>1296.7</i>	1281.6	1274.7	1281.6
17.5°	1249.0	<i>1262.7</i>	1245.6	1234.7	1238.8
20°	1225.3	<i>1239.1</i>	1219.7	1204.3	1208.4
22.5°	1199.4	<i>1211.0</i>	1189.3	1171.6	1174.7
25°	1159.2	<i>1167.5</i>	1139.5	1119.8	1119.8
27.5°	1114.5	<i>1119.4</i>	1086.9	1066.2	1060.4
30°	1081.8	<i>1084.6</i>	1050.9	1026.6	1008.7
32.5°	1048.1	<i>1049.7</i>	1011.5	972.3	944.5
35°	996.0	<i>993.3</i>	951.0	874.2	837.0
37.5°	940.6	<i>934.5</i>	884.6	767.7	712.4
40°	904.6	<i>896.3</i>	832.8	692.1	630.2
42.5°	867.4	<i>855.9</i>	775.4	614.3	545.8
45°	808.9	<i>795.2</i>	680.9	492.2	422.0
47.5°	750.9	<i>732.8</i>	584.1	381.3	321.0
50°	710.4	<i>691.2</i>	517.7	314.0	265.9
52.5°	669.9	<i>650.7</i>	450.2	263.6	225.4
55°	612.0	<i>585.8</i>	351.7	202.0	177.3
57.5°	552.9	<i>515.5</i>	261.9	157.4	138.1
60°	513.5	<i>464.0</i>	212.4	130.5	116.8
62.5°	475.2	<i>412.5</i>	174.2	113.9	111.1
65°	415.0	<i>333.8</i>	128.0	102.7	101.3
67.5°	357.6	<i>254.7</i>	95.1	92.5	91.2
70°	313.7	<i>200.9</i>	87.2	85.8	84.4
72.5°	274.3	<i>153.8</i>	79.3	77.9	76.5
75°	219.5	<i>95.7</i>	67.5	66.1	64.7
77.5°	164.0	<i>60.3</i>	55.7	54.3	52.9
80°	128.0	<i>49.6</i>	47.8	46.4	45.0
82.5°	96.5	<i>40.1</i>	38.8	37.4	36.0
85°	52.1	<i>25.9</i>	26.7	23.9	22.5
87.5°	18.0	<i>12.7</i>	12.8	10.8	9.7
90°	0.0	<i>1.1</i>	2.2	3.3	3.3
92.5°	2.7	<i>3.8</i>	4.9	6.9	7.8
95°	8.9	<i>16.5</i>	8.9	10.1	12.2
97.5°	15.8	<i>31.7</i>	65.4	19.3	16.7
100°	21.1	<i>39.6</i>	131.2	38.6	25.6
102.5°	26.5	<i>45.8</i>	177.5	101.9	55.8
105°	34.5	<i>53.0</i>	201.3	257.1	170.1
107.5°	42.5	<i>56.4</i>	192.1	374.2	350.5
110°	47.8	<i>60.9</i>	186.8	393.2	422.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	53.2	66.2	181.5	382.1	431.4
115°	61.2	74.2	173.5	360.5	421.4
117.5°	69.4	82.2	171.5	337.2	399.9
120°	75.6	87.6	167.9	319.5	384.7
122.5°	80.1	92.9	163.5	304.3	364.3
125°	87.8	99.8	163.5	285.8	338.0
127.5°	94.3	106.5	163.7	264.5	316.0
130°	97.8	110.9	164.6	250.2	299.1
132.5°	102.3	115.3	164.6	243.8	284.0
135°	109.0	120.9	164.6	235.4	270.2
137.5°	114.5	127.4	164.6	226.2	256.0
140°	119.0	130.9	164.6	220.8	248.0
142.5°	123.4	134.5	165.5	214.5	240.0
145°	129.0	139.9	165.7	205.1	226.8
147.5°	135.7	145.2	167.0	198.3	215.0
150°	140.1	148.8	167.9	193.8	207.9
152.5°	144.6	152.4	167.9	190.2	201.7
155°	151.2	156.7	169.0	185.9	194.6
157.5°	156.6	161.8	170.3	183.2	189.5
160°	160.1	164.5	171.2	181.4	186.8
162.5°	162.8	167.1	172.1	180.4	184.1
165°	167.9	170.1	173.5	178.0	181.2
167.5°	170.8	172.7	174.6	176.8	178.8
170°	173.5	174.5	174.6	176.8	177.9
172.5°	174.4	176.3	175.5	175.9	177.0
175°	176.8	177.9	176.8	175.7	174.6
177.5°	176.8	177.7	176.8	176.8	175.9
180°	176.8	176.8	176.8	176.8	176.8



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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	17.60	18.65	18.32	19.38	20.26	9.83	10.88	10.56	11.62	12.49
	3H	19.11	20.04	19.84	20.79	21.70	11.20	12.14	11.94	12.88	13.79
	4H	19.63	20.51	20.39	21.27	22.19	11.86	12.74	12.62	13.50	14.42
	6H	20.03	20.85	20.80	21.61	22.55	12.46	13.27	13.23	14.04	14.97
	8H	20.17	20.94	20.95	21.73	22.66	12.69	13.46	13.47	14.25	15.18
	12H	20.26	20.99	21.04	21.77	22.73	12.86	13.60	13.65	14.37	15.34
4H	2H	17.45	18.33	18.21	19.09	20.01	10.47	11.35	11.23	12.11	13.03
	3H	19.10	19.83	19.88	20.63	21.56	12.04	12.77	12.81	13.56	14.50
	4H	19.70	20.36	20.49	21.15	22.12	12.84	13.50	13.63	14.30	15.26
	6H	20.20	20.77	21.01	21.59	22.57	13.59	14.16	14.40	14.98	15.95
	8H	20.39	20.93	21.20	21.74	22.72	13.89	14.42	14.69	15.23	16.22
	12H	20.53	21.01	21.36	21.84	22.83	14.11	14.59	14.94	15.42	16.41
8H	4H	19.63	20.16	20.44	20.98	21.96	13.31	13.84	14.12	14.65	15.64
	6H	20.17	20.61	21.01	21.47	22.45	14.20	14.64	15.03	15.49	16.48
	8H	20.41	20.80	21.25	21.65	22.65	14.59	14.98	15.44	15.84	16.84
	12H	20.60	20.95	21.45	21.79	22.85	14.92	15.26	15.77	16.11	17.17
12H	4H	19.59	20.07	20.42	20.90	21.89	13.37	13.84	14.19	14.68	15.67
	6H	20.14	20.53	20.99	21.39	22.39	14.31	14.70	15.16	15.56	16.56
	8H	20.39	20.74	21.24	21.58	22.64	14.76	15.11	15.61	15.95	17.01