

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P621445

Luminaire Tested: VLT-F-050U-100D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621445
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-100D-830-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

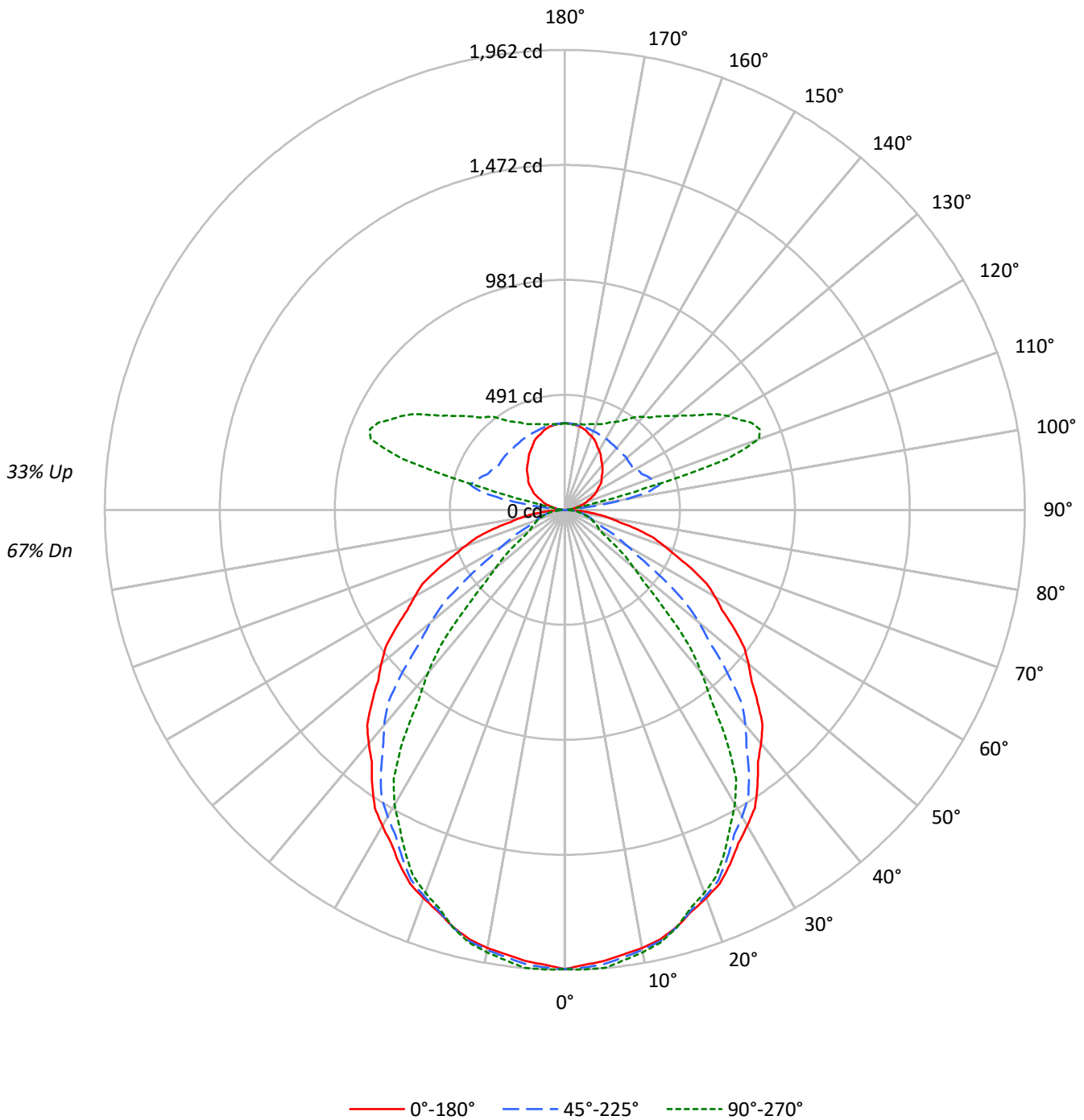
Lumens per Lamp: N/A
Luminaire Lumens: 5977.1 lumens
Efficiency: N/A
Efficacy: 136.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 43.8
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	102	98	95	91	96	93	90	87	83	80	78	73	72	70	65	64	62	58
2	94	87	81	76	89	82	77	73	74	70	66	66	63	60	58	56	54	50
3	87	77	70	65	81	73	67	62	66	61	57	59	55	52	52	50	47	44
4	80	69	62	56	75	66	59	54	59	54	49	53	49	45	48	44	41	38
5	74	62	54	49	69	59	52	47	54	48	43	48	44	40	43	40	37	34
6	68	56	48	43	64	54	47	41	49	43	38	44	39	36	40	36	33	30
7	63	51	43	38	60	49	42	37	44	39	34	40	35	32	36	32	29	27
8	59	47	39	34	56	45	38	33	41	35	31	37	32	29	34	30	27	25
9	55	43	36	31	52	41	34	30	38	32	28	34	30	26	31	27	24	22
10	52	40	33	28	49	38	31	27	35	29	25	32	27	24	29	25	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14058	14058	14058
5°	13908	14010	14126
10°	13833	13892	13966
15°	13682	13697	13697
20°	13462	13400	13276
25°	13204	12980	12756
30°	12896	12527	12024
35°	12553	11985	10549
40°	12190	11223	8494
45°	11810	9940	6162
50°	11409	8315	4270
55°	11015	6331	3190
60°	10602	4386	2411
65°	10137	3128	2474
70°	9469	2633	2547
75°	8753	2692	2581
80°	7612	2843	2678
85°	6167	3170	2668

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11810 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.6	3.1
10°-20°	519.1	8.7
20°-30°	755.1	12.6
30°-40°	835.4	14.0
40°-50°	717.2	12.0
50°-60°	496.6	8.3
60°-70°	295.9	5.0
70°-80°	145.8	2.4
80°-90°	45.9	0.8
90°-100°	45.4	0.8
100°-110°	323.2	5.4
110°-120°	438.7	7.3
120°-130°	357.1	6.0
130°-140°	287.2	4.8
140°-150°	226.4	3.8
150°-160°	165.6	2.8
160°-170°	102.8	1.7
170°-180°	35.1	0.6
0°-30°	1458.9	24.4
0°-40°	2294.3	38.4
0°-60°	3508.1	58.7
0°-90°	3995.7	66.9
90°-120°	807.3	13.5
90°-150°	1677.9	28.1
90°-180°	1981.0	33.1
0°-180°	5977.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1959	1959	1959	1959	1959	
5°	1931	1960	1945	1943	1961	183
15°	1842	1866	1844	1834	1844	519
25°	1668	1680	1639	1611	1611	767
35°	1433	1429	1368	1258	1204	895
45°	1164	1144	980	708	607	898
55°	880	843	506	291	255	787
65°	597	480	184	148	146	591
75°	316	138	97	95	93	333
85°	75	37	38	34	32	87
90°	0	2	5	7	7	4
95°	19	34	19	21	26	21
105°	72	110	420	536	355	76
115°	128	155	362	752	879	127
125°	183	208	341	596	705	163
135°	227	252	343	491	564	175
145°	269	292	346	428	473	169
155°	316	327	353	388	406	145
165°	350	355	362	371	378	98
175°	369	371	369	366	364	35
180°	369	369	369	369	369	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1959.1	1959.1	1959.1	1959.1	1959.1
2.5°	1942.9	1965.1	1954.2	1954.4	1962.3
5°	1930.8	1960.4	1944.9	1943.3	1961.1
7.5°	1913.0	1940.3	1924.3	1922.2	1937.6
10°	1898.4	1924.1	1906.5	1902.7	1916.6
12.5°	1877.3	1903.1	1883.8	1876.8	1890.7
15°	1841.7	1865.5	1843.7	1833.8	1843.7
17.5°	1796.8	1816.6	1791.9	1776.3	1782.2
20°	1762.8	1782.6	1754.7	1732.6	1738.5
22.5°	1725.5	1742.2	1711.0	1685.6	1689.9
25°	1667.7	1679.5	1639.3	1611.0	1611.0
27.5°	1603.3	1610.4	1563.6	1533.9	1525.6
30°	1556.3	1560.3	1511.8	1476.8	1451.1
32.5°	1507.8	1510.1	1455.2	1398.8	1358.8
35°	1432.9	1428.9	1368.1	1257.6	1204.2
37.5°	1353.2	1344.4	1272.6	1104.4	1024.9
40°	1301.3	1289.5	1198.1	995.7	906.7
42.5°	1247.9	1231.3	1115.6	883.8	785.3
45°	1163.7	1143.9	979.5	708.1	607.2
47.5°	1080.3	1054.2	840.3	548.5	461.8
50°	1022.0	994.3	744.8	451.8	382.5
52.5°	963.8	936.1	647.6	379.2	324.2
55°	880.4	842.8	506.0	290.6	255.0
57.5°	795.4	741.6	376.8	226.4	198.7
60°	738.7	667.5	305.6	187.8	168.0
62.5°	683.7	593.4	250.6	163.8	159.9
65°	597.0	480.3	184.2	147.7	145.7
67.5°	514.5	366.4	136.8	133.1	131.1
70°	451.3	289.1	125.5	123.4	121.4
72.5°	394.7	221.3	114.1	112.1	110.1
75°	315.7	137.6	97.1	95.1	93.1
77.5°	236.0	86.8	80.1	78.1	76.1
80°	184.2	71.4	68.8	66.7	64.8
82.5°	138.8	57.7	55.9	53.8	51.8
85°	74.9	37.3	38.5	34.4	32.4
87.5°	25.9	18.4	18.7	15.9	14.3
90°	0.0	2.3	4.6	7.0	7.0
92.5°	5.6	7.8	10.2	14.4	16.2
95°	18.6	34.4	18.6	21.0	25.5
97.5°	32.9	66.1	136.4	40.2	34.8
100°	44.1	82.6	273.7	80.6	53.4
102.5°	55.2	95.6	370.3	212.6	116.5
105°	71.9	110.5	419.9	536.4	354.9
107.5°	88.6	117.7	400.9	780.7	731.2
110°	99.8	127.0	389.7	820.3	881.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	110.9	138.1	378.6	797.1	900.1
115°	127.6	154.8	361.9	752.2	879.2
117.5°	144.8	171.5	357.7	703.6	834.2
120°	157.8	182.7	350.3	666.6	802.7
122.5°	167.0	193.8	341.0	634.8	760.0
125°	183.3	208.2	341.0	596.4	705.2
127.5°	196.7	222.1	341.5	551.8	659.3
130°	204.2	231.4	343.3	522.0	624.1
132.5°	213.4	240.6	343.3	508.6	592.5
135°	227.3	252.3	343.3	491.1	563.7
137.5°	238.9	265.7	343.3	471.9	534.0
140°	248.2	273.2	343.3	460.6	517.3
142.5°	257.5	280.6	345.2	447.6	500.6
145°	269.1	291.8	345.7	427.9	473.3
147.5°	283.0	303.0	348.4	413.7	448.7
150°	292.3	310.5	350.3	404.3	433.8
152.5°	301.6	317.9	350.3	396.8	420.8
155°	315.5	326.8	352.6	387.8	406.0
157.5°	326.6	337.5	355.4	382.2	395.3
160°	334.1	343.1	357.3	378.4	389.7
162.5°	339.6	348.7	359.1	376.5	384.2
165°	350.3	354.8	361.9	371.3	378.1
167.5°	356.3	360.4	364.2	369.0	373.0
170°	361.9	364.2	364.2	368.9	371.2
172.5°	363.8	367.8	366.1	367.1	369.3
175°	368.9	371.1	368.9	366.5	364.2
177.5°	368.9	370.7	368.9	368.8	367.0
180°	368.9	368.9	368.9	368.9	368.9



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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	18.26	19.22	19.07	20.05	21.06	10.49	11.46	11.30	12.28	13.29
	3H	19.76	20.62	20.58	21.46	22.50	11.86	12.72	12.68	13.55	14.59
	4H	20.28	21.09	21.12	21.93	22.98	12.51	13.32	13.35	14.16	15.22
	6H	20.68	21.43	21.53	22.28	23.34	13.11	13.85	13.96	14.70	15.77
	8H	20.82	21.53	21.68	22.39	23.46	13.34	14.05	14.20	14.91	15.98
	12H	20.90	21.58	21.77	22.43	23.53	13.51	14.18	14.37	15.04	16.13
4H	2H	18.10	18.91	18.95	19.75	20.81	11.12	11.93	11.97	12.77	13.83
	3H	19.75	20.42	20.60	21.29	22.36	12.68	13.36	13.54	14.23	15.30
	4H	20.34	20.95	21.21	21.82	22.92	13.48	14.09	14.35	14.96	16.06
	6H	20.84	21.37	21.72	22.26	23.36	14.23	14.75	15.11	15.65	16.75
	8H	21.03	21.52	21.92	22.41	23.52	14.52	15.01	15.41	15.90	17.01
	12H	21.16	21.60	22.07	22.51	23.63	14.74	15.18	15.65	16.09	17.21
8H	4H	20.27	20.76	21.15	21.65	22.76	13.94	14.43	14.83	15.32	16.44
	6H	20.80	21.21	21.72	22.14	23.25	14.83	15.24	15.74	16.17	17.28
	8H	21.04	21.40	21.96	22.32	23.45	15.23	15.58	16.15	16.51	17.64
	12H	21.23	21.55	22.16	22.47	23.65	15.55	15.87	16.47	16.78	17.96
12H	4H	20.22	20.66	21.13	21.57	22.69	14.00	14.44	14.90	15.35	16.46
	6H	20.78	21.14	21.70	22.06	23.19	14.94	15.30	15.87	16.23	17.36
	8H	21.02	21.34	21.95	22.26	23.44	15.39	15.71	16.32	16.62	17.81