

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: P622011

Luminaire Tested: VLT-WB-M-050U-050D-940-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P622011  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-32)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/28/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: VLT-WB-M-050U-050D-940-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
WHITE BAFFLE WITH MEDIUM OPTIC  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3744.5 lumens  
Efficiency: N/A  
Efficacy: 108.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.16 / 1.14  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

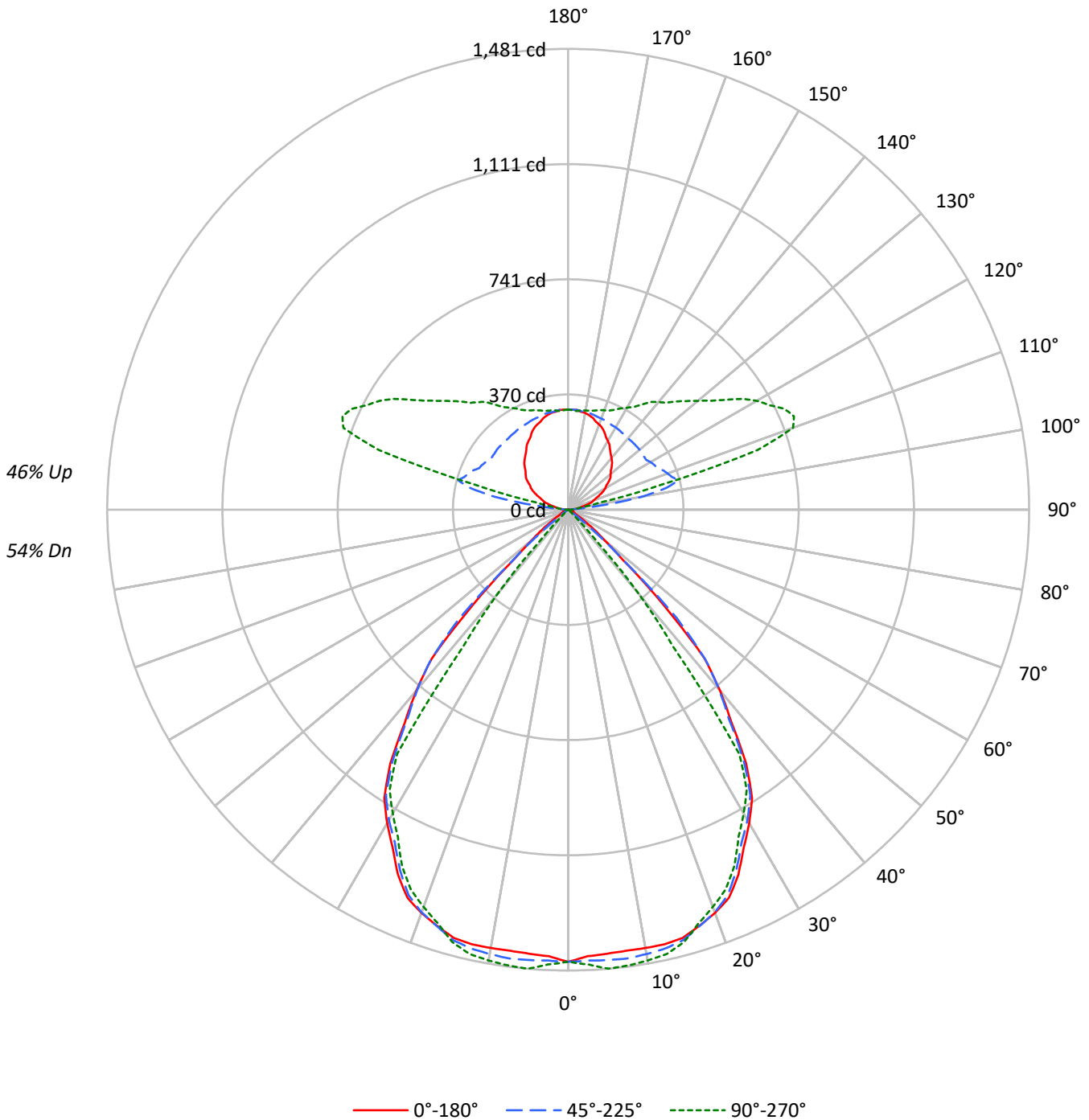
Input Watts (W): 34.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	60	60	60	54				
1	101	97	94	91	94	91	88	86	78	76	75	67	65	64	56	55	55	50				
2	94	88	83	79	87	82	78	74	71	68	66	61	59	57	52	51	50	45				
3	87	79	73	69	81	74	69	65	65	61	58	57	54	52	49	47	45	42				
4	81	72	65	60	76	68	62	58	60	55	52	52	49	47	45	43	41	38				
5	75	66	59	54	70	62	56	51	55	50	47	48	45	42	42	40	38	35				
6	70	60	53	48	66	57	51	46	50	46	42	45	41	38	39	37	35	32				
7	66	55	48	43	62	52	46	42	47	42	38	41	38	35	37	34	32	29				
8	62	51	44	39	58	48	42	38	43	38	35	39	35	32	34	31	29	27				
9	58	47	40	36	54	45	38	34	40	35	32	36	32	29	32	29	27	25				
10	54	43	37	33	51	41	35	31	37	33	29	34	30	27	30	27	25	23				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10426	10426	10426
5°	10317	10466	10666
10°	10422	10564	10722
15°	10580	10633	10687
20°	10530	10514	10373
25°	10242	10120	9998
30°	9636	9542	9338
35°	8729	8603	8395
40°	7099	7051	3333
45°	4393	5009	229
50°	1676	1343	137
55°	823	244	51
60°	399	118	14
65°	367	17	17
70°	346	21	21
75°	341	28	28
80°	339	41	0
85°	338	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 5009 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.7	3.7
10°-20°	402.5	10.7
20°-30°	585.2	15.6
30°-40°	582.4	15.6
40°-50°	256.1	6.8
50°-60°	37.8	1.0
60°-70°	8.6	0.2
70°-80°	3.2	0.1
80°-90°	1.5	0.0
90°-100°	39.6	1.1
100°-110°	281.9	7.5
110°-120°	382.7	10.2
120°-130°	311.5	8.3
130°-140°	250.5	6.7
140°-150°	197.5	5.3
150°-160°	144.4	3.9
160°-170°	89.7	2.4
170°-180°	30.6	0.8
0°-30°	1126.5	30.1
0°-40°	1708.9	45.6
0°-60°	2002.8	53.5
0°-90°	2016.1	53.8
90°-120°	704.2	18.8
90°-150°	1463.7	39.1
90°-180°	1728.0	46.1
0°-180°	3744.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1453	1453	1453	1453	1453	
5°	1432	1458	1453	1456	1481	137
15°	1424	1454	1431	1417	1438	400
25°	1294	1318	1278	1245	1263	591
35°	996	993	982	961	958	610
45°	433	492	494	33	23	335
55°	66	71	20	7	4	66
65°	22	19	1	1	1	22
75°	12	2	1	1	1	13
85°	4	0	0	0	0	4
90°	0	2	4	6	6	1
95°	16	30	16	18	22	18
105°	63	96	366	468	310	66
115°	111	135	316	656	767	110
125°	160	182	298	520	615	142
135°	198	220	300	428	492	153
145°	235	254	302	373	413	147
155°	275	285	308	338	354	126
165°	306	310	316	324	330	86
175°	322	324	322	320	318	30
180°	322	322	322	322	322	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1452.9	1452.9	1452.9	1452.9	1452.9
2.5°	1436.4	1458.2	1450.4	1449.9	1462.8
5°	1432.3	1457.5	1452.9	1456.5	1480.7
7.5°	1429.5	1454.8	1454.8	1453.0	1477.2
10°	1430.3	1456.4	1449.8	1447.3	1471.4
12.5°	1430.3	1458.0	1444.1	1437.4	1462.4
15°	1424.1	1454.3	1431.3	1417.4	1438.5
17.5°	1401.9	1434.7	1403.1	1376.0	1393.7
20°	1378.9	1414.1	1376.8	1342.2	1358.3
22.5°	1350.1	1381.2	1340.6	1304.4	1321.3
25°	1293.5	1317.7	1278.1	1244.6	1262.7
27.5°	1222.2	1235.4	1205.9	1173.7	1185.4
30°	1162.9	1173.0	1151.6	1120.9	1126.9
32.5°	1099.6	1106.4	1089.1	1062.5	1067.7
35°	996.4	993.3	982.0	961.3	958.3
37.5°	861.5	856.2	848.9	769.1	551.5
40°	757.8	759.8	752.7	470.4	355.8
42.5°	648.4	660.9	650.7	320.3	116.4
45°	432.9	492.2	493.6	32.7	22.6
47.5°	234.0	298.6	242.9	20.3	16.5
50°	150.1	187.3	120.3	15.4	12.3
52.5°	107.3	125.2	47.1	12.1	9.0
55°	65.8	70.8	19.5	7.1	4.1
57.5°	39.3	46.7	12.3	2.6	1.0
60°	27.8	32.8	8.2	1.0	1.0
62.5°	24.5	24.7	5.8	1.0	1.0
65°	21.6	18.6	1.0	1.0	1.0
67.5°	18.9	13.5	1.0	1.0	1.0
70°	16.5	9.4	1.0	1.0	1.0
72.5°	14.8	6.2	1.0	1.0	1.0
75°	12.3	2.3	1.0	1.0	1.0
77.5°	9.9	1.2	1.0	0.8	0.8
80°	8.2	1.2	1.0	0.0	0.0
82.5°	6.6	1.2	0.2	0.0	0.0
85°	4.1	0.1	0.0	0.0	0.0
87.5°	1.6	0.4	0.8	1.2	1.2
90°	0.0	2.0	4.0	6.1	6.1
92.5°	4.9	6.8	8.9	12.6	14.2
95°	16.2	30.0	16.2	18.3	22.3
97.5°	28.7	57.6	119.0	35.1	30.4
100°	38.4	72.1	238.8	70.3	46.5
102.5°	48.2	83.4	323.0	185.5	101.6
105°	62.7	96.4	366.3	467.9	309.6
107.5°	77.3	102.6	349.7	681.0	637.8
110°	87.0	110.8	340.0	715.5	769.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	96.7	120.5	330.2	695.3	785.1
115°	111.3	135.0	315.7	656.1	766.9
117.5°	126.3	149.6	312.0	613.7	727.7
120°	137.6	159.4	305.6	581.4	700.2
122.5°	145.7	169.0	297.5	553.7	662.9
125°	159.9	181.6	297.5	520.2	615.2
127.5°	171.6	193.8	297.9	481.3	575.1
130°	178.1	201.8	299.5	455.3	544.3
132.5°	186.2	209.9	299.5	443.6	516.8
135°	198.3	220.1	299.5	428.4	491.7
137.5°	208.4	231.8	299.5	411.6	465.8
140°	216.5	238.3	299.5	401.8	451.3
142.5°	224.6	244.8	301.1	390.4	436.7
145°	234.7	254.5	301.5	373.2	412.8
147.5°	246.9	264.3	303.9	360.9	391.4
150°	255.0	270.8	305.6	352.7	378.4
152.5°	263.1	277.3	305.6	346.1	367.1
155°	275.2	285.1	307.6	338.3	354.1
157.5°	284.9	294.4	310.0	333.3	344.8
160°	291.4	299.3	311.6	330.1	340.0
162.5°	296.2	304.2	313.2	328.4	335.1
165°	305.6	309.5	315.7	323.9	329.8
167.5°	310.8	314.4	317.7	321.8	325.4
170°	315.7	317.7	317.7	321.8	323.8
172.5°	317.3	320.9	319.3	320.2	322.2
175°	321.7	323.7	321.7	319.7	317.7
177.5°	321.7	323.3	321.7	321.7	320.1
180°	321.7	321.7	321.7	321.7	321.7



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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	0.47	1.18	1.44	2.13	3.36	0.00	0.00	0.00	0.00	0.00
	3H	0.91	1.54	1.89	2.50	3.75	0.00	0.00	0.00	0.00	0.00
	4H	1.07	1.66	2.06	2.62	3.89	0.00	0.00	0.00	0.00	0.00
	6H	1.25	1.79	2.25	2.76	4.04	0.00	0.00	0.00	0.00	0.00
	8H	1.34	1.85	2.34	2.83	4.10	0.00	0.00	0.00	0.00	0.00
	12H	1.40	1.89	2.41	2.86	4.16	0.00	0.00	0.00	0.00	0.00
4H	2H	0.17	0.76	1.17	1.72	2.99	0.00	0.00	0.00	0.00	0.00
	3H	0.65	1.13	1.65	2.13	3.40	0.00	0.00	0.00	0.00	0.00
	4H	0.82	1.26	1.83	2.25	3.55	0.00	0.00	0.00	0.00	0.00
	6H	1.05	1.43	2.07	2.44	3.74	0.00	0.00	0.00	0.00	0.00
	8H	1.17	1.52	2.19	2.52	3.83	0.00	0.00	0.00	0.00	0.00
	12H	1.27	1.59	2.31	2.61	3.92	0.00	0.00	0.00	0.00	0.00
8H	4H	0.65	1.00	1.66	2.00	3.31	0.00	0.00	0.00	0.00	0.00
	6H	0.88	1.17	1.92	2.21	3.52	0.00	0.00	0.00	0.00	0.00
	8H	1.02	1.27	2.06	2.30	3.63	0.00	0.00	0.00	0.00	0.00
	12H	1.15	1.37	2.20	2.39	3.77	0.00	0.00	0.00	0.00	0.00
12H	4H	0.58	0.89	1.61	1.91	3.22	0.00	0.00	0.00	0.00	0.00
	6H	0.82	1.07	1.87	2.10	3.43	0.00	0.00	0.00	0.00	0.00
	8H	0.95	1.17	2.00	2.19	3.57	0.00	0.00	0.00	0.00	0.00