

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: 17899

Luminaire Tested: **VB-SB-2T5**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 17899
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: VB-SB-2T5
Description: - DIRECT/INDIRECT SUSPENDED LUMINAIRE - VERTECHS - WHITE INTERIOR
WITH SPECULAR REFLECTORS AND 19 CELL SEMI-SPECULAR LOUVER BLADE
Light Source: TWO PHILIPS 54 WATT T5 LAMPS

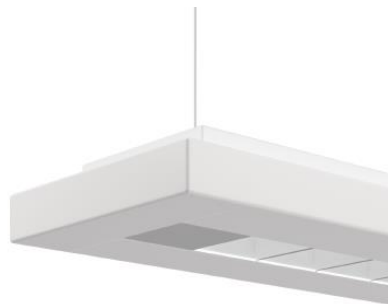
F54T5.841HO. LUMEN RATING = 4500 LMS.

Ballast/Driver: -

Summary

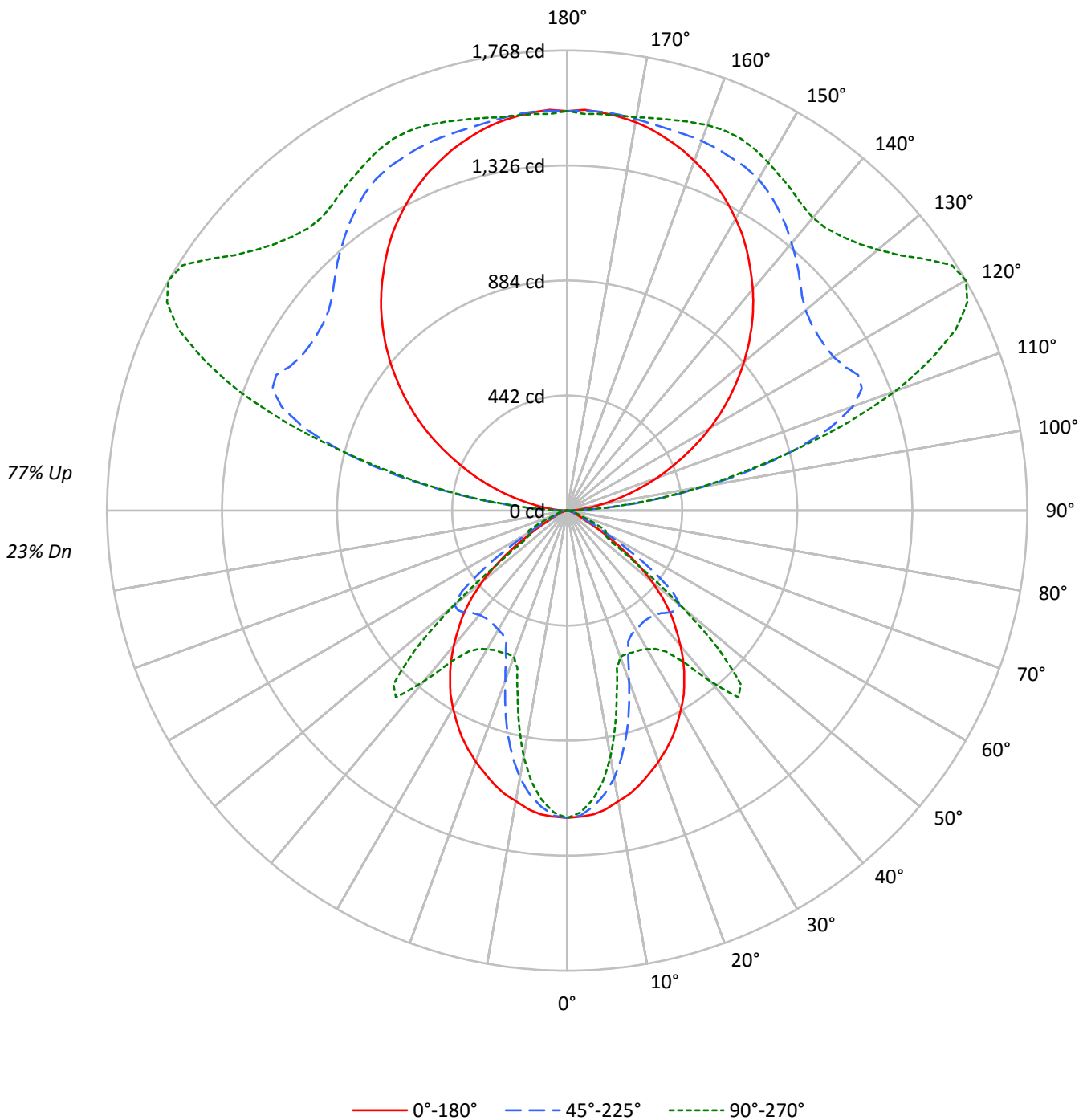
Lumens per Lamp: 4500 (2 lamps)
Luminaire Lumens: 8197.4 lumens
Efficiency: 91.1%
Efficacy: 67.2 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.6 / 0.97
Luminous Opening: Rectangular (W 0.22' x L: 3.59' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 122
Input Voltage (V): NR
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: 25 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	92	92	92	92	81	81	81	81	62	62	62	45	45	45	29	29	29	21
1	84	80	77	74	75	72	69	67	55	53	52	40	39	38	26	25	25	19
2	77	71	66	61	68	63	59	55	49	46	44	36	34	32	23	22	22	16
3	70	62	56	51	62	56	51	47	43	40	37	32	30	28	21	20	19	14
4	64	55	49	44	57	49	44	40	39	35	32	28	26	24	19	18	16	12
5	59	49	42	37	52	44	38	34	35	30	27	26	23	21	17	16	15	11
6	54	44	37	32	48	40	34	29	31	27	24	23	20	18	16	14	13	10
7	50	40	33	28	45	36	30	26	28	24	21	21	18	16	14	13	11	9
8	46	36	29	25	41	32	27	23	26	21	19	19	16	14	13	12	10	8
9	43	33	26	22	38	30	24	20	23	19	17	18	15	13	12	10	9	7
10	40	30	24	20	36	27	22	18	21	17	15	16	14	12	11	10	8	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16090	16090	16090
5°	16020	15625	15264
10°	15686	14430	13278
15°	15338	12476	10373
20°	14889	10060	8673
25°	14407	8331	9033
30°	13795	8322	9670
35°	13050	8603	10979
40°	12052	9310	15217
45°	10869	10678	18181
50°	9017	11986	12255
55°	6206	9329	4785
60°	3080	4487	4691
65°	1648	2180	3767
70°	1132	1474	2132
75°	843	1295	1638
80°	738	1036	1523
85°	516	1470	1642



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	106.0	1.3	1.2
10°-20°	250.1	3.1	2.8
20°-30°	312.8	3.8	3.5
30°-40°	376.0	4.6	4.2
40°-50°	462.2	5.6	5.1
50°-60°	265.5	3.2	3.0
60°-70°	80.4	1.0	0.9
70°-80°	25.5	0.3	0.3
80°-90°	8.1	0.1	0.1
90°-100°	214.2	2.6	2.4
100°-110°	784.2	9.6	8.7
110°-120°	1113.3	13.6	12.4
120°-130°	1087.9	13.3	12.1
130°-140°	981.5	12.0	10.9
140°-150°	868.0	10.6	9.6
150°-160°	684.8	8.4	7.6
160°-170°	430.6	5.3	4.8
170°-180°	146.4	1.8	1.6
0°-30°	668.9	8.2	7.4
0°-40°	1044.9	12.7	11.6
0°-60°	1772.6	21.6	19.7
0°-90°	1886.6	23.0	21.0
90°-120°	2111.6	25.8	23.5
90°-150°	5049.0	61.6	56.1
90°-180°	6311.0	77.0	70.1
0°-180°	8197.4	100.0	91.1

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1181	1181	1181	1181	1181	
5°	1171	1159	1142	1121	1116	111
15°	1087	1014	884	764	735	306
25°	958	777	554	583	601	440
35°	784	511	517	607	660	489
45°	564	371	554	844	943	430
55°	261	260	393	245	201	234
65°	51	54	68	96	117	57
75°	16	21	25	26	31	18
85°	3	6	9	10	10	4
90°	0	0	0	0	0	3
95°	47	182	201	197	184	56
105°	240	590	909	950	912	255
115°	497	705	1233	1550	1647	493
125°	763	908	1175	1543	1683	681
135°	1002	1136	1263	1420	1490	773
145°	1208	1299	1414	1490	1504	755
155°	1369	1407	1495	1563	1577	631
165°	1479	1496	1517	1552	1554	417
175°	1535	1540	1538	1535	1529	146
180°	1535	1535	1535	1535	1535	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1180.6	1180.6	1180.6	1180.6	1180.6
2.5°	1177.2	1177.6	1172.4	1166.2	1161.1
5°	1171.0	1158.7	1142.1	1120.8	1115.7
7.5°	1156.3	1137.3	1099.5	1069.2	1050.3
10°	1133.5	1105.7	1042.7	985.0	959.5
12.5°	1114.6	1065.4	968.1	886.6	851.1
15°	1087.1	1013.8	884.2	764.1	735.2
17.5°	1056.8	968.4	789.6	682.3	635.8
20°	1026.6	905.2	693.6	604.2	598.0
22.5°	993.6	842.5	613.1	586.6	595.2
25°	958.1	776.8	554.0	582.8	600.7
27.5°	917.9	703.6	536.1	582.8	604.2
30°	876.6	640.6	528.8	586.6	614.5
32.5°	834.6	572.9	522.3	590.4	629.3
35°	784.4	511.0	517.1	606.6	659.9
37.5°	734.2	458.0	518.5	642.0	729.0
40°	677.4	423.9	523.3	705.0	855.3
42.5°	619.3	394.0	534.7	802.0	973.3
45°	563.9	371.0	554.0	843.6	943.3
47.5°	498.2	351.0	567.7	760.7	794.7
50°	425.3	332.1	565.3	577.7	578.0
52.5°	348.3	304.2	509.9	420.5	338.3
55°	261.2	260.2	392.6	245.1	201.4
57.5°	177.3	197.3	269.1	168.4	167.0
60°	113.0	128.1	164.6	141.9	172.1
62.5°	72.4	83.7	101.6	129.1	166.0
65°	51.1	53.5	67.6	96.5	116.8
67.5°	38.7	39.7	48.3	63.8	71.4
70°	28.4	29.4	37.0	44.9	53.5
72.5°	18.4	23.2	29.4	33.2	39.7
75°	16.0	20.8	24.6	25.6	31.1
77.5°	13.2	15.6	18.4	19.4	25.6
80°	9.4	12.2	13.2	17.0	19.4
82.5°	4.6	6.7	10.8	11.9	14.6
85°	3.3	5.7	9.4	10.5	10.5
87.5°	2.6	1.2	5.7	5.7	8.4
90°	0.5	0.5	0.5	0.5	0.5
92.5°	16.0	61.0	62.4	68.6	48.7
95°	47.3	182.1	201.0	197.3	183.5
97.5°	85.1	326.9	359.6	363.4	349.6
100°	129.1	472.1	533.7	594.2	522.3
102.5°	179.7	513.4	729.0	689.8	705.0
105°	239.9	590.4	908.9	949.5	911.7
107.5°	301.8	613.1	1060.3	1146.3	1137.0
110°	367.2	637.2	1167.3	1321.0	1342.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	429.1	668.5	1225.4	1455.9	1507.8
115°	496.9	705.0	1233.0	1550.4	1647.4
117.5°	565.3	746.6	1200.3	1604.4	1733.4
120°	633.4	803.3	1181.4	1604.4	1768.5
122.5°	698.8	877.6	1175.2	1563.2	1753.4
125°	763.1	907.9	1175.2	1542.9	1682.9
127.5°	824.7	980.8	1181.4	1485.1	1611.0
130°	886.6	1036.5	1196.5	1452.4	1558.0
132.5°	945.7	1088.1	1223.0	1429.4	1517.8
135°	1002.5	1136.0	1263.2	1420.4	1489.9
137.5°	1057.9	1180.0	1303.5	1419.4	1471.3
140°	1109.8	1216.4	1341.3	1429.7	1468.6
142.5°	1158.7	1255.7	1380.2	1454.8	1481.3
145°	1207.8	1298.7	1414.2	1489.9	1503.7
147.5°	1254.3	1314.8	1445.9	1502.6	1522.9
150°	1294.5	1350.3	1470.0	1531.5	1544.3
152.5°	1333.7	1380.2	1486.1	1550.4	1564.2
155°	1368.8	1406.7	1495.1	1563.2	1576.9
157.5°	1401.8	1432.1	1505.4	1568.0	1580.7
160°	1429.4	1455.9	1511.6	1564.5	1575.6
162.5°	1457.2	1476.1	1514.0	1559.4	1565.6
165°	1478.6	1496.4	1516.7	1551.8	1554.2
167.5°	1499.9	1515.4	1520.5	1544.3	1544.3
170°	1515.4	1521.6	1526.7	1542.9	1533.9
172.5°	1526.7	1533.9	1533.9	1538.1	1530.5
175°	1535.3	1540.5	1538.1	1535.3	1529.1
177.5°	1541.5	1543.2	1537.7	1534.3	1525.3
180°	1534.6	1534.6	1534.6	1534.6	1534.6

(END OF REPORT)