

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: 89320

Luminaire Tested: **VB-SB-3T5-DL-8**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89320  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: VB-SB-3T5-DL-8  
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**

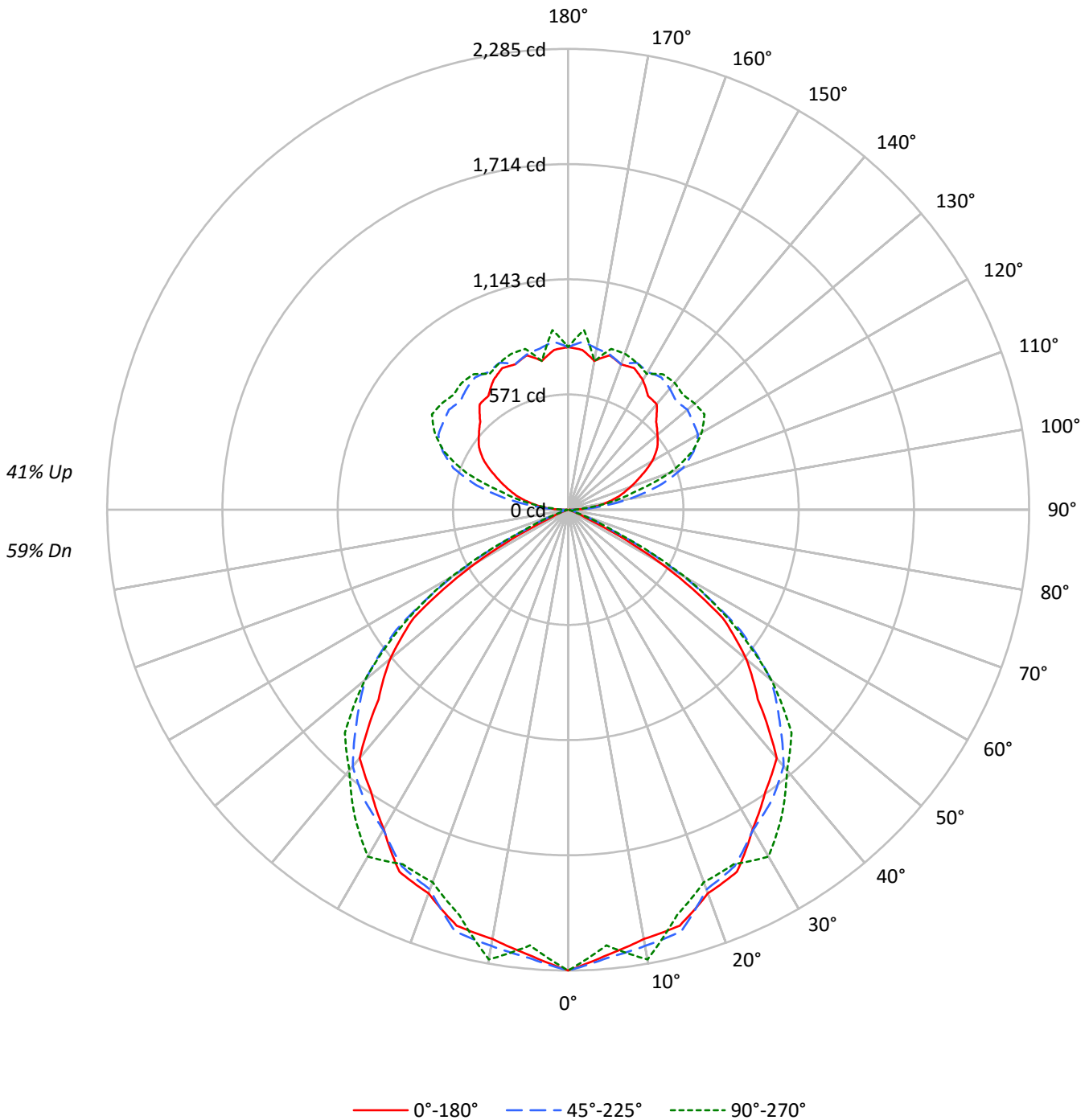
Lumens per Lamp: 4500 (3 lamps)  
Luminaire Lumens: 8685.1 lumens  
Efficiency: 64.3%  
Efficacy: 49.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')  
CIE Type: General Diffuse

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	70	70	70	70	66	66	66	66	57	57	57	49	49	49	41	41	41	38
1	65	63	60	58	61	59	57	55	51	50	48	44	43	42	38	37	37	34
2	60	55	52	49	56	52	49	46	46	43	41	40	38	36	34	33	32	29
3	55	49	45	41	51	46	42	39	41	38	35	36	33	31	31	29	28	25
4	50	44	39	35	47	41	37	34	36	33	30	32	29	27	28	26	24	22
5	46	39	34	31	43	37	33	29	33	29	27	29	26	24	25	23	21	19
6	43	35	30	27	40	33	29	25	30	26	23	26	23	21	23	21	19	17
7	40	32	27	23	37	30	26	22	27	23	21	24	21	19	21	19	17	15
8	37	29	24	21	34	28	23	20	25	21	18	22	19	17	19	17	15	14
9	34	27	22	19	32	25	21	18	23	19	16	20	17	15	18	15	14	12
10	32	24	20	17	30	23	19	16	21	17	15	19	16	14	16	14	12	11

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

	0°	45°	90°
0°	10652	10652	10652
5°	10299	10031	9663
10°	10086	9608	9733
15°	10083	9288	8705
20°	9754	8499	8061
25°	9809	8247	7867
30°	9400	7774	8024
35°	9175	7550	7495
40°	9153	7268	6923
45°	8097	6665	6549
50°	7608	6125	5664
55°	6794	5084	4499
60°	4286	3373	3149
65°	940	1283	1209
70°	256	325	229
75°	146	183	89
80°	101	129	40
85°	124	106	40



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	211.5	2.4	1.6
10°-20°	597.3	6.9	4.4
20°-30°	902.9	10.4	6.7
30°-40°	1110.0	12.8	8.2
40°-50°	1128.8	13.0	8.4
50°-60°	872.8	10.0	6.5
60°-70°	265.9	3.1	2.0
70°-80°	26.9	0.3	0.2
80°-90°	15.7	0.2	0.1
90°-100°	154.5	1.8	1.1
100°-110°	424.4	4.9	3.1
110°-120°	606.7	7.0	4.5
120°-130°	642.1	7.4	4.8
130°-140°	576.7	6.6	4.3
140°-150°	485.5	5.6	3.6
150°-160°	363.9	4.2	2.7
160°-170°	222.8	2.6	1.7
170°-180°	76.6	0.9	0.6
0°-30°	1711.7	19.7	12.7
0°-40°	2821.7	32.5	20.9
0°-60°	4823.4	55.5	35.7
0°-90°	5131.8	59.1	38.0
90°-120°	1185.7	13.7	8.8
90°-150°	2890.0	33.3	21.4
90°-180°	3553.0	40.9	26.3
0°-180°	8685.1	100.0	64.3

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2285	2285	2285	2285	2285	
5°	2216	2275	2231	2212	2169	210
15°	2135	2119	2164	2124	2082	598
25°	1980	1967	1951	1942	1940	902
35°	1705	1746	1759	1824	1848	1073
45°	1329	1412	1482	1501	1566	1045
55°	934	992	1042	1003	1009	791
65°	100	137	232	276	245	183
75°	11	20	28	25	16	13
85°	4	6	12	12	6	5
90°	18	21	24	46	20	21
95°	113	156	138	143	82	103
105°	262	430	470	416	342	274
115°	400	577	686	666	677	398
125°	540	637	756	804	824	479
135°	617	692	758	808	805	482
145°	689	740	802	811	820	439
155°	774	783	804	789	804	353
165°	793	780	796	772	826	220
175°	795	794	836	796	894	74
180°	806	806	806	806	806	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2284.8	2284.8	2284.8	2284.8	2284.8
5°	2216.4	2274.7	2230.7	2212.0	2168.8
10°	2161.5	2166.5	2196.3	2132.8	2264.9
15°	2135.2	2118.7	2164.5	2123.6	2082.0
20°	2024.9	2052.9	2003.4	2026.4	1965.5
25°	1980.2	1967.1	1951.3	1942.3	1940.3
30°	1829.3	1844.8	1832.4	1955.8	1986.4
35°	1705.1	1745.5	1759.3	1824.5	1848.2
40°	1608.1	1573.4	1660.9	1697.2	1687.5
45°	1329.3	1412.1	1481.8	1501.4	1565.7
50°	1152.0	1253.9	1313.2	1318.8	1317.2
55°	934.3	992.1	1041.5	1003.0	1009.1
60°	525.3	604.7	653.7	649.3	674.9
65°	100.3	137.2	232.4	275.7	245.1
70°	23.0	36.2	54.4	65.6	43.4
75°	10.6	20.3	27.8	24.6	15.6
80°	5.5	10.2	17.5	13.3	6.3
85°	4.5	6.5	12.5	12.0	5.7
90°	18.3	21.2	24.1	46.3	20.5
95°	113.3	155.7	138.3	143.0	81.5
100°	186.2	306.2	306.7	279.5	209.6
105°	262.2	430.4	470.2	416.5	342.5
110°	327.4	525.3	605.7	537.7	538.8
115°	400.0	577.3	686.3	665.5	676.7
120°	481.2	618.1	743.2	772.3	764.5
125°	539.8	636.6	755.9	804.2	824.1
130°	577.7	660.1	771.3	813.5	818.7
135°	616.8	692.4	757.5	808.1	804.7
140°	682.4	692.6	783.4	811.1	820.9
145°	689.3	739.5	802.3	810.7	819.5
150°	741.0	753.8	787.6	816.4	778.0
155°	774.0	783.1	804.3	789.1	803.9
160°	766.9	786.7	767.2	782.3	822.9
165°	792.8	779.7	795.9	772.5	825.5
170°	749.2	774.5	811.1	794.4	747.1
175°	795.2	794.2	836.0	795.5	894.0
180°	806.1	806.1	806.1	806.1	806.1

(END OF REPORT)