

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: 89368

Luminaire Tested: **VB-SB-3T5-UDU-3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89368  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: VB-SB-3T5-UDU-3  
Description: CORELITE VERTECHS SUSPENDED LUMINAIRE  
WHITE INTERIOR WITH SPECULAR REFLECTORS AND 19 CELL SEMI-SPECULAR LOUVER  
BLADE  
WITH LAMP ISOLATORS  
Light Source: 54 WATT T5 LAMPS  
FP54T5/841HO. LUMEN RATING = 4500 LMS.  
Ballast/Driver: -

**Summary**

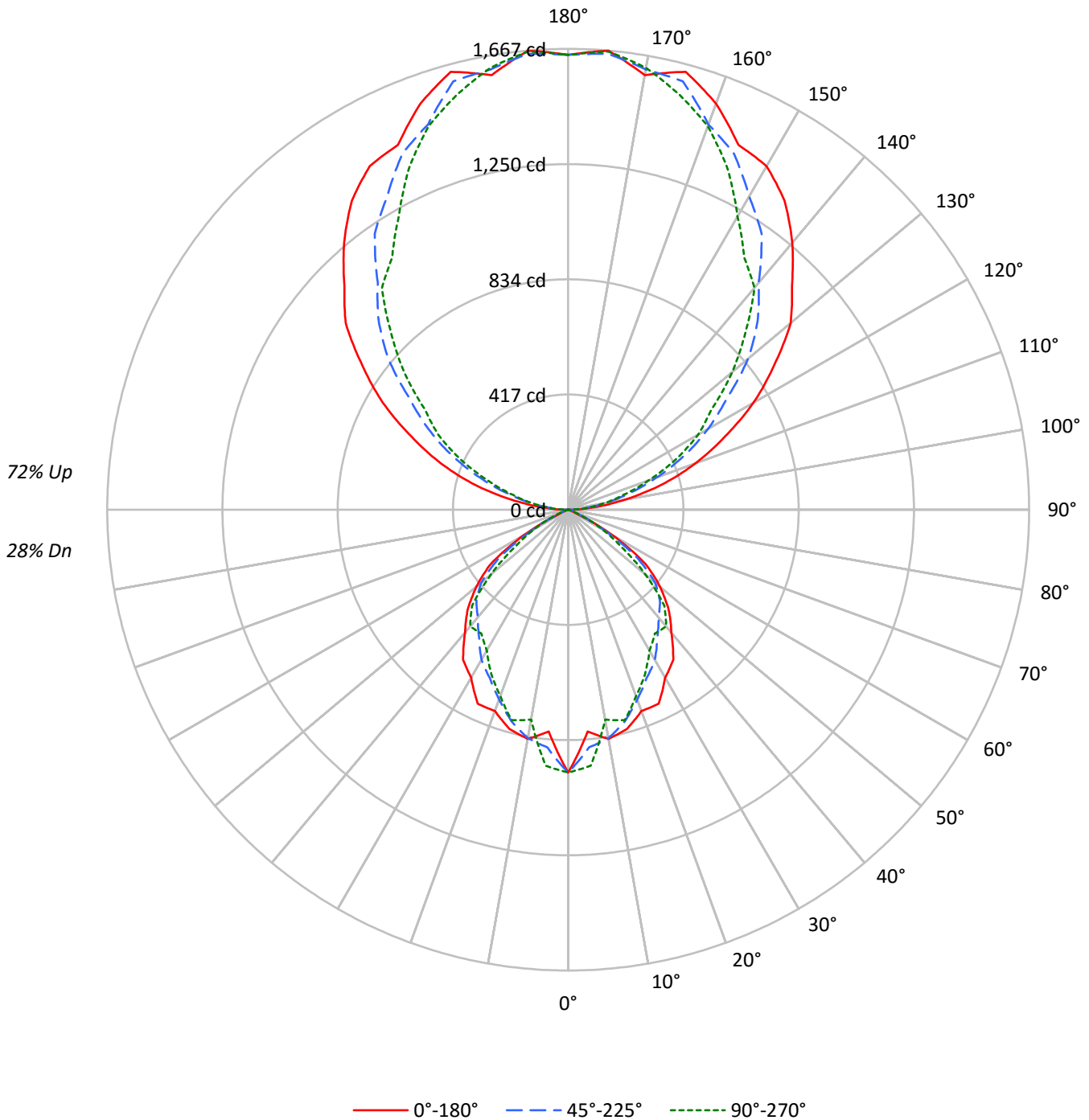
Lumens per Lamp: 4500 (3 lamps)  
Luminaire Lumens: 5979.9 lumens  
Efficiency: 44.3%  
Efficacy: 33.8 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 0.96 / 1.16  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')  
CIE Type: Semi-Indirect

Input Watts (W): 177  
Input Voltage (V): NR  
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: 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	45	45	45	45	40	40	40	40	32	32	32	23	23	23	16	16	16	13
1	41	40	38	37	37	36	34	33	28	27	26	21	21	20	15	14	14	11
2	38	35	33	30	34	31	29	28	25	24	22	19	18	17	13	13	12	10
3	35	31	28	26	31	28	25	23	22	20	19	17	16	15	12	11	11	9
4	32	27	24	22	28	25	22	20	20	18	16	15	14	13	11	10	9	8
5	29	25	21	19	26	22	19	17	18	16	14	14	12	11	10	9	8	7
6	27	22	19	16	24	20	17	15	16	14	12	12	11	10	9	8	7	6
7	25	20	17	14	22	18	15	13	14	12	11	11	10	9	8	7	7	5
8	23	18	15	13	21	16	14	12	13	11	10	10	9	8	7	7	6	5
9	21	16	13	11	19	15	12	10	12	10	9	9	8	7	7	6	5	4
10	20	15	12	10	18	14	11	9	11	9	8	9	7	6	6	6	5	4

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

	0°	45°	90°
0°	4434	4434	4434
5°	3741	3881	4142
10°	3929	3671	3314
15°	3875	3399	3297
20°	3733	3097	2943
25°	3835	2838	2663
30°	3605	2660	2376
35°	3564	2411	2217
40°	3303	2225	2261
45°	3135	2111	2055
50°	2859	1914	1565
55°	2486	1492	1043
60°	1526	820	665
65°	297	284	343
70°	76	84	75
75°	39	60	30
80°	24	37	12
85°	8	15	3



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	81.7	1.4	0.6
10°-20°	223.1	3.7	1.7
20°-30°	319.2	5.3	2.4
30°-40°	365.9	6.1	2.7
40°-50°	366.4	6.1	2.7
50°-60°	254.7	4.3	1.9
60°-70°	69.6	1.2	0.5
70°-80°	8.3	0.1	0.1
80°-90°	3.3	0.1	0.0
90°-100°	75.8	1.3	0.6
100°-110°	265.3	4.4	2.0
110°-120°	484.2	8.1	3.6
120°-130°	664.8	11.1	4.9
130°-140°	768.8	12.9	5.7
140°-150°	767.9	12.8	5.7
150°-160°	657.8	11.0	4.9
160°-170°	445.6	7.5	3.3
170°-180°	157.7	2.6	1.2
0°-30°	624.0	10.4	4.6
0°-40°	989.8	16.6	7.3
0°-60°	1610.9	26.9	11.9
0°-90°	1692.0	28.3	12.5
90°-120°	825.4	13.8	6.1
90°-150°	3026.8	50.6	22.4
90°-180°	4288.0	71.7	31.8
0°-180°	5979.9	100.0	44.3

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	951	951	951	951	951	
5°	805	846	863	828	930	80
15°	821	811	792	762	789	230
25°	774	716	672	659	657	349
35°	662	611	562	544	547	408
45°	515	474	469	490	491	394
55°	342	330	306	243	234	291
65°	32	42	52	67	70	63
75°	3	6	9	8	5	4
85°	0	1	2	1	0	1
90°	7	6	7	6	6	14
95°	85	66	56	59	58	103
105°	349	270	228	212	207	367
115°	624	535	463	430	428	622
125°	908	824	699	668	632	815
135°	1144	1082	970	908	906	889
145°	1364	1308	1219	1156	1111	850
155°	1456	1509	1420	1377	1363	683
165°	1640	1618	1604	1517	1554	456
175°	1667	1700	1655	1664	1664	156
180°	1645	1645	1645	1645	1645	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	951.0	951.0	951.0	951.0	951.0
5°	805.1	846.1	863.0	827.8	929.6
10°	841.9	868.5	839.1	808.9	771.1
15°	820.6	810.9	792.2	762.4	788.6
20°	775.0	779.8	730.0	726.5	717.7
25°	774.2	716.1	671.6	659.3	656.8
30°	701.5	676.8	626.9	616.2	588.3
35°	662.4	611.0	561.9	544.0	546.8
40°	580.2	534.9	508.5	528.5	551.1
45°	514.7	474.1	469.3	489.7	491.4
50°	432.9	404.7	410.4	369.9	364.0
55°	341.9	329.9	305.7	242.8	234.0
60°	187.0	195.0	158.9	135.9	142.5
65°	31.7	41.5	51.5	67.4	69.6
70°	6.8	10.8	14.1	21.3	14.3
75°	2.8	6.0	9.1	8.4	5.2
80°	1.3	2.8	5.0	4.2	1.9
85°	0.3	1.0	1.8	1.4	0.4
90°	6.9	5.8	6.9	6.5	5.9
95°	84.7	66.5	55.9	58.9	57.6
100°	205.5	157.9	130.8	128.1	127.5
105°	349.4	270.0	228.3	212.0	207.1
110°	488.3	400.7	339.6	323.8	309.3
115°	624.5	534.6	463.0	430.2	427.7
120°	773.8	674.9	582.8	539.0	541.9
125°	908.3	823.9	699.1	667.5	632.0
130°	1050.5	956.7	849.1	794.0	774.6
135°	1143.9	1082.4	969.9	907.6	906.0
140°	1261.1	1195.5	1071.3	1021.0	1047.6
145°	1364.5	1308.4	1219.3	1155.6	1110.7
150°	1435.2	1444.0	1308.9	1245.9	1224.8
155°	1456.2	1508.6	1420.1	1377.1	1363.0
160°	1563.2	1547.8	1482.7	1497.3	1476.0
165°	1640.0	1617.7	1603.9	1516.8	1554.0
170°	1596.1	1635.7	1617.2	1647.0	1623.1
175°	1667.1	1700.4	1655.2	1664.2	1663.7
180°	1645.1	1645.1	1645.1	1645.1	1645.1

(END OF REPORT)