

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: P621483

Luminaire Tested: VLT-F-0U-050D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621483
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: VLT-F-0U-050D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

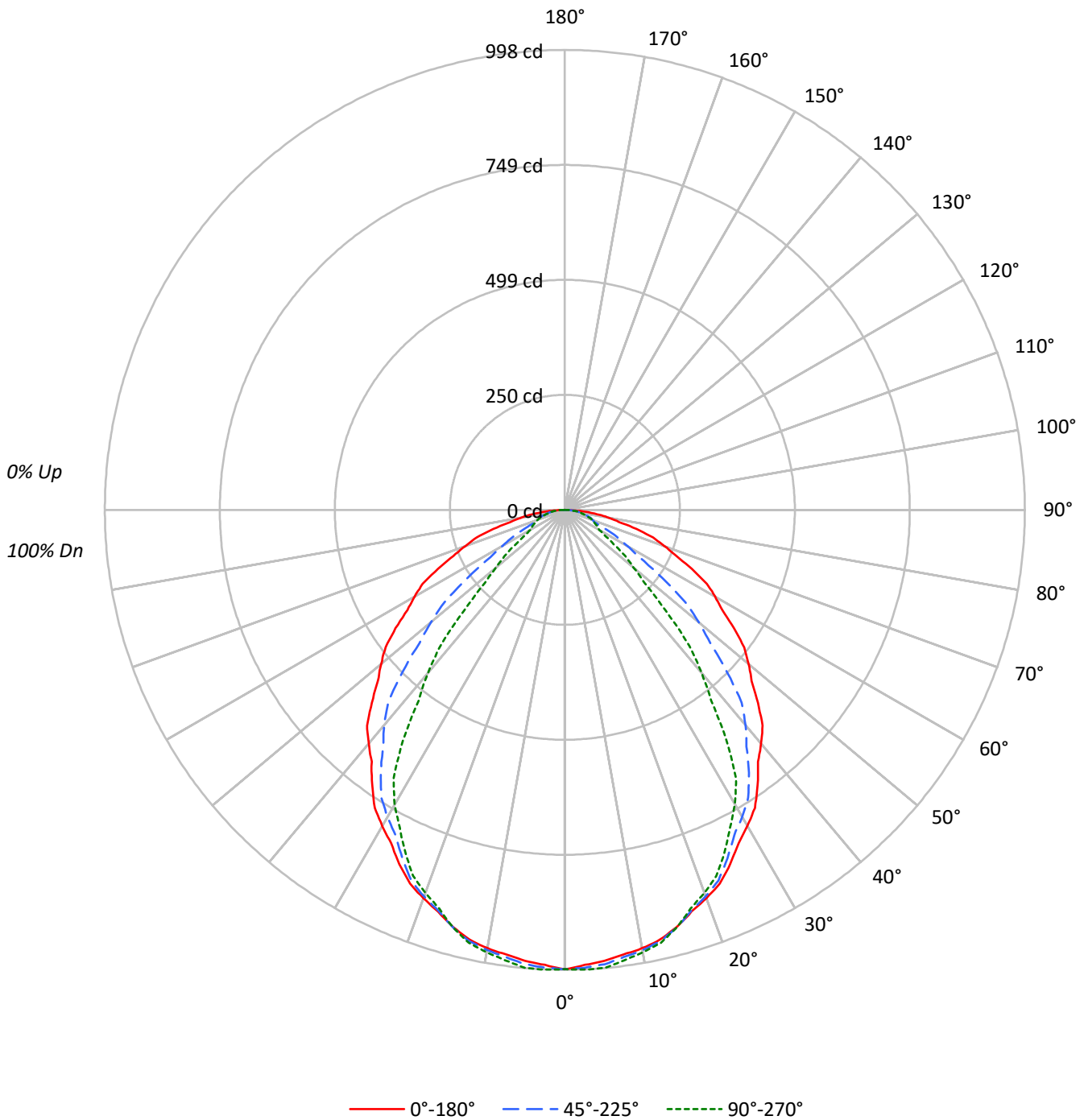
Lumens per Lamp: N/A
Luminaire Lumens: 2032.7 lumens
Efficiency: N/A
Efficacy: 141.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 14.4
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	77	72	92	83	76	71	80	74	70	78	73	69	75	71	67	65				
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59	57				
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	51				
6	75	63	54	49	73	62	54	48	60	53	48	58	52	48	57	51	47	45				
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41				
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33				
10	57	45	38	33	56	45	37	33	44	37	32	43	37	32	42	36	32	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7154	7154	7154
5°	7077	7129	7188
10°	7039	7069	7106
15°	6962	6970	6970
20°	6850	6818	6755
25°	6719	6604	6490
30°	6562	6374	6118
35°	6387	6099	5367
40°	6203	5710	4322
45°	6009	5058	3135
50°	5806	4231	2172
55°	5605	3222	1624
60°	5395	2232	1227
65°	5158	1591	1258
70°	4817	1339	1297
75°	4456	1370	1314
80°	3872	1446	1364
85°	3137	1614	1359

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6009 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.9	4.6
10°-20°	264.2	13.0
20°-30°	384.2	18.9
30°-40°	425.1	20.9
40°-50°	365.0	18.0
50°-60°	252.7	12.4
60°-70°	150.6	7.4
70°-80°	74.2	3.6
80°-90°	22.9	1.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	742.3	36.5
0°-40°	1167.4	57.4
0°-60°	1785.1	87.8
0°-90°	2032.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2032.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	997	997	997	997	997	
5°	982	998	990	989	998	93
15°	937	949	938	933	938	264
25°	849	855	834	820	820	390
35°	729	727	696	640	613	456
45°	592	582	498	360	309	457
55°	448	429	258	148	130	400
65°	304	244	94	75	74	301
75°	161	70	49	48	47	170
85°	38	19	20	18	16	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	996.9	996.9	996.9	996.9	996.9
2.5°	988.6	999.9	994.4	994.5	998.5
5°	982.4	997.5	989.7	988.8	997.9
7.5°	973.4	987.3	979.1	978.1	985.9
10°	966.0	979.1	970.1	968.2	975.2
12.5°	955.3	968.3	958.6	955.0	962.1
15°	937.1	949.2	938.2	933.1	938.2
17.5°	914.3	924.3	911.8	903.8	906.9
20°	897.0	907.0	892.8	881.6	884.6
22.5°	878.0	886.5	870.6	857.7	859.9
25°	848.6	854.6	834.1	819.7	819.7
27.5°	815.8	819.4	795.6	780.5	776.3
30°	791.9	793.9	769.3	751.5	738.4
32.5°	767.2	768.4	740.4	711.8	691.4
35°	729.1	727.1	696.2	639.9	612.7
37.5°	688.5	684.1	647.5	562.0	521.5
40°	662.2	656.1	609.6	506.7	461.4
42.5°	635.0	626.5	567.6	449.7	399.6
45°	592.1	582.1	498.4	360.3	308.9
47.5°	549.7	536.4	427.6	279.1	235.0
50°	520.1	506.0	379.0	229.9	194.6
52.5°	490.4	476.3	329.5	193.0	165.0
55°	448.0	428.8	257.5	147.9	129.8
57.5°	404.7	377.3	191.8	115.2	101.1
60°	375.9	339.6	155.5	95.5	85.5
62.5°	347.9	302.0	127.5	83.4	81.4
65°	303.8	244.4	93.7	75.2	74.1
67.5°	261.8	186.5	69.6	67.7	66.7
70°	229.6	147.1	63.8	62.8	61.8
72.5°	200.8	112.6	58.1	57.0	56.0
75°	160.7	70.0	49.4	48.4	47.4
77.5°	120.1	44.2	40.8	39.7	38.7
80°	93.7	36.3	35.0	34.0	33.0
82.5°	70.6	29.4	28.4	27.4	26.4
85°	38.1	19.0	19.6	17.5	16.5
87.5°	13.2	9.2	9.1	7.4	6.6
90°	0.0	0.0	0.0	0.0	0.0



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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	18.40	19.87	18.77	20.19	20.50	10.64	12.11	11.00	12.42	12.73
	3H	19.94	21.25	20.32	21.58	21.95	12.03	13.35	12.41	13.68	14.04
	4H	20.48	21.71	20.88	22.06	22.44	12.72	13.95	13.12	14.29	14.67
	6H	20.91	22.04	21.32	22.41	22.80	13.33	14.47	13.75	14.84	15.23
	8H	21.05	22.13	21.48	22.52	22.92	13.58	14.65	14.00	15.04	15.45
	12H	21.15	22.18	21.58	22.57	23.00	13.76	14.79	14.19	15.17	15.60
4H	2H	18.30	19.53	18.70	19.88	20.26	11.32	12.55	11.72	12.90	13.28
	3H	19.99	21.01	20.40	21.41	21.81	12.93	13.94	13.34	14.34	14.75
	4H	20.60	21.52	21.04	21.93	22.37	13.74	14.66	14.18	15.07	15.51
	6H	21.13	21.92	21.58	22.36	22.82	14.51	15.31	14.97	15.75	16.21
	8H	21.32	22.06	21.79	22.51	22.98	14.82	15.56	15.28	16.00	16.47
	12H	21.48	22.14	21.96	22.62	23.09	15.06	15.72	15.54	16.20	16.67
8H	4H	20.56	21.30	21.02	21.74	22.21	14.24	14.98	14.70	15.42	15.89
	6H	21.11	21.72	21.61	22.22	22.69	15.14	15.75	15.64	16.24	16.72
	8H	21.35	21.90	21.86	22.41	22.90	15.53	16.08	16.05	16.60	17.09
	12H	21.56	22.05	22.07	22.54	23.11	15.88	16.37	16.39	16.86	17.42
12H	4H	20.53	21.20	21.02	21.67	22.15	14.31	14.97	14.80	15.45	15.92
	6H	21.08	21.63	21.60	22.15	22.63	15.25	15.80	15.77	16.31	16.80
	8H	21.35	21.84	21.86	22.33	22.90	15.72	16.21	16.23	16.70	17.27