

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: 89316

Luminaire Tested: **VB-SB-2T5-DL-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89316  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: VB-SB-2T5-DL-4  
Description: CORELITE VERTECHS SUSPENDED LUMINAIRE  
WHITE INTERIOR WITH SPECULAR REFLECTORS AND 19 CELL SEMI-SPECULAR LOUVER  
BLADE  
WITH DOWNLIGHT ISOLATORS  
Light Source: 54 WATT T5 LAMPS  
FP54T5/841HO. LUMEN RATING = 4500 LMS.  
Ballast/Driver: -

**Summary**

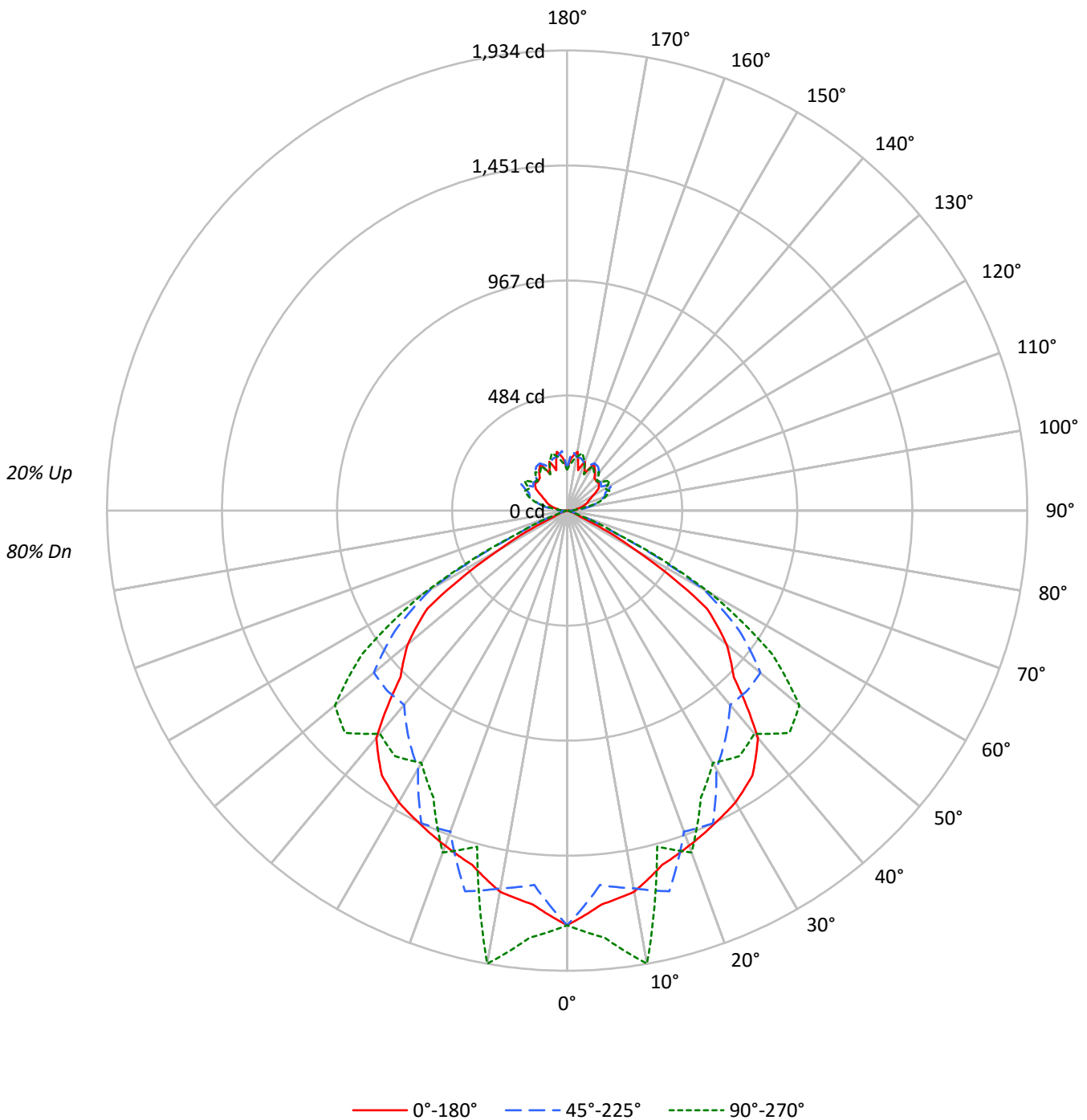
Lumens per Lamp: 4500 (2 lamps)  
Luminaire Lumens: 4881.2 lumens  
Efficiency: 54.2%  
Efficacy: 41.4 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.06 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')  
CIE Type: Semi-Direct

Input Watts (W): 118  
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



TEST NUMBER: 89316  
CATALOG NUMBER: VB-SB-2T5-DL-4

### Luminous Intensity Polar Plot





TEST NUMBER: 89316

CATALOG NUMBER: VB-SB-2T5-DL-4

**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	62	62	62	62	59	59	59	59	54	54	54	50	50	50	46	46	46	44
1	58	55	54	52	55	53	52	50	49	48	47	45	44	43	42	41	40	39
2	53	49	46	44	51	47	45	42	44	42	40	41	39	37	37	36	35	33
3	49	44	40	37	47	42	39	36	39	36	34	36	34	32	34	32	30	29
4	45	39	35	32	43	38	34	31	35	32	29	33	30	28	30	28	26	25
5	41	35	31	27	39	34	30	27	31	28	25	29	27	24	27	25	23	22
6	38	31	27	24	36	30	26	23	28	25	22	27	24	21	25	22	20	19
7	35	29	24	21	34	28	24	21	26	22	20	24	21	19	23	20	18	17
8	33	26	22	19	31	25	21	18	24	20	18	22	19	17	21	18	16	15
9	31	24	20	17	29	23	19	17	22	18	16	20	17	15	19	17	15	14
10	29	22	18	15	27	21	18	15	20	17	14	19	16	14	18	15	13	12

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

	0°	45°	90°
0°	8126	8126	8126
5°	7719	7104	8028
10°	7589	7054	8311
15°	7281	7109	6112
20°	7220	6091	6272
25°	7213	6129	5393
30°	7274	5319	4947
35°	7306	4989	5112
40°	7100	4662	5022
45°	6028	4814	5526
50°	5777	4945	5476
55°	5211	4320	4687
60°	2705	3411	3255
65°	596	1192	1156
70°	180	271	221
75°	110	142	75
80°	69	102	39
85°	77	69	32



TEST NUMBER: 89316

CATALOG NUMBER: VB-SB-2T5-DL-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	163.3	3.3	1.8
10°-20°	451.1	9.2	5.0
20°-30°	648.5	13.3	7.2
30°-40°	778.0	15.9	8.6
40°-50°	855.1	17.5	9.5
50°-60°	754.5	15.5	8.4
60°-70°	245.1	5.0	2.7
70°-80°	22.4	0.5	0.2
80°-90°	10.0	0.2	0.1
90°-100°	53.7	1.1	0.6
100°-110°	120.9	2.5	1.3
110°-120°	161.9	3.3	1.8
120°-130°	164.8	3.4	1.8
130°-140°	143.2	2.9	1.6
140°-150°	128.2	2.6	1.4
150°-160°	97.5	2.0	1.1
160°-170°	62.3	1.3	0.7
170°-180°	20.7	0.4	0.2
0°-30°	1262.9	25.9	14.0
0°-40°	2040.9	41.8	22.7
0°-60°	3650.4	74.8	40.6
0°-90°	3927.9	80.5	43.6
90°-120°	336.5	6.9	3.7
90°-150°	772.8	15.8	8.6
90°-180°	953.0	19.5	10.6
0°-180°	4881.2	100.0	54.2

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1743	1743	1743	1743	1743	
5°	1661	1789	1580	1950	1802	158
15°	1542	1690	1657	1651	1462	439
25°	1456	1454	1450	1272	1330	673
35°	1358	1264	1163	1222	1260	843
45°	990	980	1070	1227	1321	791
55°	717	735	885	997	1051	588
65°	64	121	216	274	234	116
75°	8	15	22	25	13	9
85°	3	5	8	8	5	3
90°	11	15	14	16	17	9
95°	41	62	52	56	31	27
105°	70	97	133	127	138	70
115°	101	120	177	204	196	102
125°	161	167	174	209	219	139
135°	174	183	180	192	175	136
145°	205	223	226	204	197	127
155°	169	259	208	240	168	90
165°	176	241	227	217	250	58
175°	224	213	251	204	202	22
180°	172	172	172	172	172	



TEST NUMBER: 89316

CATALOG NUMBER: VB-SB-2T5-DL-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1743.0	1743.0	1743.0	1743.0	1743.0
5°	1661.3	1789.4	1579.8	1950.5	1801.8
10°	1626.3	1568.0	1612.4	1560.3	1934.0
15°	1541.8	1689.5	1656.8	1651.3	1461.9
20°	1499.0	1640.9	1435.8	1434.1	1529.2
25°	1456.1	1454.3	1450.3	1271.5	1330.1
30°	1415.6	1392.4	1253.8	1352.1	1224.7
35°	1357.8	1264.4	1162.6	1221.7	1260.5
40°	1247.4	1113.7	1065.4	1209.9	1224.1
45°	989.7	979.6	1070.2	1226.6	1321.1
50°	874.8	773.9	1060.2	1288.2	1273.6
55°	716.6	735.0	885.0	996.8	1051.1
60°	331.5	479.4	660.9	659.9	697.5
65°	63.6	121.3	216.0	274.0	234.2
70°	16.2	24.6	45.3	60.5	41.8
75°	8.0	15.4	21.6	24.7	13.2
80°	3.8	6.4	13.8	11.3	6.2
85°	2.8	5.3	8.1	8.2	4.6
90°	11.3	14.7	14.5	15.8	16.7
95°	40.8	62.4	51.7	56.5	30.7
100°	41.2	71.7	97.8	90.6	73.4
105°	69.6	97.3	132.6	127.3	138.2
110°	86.2	132.1	165.7	164.1	172.8
115°	101.0	120.3	177.4	203.6	195.8
120°	124.3	139.2	222.1	206.6	184.1
125°	161.1	166.8	174.1	208.8	219.0
130°	175.8	184.7	184.3	188.1	186.1
135°	173.8	183.1	180.0	191.7	175.2
140°	178.3	181.4	208.8	179.2	209.3
145°	204.8	222.9	225.9	203.6	196.9
150°	223.6	182.4	229.0	167.3	216.3
155°	169.1	259.1	207.8	240.5	168.2
160°	218.5	195.3	211.8	197.7	212.6
165°	175.6	241.0	227.1	216.7	250.0
170°	250.7	193.9	230.2	250.7	228.7
175°	224.3	213.0	251.1	203.7	201.7
180°	172.3	172.3	172.3	172.3	172.3

(END OF REPORT)