

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: 89327

Luminaire Tested: **VB-SB-3T5-DL-1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89327  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: VB-SB-3T5-DL-1  
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**

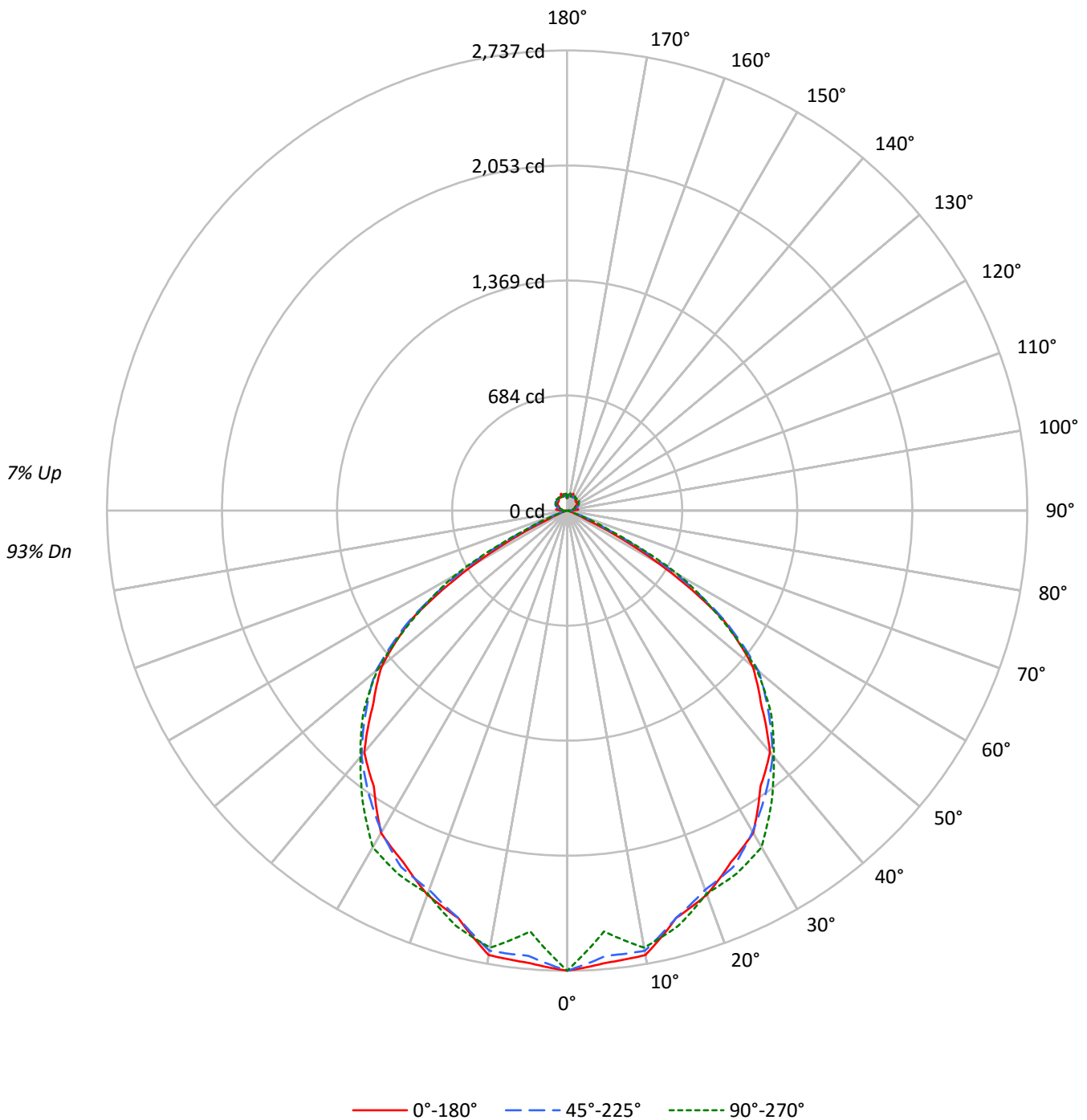
Lumens per Lamp: 4500 (3 lamps)  
Luminaire Lumens: 6416.5 lumens  
Efficiency: 47.5%  
Efficacy: 36.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.33  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')  
CIE Type: Direct

Input Watts (W): 177  
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	56	56	56	56	54	54	54	54	51	51	51	48	48	48	46	46	46	44
1	52	50	49	47	51	49	48	46	46	45	44	44	43	42	42	41	41	39
2	48	45	42	40	47	44	41	39	42	40	38	40	38	37	38	37	35	34
3	44	40	37	34	43	39	36	34	37	35	33	36	34	32	34	32	31	30
4	41	36	32	30	40	35	32	29	34	31	29	32	30	28	31	29	27	26
5	38	32	29	26	37	32	28	26	30	27	25	29	27	24	28	26	24	23
6	35	29	25	23	34	29	25	23	28	24	22	27	24	22	26	23	21	20
7	33	27	23	20	32	26	23	20	25	22	20	24	21	19	23	21	19	18
8	30	24	21	18	29	24	20	18	23	20	18	22	19	17	21	19	17	16
9	28	22	19	16	28	22	19	16	21	18	16	21	18	16	20	17	15	15
10	27	21	17	15	26	20	17	15	20	17	14	19	16	14	18	16	14	13

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

	0°	45°	90°
0°	12759	12759	12759
5°	12542	11953	11197
10°	12525	11631	11345
15°	11845	10758	10690
20°	11710	10183	9944
25°	11428	9881	9664
30°	11375	9359	9337
35°	10784	8829	8592
40°	10683	8327	7847
45°	9941	7617	7183
50°	9509	6936	6330
55°	8241	5607	4954
60°	5162	3741	3605
65°	1095	1414	1357
70°	309	367	255
75°	169	204	91
80°	123	135	47
85°	132	79	24



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	253.0	3.9	1.9
10°-20°	716.6	11.2	5.3
20°-30°	1082.0	16.9	8.0
30°-40°	1292.2	20.1	9.6
40°-50°	1300.9	20.3	9.6
50°-60°	1002.7	15.6	7.4
60°-70°	302.1	4.7	2.2
70°-80°	30.0	0.5	0.2
80°-90°	11.2	0.2	0.1
90°-100°	35.7	0.6	0.3
100°-110°	53.8	0.8	0.4
110°-120°	67.5	1.1	0.5
120°-130°	71.9	1.1	0.5
130°-140°	65.1	1.0	0.5
140°-150°	55.8	0.9	0.4
150°-160°	41.6	0.6	0.3
160°-170°	26.1	0.4	0.2
170°-180°	8.1	0.1	0.1
0°-30°	2051.7	32.0	15.2
0°-40°	3343.9	52.1	24.8
0°-60°	5647.5	88.0	41.8
0°-90°	5990.8	93.4	44.4
90°-120°	157.1	2.4	1.2
90°-150°	349.9	5.5	2.6
90°-180°	426.0	6.6	3.2
0°-180°	6416.5	100.0	47.5

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2737	2737	2737	2737	2737	
5°	2699	2616	2658	2695	2513	258
15°	2508	2563	2507	2538	2557	715
25°	2307	2343	2338	2355	2383	1069
35°	2004	2040	2057	2099	2119	1269
45°	1632	1682	1693	1702	1717	1271
55°	1133	1214	1149	1118	1111	968
65°	117	165	256	305	275	219
75°	12	23	31	26	16	16
85°	5	7	9	7	3	6
90°	26	19	13	9	6	17
95°	67	52	31	19	14	42
105°	48	61	50	47	44	53
115°	56	66	76	73	70	56
125°	71	70	80	92	82	64
135°	74	75	87	88	94	59
145°	92	86	88	99	85	55
155°	86	86	84	94	91	42
165°	91	95	91	91	86	28
175°	81	70	87	84	107	8
180°	75	75	75	75	75	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2736.7	2736.7	2736.7	2736.7	2736.7
5°	2699.3	2615.5	2658.1	2694.7	2513.1
10°	2684.2	2619.3	2658.6	2583.1	2639.9
15°	2508.3	2562.9	2507.0	2538.0	2556.7
20°	2431.0	2469.9	2400.4	2469.5	2424.6
25°	2307.1	2343.1	2338.1	2354.9	2383.4
30°	2213.6	2170.9	2206.0	2310.1	2311.4
35°	2004.2	2039.7	2057.2	2098.8	2118.7
40°	1876.9	1851.3	1903.0	1888.1	1912.8
45°	1632.2	1682.3	1693.4	1702.1	1717.3
50°	1439.9	1497.5	1487.2	1464.9	1472.0
55°	1133.4	1214.0	1148.7	1117.9	1111.0
60°	632.7	698.8	724.9	738.1	772.5
65°	116.8	165.1	256.3	305.4	275.0
70°	27.8	43.7	61.3	70.1	48.4
75°	12.3	23.4	31.0	26.5	16.0
80°	6.7	12.7	18.3	13.9	7.4
85°	4.8	7.4	9.3	7.2	3.4
90°	25.7	18.7	13.0	9.3	6.1
95°	67.2	52.5	30.6	18.7	14.0
100°	55.9	65.4	41.2	31.4	31.9
105°	47.7	60.8	49.7	46.6	43.5
110°	47.3	57.4	63.0	58.8	49.3
115°	56.4	65.8	76.1	73.2	69.9
120°	64.9	69.5	79.6	84.9	79.7
125°	70.8	70.5	80.2	92.2	82.2
130°	80.5	74.5	82.3	93.4	94.5
135°	74.3	75.4	86.9	87.9	93.7
140°	76.6	82.5	85.3	88.5	89.2
145°	92.5	85.9	88.5	98.9	84.7
150°	87.3	93.5	91.0	83.7	96.8
155°	86.5	86.1	83.9	93.7	90.6
160°	107.0	97.5	90.6	90.4	86.0
165°	91.2	95.0	91.1	91.3	85.9
170°	100.8	87.2	90.5	79.5	108.4
175°	81.4	69.5	87.4	84.5	107.3
180°	74.8	74.8	74.8	74.8	74.8

(END OF REPORT)